

“สิทธิต่างๆในทางกฎหมายลิขสิทธิ์ระหว่างประเทศที่เกี่ยวข้องกับการให้บริการสตรีมมิ่ง (Streaming)”

The Various Rights Involved under the International Copyright Law in relation to Streaming Services.

เอกอรรกร สิทธิคุณ

Aekaornkorn Sittikun

คณะนิติศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ถนนพญาไท แขวงวังใหม่ เขตปทุมวัน กรุงเทพฯ 10330

Faculty of Law, Chulalongkorn University, Phayathai Road, Pathumwan, Bangkok 10330

Corresponding author E-mail: aekaornkorn@gmail.com

(Received: July 13, 2021; Revised: August 19, 2021; Accepted: September 29, 2021)

บทคัดย่อ

การสตรีมมิ่งเป็นอุตสาหกรรมเกิดใหม่ที่ใช้กันอย่างแพร่หลายในหลายภาคส่วน เนื่องจากความก้าวหน้าทางเทคโนโลยีและนวัตกรรมทำให้ผู้ใช้สามารถเข้าถึงเนื้อหาออนไลน์ได้ทุกที่ทุกเวลา เทคโนโลยีการสตรีมมิ่งนี้จึงได้เข้ามาแทนที่วิธีการดาวน์โหลดเนื้อหาแบบเดิม เนื่องจากการให้บริการสตรีมมิ่งในหมู่ผู้บริโภคได้เติบโตขึ้นอย่างมากในช่วงไม่กี่ปีที่ผ่านมา ก่อให้เกิดประเด็นปัญหาทางกฎหมายเกี่ยวกับการสตรีมมิ่ง โดยเฉพาะการรับส่งสัญญาณภาพและเสียงของกีฬาและสื่อบันเทิงผ่านเครือข่ายระบบอินเทอร์เน็ตซึ่งไม่ได้ได้รับอนุญาตได้กลายเป็นปัญหาหลักประการหนึ่งในการละเมิดลิขสิทธิ์ ซึ่งปัญหาของการให้บริการสตรีมมิ่งยังคงมีความไม่ชัดเจนในแง่ของการคุ้มครองทางกฎหมายโดยเฉพาะกฎหมายลิขสิทธิ์

บทความนี้จึงสำรวจและวิเคราะห์ถึงสิทธิต่างๆในทางกฎหมายลิขสิทธิ์ระหว่างประเทศที่เกี่ยวข้องกับการให้บริการสตรีมมิ่งบนอินเทอร์เน็ตและขอบเขตความคุ้มครองงานอันมีลิขสิทธิ์ซึ่งเผยแพร่ผ่านบริการสตรีมมิ่งในระดับสากล

คำสำคัญ: สตรีมมิ่ง, ความก้าวหน้าทางเทคโนโลยี, นวัตกรรม, การละเมิดลิขสิทธิ์, กฎหมายลิขสิทธิ์

Abstract

Streaming is an emerging industry used widely in various sectors, which significantly gains as technological advances and innovations have enabled users to access online content at any time from anywhere. The inception of this streaming technology has superseded the way of traditional content downloading. Since the evolution towards more streaming among consumers has grown immensely in recent years, new and challenging legal issues around this streaming have arisen. The unauthorised retransmission of sports and entertainment industries telecasts over the internet have become one of the main concerns in streaming piracy. The

issues of streaming are still unsettled in terms of legal protection especially in a copyright perspective.

This Article explores and critically analyses various rights of using streaming technology in the internet under the international copyright laws and copyright protection at an international level. The ways of protecting copyrighted streaming work will also be proposed accordingly. Legal challenges remain as to whether the legal regime for copyright protection to the streaming services is sufficient.

Keyword : Streaming, techonological advances, innovations, copytight infringement, copyright law

Introduction

Streaming has become the leading technology in the online mainstream digital world. Streaming is essentially different from traditional downloading where users need to download and copy music to their computers or other devices first in order to play them. Since streaming technologies allow users to view or listen to music or movies online in real time, it undoubtedly supersedes downloading to become the main instrument to experience the online world.¹ Apart from its productive function, one of the reasons for the increased use of this form of digital transmission is the increase of available broadband connection and the development of internet, which enables access everywhere and at any time. As a consequence, streaming is currently used widely in various sectors, especially real-time entertainment,² which consists of online video and music services, such as YouTube, Spotify and Deezer.³ It can be said that streaming maximises the opportunities offered by advanced technology.⁴

However, despite its significance and popularity, it appears that the issue of streaming is still unsettled from a copyright perspective. The little attention paid to streaming, especially in terms of legal protection, has sparked a debate about how right holders are remunerated for their new streaming services. Therefore, the purpose of this article is to examine the several rights of using streaming technologies on the internet under international copyright law and the protection of streaming technologies at an international level. This will entail examining the technological aspects of internet streaming in two primary forms, namely live streaming and on-demand streaming, together with the rights involved with this technology. Examples will be provided of infringing copyrighted work, as well as the legitimate use of such work via streaming technology. Ways to protect works communicated by streaming technology will also be proposed at the end of the article.

¹ Maurizio Borghi, 'Chasing Copyright Infringement in the Streaming Landscape' [2011] 42(3) *International Review of Intellectual Property and Competition Law* 2.

² Sandvine, 'Fall 2010 Global Internet Phenomena Report' (*Intelligent Broadband Networks*, 20 October 2010) <lp1.electronicbox.net/index_files/misc/2010GlobalInternetPhenomenaReport.pdf> accessed 9 January 2019.

³ IFPI, 'Music how, when, where you want it' (*IFPI Digital Music Report 2010*, 2010) <<https://www.ifpi.org/content/library/DMR2010.pdf>> accessed 3 January 2019.

⁴ IFPI, 'Global Music Report 2018' (*Resources and Reports*, 2018) <<https://www.ifpi.org/resources-and-reports.php#/investing-in-music.php>> accessed 3 January 2019.

Background information of streaming and communication

Two main types of streaming are used in online distribution, namely, live streaming and on-demand streaming and, although the transmission process is similar, the initiation is very different.⁵ This is because of the different set of rights involved.

In terms of live streaming, real-time content is delivered from the original source to multiple end users directly and simultaneously and this is called “webcasting”.⁶ End users can access any content that is available on a website without requesting permission.⁷ This type of streaming is also known as “lifecasting”, since it is widely used to stream specific events that need to broadcast in real time; for example, live shows and live personal events or more formal conferences.⁸ Moreover, it can be used to broadcast or retransmit the contents, which is similar to traditional transmitters, such as webradio and webtelevision.

As for on-demand streaming, this is a different approach from live streaming. In this case, the data is kept on the platform server, where a user can upload it and wait for other end users to download it. As its name suggests, on-demand streaming is initiated at the user’s request. The content will reach end users after they have requested it. Any content that can be downloaded, such as videogames and e-books, can be made available online through on-demand streaming.⁹

Use of streaming for commercial purposes

On-demand streaming is a sales channel for recorded music. An obvious example of this is Spotify, which delivers music to consumers based on a streaming service.

One of the major differences between streaming services and traditional sales is the means by which the right holders are remunerated. For physical or downloaded sales, an agreed fee is paid upon the sale of the product irrespective of whether the buyer listens to the music. On the contrary, fees from streaming services totally depend on the consumption.¹⁰ It should be noted that, despite a significant drop in sales of the traditional music industry and

⁵ Eldar Haber, 'Copyrights in the Stream: The Battle on Webcasting' [2011] 769(28) Santa Clara Computer & High Tech. L. J.

⁶ M. Sakthivel, 'Webcasters' protection under copyright- A comparative study' [2011] 27 Computer Law & Security Review 479-496.

⁷ Ibid.

⁸ M Makeen, Chapter12, Video Streaming and the Communication to the Public Right, in Aplin (ed) Research Handbook on Intellectual Property and Digital Technologies (Edware Elgar, forthcoming 2019) 21-30.

⁹ Ibid.

¹⁰ Lauri Rechardt, 'Streaming and Copyright: a Recording Industry Perspective' (WIPO Magazine, May2015) <https://www.wipo.int/wipo_magazine/en/2015/02/article_0001.html> accessed 6 January 2019.

the general move to streaming, the overall payments and benefits of artists are surprisingly increased because of the higher sales and growth in the market caused by streaming.¹¹

Various rights regarding streaming services

Since a new mean to communicate copyrighted work is being widely used by streaming services, it is vital for the law to keep pace with this technology. Therefore, the rights of authors are automatically extended in cases that involve a growing use of streaming.¹² The extension of these rights can be seen in the protection afforded by the World Intellectual Property Organisation (WIPO) under the WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty (an author's communication right).

Authors' right in streaming

Since the emergence of the internet and broadcasting over the internet could never have been imagined at the time of the Berne Convention's entry into force in the 1970s, there is a question of whether Article 11bis of the Berne Convention covers all types of broadcasting, particularly broadcasting over the internet.¹³ This issue has caused a controversy with two sides having different opinions. Some argue that Article 11bis cannot be interpreted to cover internet-related issues because the concept of an internet was unimaginable at the time the Berne Convention was enacted. It appears that there is no need to seek permission from the author when a broadcasting company wishes to rebroadcast the author's work simultaneously.¹⁴ Nevertheless, others believe that broadcasting should cover broadcasting over the internet too.

Right of communication to the public by transmission

According to Article 8 of the WIPO Copyright Treaty (WCT), authors have the right to communicate their work to the public and to make their work available to the public by wired or wireless means and through on-demand communication.¹⁵ It can be seen that live-streaming is not directly mentioned in this Article and this leads to the problematic issue of how to interpret Article 8 of the WCT in a way that provides authors with the right to exploit

¹¹ IFPI, 'Global Music Report 2018' (*Resources and Reports*, 2018) <<https://www.ifpi.org/resources-and-reports.php#/investing-in-music.php>>accessed 3 January 2019.

¹² M. Sakthivel, 'Webcasters' protection under copyright- A comparative study' [2011] 27 (Computer Law & Security Review) 479.

¹³ *ibid* 486.

¹⁴ *Ibid*.

¹⁵ *ibid* 487.

their work through live streaming. A different opinion is possible, since streaming technology was unknown at the time the WCT was negotiated.¹⁶

As a result, it can be concluded that there is no international document to clearly grant authors the right to exploit their work via streaming. This means that authors' right to exploit this new technology at an international level widely remains uncertain.

WIPO and streaming

In relation to satellite broadcasting, at the international level, the Satellite Convention was purportedly negotiated because the Rome Convention could not be extended to cover advanced technology in the broadcasting industry. However, it appears that the scope of this Convention is limited to satellite broadcasting; moreover, the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) also fails to address the concerns of broadcasting organisations.¹⁷ In the international context, the Rome Convention protects broadcasting organisations under the umbrella of neighbouring rights, but it only addresses traditional broadcasting issues. It should be noted that none of these international instruments mention the issue of live streaming.¹⁸

Protection of live streaming from an international perspective

Live streaming can mainly be seen in relation to sporting events, which are the most popular live events in Europe. These sporting events can be disseminated by various methods, such as traditional broadcasting, satellite, cable or internet.¹⁹ However, with the advent of this new technology, live streaming enables viewers to access live sporting events in real time via the internet.²⁰ Therefore, extending the rights of the owners of these sporting events should be considered more fully based on this new mode of communication.

Unauthorised use of work by live streaming: Piracy in streaming

Most of the unauthorised use of streaming is often done by the unauthorised retransmission of events. This mainly occurs in the sport and entertainment industries because most of the contents transmitted through streaming technology are distributed for entertainment

¹⁶ M. Sakthivel, 'Webcasters' protection under copyright- A comparative study' [2011] 27 (Computer Law & Security Review 486.

¹⁷ Edson Beas Rodrigues, *Determining the normative meaning of art 13 of the TRIPS Agreement and art 9(2) of the Berne Convention* (Cambridge University Press 2012) 117-156.

¹⁸ Lauri Rechardt, 'Streaming and Copyright: a Recording Industry Perspective' (*WIPO Magazine*, May 2015) <https://www.wipo.int/wipo_magazine/en/2015/02/article_0001.html> accessed 6 January 2019.

¹⁹ Maurizio Borghi, 'Chasing Copyright Infringement in the Streaming Landscape' [2011] 42(3) *International Review of Intellectual Property and Competition Law*.

²⁰ *Ibid.*

purposes, making sport and the entertainment industries victims of streaming piracy.²¹ Also, programmes can be easily streamed illegally by anyone who has technical knowledge and the correct software. Based on the Organisation for Economic Co-operation and Development (OECD)'s report of the Piracy of Digital Contents, there is evidence that the acts of illegal streaming are widespread and mushrooming; hence, there is a need to consider the question of whether people have the right to stream.

Since sport is not generally perceived to be copyrightable material due to a lack of creativity, it follows that a video of sport is also not a copyrightable subject matter. In most countries, copyright protects the broadcasting signals that carry copyrightable content; in contrast, if the content is non-copyrightable, it will not be protected by copyright. However, the broadcasting of non-copyrightable content is protected under copyright regulation in some jurisdictions.

Case Study: Union des Associations Europeennes de Football (UEFA) v. Briscoomb.²²

National law approach to Live Streaming

The UK protects live streaming transmissions under its copyright regime by extending the definition of broadcast to modern technology. A broadcast is recognised as an independent copyrightable work by Section 1 of the UK Copyright Designs and Patent Act (CDPA) 1988. This is significantly different from the US Patent Act, which does not consider broadcasting as a work. Sub-section 1A was introduced when the regulations were amended in 2003 in order to widen the definition of broadcast to the digital context. Sub-section 1 of Section 6 provides that "Broadcast means electronic transmission of sound or visual image or both". This means that all types of broadcasts are covered, including both live and on-demand streaming; therefore, it follows that all the rights available to other works, such as literary and musical works, are also made available to the owner of broadcasted works.²³ In addition the right is given to the content owner rather than the broadcaster, which seems to be similar to the TRIPS' protection of broadcasting organisations. Even the judiciary agrees and expressed the same view of this issue in the case described below.

UEFA v. Briscoomb is considered to be a remarkable case because UEFA was the first to claim on the matter of a football match in Europe. The defendants streamed the UEFA football match without the consent of UEFA. They made illegal copies of the broadcast and allowed their subscribers to store it in their computers. These acts are prohibited in Section 17 of the

²¹ Elisabeth Fiordalisi, 'The Tangled Web: Cross-Border Conflicts of Copyright Law in the Age of Internet Sharing' [2015] 12(2) Loyola University Chicago International Law Review.

²² Union des Associations Europeennes de Football (UEFA) v Briscoomb [2006] EWHC 1268 (Ch).

²³ M. Sakthivel, 'Webcasters' protection under copyright- A comparative study' [2011] 27 (Computer Law & Security Review 494.

CDPA, which prohibits the copying of work by others who do not have permission to do so from the owner of the work. According to Section 6 of the CDPA 1988, sporting contents can also be the subject matter of a broadcast, which includes any types of sound, images and live coverage of events. In addition, the ownership of rights in a broadcast is with UEFA based on Section 9. It was very clear to the judgement that UEFA held the copyright of every broadcast.

It can be noted that the UK extends authors' right to exploit their work using streaming technology and it also expands all the rights given to author in exploitation of their work over streaming technology.

On-demand streaming and its rights

It is generally accepted that on-demand streaming is recognised as the author's right to communicate rather than the owner's broadcasting right because of the freedom end users enjoy to select the content and time of the programme.²⁴ This means that it is considered to be a new way of 'communication to the public' rather than part of traditional broadcasting.²⁵ As a result, the author has the right to the on-demand streaming.²⁶ In this article, on-demand streaming will be indicated more fully in the following paragraphs specifically on the music streaming which can be seen as the obvious example of on-demand streaming.

Who should be protected?

Focusing on the music industries, there is a question of whether or how the right owners of music benefit from the rising trend of streaming consumption in terms of income. The right owners of musical content are those who own the rights to the musical composition, such as songwriters, composers and music publishers. The right owners of a recorded performance are the record label and the recording artist-performer. Record producers, artists and performers are protected under neighbouring rights.

Neighbouring rights or related rights

Sound recording performance rights are generally controlled by music licensing companies that are responsible for negotiating rates and terms with users of sound recordings. Sound recording performance rights represent the majority of all neighbouring rights worldwide and

²⁴ M. Sakthivel, 'Webcasters' protection under copyright- A comparative study' [2011] 27 (Computer Law & Security Review 495.

²⁵ M Makeen, Chapter12, Video Streaming and the Communication to the Public Right, in Aplin (ed) Research Handbook on Intellectual Property and Digital Technologies (Edward Elgar, forthcoming 2019) 21-30.

²⁶ M. Sakthivel, 'Webcasters' protection under copyright- A comparative study' [2011] 27 (Computer Law & Security Review 484.

they are a growing source of revenue from around the world for recording artists and recording labels.²⁷

Due to the increased consumption of digital music, sound recording performance rights or neighbouring rights are a growing source of global revenue for recording artists and labels. There is evidence that the revenue from digital services from overall neighbouring rights has increased significantly, while the sales of physical products of recorded music, such as CDs and cassettes have dramatically declined.²⁸ The fact that revenue from streaming supersedes that of traditional recordings illustrates its great significance in this digital age.

The group of people who participate in the creation and production, namely artists, performers, music producers and film producers, can have more control over their creative endeavours under neighbouring rights or related rights. The rights of performers, phonogram producers and broadcasters are absolutely protected by related rights. Moreover, these people's rights are protected under the international copyright laws, namely the 1961 Rome Convention, the World IP Organisation (WIPO), and the three directives of European Union, which are described below.

“1. The 1961 Rome Convention for the protections of performers, producers of phonograms and broadcasting organisations.

2. The World IP Organisation (WIPO) Performances and Phonograms Treaty (WPPT) protects neighbouring rights in the musical sector.

3. Three directives of European Union:

- The directive dated 27th September 1993 is related to the coordination of certain rules on authors' rights and neighbouring rights applicable to satellite broadcasting.

- The directive dated 29th October 1993, replaced by directive n.2006/116/EC of the 12th December 2006 contains the terms of protection of copyrights and related rights.

- The directive n. 2001/29/EC of the 22nd May 2001 is related to the harmonisation of certain aspects of copyright and related rights in the information society.”

It appears that neighbouring rights are protected and remunerated in a similar way worldwide based on the structured international and European legal framework; however, it is apparent

²⁷ Annabelle Gauberti, 'Neighbouring rights in the digital era' [2015] Intellectual Property Magazine.

²⁸ Ibid.

that, in reality, different countries use different methods, for example the US and the UK. According to the US Copyright Act, the owner of sound recordings is granted an exclusive right to “perform the copyrighted work publicly by means of a digital audio transmission.” This right is limited by a statutory licence for so-called non-interactive digital audio transmissions. Therefore, services that comply with the statutory licence may stream sound recordings without the permission of the copyright owner. However, in the UK, sound recording copyright owners are granted exclusive performance rights to sound recording by the Copyright, Designs and Patents Act. Moreover, performers are given the right to an equitable remuneration for a share of the licensing proceeds for the use of sound recordings. As a result of the given rights, the performer on the record has the right to share the producer’s revenue when the sound recording is broadcasted in the UK.²⁹

Neighbouring rights on a cross-border basis

Since music is a global business, it is unavoidable to expand it to other countries. This means that protection under one national law is not enough. Performers and producers can collect royalties from a sound recording in another territory. According to Article 2 of the Rome Convention, the same level of protection is granted to nationals of contracting states in each other’s territory. In other words, contracting states must protect the nationals of other member states at the same level as their own nationals.

It can be said that eligibility for royalties depends on considering the facts on a case-by-case basis. This includes various factors, such as the nationality of the performers and producers, the place where the recordings were made and the place of the first publication.³⁰ All of these factors are extremely important to assure people of their rights.

Under the digital market of streaming, there is an increase of copyright enforcement across national boundaries.³¹ Due to such universal access to video streaming published to allow internet users to listen to music being exhibited on the other countries. This leads to the difficulties of cross-border of copyright enforcement when copyrightable work is used in other jurisdictions.³² This is because copyright law provide legal protection on territorial basis, and different nations have different copyright law and protection. So, it is challenging to indicate where the copyright infringement took place to find the applicable law to deal with the issues

²⁹ Annabelle Gauberti, 'Neighbouring rights in the digital era' [2015] Intellectual Property Magazine 18.

³⁰ Annabelle Gauberti, 'Neighbouring rights in the digital era' [2015] Intellectual Property Magazine 18.

³¹ Terralex, 'Cross-Border Copyright Guide 2016'(RPC.co.uk, 2016) <<https://www.rpc.co.uk/-/media/rpc/files/terrallex-crossborder-copyright-guide-2016.pdf>> accessed 10 January 2019.

³² Elisabeth Fiordalisi, 'The Tangled Web: Cross-Border Conflicts of Copyright Law in the Age of Internet Sharing' [2015] 12(2) Loyola University Chicago International Law Review.

of copyright infringement. It is obvious that this problematic issues of conflicts of law would not be happened if there is an global harmonisation of copyright laws.

Expanding rights framework to follow technology and global expansion

The advance of technology can be considered to be a two-edged sword. On the one hand, the advent of technology has led to improvements in the sale of works and provided more access to new markets so that authors can reap the benefits of their labour and obtain a better and more sustainable return. On the other hand, the advantages of faster and cheaper reproduction and distribution technology can cause drawbacks such as an increase of counterfeit and unauthorised copies of works.³³ The issues that have arisen from the advent of this technology, especially the important issues of the rise of rights and the revenue of right owners, will be further demonstrated in the following paragraphs.

A number of international instruments have expanded global copyright law in order to keep pace with this situation. For example, the TRIPS agreement extends copyright protection to computer programmes and electronic databases. Moreover, three concepts of copyright were introduced by the 1996 WIPO Copyright Treaty and the 1996 WIPO Performances and Phonograms Treaty to help right holders to control the access and reproduction of their works by digital means.

Furthermore, despite the expansion of rights, there is growing concern about the advent of radio broadcasting, which involves both live and recorded music. The producers and performers have begun to control a share of the revenue, as can be seen in the music industry.

Related rights

Performers, phonogram producers and broadcasters have international protection under the 1961 Rome Convention.³⁴ Performers and sound recording companies are protected by related or neighbouring rights in performance and phonograms under the global norm. However, the scope of protection can vary from country to country, depending on whether they extend these rights beyond the minimum requirements established in the Rome Convention 1961.

One of the important related rights is economic rights which give authors the opportunity to make commercial gain from the exploitation of their work. Authors have exclusive rights to prohibit various unauthorised uses of their work. The WIPO Treaties confirm that the rights of

³³ U. Suthersanen, "The First Global Copyright Act", in *IN A SHIFTING EMPIRE: 100 YEARS OF THE COPYRIGHT ACT 1911*, U. Suthersanen & Y. Gendreau, eds., Edward Elgar, 2012, chapter 1.

³⁴ Articles 10, 12, Rome Convention on the Protection of Performers, Producers of Phonograms and Broadcasting Organisations 1961.

reproduction, distribution and communication are not only granted to authors, but also performers, phonogram producers and broadcasters have economic rights under the Rome Convention and the TRIPS agreement.

International Copyright system and streaming

Due to the characteristics of streaming industries such as the music industry, which operates one of the largest online services in multiple territories, there is a need to ensure that all the necessary rights are covered in the international system. The 1996 WIPO Internet Treaties created internationally-harmonised rights that have greatly enhanced the global expansion of digital music services. In this regard, the exclusive rights involved with streaming will be demonstrated below.

1. Clearing and licensing rights

The process of clearing and licensing rights has been made easier in each of a large number of territories based on the exclusive rights recognised in the 1996 WIPO Internet Treaties, the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). Also, because these rights are now broadly recognised, right holders have greater confidence in licensing their rights to digital services in new territories.

2. Right to make available³⁵

The right to make available in Article 8 of the WCT is an exclusive right that enables authors, phonogram producers, performers and other right owners to combat piracy on the internet. This exclusive right is considered to be one of the most significant successes of the WIPO treaties because it covers the use of phonograms in the digital environment, making it appropriate for the current development of electronic commerce.³⁶ This right provides control over making available all means to be delivered by wire or wireless and whenever members of the public access work in any place and at any time individuals choose. Therefore, it should be noted that on-demand streaming of music is covered under this right due to its broad definition.³⁷ The significance of this right is that it is suitable for promoting the development of electronic commerce and the dissemination of music over digital networks. It applies

³⁵ IFPI, 'The WIPO Treaties: 'Making Available' Right' (*ifpi.org*, March 2003) <<https://www.ifpi.org/content/library/wipo-treaties-making-available-right.pdf>> accessed 2 January 2019.

³⁶ Ibid.

³⁷ Ibid.

equally to all types of transmission, whether downloads or on-demand streaming, to ensure that right owners will benefit from fair terms for digital services worldwide.³⁸

This right is not only immensely attractive to copyright holders, but also consumers who will have wider and easier access to music due to its significance and ability to cover all types of exploitation, allowing consumers to have a choice of place and time to play music.³⁹

Finally, it should not be forgotten that copyright exceptions should pass the three-step-test, as illustrated below.

Limitations and Exceptions to copyright

The 'Three-step' test provides a guideline for the national parliament of every WTO member country to enact only the copyright exceptions that pass the three-step test. The court can only use the three-step test to settle private disputes where national norms explicitly show that the test should govern the application of copyright exceptions. In other words, it is a way to restrict the kinds of permitted fair use in national laws.

Article 9(2) of the Berne Convention has been transformed into an expansive version under Article 13 of the TRIPS, in which it is stated that "Members shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder."⁴⁰

The three-step test comprises three rules, which restrain the nature and scope of limitations within national copyright laws.⁴¹ The limitations and exceptions must be limited to certain special cases in the first step of the test and the scope of the operation of any exceptions or limitations in the national law must be restricted. It must be clearly defined, but there is no need to identify every possible situation in which exception could be applied. In addition, it should be of narrow interpretation and enforcement in terms of scope, purposes, the individuals involved and the limited application.

In respect of the second step, the limitation must not conflict with the normal exploitation of the work. This means that the limitation must be considered in an explicit statement in the various copyright instruments that the scope of protection is extended to protect work which

³⁸ Lauri Rechardt, 'Streaming and Copyright: a Recording Industry Perspective' (*WIPO Magazine*, May 2015) <https://www.wipo.int/wipo_magazine/en/2015/02/article_0001.html> accessed 6 January 2019.

³⁹ Ibid.

⁴⁰ TRIPS Art .13.

⁴¹ Andrew F. Christie and Robin Wright, 'A Comparative Analysis of the Three-Step Tests in International Treaties' [2014] *International Review of Intellectual Property and Competition Law*.

can be in any manner or any form of exploitation that can generate commercial gain. The obvious example of this can be seen in bulk photocopying for a specific purpose.

In the third step, it must be ensured that these limitations do not unreasonably prejudice the legitimate interests of right holders. This last step is to guarantee the rights of the authors concerned. It is suggested that national states can introduce absolute exceptions if any act threatens to unreasonably prejudice the owner of the rights.⁴² However, Article 13 of the TRIPS does not show the method to determine the prejudice to the legitimate interests of the rights owner, which should be limited to the right holder of the member that makes the complaint.

Conclusion

In conclusion, it has been demonstrated in this article that there should be certain sufficient protection for copyright holders due to the emergence of streaming services on various online platforms, particularly music channels. It has been shown explicitly that copyrights may not be adequately protected at the international level, despite the widespread use of streaming technology. The rights of copyright holders to broadcast and communicate their work to the public are not sufficiently represented and this lack of copyright protection will result in undesirable piracy. This is especially true in respect of live streaming, since the international copyright law does not provide clear protection due to its characteristics of non-copyrightable work. On the contrary, right owners of on-demand streaming, especially in the music industry, are granted more obvious rights than right owners of live streaming, even though there is no difference between them because they both use the same types of technology and transmission. Nevertheless, unlike the international legal instruments, some jurisdictions, such as the UK and New Zealand provide rights and legal protection over live streaming.

It can be concluded that, although there is no international protection, national states can play an important role in copyright protection in relation to streaming. In the end, based on the various rights provided for on-demand streaming, owners of works should have their rights extended to cover real time streaming too. It is worth noting that there is a serious challenge to protect the rights of owners of the work when a new mode of communication is developed for the purpose of disseminating copyright. Therefore, the law in these regards needs to be amended to extend the rights of owners of the work, serving the dynamic context of the society and unstoppably emerging technological innovation. I believe that more rights under international copyright law are likely to follow in the years to come.

⁴² Edson Beas Rodrigues, *Determining the normative meaning of art 13 of the TRIPS Agreement and art 9(2) of the Berne Convention* (Cambridge University Press 2012) 117-156.