

**The Interpretation of Copyright Protection in Video Game Streaming in Europe**

**A Thesis Submitted for the Degree of Doctor of Philosophy**

**By**

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## **Abstract**

Video games play an important role in the economic and cultural landscape in Europe and have been the basis for user-generated content of all kinds. Online video gaming in particular has become very popular worldwide. One of the reasons for the ever-increasing popularity of the online video game is that it is available for live game streaming. ‘Let’s Play’ (LP) videos, is a term originated by the gaming community to refer to videos of someone playing a video game, with their audio commentary of the gameplay, which is edited to entertain the audience. LP videos are ‘episodic accounts of a player’s journey’, are very entertaining in nature, and can be broadcasted as pre-recorded videos on video-sharing platforms as well as live streamed.

There are three types of LP videos: reviews, playthrough videos with commentary, and playthrough videos without commentary. The first category constitutes reviews of video games. In the second category a viewer can watch the entire or part of the video game being played, while the gamer gives his/her commentary on their experience. In the third category, viewers can watch videos of the entire game being played, with no commentary of the gamer.

There is a debate about whether streaming video games online constitutes an act of communication to the public and as such, an online copyright infringement. Article 3 of the Directive 2001/29/EC provides that Member States shall provide authors with the exclusive right to authorise or prohibit any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access them from a place and at a time individually chosen by them. Given that gamers communicate to the public whole or part of a video game, without the authorisation of the rightholder, it constitutes an unauthorised act of communication to the public. However, economic and strategy reasons have led video game developers to tolerate streaming activity, leaving streamers and platforms that host streaming videos at an uncertain stage regarding the lawfulness of their activities. While review LP videos fall under the exceptions and limitations to the communication to the public right, for the purposes of criticism or review, playthrough videos with and without commentary do not.

The thesis interprets the communication to the public right in video game streaming, explores whether hosting service providers (platforms) can effectively take down infringing content as well as whether Internet Service Providers (ISPs) can effectively block access to infringing content. With the deployment of doctrinal and comparative analysis, the thesis

brings to the surface the limitations of current online copyright enforcement methods and proposes ways to overcome those obstacles.

In an effort to strike a fair balance between the rightholders' rights, the right to conduct a business, and the freedom of expression, the thesis contributes that for LP videos and live streams to continue to exist, without the risk that they will be taken down after a request made by the rightholders, licence agreement is an alternative and feasible solution. In light of the DSM Directive 2019/790, streaming platforms, such as YouTube and Twitch.tv, perform an act of communication to the public or an act of making available to the public when give the public access to copyright-protected works or other protected subject matter uploaded by its users. Platforms shall be liable for unauthorised act of communication to the public, unless they obtain authorisation from the rightholder, by concluding a licence agreement, or they demonstrate that they have made their best efforts to obtain authorisation. The DSM Directive requires a licence agreement between rightholders and service providers (platforms). It is proposed that the licence agreement, which would allow the streaming of video game content, should be restricted to certain types of video games. Meanwhile, the thesis explores the potential of blockchain technology for the facilitation of the licence agreement. The potential of blockchain technology to process huge amounts of data, to issue digital certificates and the track of the use of non-licensable works would benefit the rightholders, intermediaries, and users.

## **Declaration**

I hereby declare that the thesis is based on my original work, except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Brunel University or other institutions.

**Singed:**

**Date:**

## **Acknowledgements**

‘When you set out on the way to Ithaki wish for a long, eventful journey, full of adventure, full of understanding’. Konstantinos P Kavafis

As a kid, and later as a high school student, it was hard for me to truly understand the meaning of these lines. The PhD was my way to Ithaki. It was indeed full of adventure, amidst a global pandemic. The end of the journey is rewarding, though.

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## Abbreviations

AI	Artificial Intelligence
AIPPI	Association Internationale pour la Protection de la Propriété Intellectuelle
AOL	America Online
APPG	All-Party Parliamentary Group (UK)
AR	Augmented Reality
BT	British Telecommunications
CDN	Content Delivery Network
CDPA	Copyright, Designs and Patents Act 1988
CEPS	Centre for European Policy Studies
CJEU	Court of Justice of the European Union
CMO	Collective Management Organisations
DNS	Domain Name System
DPI	Deep Packet Inspection
DSM Directive	Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (DSM Directive) [2019] OJ L 130/92
ECHR	European Convention on Human Rights
E-Commerce Directive	Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') [2000] OJ L 178/1
ECtHR	European Court of Human Rights
EEA	European Economic Area
EU	European Union
EUIPO	European Union Intellectual Property Office
EULA	End-User Licence Agreements

EuroISPA	The European Internet Service Providers Association
FPS	First-Person Shooter
GDP	Gross Domestic Product
HMD	Head-Mounted-Display
InfoSoc Directive	Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10
IP address	Internet Protocol address
ISP	Internet Service Provider
ISS	Information Society Service
LP	Let's Play
MMORPG	Massively Multiplayer Online Role-Playing Game
MOBA	Multiplayer Online Battle Arena
NPC	Non-playable characters
OCSSP	Online Content-Sharing Service Provider
P2P	Peer-to-Peer
PC	Personal Computer
PS	PlayStation
RPG	Role-Playing Game
RTS	Real Time Strategy
UDHR	Universal Declaration on Human Rights
UGC	User-Generated Content
UK	United Kingdom
UrhG	Gesetz über Urheberrecht und verwandte Schutzrechte – Urheberrechtsgesetz 1965
URL	Uniform Resource Locator

VR	Virtual Reality
WCT	World Intellectual Property Office Copyright Treaty
WIPO	World Intellectual Property Office



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## Chapter 1: Introduction

More than 2,000 years ago, the ancient Greek philosopher Aristotle was concerned with the concept of virtue, which lies at an intermediate point between two extremes: excess and deficiency.<sup>1</sup> This ‘golden mean’, usually denoted by the Greek letter  $\Phi$ , remains highly relevant in nature, science, and arts.<sup>2</sup> The thesis aspires to bring this philosophy into legal studies, emphasising the contemporary issue of striking a fair balance between copyright holders’ rights, the right to conduct a business, and the freedom of expression in video game streaming.

Video games have shaped not only the economic but also the cultural landscape in Europe.<sup>3</sup> Contemporary video games are complex works of authorship that function within a sophisticated technological framework.<sup>4</sup> Playing video games online has become extremely popular worldwide. The ever-increasing popularity of online video gaming is attributed to the plethora of content generated by users and live streaming. Among the forms of user-generated content that are highly associated with video games are the ‘Let’s Play’ (LP) videos, a term coined by the gaming community to refer to pre-recorded videos documenting a playthrough of a video game, accompanied by the player’s commentary,<sup>5</sup> which is edited to entertain the online audience.<sup>6</sup>

There are two types of streaming that are used for online distribution of digital works: live streaming and on-demand streaming. In live streaming the digital work is delivered simultaneously to multiple users from a single source in real time, while on-demand streaming is used to make digital works available upon a user’s request.<sup>7</sup> In both types of streaming the process of transmission is similar but the initiation of the transmission is different. In essence, in live streaming the data are captured from a source, processed to a digital signal, and transmitted to multiple users simultaneously, whereas in on-demand streaming the data are stored on a central server from where the transmission is initiated upon a user’s request.<sup>8</sup>

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<sup>1</sup> Aristotle, *The Nicomachean Ethics of Aristotle* (Dancing Unicorn Press 2016) 44.

<sup>2</sup> MG Lorenzi, M Francaviglia, and G Iovane, ‘The Golden Mean Revisited: From Fidia to the Structure of “Kosmos”’ (2008) 1(2) *Journal of Applied Mathematics* 109.

<sup>3</sup> Y Harn Lee, ‘Copyright and Gaming’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020) 60.

<sup>4</sup> *ibid* 44.

<sup>5</sup> *ibid*.

<sup>6</sup> K Coogan, ‘Let’s Play: A Walkthrough of Quarter-Century-Old Copyright Precedent as Applied to Modern Video Games’ (2018) 28(2) *Fordham Intellectual Property, Media and Entertainment Law Journal* 381.

<sup>7</sup> M Borghi, ‘Chasing Copyright Infringement in the Streaming Landscape’ (2011) 42(3) *IIC* 316.

<sup>8</sup> *ibid*.

Although streaming is a massive trend in online distribution,<sup>9</sup> the European jurisprudence related to the copyright implications of this technology is scarce. A more extensive body of literature regarding video game streaming and the copyright law issues deriving from it has emerged primarily from the US. In the past decade, scholars have sought to determine the applicability of communication to the public right on Internet streaming<sup>10</sup> and video game streaming,<sup>11</sup> but much of the analysis has been based on the doctrine of fair use and the concept of derivative works, which are unique to US copyright law. Therefore, this is a rich area for exploration in Europe.

In the article ‘Chasing Copyright Infringement in the Streaming Landscape’, Borghi argued that public communication is an umbrella term, which includes the right to broadcast the work to the public and the right to make the work available from a place and at a time individually chosen by the public.<sup>12</sup> The article explained the difference between ‘broadcasting’ and ‘making available’, stating that in broadcasting users can access the work only at the time it is transmitted, while in ‘making available’ users can access the work any time it is wanted.<sup>13</sup> In other words, live streaming could fall under the definition of ‘broadcasting’, while on-demand streaming could be included in the definition of ‘making available’.

YouTube and Twitch.tv are the main intermediary service providers viewers can access to watch LP videos and live streams.<sup>14</sup> According to the e-Commerce Directive, service providers

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<sup>9</sup> MF Makeen, ‘Video Streaming and the Communication to the Public Right in the United States and European Union’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited, 2020) 247. It has been noted that the terms ‘download’ and ‘streaming’ have been used interchangeably; however, in essence they are two different methods of communicating content online. While in downloading the file can be played when it has been copied into the permanent memory of a computer, in streaming technology the file is not copied, and it can be played when there will be enough data stored in the Random-Access Memory (RAM).

<sup>10</sup> M Borghi, ‘Chasing Copyright Infringement in the Streaming Landscape’ (2011) 42(3) IIC 316; T Lu, ‘Understanding Streaming and Copyright: A Comparison of the United States and European Regimes’ (2018) 13(2) Journal of Business and Technology Law 185; See also Makeen (n 9).

<sup>11</sup> M Larkey, ‘Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcases’ (2015) 13 Rutgers JL & Pub Pol’y 52; E Brusa, ‘Professional Video Gaming: Piracy that Pays’ (2015) 49 J Marshall Law Review 217; S Matsui, ‘Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright’ (2016) 24 Tex Intell Prop LJ 215; IAC Caguioa, ‘Recent Copyright Issues in Video Games, Esports and Streaming’ (2019) 63 Ateneo LJ 882.

<sup>12</sup> Borghi (n 10).

<sup>13</sup> *ibid.*

<sup>14</sup> C Postel, ‘Let’s Play: YouTube and Twitch’s Video Game Footage and a New Approach to Fair Use’ (2017) 68 Hastings LJ 1169; Y Li and others, ‘Tell Me Before You Stream Me: Managing Information Disclosure in Video Game Live Streaming’ (Proceedings of the ACM on Human-Computer Interaction New York, USA, 2018) <<https://doi.org/10.1145/3274376>> last accessed on 4 April 2022; Caguioa (n 11) 888, 889, 890; B Hutchins, B Li, and D Rowe, ‘Over-the-Top Sport: Live Streaming Services, Changing Coverage Rights Markets and the Growth of Media Sport Portals’ (2019) 41(7) Media Cult Soc 975, 987, 988.

carry out mere conduit, caching, and hosting services.<sup>15</sup> However, the categorisation of live streaming as a mere conduit or hosting service is a challenging task. Different opinions have been expressed on this matter. While Borghi is of the opinion that ‘both kinds of websites offering live and on-demand streaming can also be hosting services’,<sup>16</sup> Larkey has differentiated the two activities as ‘mere conduit service providers offering live streaming services and hosting service providers offering on-demand streaming’.<sup>17</sup> A similar view has been adopted by the European Commission, as indicated in their 2018 report, that ‘for instance, a Web streaming service may offer the ability of live streaming, which to the extent that it amounts to live streaming, may have to be considered a “mere conduit” activity’.<sup>18</sup>

A more recent report, conducted by Schwemer, Mahler and Styri for the European Commission in the summer of 2020, places live streaming in a grey area, where the applicability of Articles 12 and 13 of the e-Commerce Directive is not clear.<sup>19</sup> From a functional point of view, live streaming is similar to hosting, but it does not fall under the definition of Article 14 of the e-Commerce Directive since the streamed content is not stored before communication.<sup>20</sup> From a technical perspective, live streaming resembles mere conduit because it involves the element of transmission, but the temporal characteristic of live streaming is not what the European Union (EU) legislators intended when enacting Article 12 (mere conduit). According to the report, ‘(live streaming) is somewhat comparable to hosting because the live streaming service hosts the live stream, which is not necessarily a stored file but a continuous content stream’.<sup>21</sup> In addition, live streaming providers, such as Facebook and YouTube, can select the viewers or receivers of the live stream, based on algorithms that assess the users’ interest.<sup>22</sup> This case is protected under neither Article 12 nor Article 14 of the e-Commerce Directive. In a period of three years, different reports regarding the liability of intermediary services have presented a deviation in opinions, which necessitates not only

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<sup>15</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, arts 12, 13, and 14.

<sup>16</sup> M Borghi, ‘Chasing Copyright Infringement in the Streaming Landscape’ (2011) 42(3) IIC 316, 317.

<sup>17</sup> M Larkey, ‘Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcases’ (2015) 13 Rutgers JL & Pub Pol’y 52, 75.

<sup>18</sup> European Commission, ‘Hosting Intermediary Services and Illegal Content Online: An Analysis of the Scope of Article 14 ECD in light of Developments in the Online Services Landscape’ (2018) 14 <[https://www.ivir.nl/publicaties/download/hosting\\_intermediary\\_services.pdf](https://www.ivir.nl/publicaties/download/hosting_intermediary_services.pdf)> last accessed on 28 January 2023.

<sup>19</sup> S Schwemer, T Mahler, and H Styri, ‘Legal Analysis of the Intermediary Service Providers of Non-Hosting Nature’ (Final Report prepared for the European Commission 2020) 58 <<https://op.europa.eu/en/publication-detail/-/publication/3931eed8-3e88-11eb-b27b-01aa75ed71a1/language-en>> last accessed on 28 January 2023.

<sup>20</sup> *ibid.*

<sup>21</sup> *ibid.*

<sup>22</sup> J Cho and others, ‘Do Search Algorithms Endanger Democracy? An Experimental Investigation of Algorithm Effects on Political Polarization’ (2020) 64(2) Journal of Broadcasting & Electronic Media 150, 151.

further exploration but also an update of the relevant legislation on intermediary liability in order to address live streaming. This could be achieved with the introduction of a clarifying and technological neutral Recital, which would include a non-exhaustive list of examples.

Intermediaries have deployed filtering systems to detect potentially infringing content. Automated filtering systems, such as YouTube's Content ID or Twitch.tv's Audible Magic, are widely used by online platforms, but they lack a crucial aspect of copyright law: they are unable to recognise exception or limitation cases. Previous studies have highlighted the problems created by the existing filtering tools that fail to detect exception or limitation cases and proposed that human oversight is of the utmost importance.<sup>23</sup> However, human review, apart from being unachievable because of the scale of online content, would also be biased by the algorithmic assessment. Recent research has shown that people tend to better trust algorithmic judgements than human judgements, as algorithms show a superior level of accuracy.<sup>24</sup> Setting aside human review, Solomon proposed that service providers should be required to educate content creators on their rights under fair use, which in turn would give confidence to creators to dispute false claims, as well as an amendment in the monetisation practice, which would ensure that any monetisation on videos would be on a proportionate level to the amount of copyrighted material used in it.<sup>25</sup>

A considerable amount of literature has dealt with the topic of copyright enforcement.<sup>26</sup> Among the remedies available to rightholders are blocking injunctions against intermediaries, requiring them to prevent unauthorised access to protected materials online. Copyright holders, intermediaries, and Internet users each have different interests. Given that intermediaries are passive or neutral third parties, and as such exempt from liability, courts balance the lack of

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<sup>23</sup> D Halbert, 'Mass Culture and the Culture of the Masses: A Manifesto for User-Generated Rights' (2009) 11 Vand J Ent & Tech L 921, 959; DE Ashley, 'Note, the Public as Creator and Infringer: Copyright Law Applied to the Creators of User-Generated Video Content' (2010) 20 Fordham Intellectual Property, Media and Entertainment Law Journal 563, 602, 606; A Tie, 'Copyright Law Issues in the Context of Video Game Let's Plays and Livestreams' (2020) 3(2) IELR 121, 130.

<sup>24</sup> JM Logg, JA Minson, and DA Moore, 'Algorithmic Appreciation: People Prefer Algorithmic to Human Judgement' (2019) 151 Organisational Behaviour and Human Decision Processes 90, 93.

<sup>25</sup> L Solomon, 'Fair Users or Content Abusers: The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube' (2015) 44 Hofstra L Rev 237, 263.

<sup>26</sup> C Angelopoulos, 'Are Blocking Injunctions against ISPs Allowed in Europe? Copyright Enforcement in the Post-Telekabel EU Legal Landscape' (2014) JIPLP 9; F Wang, 'Site Blocking Orders in the EU: Justification and Feasibility' (14th Annual Intellectual Property Scholars Conference (IPSC), Boalt Hall School of Law, University of California, Berkeley, 2014) 12; A Marsoof, 'The Blocking Injunction – A Critical Review of Its Implementation in the United Kingdom Within the Legal Framework of the European Union' (2015) 46 IIC 632; C Geiger and E Izyumenko, 'The Role Of Human Rights In Copyright Enforcement Online: Elaborating A Legal Framework For Website Blocking' (2016) 32(1) Am U Int'l L Rev 43; M Perel, 'Digital Remedies' (2020) 35 Berkeley Tech LJ 1.

liability by issuing injunction orders. However, their effectiveness may be compromised due to changes in the subject matter, for example where mirror websites appear under domain names that are not covered by the order. In order to address this issue, dynamic injunctions may be drafted that also cover the new Internet Protocol (IP) address or Uniform Resource Locator (URL) without the need for a new judicial procedure.<sup>27</sup>

In addition to being a legal issue, site blocking orders are also a technical issue, as it concerns the determination and deployment of the suitable measure. In the *UPC Telekabel* case, the Court ruled that it is the responsibility of the intermediary to choose and implement the appropriate technical measures to protect rightholders, because intermediaries have the technical knowledge and resources available for this task.<sup>28</sup> However, it is not an easy task for the intermediaries, as the selection and deployment of the technical method has to strike a fair balance between copyright holders' rights, the right to conduct a business, and the freedom of information of Internet users. In the absence of a harmonised standard,<sup>29</sup> national courts may implement the InfoSoc Directive differently, according to their national laws. For example, as will be discussed in Chapter 5, some national courts may issue technologically specific blocking orders, while other national courts may issue blocking injunctions with non-specific technical measures, or even not issue any order compelling the service providers to block infringing sites.

Wang explained that the *UPC Telekabel* reinstated the harmonised implementation of the principle of proportionality in cases where several fundamental rights are at issue.<sup>30</sup> The principle of proportionality, also described as the 'ultimate balancing test',<sup>31</sup> stipulates that the measures taken should not unnecessarily deprive Internet users of the possibility of lawfully accessing the information available and that those measures should have the effect of preventing unauthorised access.<sup>32</sup> Savola formulated a generic balancing rule, according to which the negative economic impact caused to rightholders would justify stronger enforcement mechanisms, and the greater the cost of blocking caused to the intermediary and the greater the

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<sup>27</sup> European Commission, 'Communication from the Commission on the European Parliament, the Council and the European Economic and Social Committee, Guidance on Certain Aspects of Directive 2004/48/EC of the European Parliament and of the Council on the Enforcement of Intellectual Property Rights' Brussels 29 November 2017, COM (2017) 708 final, 20.

<sup>28</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541, para 52.

<sup>29</sup> European Commission, COM (2017) 708 final (n 27), 1.

<sup>30</sup> F Wang, 'Site Blocking Orders in the EU: Justification and Feasibility' (14th Annual Intellectual Property Scholars Conference (IPSC), Boalt Hall School of Law, University of California, Berkeley, 2014) 11.

<sup>31</sup> *Golden Eye (International) Ltd & Ors v Telefónica UK Ltd & Anor* [2012] EWCA Civ 1740, para 18.

<sup>32</sup> Case C-314/12 (n 28), para 64.



impact on the freedom of information of Internet users, the more significant the losses must be to the rightholder.<sup>33</sup> Therefore, effectiveness (which will be analysed in 5.1 when evaluating blocking techniques), negative burden (economic loss), and the avoidance of collateral damage are criteria for assessing proportionality.

Although the principle of proportionality has been applied consistently in the United Kingdom (UK),<sup>34</sup> the determination of the appropriate technical measure by the intermediary may cause inconsistent implementation by intermediaries in national jurisdictions. Therefore, it may be beneficial to have a harmonised framework, as will be discussed in Chapter 5.

A ‘subspecies’ of dynamic blocking orders are the live blocking orders aiming at limiting infringements of rights for live (sports) events.<sup>35</sup> Live blocking orders differ from previous blocking orders against Internet Service Providers (ISPs) because their application is directed against the streaming service rather than a website. Live blocking orders are uncharted territory for many jurisdictions,<sup>36</sup> and it is not clear if a live blocking order, similar to the one granted by the courts in the UK,<sup>37</sup> could be granted for live video game streaming. The lack of clarity is mainly attributed to technical issues. Copyright holders of sporting events, such as the Football Association Premier League, have at their disposal advanced monitoring technology that enables them to identify infringing streams. Live video game streaming, on the other hand, differs from any other sporting event streaming in terms of schedule. Official sporting events, such as Premier League matches, are scheduled for a certain season, starting and ending at predetermined days and times, while live streaming of video game content starts and ends at the users’ discretion. The effectiveness of blocking injunctions against ISPs in the context of video game streaming remains an area open for exploration. The thesis discusses and evaluates

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<sup>33</sup> P Savola, ‘Proportionality of Website Blocking: Internet Connectivity Providers as Copyright Enforcers’ (2014) 5 JIPITEC 116 <<https://www.jipitec.eu/issues/jipitec-5-2-2014/4000/savola.pdf>> last accessed on 28 January 2023.

<sup>34</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch), para 69; *EMI Records Ltd v British Sky Broadcasting Ltd* [2013] EWHC 379 (Ch), para 8; *Twentieth Century Fox and others v British Telecom Plc* [2011] EWHC 1981 (Ch), para 186.

<sup>35</sup> EUIPO, ‘Study on Dynamic Blocking Injunctions in the European Union’ (March 2021), 39 <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2021\\_Dynamic\\_Blocking\\_Injunctions/2021\\_Study\\_on\\_Dynamic\\_Blocking\\_Injunctions\\_in\\_the\\_European\\_Union\\_FullR\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Dynamic_Blocking_Injunctions/2021_Study_on_Dynamic_Blocking_Injunctions_in_the_European_Union_FullR_en.pdf)> last accessed on 8 April 2023.

<sup>36</sup> *ibid.*, 40. To date, the UK is a pioneer in live blocking injunctions. Their availability has not yet been tested in Germany and Greece. However, in France a discussion regarding live blocking has emerged in connection with the Draft Law on audio-visual communication in the digital age.

<sup>37</sup> *Matchroom Boxing Ltd & Anor v British Telecommunications Plc & Ors* [2020] EWHC 2868 (Ch); *Union Des Associations Européennes De Football v British Telecommunications Plc & Ors* [2017] EWHC 3414 (Ch); *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch).

the effectiveness of the different technological methods of blocking, taking into consideration the conflict of fundamental rights and the possibility of circumvention.

As there is no extensive body of literature and jurisprudence in Europe on the copyright implications of LPs and live streams, users of YouTube, Twitch, and other platforms reside in a grey area. In contrast to Europe, scholars from the USA have produced a substantial body of literature focusing on copyright and LP videos.<sup>38</sup> However, the concept of derivative works and fair use discussed on the other side of the Atlantic are unique to US copyright law and have no European or UK counterpart. Therefore, the determination of the legal status of video games, the associated online copyright infringement via LPs and live streams, and the application of exceptions and limitation is a rich area for research.

Tie discussed the problems of applying copyright law to video game streaming and the limitations of automated tools deployed by YouTube and Twitch.tv and suggested compulsory licensing agreements between video game developers and LP creators.<sup>39</sup> Qiu also stressed the importance of a compulsory licence between players and copyright owners, providing that the former would pay remuneration to the latter to stream video games.<sup>40</sup> Despite the innovative approaches, a compulsory licence mechanism cannot be applied for video game streaming, as compulsory licences will only be granted in limited circumstances, including for jukeboxes,<sup>41</sup> mechanical licences for musical works,<sup>42</sup> and broadcasting or communicating to the public of phonograms.<sup>43</sup>

Although Tie and Qiu proposed a licence between Internet users and copyright owners,<sup>44</sup> one could argue that this is an unrealistic endeavour. There are millions of Internet users who upload user-generated content. Recent developments in copyright law in Europe (Directive

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<sup>38</sup> M Larkey, 'Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcasts' (2015) 13 Rutgers JL & Pub Pol'y 52; SC Mejia, 'Fair Play: Copyright Issues and Fair Use in YouTube "Let's Plays" and Videogame Livestreams' (2015) 7 Intellectual Property Brief 1; IO Taylor Jr, 'Video Games, Fair Use and the Internet: The Plight of the Let's Play' (2015) U Ill JL Tech & Pol'y 247; S Matsui, 'Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright' (2016) 24 Tex Intell Prop LJ 215.

<sup>39</sup> A Tie, 'Copyright Law Issues in the Context of Video Game Let's Plays and Livestreams' (2020) 3(2) IELR 121, 129.

<sup>40</sup> Y Qiu, 'A Cure for Twitch: Compulsory Licence Promoting Video Live Streaming' (2017) 21 Marquette Intell Prop L Rev 31, 44.

<sup>41</sup> The Berne Convention for the Protection of Literary and Artistic Works (adopted in 1886, entered into force 5 December 1887) 1161 UNTS 30 (Berne Convention), art 11bis (2).

<sup>42</sup> *ibid*, art 13.

<sup>43</sup> International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Entry into force 18 May 1964) (Rome Convention), art 12.

<sup>44</sup> Tie (n 39); Qiu (n 40).

2019/790 on Copyright in the Digital Single Market, the ‘DSM Directive’)<sup>45</sup> highlight the importance of fostering licence agreements between rightholders and online content-sharing service providers (OCSSPs) to mitigate the market distortion created by safe harbour provisions for user-generated content platforms, allowing these platforms to pay less than the market rate for copyright permissions.<sup>46</sup>

The type of video game that would be subject to a licence agreement is an additional issue for exploration. Previous studies concluded that the determining factor to select which video games will be subject to licence agreement is their ‘publication and upload to the Internet by the copyright owner independently and directly’.<sup>47</sup> However, this argument has some limitations, as games that are ‘published only on CD or other hard carriers’ would be excluded because they would not be uploaded on the Internet.<sup>48</sup> The categorisation of video games as ‘published and uploaded to the Internet’ and ‘published only by CD’ is now irrelevant and rather outdated. Nowadays and moving forward, the majority of – if not all – video games are only available in digital edition. An alternative factor for considering which video game genres will be subject to a licence agreement may be the impact of streaming such video games on the market. It will be discussed that streaming competitive video games would attract more viewers and potential consumers, while streaming pure story-driven video games would have the opposite effect, as the story and the unexpected development of the video game plot would be revealed to the audience.

In order to strike a fair balance between the conflicting rights and in light of the recent developments in copyright law at a European level on the communication to the public right, licence agreements between copyright owners and OCSSPs will be further explored. Emphasis will be given to the categories of video games that could be subject to the agreement, the right to cancellation, and the determination of fair remuneration for the copyright holder.

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<sup>45</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (DSM Directive) [2019] OJ L 130/92. Article 2(6) of the DSM Directive defines an ‘Online content sharing service provider’ as ‘a provider of an information society service of which the main or one of the main purposes is to store and give the public access to a large amount of copyright-protected works or other protected subject matter uploaded by its users, which it organises and promotes for profit-making purposes. Providers of services, such as not-for-profit online encyclopaedias, not-for-profit educational and scientific repositories, open-source software-developing-and-sharing platforms, electronic communication service providers as defined in Directive (EU) 2018/1972, online marketplaces, business-to-business cloud services and cloud services that allow users to upload content for their own use, are not “online content sharing service providers” within the meaning of this Directive’.

<sup>46</sup> *ibid*, art 17(1).

<sup>47</sup> Y Qui, ‘A Cure for Twitch: Compulsory Licence Promoting Video Live Streaming’ (2017) 21 *Marquette Intell Prop L Rev* 31, 46.

<sup>48</sup> *ibid*, 47.

One of the most significant current discussions in law is the potential of blockchain technology for copyright protection and licensing. Blockchain is a database, a type of distributed ledger, in which all the transactions are grouped into blocks. This technology has been deployed in several creative industries, including music and fashion. Gough noted that the decentralised nature of blockchain offers the music industry the chance to create a database, remove inefficiencies, and improve remuneration,<sup>49</sup> while Malaurie-Vignal highlighted the popularity of blockchain technology in the fashion industry, since it can facilitate evidence of authorship and prior rights, ensure the traceability of transactions, and assist the management of copyrights with smart contracts.<sup>50</sup> This indicates a need to understand the potential of blockchain technology in the video game industry for licensing purposes.

Video game streaming is an emerging and profitable industry for players who create LP videos and live streams of their gameplay experience, and for intermediary platforms that host this type of user-generated content. Copyright holders, however, have not been included in this equation. The thesis applies the exclusive right of rightholders to communicate their work to the public to video game streaming, evaluates the benefits and limitations of the current measures of copyright enforcement mechanisms, and explores an alternative solution, through licence agreement, to strike a fair balance between the conflicting rights.

## 1.1 Methodology

To address these issues, the thesis builds on the foundation of doctrinal research by analysing and understanding the development and interpretation of the law. This subchapter sets out in detail the methodology of this thesis in accordance with recent trends in legal research methods. As Cryer and others stated, ‘it is better to be open about the bases of research and to think about them, than to leave them unaddressed and uncritically accepted’.<sup>51</sup> While the answer to the question whether law is a social science is an ambiguous one,<sup>52</sup> Genn and

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<sup>49</sup> O Gough, ‘Blockchain: A New Opportunity for Record Labels’ (2018) 7 *International Journal of Music Business Research* 26.

<sup>50</sup> M Malaurie-Vignal, ‘Blockchain, Intellectual Property and Fashion’ (2020) 15(2) *JIPLP* 92. Sean Thomas also explained the potential of blockchain technology for the facilitation of payment, tracking, and recording transactions in the circular economy. S Thomas, ‘Law, Smart Technology, and Circular Economy: All Watched Over by Machines of Loving Grace?’ (2017) 10(2) *Law, Innovation and Technology* 230, 236.

<sup>51</sup> R Cryer, T Hervey, and B Sokhi-Bulley, *Research Methodologies in EU and International Law* (Hart Publishing 2011) 5.

<sup>52</sup> G Samuel, ‘Is Law Really a Social Science? A View from Comparative Law’ (2008) 67(2) *CLJ* 288.

others opine that law requires its own methodological approach, as it is a unique type of research.<sup>53</sup>

The main approach employed in this thesis is the doctrinal method. More specifically, doctrinal research is the process used to identify, analyse, and synthesise the content of the law.<sup>54</sup> In principle, doctrinal research assigns to the researcher the task of developing an understanding of the authoritative text in order to be able to use it properly in a case or legal argument. The character of legal doctrinal research is argumentative, and it aims at the formation of a legal argument based on legal reasoning.<sup>55</sup> This is often done through a historical perspective and potentially includes secondary sources such as journal articles and other written commentaries.<sup>56</sup> In this thesis, primary sources, including EU legislation, Conventions, national legislation, and relevant and available case law, will be assessed.

Dobinson and others expressed that a researcher aims at describing the law and examining how it applies.<sup>57</sup> During this process, the researcher may also provide an analysis of the law to demonstrate how it has developed. Doctrinal research is not merely an act of finding the relevant legislation and case law; it is a process of selecting and weighing materials, taking into consideration the source of the material, and understanding the social context of decisions and interpretation.<sup>58</sup> Dobinson and others go a step further by stating that ‘for these reasons it can be argued that doctrinal research is qualitative’.<sup>59</sup>

Although some scholars see the doctrinal research as analogous to the literature review deployed in social sciences,<sup>60</sup> Hutchinson and others are of the opinion that doctrinal research is more than a literature review.<sup>61</sup> Doctrinal research departs from the background research of sources and emphasises the analysis of the primary legal documents so as to establish the nature of the law. After having discussed the recent trends and arguments in legal research methods, this thesis falls in line with the trend that perceives the doctrinal research as the basis for legal

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<sup>53</sup> D Hazel Genn, M Partington, and S Wheeler, *The Nuffield Inquiry: Law in the Real World: Improving Our Understanding of How Law Works* (The Nuffield Foundation 2006) para 94: ‘Legal scholarship is characterised as a law centred enterprise.’

<sup>54</sup> D Watkins and M Burton, *Research Methods in Law* (2nd edn, Routledge 2018) 13.

<sup>55</sup> A Argyrou, ‘Making the Case for Case Studies in Empirical Legal Research’ (2017) 13(3) *Utrecht L Rev* 95.

<sup>56</sup> I Dobinson and F Johns, ‘Legal Research as Qualitative Research’ in M McConville and W Hong Chui (eds), *Research Methods for Law* (Edinburgh University Press 2017) 21.

<sup>57</sup> *ibid.*

<sup>58</sup> *ibid.*, 24.

<sup>59</sup> *ibid.*, 21.

<sup>60</sup> A Fink, ‘Conducting Research Literature Review: From the Internet to Paper’ in M McConville and W Hong Chui (eds), *Research Methods for Law* (Edinburgh University Press 2007) 22.

<sup>61</sup> T Hutchinson and N Duncan, ‘Defining and Describing What We Do: Doctrinal Legal Research’ (2012) 17(1) *Deakin LR* 83.

research. Therefore, the identification, analysis, and synthesis of the content of the law (both legislation and case law) could fall within both doctrinal and qualitative research.

Although the main methodological approach is the doctrinal method, this research also employs the comparative legal research method, analysing different national jurisdictions in Europe.<sup>62</sup> Before examining which jurisdictions have been selected and the rationale for this selection, emphasis should be given to the nature of the comparative research method per se. Zweigert and Kötz adopt the term ‘macrocomparison’ for the comparison of different techniques of legislation, the contribution made by those engaged in the law, and diverse styles of judicial opinion. Kamba defines comparative law as a ‘systematic application of the comparative technique to the field of law’.<sup>63</sup> In legal study or research, the systematic comparison may entail comparison between two or more legal systems or even parts of two or more legal systems.<sup>64</sup> Legrand criticised the approach taken by a number of comparatists, who limited their legal research to a mere juxtaposition of legal rules.<sup>65</sup> Fundamentally, comparative legal research does not operate in a vacuum, and as Cotterrell explained, laws are inextricably linked with culture.<sup>66</sup>

To gain a better understanding of what kind of comparative analysis is appropriate, Samuel’s ‘methodological road map’ of comparative law would be of great assistance.<sup>67</sup> First and foremost, a choice should be made on the presumption to be adopted: presumption of similarity or presumption of difference? According to the presumption of similarity, in comparative analysis similarities rather than differences have to be assumed and sought out.<sup>68</sup> Consequently, in the presumption of differences, priority will be given to the divergences instead. This methodological choice has given rise to a debate within comparative law. While Legrand opined that comparison involves a presumption of difference, where ‘the comparatist must learn to detect, to understand, to value, indeed, to cherish difference’, and wondered ‘what is the point of comparison if all that comparatists see are similarities?’,<sup>69</sup> Zweigert and Kötz

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<sup>62</sup> K Zweigert and H Kötz, *An Introduction to Comparative Law* (Tony Weir tr, 3rd edn, Oxford University Press 1998) 4.

<sup>63</sup> WJ Kamba, ‘Comparative Law: A Theoretical Framework’ (1974) 23(3) ICLQ 485, 486.

<sup>64</sup> *ibid.*

<sup>65</sup> P Legrand, ‘How to Compare Now’ (1996) 16 *Legal Stud* 232, 234.

<sup>66</sup> R Cotterrell, ‘Comparative Law and Legal Culture’ in M Reimann and R Zimmermann (eds), *The Oxford Handbook of Comparative Law* (Oxford University Press 2006) 710.

<sup>67</sup> G Samuel, *An Introduction to Comparative Law and Method* (Hart Publishing 2014) 173.

<sup>68</sup> R Michaels, ‘The Functional Method of Comparative Law’ in M Reimann and R Zimmermann (eds), *The Oxford Handbook of Comparative Law* (Oxford University Press 2006) 336.

<sup>69</sup> Legrand (n 65) 240.

explained the importance of the presumption of similarity.<sup>70</sup> In an effort to reconcile the opposing views, Dannemann proposed that both similarities and differences should be explored.<sup>71</sup> From a wider theoretical perspective, neither approach is preferable, but the most relevant issue for consideration should be the aim.<sup>72</sup> For the purposes of this research, as the pursuit is to identify how video games are protected under copyright law in different jurisdictions in the EU, establish whether streaming video games is an act of communication to the public or not, explore the reasons why there is no litigation so far, and explore how users and platforms (as intermediaries) could respond to potential litigation, both similarities and differences will be observed and analysed.

The second methodological dichotomy is between analogical and genealogical comparison. In the analogical approach, the comparatist would examine the compared items per se, focusing on similarities or differences in mentality or effectiveness.<sup>73</sup> On the contrary, the genealogical comparison seeks the underlying historical influence between items, often tracing them back to a common legal ancestor.<sup>74</sup> Although this research should employ an analogical approach, one should not disregard the genealogical connection that exists between legal systems in Europe. For example, although different legal systems have been developed, including the Romanistic, Germanic, Nordic, and Common law family, there are some ‘hybrid’ legal systems as well.<sup>75</sup> Greece is an example of a ‘hybrid’ system of law, as its Civil Code was influenced by the German Civil Code (‘Bürgerliches Gesetzbuch’, abbreviated ‘BGB’) in the 19th century, when Greece won the War of Liberation from Turkish domination. During this era, Greece and Germany established close contact, as the Bavarian Prince Otto ruled as King of Greece, surrounded by his legal advisers. In addition to the German Civil Code, Greek legislators were also influenced by the French Civil Code even before their Revolution;<sup>76</sup> however, the Bavarian Regency had a great impact in the evolution of Greek legislation at large.

Finally, another difficulty that a comparatist may face is that of choosing between internal and external perspective. One would consider that the proper understanding of any legal system

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<sup>70</sup> K Zweigert and H Kötz, *An Introduction to Comparative Law* (Tony Weir tr, 3rd edn, Oxford University Press 1998) 40.

<sup>71</sup> G Dannemann, ‘Comparative Law: Study of Similarities or Differences?’ in M Reimann and R Zimmermann (eds), *The Oxford Handbook of Comparative Law* (Oxford University Press 2006) 391.

<sup>72</sup> G Samuel, *An Introduction to Comparative Law and Method* (Hart Publishing 2014) 55.

<sup>73</sup> *ibid*, 58.

<sup>74</sup> *ibid*, 57.

<sup>75</sup> Zweigert and Kötz (n 70) 72,73.

<sup>76</sup> P Zepos, ‘The Historical and Comparative Background of the Greek Civil Code’ (1961) 3 *Inter-Am L Rev* 285, 287.

would require an internal perspective, or in other words that a comparatist, in order to gain a better understanding of another jurisdiction's law, needs to 'be immersed in the mentality of the other'.<sup>77</sup> However, this position raises objections as it is impossible to be adopted for practical reasons. On the other hand, an external perspective would secure a greater distance and thus more objectivity.<sup>78</sup> In the context of EU law, the borderline between internal and external perspective is gradually blurring. The instrumentalist approach of Council Directives and the role of the Court of Justice of the European Union (CJEU) contribute to a new European legal culture, where the appropriate perspective could be described as internal to a European law, while remaining external to the national legal systems.<sup>79</sup>

The next step of the methodological process should be the selection of the national jurisdictions that will be the 'objects' of the comparative analysis. Practical considerations mean that not all European national jurisdictions can be considered. Therefore, the thesis focuses on four national jurisdictions: Germany, France, Greece, and the UK. The selection of these jurisdictions has been determined by various factors.

Germany, France, and Greece represent civil law systems, while the UK provides a common law alternative. Legislation and judicial decisions are the bases upon which the two legal systems have been developed. Even the terms 'legislation' and 'judicial decisions' denote a civilian legal system, as the common law jurist would refer to 'enacted law and case law' respectively. Germany and France are the most significant Romanist legal systems.<sup>80</sup> Although both countries are part of the civilian law, their constitutional and judicial organisation is different.<sup>81</sup>

English legal history since 1066 explains the reasons why common law never experienced a movement for codification; England never had a political disruption similar to the one that occurred in France in 1789, nor was it affected by the Enlightenment idea that 'the disorderly and patchy historical growth of law could be pruned and planed into a generally

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<sup>77</sup> G Samuel, *An Introduction to Comparative Law and Method* (Hart Publishing 2014) 61.

<sup>78</sup> *ibid.*, 62.

<sup>79</sup> MW Hesselink, 'A European Legal Method? On European Private Law and Scientific Method' (2008) 15(1) *ELJ* 20.

<sup>80</sup> J Dainow, 'The Constitutional and Judicial Organisation of France and Germany and Some Comparison of the Civil Law and Common Law Systems' (1961) 37 *Int LJ* 1.

<sup>81</sup> *ibid.*



comprehensible form as a result of deliberate and planned legislation based on a rational system'.<sup>82</sup>

Greece, as explained previously, is an example of a 'hybrid' system of law, mainly influenced by the Germanic legal system. However, Greece has developed a novel non-judicial mechanism to address online infringements of intellectual property rights, through an administrative authority (the Committee for the Notification of Copyright and Related Rights Infringement on the Internet, 'EDPPI'). The administrative procedure does not prevent the filing of civil or criminal proceedings; however, if the applicant has already brought the claim before national courts, the EDPPI will close the case without further action.<sup>83</sup>

Lenaerts and Gutman highlighted the importance of the comparative legal method within the EU legal order, emphasising the EU courts' interpretation of rules and concepts of EU law and their review of the compatibility of national law with EU law.<sup>84</sup> In the context of interpretation, the comparative legal method may either reveal 'a solution common to the laws of the Member States which is then taken up for the interpretation of the EU laws concerned' or may 'reveal divergence among the laws of Member States, which would allow the Court to establish an autonomous EU interpretation'.<sup>85</sup>

Although in a globalised world a comparison between the EU with equivalent supranational organisations (e.g. the US) would be a 'fruitful field for comparative research',<sup>86</sup> this thesis does not undertake a comparison between supranational organisations. The focus of this thesis is in Europe; however, the comparison is not between the European and national legal systems. This approach would raise methodological challenges, as the EU and its Member States are interdependent.<sup>87</sup> Hence, the EU is not itself a comparator jurisdiction.

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<sup>82</sup> K Zweigert and H Kötz, *An Introduction to Comparative Law* (Tony Weir tr, 3rd edn, Oxford University Press 1998) 181.

<sup>83</sup> Greek Copyright Law 2121/1993, art 66E; EUIPO, 'Study on Dynamic Blocking Injunctions in the European Union' (March 2021), 20 <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2021\\_Dynamic\\_Blocking\\_Injunctions/2021\\_Study\\_on\\_Dynamic\\_Blocking\\_Injunctions\\_in\\_the\\_European\\_Union\\_FullR\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Dynamic_Blocking_Injunctions/2021_Study_on_Dynamic_Blocking_Injunctions_in_the_European_Union_FullR_en.pdf)> last accessed on 8 April 2023.

<sup>84</sup> K Lenaerts and K Gutman, 'The Comparative Law Method and the European Court of Justice: Echoes Across the Atlantic' (2016) 64 *The American Journal of Comparative Law* 841, 844.

<sup>85</sup> *ibid.*, 851.

<sup>86</sup> A Bakardjieva Engelbrekt, 'Comparative Law and European Law: the End of an Era, a New Beginning, or Time to Face the Methodological Challenges?' (2015) 61 *Scandinavian Stud L* 88, 99.

<sup>87</sup> R Dehousse, 'Comparing National and EC Law: the Problem of the Level of Analysis' (1994) 42(4) *The American Journal of Comparative Law* 761, 766, 771.

In addition to legal and historical considerations, Germany, France, and the UK have been chosen as representatives as they are the top three leaders in the video game market in Europe.<sup>88</sup> Although Greece is not a leader in video game development, there is a strong presence of small independent developers as well as representation in worldwide competitions.<sup>89</sup> Moreover, among the selected jurisdictions, Germany, France, and the UK represented approximately 55% of the total Gross Domestic Product (GDP) generated by copyright industries at an EU level in 2014–2016 and 48% of total employment in the same sector in the EU.<sup>90</sup> In addition to these considerations, Germany, France, and the UK also represented over 48% of the total EU population in 2018.<sup>91</sup>

Apart from the three EU Member States, this thesis also considers the special case of the UK for various reasons. The UK is characterised as a ‘special case’ due to the departure from the EU on 31 January 2020. There was an agreed transition period until 31 December 2020,<sup>92</sup> where the UK, as a third country, was bound by all EU law, across all policy areas, with the exception of provisions of the Treaties and Acts that were not binding upon and in the UK before the Withdrawal Agreement entered into force; all institutions, bodies, offices, and agencies of the EU continued to hold the powers conferred upon them by EU law in relation to the UK and to natural and legal persons residing or established in the EU; the UK continued to take part in EU programmes and contribute to the EU budget until 2020 and the CJEU continued to have jurisdiction over the UK during the transition period, to name but a few. Since a substantial part of UK copyright law is derived from EU copyright law, there are references in UK law to the EU, the EEA, and Member States. To address these issues the UK has introduced the Intellectual Property (Copyright and Related Rights) (Amendment) (EU

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<sup>88</sup> J Johnson, ‘Western European Countries Ranked by Video Game Revenues in 2019’ (*Statista*, 11 October 2019) <<https://www.statista.com/statistics/788396/leading-gaming-markets-by-revenue-in-europe/>> last accessed on 4 February 2022.

<sup>89</sup> FEFFS, ‘Festival Européen Du Film Fantastique de Strasbourg’ <<http://strasbourgfestival.com/igc-apocalypse-cow-en/>> last accessed on 4 February 2022.

<sup>90</sup> European Patent Office and the European Union Intellectual Property Office, ‘IPR – Intensive Industries and Economic Performance in the European Union’ (September 2019) <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/IPContributionStudy/IPR-intensive\\_industries\\_and\\_economicin\\_EU/WEB\\_IPR\\_intensive\\_Report\\_2019.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/IPR-intensive_industries_and_economicin_EU/WEB_IPR_intensive_Report_2019.pdf)> last accessed on 8 April 2023.

<sup>91</sup> The World Bank, ‘Data for European Union, Germany, France, Greece, United Kingdom’ <<https://data.worldbank.org/?locations=EU-DE-FR-GR-GB>> last accessed on 4 February 2022.

<sup>92</sup> European Commission, The European Union, and the United Kingdom – Forging a New Partnership <[https://ec.europa.eu/info/european-union-and-united-kingdom-forging-new-partnership/brexit-brief/transition-period\\_en](https://ec.europa.eu/info/european-union-and-united-kingdom-forging-new-partnership/brexit-brief/transition-period_en)> last accessed on 4 February 2022.

Exit) Regulations 2019,<sup>93</sup> which removed or corrected references to the EU, EEA, or Member States in the UK copyright legislation.

In the UK, there are 2,261 active game companies, operating at all sizes and scales (from mobile, PC, and console to Virtual Reality (VR) and e-sports).<sup>94</sup> Among the UK's successful titles stands out *Grand Theft Auto V* by Rockstar Games, a British video game developer, selling over 95 million units worldwide and reaching the top of the UK chart in March 2018 and 2020.<sup>95</sup> As far as the consumer market is concerned, the UK is the sixth largest video game market worldwide in 2018, with approximately 37.3 million people playing games.<sup>96</sup>

Although Britain's exit from the EU (Brexit) is now a fact, the thesis considers UK legislation and case law on copyright as well as considering the impact of Brexit on the interpretation and application of EU notions and standards, including the key definitions of 'originality'.<sup>97</sup> As there is not a unitary regulatory system for EU copyright law, the key elements of substantive copyright law have been harmonised in the EU through the EU Directives that have been implemented in all Member States, including the UK.<sup>98</sup> Meanwhile, the harmonisation in the area of copyright law has been achieved to a certain extent as a 'result of judicial interpretation by the Court of Justice, rather than comprehensive legislative intervention'.<sup>99</sup>

Without doubt, other legal traditions exist within the EU, such as the Scandinavian countries. Although the focus of this thesis is on four national jurisdictions, other Member

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<sup>93</sup> Guidance: Changes to Copyright Law from 1 January 2021 <<https://www.gov.uk/guidance/changes-to-copyright-law-after-the-transition-period>> last accessed on 4 February 2022.

<sup>94</sup> Based on data exported in June 2018 from ukie. See ukie, 'The Game Industry in Numbers' <<https://ukie.org.uk/research>> last accessed on 4 February 2022.

<sup>95</sup> L Hebblethwaite, 'Call of Duty: Modern Warfare Camps Out the Top Spot for another Week at No 1' (*ukie*, 03 February 2020) <<https://ukie.org.uk/news/2020/02/call-duty-modern-warfare-camps-out-top-spot-another-week-no1>> last accessed on 4 February 2022.

<sup>96</sup> Newzoo, 'UK Games Market 2018' (*Newzoo*, 25 July 2018) <https://newzoo.com/insights/infographics/uk-games-market-2018/> last accessed on 4 February 2022.

<sup>97</sup> As far as the originality criterion is concerned, it is of the utmost importance to mention that in 2009 in Case C-5/08 *Infopaq International A/S v Danske Dagblades Forening* [2009] ECR I-6569; [2012] Bus LR 102; [2009] 7 WLUK 441 (ECJ (4th Chamber)) the CJEU held that 'intellectual creation' is the standard of originality that applies to all copyright works within the EU. This signalled the end of the traditional UK originality test of 'skill and labour', which was replaced by the test of intellectual creation 'only through the choice, sequence and combination of those words that the author may express his creativity in an original manner and achieve a result which is an intellectual creation'. There are some concerns whether the UK courts would revert to their traditional understanding of the originality test. See L McDonagh, 'UK Patent Law and Copyright Law after Brexit: Potential Consequences' (Centre for International Governance Innovation and British Institute of International and Comparative Law, 21 November 2017) <<https://www.cigionline.org/publications/uk-patent-law-and-copyright-law-after-brexit-potential-consequences/>> last accessed on 8 April 2023.

<sup>98</sup> *ibid.*

<sup>99</sup> GB Dinwoodie and RC Dreyfuss, 'Brexit and IP: The Great Unravelling?' (2017) NYU School of Law Public Law and Legal Theory Research Paper Series Working Paper 17-26.

States will have interesting perspectives to contribute, hence they will be considered in the discussion of the effectiveness of blocking injunctions.

## 1.2 Research Question and Plan

In this context, the main research question of this thesis is the following:

How can a fair balance be struck between rightholders' rights, the right to conduct a business, and freedom of expression in video game streaming, considering the advancements in technology and the DSM Directive?

Having presented the literature review on video game streaming and the associated copyright implications, Chapter 2 will introduce and explain the key concepts, themes, and terms of the thesis. More specifically, as the research focuses on video game streaming and the communication to the public right, it is important to discuss: What is a video game, how is it protected by copyright law, and what is video game streaming? The thesis will explain the technicalities of streaming and its applicability to the communication to the public right.

Chapter 3 will undertake a detailed analysis of the communication to the public right pursuant to Article 3 of Directive 2001/29/EC (the Information Society Directive, or 'InfoSoc Directive'),<sup>100</sup> and seek to answer the following questions: Does the communication to the public right apply to video game streaming? Does the evolution of the communication to the public right present convergence or divergence in the legislation and jurisprudence of the selected jurisdictions? Do LP videos and live streams fall within the exceptions or limitations to the communication to the public right?

In addition to interpreting the communication to the public right in video game streaming, the thesis proposes methods to strike a fair balance between rightholders' rights, the right to conduct a business, and the freedom of expression. As such, Chapter 4 examines the role intermediaries play in online copyright infringement cases, by addressing the question: Are intermediaries liable for hosting infringing LP videos and/or live streams pursuant to Articles 12 to 15 of the Directive 2000/31/EC (Directive on Electronic Commerce or e-Commerce Directive) and Article 17 of the DSM Directive? In addition, the thesis analyses paragraph 4 of Article 17 of the DSM Directive in terms of the obligations placed on OCSSPs and seeks to answer the questions: What are the obligations imposed on OCSSPs by the DSM Directive,

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<sup>100</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10.

and how might they be implemented by the providers? What are the limitations of existing content moderation methods for detecting unauthorised video game streaming, and what are the ways of overcoming the challenges of deploying algorithmic filters in the detection of infringing content? Moreover, Chapter 5 is concerned with the effectiveness of blocking injunctions issued against ISPs. To address this issue, it undertakes a comparative analysis, by setting out the blocking techniques that have been ordered by the courts in the four selected jurisdictions as well as other selected Member States and evaluates their suitability for blocking infringing content in a LP video or live stream.

The thesis explores an alternative and equally important measure to reconcile the conflicting rights. In light of Directive 790/2019, Chapter 6 undertakes an analysis of the authorisation requirement and poses the following question: Could a fair balance be achieved via a licence agreement between rightholders and service providers? The advancements of blockchain technology and its implementation in other creative industries, cannot be disregarded, hence the thesis seeks to answer the question: Can a licence agreement be better achieved with the deployment of blockchain technology? The thesis considers not only the potential of blockchain technology for facilitating the licensing of video game streaming and the benefits of this technology (including registration, remuneration, and traceability of the work over the Internet) but also its limitations. Therefore, it remains a rich area for further research. It is important to clarify that although this thesis considers current developments in technology, it does not conduct empirical research or law and technology interdisciplinary research.

The thesis focuses on the video game streaming industry, whose characteristics are unique in comparison to other industries.<sup>101</sup> Many video game producers encourage users to stream their games and are not concerned with licences; and streamers create content while streaming their gameplay. The contribution of this thesis is three-fold. Firstly, it adds to the existing literature on the applicability of the communication to the public right on Internet streaming, with particular focus on the video game industry, in a way that has never been addressed before in the EU and the UK. Secondly, it brings to the surface inconsistencies in national case law, and gaps in legislation. The EU instruments of 2000 and 2001 could not have predicted the advancements in technology that have been made; therefore it is of the utmost importance for the regulator to consider updating the existing legislation. Thirdly, the proposals of the thesis

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<sup>101</sup> M Larkey, 'Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcases' (2015) 13 Rutgers JL & Pub Pol'y 52.

could be adopted by video game companies in their strategic plan and authorisation process in light of the new DSM Directive.

## Chapter 2: Understanding Video Game Streaming

Copyright was adapting to the challenges of printing technology and so begins the close and inevitable relationship between copyright and technology.<sup>102</sup>

Intellectual property is the most important area of law for video game developers and publishers, especially for development contracts, distribution, and licensing.<sup>103</sup> As streaming technology is used to broadcast the gameplay of a video game, it is of the utmost importance to discuss the following: What is a video game, how is it protected by copyright law, and what is video game streaming?

This chapter undertakes an analysis on video game streaming. First, the chapter defines what a video game is in both technical and legal terms, it provides the historical development of video games since 1970, and then it presents the video game categorisation and market value. Moving even further, emphasis is given to the popular activity and technicalities of streaming technology, which enables players to share video gameplay with a wider audience. The role of intermediary service providers is also presented, as well as their liability for transmitting and/or hosting infringing content.

### 2.1 Understanding Video Games

Although video games have been around for more than 30 years now, over the last decade they have become one of the most popular media, a form of entertainment not only for the youth but for consumers of all ages.<sup>104</sup> The development of video games is highly associated with developments in digital technology; the introduction of new consoles, the growing use of personal computers for Internet access, and the extension of the market for handheld games that are available on smart phones and tablets have all contributed to the development of the video game industry.<sup>105</sup>

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<sup>102</sup> R Jones, 'Intellectual Property Reform for the Internet Generation: An Accident Waiting to Happen' (2010) 1(2) *European Journal of Law and Technology* 1, 2.

<sup>103</sup> D Greenspan and G Dimita, 'Mastering the Game: Business and Legal Issues for Video Game Developers' (WIPO 2022) 58 <[https://www.wipo.int/copyright/en/creative\\_industries/video\\_games.html](https://www.wipo.int/copyright/en/creative_industries/video_games.html)> last accessed on 8 April 2023.

<sup>104</sup> D Williams and others, 'The Virtual Census: Representation of Gender, Race and Age in Video Games' (2009) 11(5) *New Media and Society* 815, 816.

<sup>105</sup> FW Grosheide, H Roerdink, and K Thomas, 'Intellectual Property Protection for Video Games: A Review from the European Union' (2014) 9(1) *JICLT* 1.

### 2.1.1 What Is a Video Game?

A video game is usually defined as an “electronic or computerised game played by manipulating images on a video display or television screen”.<sup>106</sup> Coming in different shapes and forms, video games may contain diverse creative elements such as audio (voice and sound effects), video (animation, moving images), and the plot (characters and game story).<sup>107</sup> It is not necessary for video games to contain all these features. For instance, *Colossal Cave Adventure* (the first text adventure game, developed in the 1970s by William Crowther) does not have any visual components as the story is narrated.<sup>108</sup> The player can only see text on the screen, which narrates the story and describes the environment around the character.<sup>109</sup> In the game, the player controls a character through simple text commands (for example ‘go south’) in order to interact.

Tavinor stresses the significance of interactivity as another element to define video games.<sup>110</sup> According to Tavinor, a video game is defined by the ability of the game to read player inputs, such as the press of a button, and translate it to certain outputs. It is the code or the software of the game that allows for this interactivity. In the early years, video games did not contain multiple creative elements. Considering the limitations of computer sciences at the time, popular games, such as *Pong*, had a basic functionality and were – in reality – pixels. Video games were mainly created by computer engineers, with minimum or no contribution from scriptwriters, photographers, or graphic designers. Therefore, it is understandable why some jurisdictions, mainly outside the European copyright framework, recognise video games as computer programs.<sup>111</sup> However, a more pragmatic approach recognises the complexity of video games. In fact, nowadays, studios do not always write computer code but use middleware

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<sup>106</sup> European Commission, *Study on the Economy of Culture in Europe* (October 2006) <[http://ec.europa.eu/culture/documents/annexes-finales\\_en.pdf](http://ec.europa.eu/culture/documents/annexes-finales_en.pdf)> last accessed on 8 April 2023.

<sup>107</sup> E Jungar, ‘Streaming Video Games: Copyright Infringement or Protected Speech?’ (2016) 3(2) *Press Start* <<https://press-start.gla.ac.uk/index.php/press-start/article/view/63>> last accessed on 4 February 2022.

<sup>108</sup> R Chirgwin, ‘Seminal Game ‘Colossal Cave Adventure’ Released onto GitLab’ (*The Register*, 30 May 2017) <[https://www.theregister.co.uk/2017/05/30/eric\\_raymond\\_sets\\_colossal\\_cave\\_adventure\\_free/](https://www.theregister.co.uk/2017/05/30/eric_raymond_sets_colossal_cave_adventure_free/)> last accessed on 4 February 2022.

<sup>109</sup> For example, ‘You are standing at the end of a road before a small brick building. Around you is a forest. A small stream flows out of the building and down a gully’.

<sup>110</sup> G Tavinor, ‘Definition of Videogames, Contemporary Aesthetics’ (2008) 6(1) *Contemporary Aesthetics* <<https://contempaesthetics.org/newvolume/pages/article.php?articleID=492>> last accessed on 4 February 2022.

<sup>111</sup> A Ramos and others, ‘The Legal Status of Video Games’ (2013) WIPO Report 11, 93 <[https://www.wipo.int/edocs/pubdocs/en/wipo\\_report\\_cr\\_vg.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_report_cr_vg.pdf)> last accessed on 8 April 2023; According to this report, in countries such as Argentina, Canada, China, Israel, Italy, the Russian Federation, Singapore, Spain, and Uruguay, jurisprudence and scholars consider video games to be mainly computer programs owing to their dependency on software. In contrast, Belgium, Brazil, Denmark, Egypt, France, Germany, India, Japan, South Africa, Sweden, and the USA recognise the complexity of video games and the need for separate legal protection of the different elements.



(previously developed software) as the basis for a game.<sup>112</sup> This is a time-saving and cost-effective alternative. Although different video games share the same code (as do *Battlefield* and *Need for Speed: the Run*, for example), the original audio-visual components of each game distinguish it from others.

Grosheide, Roerdink, and Thomas have argued that video games are part of a broader category of digital media, meaning any type of sound and/or visual media, in a digital format, for the convenience and entertainment of consumers.<sup>113</sup> Therefore, due to its broad nature, the definition of what constitutes a video game covers games that can be played both offline and online (such as *Tetris*) and games that have been developed to be played only online (such as *League of Legends*).

There are five main categories (or genres) of video games, namely First-Person Shooter (FPS) games, Real Time Strategy (RTS) games, Role-Playing Games (RPGs), Massively Multiplayer Online Role-Playing Games (MMORPGs), and Multiplayer Online Battle Arena (MOBA) games.<sup>114</sup> FPS games, such as *Call of Duty* (developed by Activision), are some of the most popular games on the market. This type of video game is ideal for players seeking fast-paced gameplay that will boost their adrenaline.<sup>115</sup> RTS games, such as *StarCraft* (developed by Blizzard Entertainment), typically simulating battles between military units, are mainly played amongst players who like strategy in real time.<sup>116</sup> RPGs, as the name suggests, allow players to experience the game as if they were the main character. Their popularity is based on the fact that the players can use their imagination and creativity and experience unique gameplay through their character.<sup>117</sup> Famous RPG titles include the video game series *The Witcher* (developed by CD Projekt Red). MMORPGs, like RPGs, ignite the imagination and transfer the player into a virtual world, where they can interact with other players simultaneously. The video game *World of Warcraft* (developed by Blizzard Entertainment) is

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<sup>112</sup> A Ramos and others, 'Video Games: Computer Programs or Creative Works?' (*WIPO Magazine*, August 2014) <[https://www.wipo.int/wipo\\_magazine/en/2014/04/article\\_0006.html](https://www.wipo.int/wipo_magazine/en/2014/04/article_0006.html)> last accessed on 28 January 2023.

<sup>113</sup> FW Grosheide, H Roerdink, and K Thomas, 'Intellectual Property Protection for Video Games: A Review from the European Union' (2014) 9(1) *JICLT* 1.

<sup>114</sup> Game Designing, 'The Evolution of Video Game Genres' (*Game Designing*, 26 January 2020) <<https://gamedesigning.org/gaming/video-game-genres/>> last accessed on 4 February 2022.

<sup>115</sup> Y Xu and others, 'Sociable killers: Understanding Social Relationships in an Online First-Person Shooter Game' (In Proceedings of the ACM 2011 conference on Computer supported cooperative work – CSCW, Hangzhou, China, March 19–23 2011) <<https://doi.org/10.1145/1958824.1958854>> last accessed on 4 February 2022.

<sup>116</sup> M Buro and others, 'Guest Editorial Real-Time Strategy Games' (2016) 8(4) *IEEE Transactions on Computational Intelligence and AI in Games* 317.

<sup>117</sup> D Waskul and M Lust, 'Role-Playing and Playing Roles: The Person, Player, and Persona in Fantasy Role Playing' (2004) 27(3) *Society for the Study of Symbolic Interaction* 333.

one characteristic example of this category. Last but not least, MOBA games (a combination of RTS and RPGs) are mainly focused on competitive play between teams and players.

### 2.1.2 Historical Development of Video Games: From Arcades to Online Gaming

What does someone buy when they purchase a video game and how are these consumers persuaded to purchase a game worth approximately £60? Boyd and others answered this question and attributed the consumers' willingness to the entertainment experience accompanying every video game.<sup>118</sup> Consumers can enjoy this experience through a limited licence to the intellectual property surrounding the game title, art, music, story, code, and graphics.

In order to understand the wider importance of contemporary video games (from their aesthetics to their technology and their cultural influence), it would be beneficial to look into their history for explanations.<sup>119</sup> While small-scale beginnings were noticed in the preceding decades, the 1970s signalled the birth of video games as an industry and paved the way for gaming consoles much like the ones we use today.<sup>120</sup> Video games were exhibited in arcades, where the addition of a coin slot contributed to the genesis of a profitable commercial industry.<sup>121</sup> While the 1980s were characterised by the proliferation of personal computers (PCs),<sup>122</sup> the last decade of the 20th century established PCs as gaming platforms.

The turn of the millennium was marked by considerable innovations, including the introduction of user-generated content, increased Internet bandwidth and connectivity, motion sensor technology, and mobile gaming. User-generated content allows players to generate new content for a game and has been characterised as an 'alternative to the classic single player-multiplayer dichotomy'.<sup>123</sup> One of the first user-generated content games, *Spore* (2008), enabled players to grow a brand-new species from a single-celled organism into a more complex creature.<sup>124</sup>

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<sup>118</sup> SG Boyd, B Pyne, and SF Kane, *Video Game Law: Everything you Need to Know about Legal and Business Issues in the Game Industry* (CRC Press LLC 2018) 19.

<sup>119</sup> S Egenfeldt-Nielsen, J Heide Smith, and S Pajares Tosca, *Understanding Video Games: The Essential Introduction* (4th edn, Routledge Taylor & Francis Group 2020) 66.

<sup>120</sup> *ibid.*, 85.

<sup>121</sup> MJP Wolf, *The Video Game Explosion: A History from Pong to PlayStation and Beyond* (Greenwood Press 2007) 18.

<sup>122</sup> *ibid.*

<sup>123</sup> *ibid.* 126.

<sup>124</sup> Electronic Arts information about the game *Spore* <<https://www.ea.com/games/spore/spore>> last accessed on 4 February 2022.

The 2010s were signalled by the distribution ‘revolution’, the rise of ‘social games’, and the ‘natural user interface’. From 2010, more and more developers created games that were available online, bypassing the publishers’ traditional cardboard boxes. Visiting a physical store and purchasing physical items was considered to be anachronistic. The rise of popularity in online competitive video gaming, also known as e-sports,<sup>125</sup> was accompanied by requests to see gaming shift to television. Although this venture has not yet been put into practice, broadcasting someone’s gameplay through streaming platforms has led to a significant growth in the audience and potential consumers. Twitch, a broadcast platform mainly dedicated to gaming videos, has reshaped the landscape. Among the various gaming videos it hosts, e-sports tournaments attract millions of viewers. In 2017, three years after Twitch’s purchase by Amazon, the service attracted approximately 10 million daily active users.<sup>126</sup>

During mid-decade, Virtual Reality (VR) offered an immersive experience to players. The Head-Mounted Display (HMD) allows players to reside in an interactive virtual world and the specific VR goggles shield the individual from the real physical environment throughout the VR experience.<sup>127</sup> Augmented Reality (AR), a technology that combines the physical view of the world with virtual elements,<sup>128</sup> would generate a better user experience.<sup>129</sup> Miller and Constine argue that where ‘VR puts users inside virtual worlds, immersing them, AR puts virtual things into users’ real worlds, augmenting them’.<sup>130</sup> It had been predicted that AR technology would be utilised by 2.5 billion users by 2023.<sup>131</sup> VR allows players to experience virtual environments, to alter physics in a way that is not possible in the real world, and to

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<sup>125</sup> Organised multiplayer video game competitions, in particular between professional players, are also known as ‘electronic sports’ or ‘e-Sports’. See A Silady, ‘The Economics of Competitive Video Gaming’ (*Smartasset*, 10 February 2020) <<https://smartasset.com/insights/the-economics-of-competitive-video-gaming>> last accessed on 4 February 2022; For example, gaming company Blizzard Entertainment, although initially indifferent to e-sports, is now officially involved with tournaments of the game *Overwatch*, offering prizes exceeding \$20,000. For 2022, see Overwatch League, ‘What is the Overwatch League’ <<https://overwatchleague.com/en-us/about#prize-pool>> last accessed on 21 August 2022.

<sup>126</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 3.

<sup>127</sup> J Roettl and R Terlutter, ‘The Same Video Game in 2D, 3D or Virtual Reality – How does Technology Impact Game Evaluation and Brand Placements?’ (2018) 13(7) PLoS ONE <<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200724>> last accessed on 4 February 2022.

<sup>128</sup> The most famous AR game is *Pokémon Go*, where the game combines the physical view of the world (such as location and streets) with virtual elements (such as animated creatures).

<sup>129</sup> H Lou, ‘AI in Video Games: Toward a More Intelligent Game’ (*Science in the News, Harvard University*, 28 August 2017) <<http://sitn.hms.harvard.edu/flash/2017/ai-video-games-toward-intelligent-game/>> last accessed on 4 February 2022.

<sup>130</sup> R Miller and J Constine, ‘Apple Acquires Augmented Reality Company Metaio’ (*Techcrunch*, 28 May 2015) <[https://techcrunch.com/2015/05/28/apple-metaio/?ncid=rss&cps=gravity\\_1462\\_-5336258945525104057](https://techcrunch.com/2015/05/28/apple-metaio/?ncid=rss&cps=gravity_1462_-5336258945525104057)> last accessed on 4 February 2022.

<sup>131</sup> BD Wassom, *Augmented Reality Law, Privacy, and Ethics* (Syngress 2014) Chapter 1.

move their body in innovative ways.<sup>132</sup> Tong and others have explored body gestures as a ‘natural user interface’ for flying in a VR game.

The economic impact of the gaming industry is significant. The European Commission launched a Press release on the reflection on a Digital Single Market for Creative Content Online, highlighting that the cultural and creative sector (which comprises published content such as books, newspapers, and magazines, musical works and sound recordings, films, video on demand, and video games) generates a turnover of more than €650 billion annually and contributes to 2.6% of the EU’s Gross Domestic Product (GDP), employing more than 3% of the EU work force.<sup>133</sup> The European Commission concluded that ‘European policymakers therefore have the responsibility to protect copyright, especially in an evolving economic and technological environment’. Three years later, in 2012, the European Commission reaffirmed the impact of video games as part of the creative industries, by stating that in 2012 the creative sector (including video games) accounted for 3.3% of GDP and employed 6.7 million people.<sup>134</sup>

Among EU Member States, Germany has shown genuine interest in the video game industry. Its intention to be one of the vital players in the video game sector is evident from a decision of the Finance Committee of the German Bundestag. The German Bundestag, in its November 2019 federal budget for 2020 and upcoming years, dedicated €50 million (approximately £44 million) to the promotion of video game development in the country.<sup>135</sup>

Similarly, France is a pioneer in the field of video game development. French video game studios have received worldwide recognition since 2014. On the level of video game production, France was the second largest country in the world after the United States.<sup>136</sup> As

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<sup>132</sup> X Tong and others, ‘Exploring Body Gestures as Natural User Interface for flying in a Virtual Reality Game with Kinect’ (Proceedings of the 2016 IEEE International Workshop on Mixed Reality Art, Greenville, SC, USA, 19 March 2016).

<sup>133</sup> European Commission, ‘European Commission launches reflection on a Digital Single Market for Creative Content Online’ Press Release (22 October 2009) [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_09\\_1563](https://ec.europa.eu/commission/presscorner/detail/en/IP_09_1563) last accessed on 4 February 2022.

<sup>134</sup> European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, ‘Promoting cultural and creative sectors for growth and jobs in the EU’, COM(2012) 537 <<https://ec.europa.eu/transparency/regdoc/rep/1/2012/EN/1-2012-537-EN-F1-1.Pdf>> last accessed on 8 April 2023.

<sup>135</sup> M Puppel, ‘German Bundestag Approves Games Funding for Coming Years’ (*Game – Verband der deutschen Games – Branche*, 15 November 2019) <<https://www.game.de/en/german-bundestag-approves-games-funding-for-coming-years/>> last accessed on 4 February 2022.

<sup>136</sup> Consulate General of France in New York, ‘France is second in the world for the production of video games’ (*Consulat général de France à New York*, 18 April 2014) <<https://newyork.consulfrance.org/France-is-second-in-the-world-for>> last accessed on 8 April 2023.

video game development is a dynamic sector in the country's economy, the French government has launched a campaign called 'Join the Game', in order to support anyone wishing to relocate to France, enjoying the country's artistic creativity and technological innovation.<sup>137</sup> It is worth mentioning that this campaign may be well appreciated among the British gaming industry, as there have been major concerns about the impact of Brexit on recruitment, markets, and funding.<sup>138</sup>

Although Greece is not a leader in video game development, there is a strong presence of small independent developers as well as representation in worldwide competitions. The video game *Apocalypse Cow*, a narrative-driven action comedy developed by Monsters (2014), won the Strasbourg 2015 Indie Game Contest for the best independent game.<sup>139</sup> In addition, the interpretation of copyright law and its application to cases would be rather important for the Greek legislature and market, particularly for attracting investment and funding for the development of a competitive video game industry.

In the United Kingdom, there are 2,261 active game companies, operating at all sizes and scales (from mobile, PC, and console to VR and e-sports).<sup>140</sup> Standing out among the UK's successful titles is *Grand Theft Auto V* by Rockstar Games, a British video game developer, selling over 95 million units worldwide, which reached the top of the UK chart in March 2018 and 2020.<sup>141</sup> As far as the consumer market is concerned, the UK was the sixth largest video game market in 2018 with approximately 37.3 million people playing video games.<sup>142</sup>

### 2.1.3 Copyright Protection of Video Games in Germany, France, Greece, and the UK

The legal nature of video games in relation to copyright is hard to determine. Video games are highly interactive multimedia consisting of individual parts that are the 'fruit' of creative

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<sup>137</sup> Ministère de l'économie, des finances et de la relance, 'Join the Game' <<https://www.entreprises.gouv.fr/en/digital/digital-policy/join-game>> last accessed on 4 February 2022.

<sup>138</sup> ukie, 'State of Play: The UK Games Industry's Priorities for the EU Negotiations' (ukie, March 2017) <[https://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017\\_0.pdf](https://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf)> last accessed on 4 February 2022.

<sup>139</sup> FEFFS, 'Festival Européen Du Film Fantastique de Strasbourg' <<http://strasbourgfestival.com/igc-apocalypse-cow-en/>> last accessed on 4 February 2022.

<sup>140</sup> ukie, 'Job Market and Economic Contribution' (ukie, 14 October 2021) <[https://ukiepedia.ukie.org.uk/index.php/Job\\_market\\_and\\_economic\\_contribution](https://ukiepedia.ukie.org.uk/index.php/Job_market_and_economic_contribution)> last accessed on 4 February 2022.

<sup>141</sup> L Hebblethwaite, 'Call of Duty: Modern Warfare Camps Out the Top Spot for Another Week at No 1' (ukie, 03 February 2020) <<https://ukie.org.uk/news/2020/02/call-duty-modern-warfare-camps-out-top-spot-another-week-no1>> last accessed on 4 February 2022.

<sup>142</sup> Among them, 49% of men and 48% of women play mobile games, while 38% of men and 26% of women play PC games. See Newzoo, 'UK Games Market 2018' (Newzoo, 25 July 2018) <<https://newzoo.com/insights/infographics/uk-games-market-2018/>> last accessed on 4 February 2022.

effort and skills. Video games consist of multiple art forms such as literary, dramatic, musical, and artistic works, computer programs, and characters.

There is a debate on which work is qualified to be copyright protected: is it the video game as a whole or the individual elements of it? Moving even further, the next question would be: under which category of protected works do they qualify? European case law<sup>143</sup> and legal scholars have answered these questions and explained that video games are complex works of authorship, or in other words an ‘amalgamation of individual elements that can each individually be copyrighted if they achieve a certain level of originality and creativity’.<sup>144</sup>

After examining the German Copyright Law 1965, the French Copyright Law 1994, the Greek Copyright Law 1993, the UK Copyright, Designs and Patents Act (CDPA) 1988, and national case law, video games per se do not initially seem to match any of the categories of protected works. On the contrary, the individual parts of video games do seem to do so.

#### 2.1.3.1 Copyright Protection of Video Games in Germany

Considering that the German Urheberrechtsgesetz (UrhG) does not establish particular rules for video game classification, legal doctrine perceives them as multimedia works. As such, different classifications apply to the protection of video games within the Copyright Law. Ramos and others argue that there are two distinct elements in video games: the computer program and the audio-visual presentation.<sup>145</sup> The computer program controls the game and enables the execution in a computer system. The UrhG categorises computer programs as ‘speech work’ or ‘literary work’.<sup>146</sup> The second element of audio-visual presentation is mainly treated as ‘film work’ under the German Copyright Law. Film works, in order to be protected as copyright works, should be personal intellectual creations reaching a certain level of creativity. In case the threshold of originality and creativity has not been reached, German case law protects the audio-visual presentation of a video game as ‘moving images’,<sup>147</sup> which do not require evidence of personal intellectual creation.

#### 2.1.3.2 Copyright Protection of Video Games in France

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<sup>143</sup> Case C-355/12 *Nintendo Co Ltd v PC Box Srl* [2014] 1 WLUK 506, ECDR 6, para 22.

<sup>144</sup> A Ramos and others, ‘The Legal Status of Video Games’ (2013) WIPO Report 7 <[https://www.wipo.int/edocs/pubdocs/en/wipo\\_report\\_cr\\_vg.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_report_cr_vg.pdf)> last accessed on 8 April 2023. See also D Farmaki, ‘Copyright Protection of Video Games: a Comparative Study’ (2022) 5(2) IELR 107.

<sup>145</sup> *ibid.*

<sup>146</sup> Gesetz über Urheberrecht und verwandte Schutzrechte – Urheberrechtsgesetz 1965, s 2(1)(1).

<sup>147</sup> *ibid.*, s 95. ‘Moving images’ (*Laufbilder*) are films that do not qualify for protection due to the lack of originality.

French case law has confirmed that video games can be considered as ‘works of the mind’, and as such could be protected under copyright law. French courts held that a ‘video game is a complex work that cannot be reduced to its sole software dimension, however significant it may be, so that each of its components is governed by the legal framework applicable to it according to its nature’.<sup>148</sup> Although there is no special definition for video games in France and it is not clear under which category video games would be protected, a study conducted by the French National Assembly concluded that the creation of a special definition and regime for video games is not needed.<sup>149</sup> The study attributed this reluctance to the low rate of video game litigation in the country.<sup>150</sup>

### 2.1.3.3 Copyright Protection of Video Games in Greece

Greek jurisprudence has also confirmed the complexity of video games. Recent case law has held that video games should be perceived not as mere software but as ‘complex audio-visual works’.<sup>151</sup> The court of first instance in Athens explained that video games are multimedia works, as they bear three main characteristics: first, they combine two or three different types of works, including images, text, and sound; second, they are stored and disseminated in digital form; and third, they are distinguished by the element of interactivity, as users interact with the work. With reference to European case law,<sup>152</sup> the Athens court recognised that it is possible to create works of varying complexity and context, or in other words works with a ‘dual nature’, that being the audio-visual elements and the computer program.

### 2.1.3.4 Copyright Protection of Video Games in the UK

The issue whether or not a single work can in fact contain several individual works protected by copyright has been discussed in numerous cases in British case law. Back in 1996 the High Court of Justice held in *Electronic Techniques (Anglia) Ltd v Critchley Components Ltd* that a particular product may be protected by a number of different categories of copyright. For

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<sup>148</sup> Cass. 1re civ., June 25, 2009, *Lefranc c/ Sté SESAM*, pourvoi n°07-20387. The French text reads ‘Le jeu vidéo est une oeuvre complexe qui ne saurait être réduite à sa seule dimension logicielle, quelle que soit l’importance de celle-ci, de sorte que chacune de ses composantes est soumise au régime qui lui est applicable en fonction de sa nature’, which reads in English: ‘The video game is a complex work that cannot be reduced to its software dimension alone, regardless of its importance, so that each of its components is subject to the regime applicable to it according to its nature.’

<sup>149</sup> Mission Parlementaire sur le Régime Juridique du Jeu Vidéo en Droit d’Auteur, report by M Patrice Martin-Lalande, November 2011, Ref. 114000733.

<sup>150</sup> *ibid.*

<sup>151</sup> First Instance Court of Athens (ΠΠρΑθ) case 2221/2015.

<sup>152</sup> Case C-355/12 *Nintendo Co Ltd v PC Box Srl* [2014] 1 WLUK 506, ECDR 6, para 22; Cass. 1re civ., (n 148).

instance, a musician may write the lyrics and the music for a song at the same time.<sup>153</sup> Similarly, in *Norowzian v Arks Ltd (No 2)* the court decided that a film could also be a dramatic work, provided that the necessary requirements are fulfilled.<sup>154</sup> Based on the reasoning of these two cases, video games can contain several individual, original, and copyright-protected works, on the condition that each one of them is the result of separate creative effort.

In *Nova Productions Ltd v Mazooma Games Ltd*, the court denied the protection of the video game as a dramatic work because it did not demonstrate sufficient unity to be capable of being performed.<sup>155</sup> The explanation given by the court was based on the fact that the sequence of images will differ every time the game is played.

This is true to a certain extent; arcade games (as was the subject of *Nova Productions Ltd v Mazooma Games Ltd* proceedings) do not entail any dramatic elements. However, contemporary video games may feature characters who perform as real actors. Even if protection is denied on those grounds, one could argue that there is some degree of drama when games incorporate animated cut scenes. Cut scenes are non-playable animated or live action sequences in a video game accompanying the story's progress. During the cut scenes, the player stops playing, there is no interactivity, and the images shown on the screen will be the same every time the game is played.<sup>156</sup> Therefore, video games with a visible narrative structure, such as RPGs, could be classified as dramatic works;<sup>157</sup> however, this would not apply to video games with no narrative components, such as *Tetris*.

Without a doubt, when considering their individual components, one realises the complexity of contemporary video games. Apart from the protection afforded to individual works, *Nova Productions Ltd v Mazooma Games Ltd* went a step further by introducing the notion that the series of frames produced on the screen were a series of graphic works protected by copyright. The High Court held that 'a work cannot be both a dramatic work and a literary work'.<sup>158</sup>

In addition to the considerations above, the claimant asserted film copyright infringement in his video game. However, the court addressed the issue briefly and dismissed the claim based

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<sup>153</sup> *Techniques (Anglia) Ltd. v Critchley Components Ltd.* [1997] FSR 401, 412.

<sup>154</sup> *Norowzian v Arks Ltd. (No 2)* [2000] FSR 363. Nourse LJ held that a dramatic work was 'a work of action, with or without words or music, which is capable of being performed before an audience'.

<sup>155</sup> *Nova Productions Ltd v Mazooma Games Ltd & Ors Rev 1* [2006] EWHC 24 (Ch).

<sup>156</sup> S Egenfeldt-Nielsen, J Heide Smith, and S Pajares Tosca, *Understanding Video Games: The Essential Introduction* (3rd edn, Routledge Taylor and Francis Group 2016) 241.

<sup>157</sup> Y Harn Lee, 'Play again? Revisiting the Case of Copyright Protection of Gameplay in Videogames' (2012) 34(12) EIPR 865, 871.

<sup>158</sup> *Nova Productions Ltd* (n 155) [111].



on the fact that the defendants did not copy the video game by photographic copy. The court left open the question of film copyright protection. Section 5B(1) of the CDPA 1988 defines a film as ‘a recording on any medium from which a moving image may by any means be produced’. This broad definition covers many multimedia works; however, as the High Court held, film copyright in the UK only protects against infringement by copying by photographic means. For video games this means the game must be copied as a whole, so there is no protection against close recreation of the game.

Consisting of two major elements, namely the software and audio-visual parts, the two-fold nature of video games was further discussed by the Court of Justice of the European Union. In *Nintendo v PC Box* case, the Court held that ‘video games... constitute complex subject matter comprising not only a computer program but also graphic and sound elements, which... have a unique creative value... they are protected, together with the entire work, by copyright in the context of the system established by Directive 2001/29’.<sup>159</sup>

After having discussed what a video game is, and how it is protected by copyright law, the first part of the chapter unveiled the complex nature of video games. The second part of the chapter focuses on the popular activity and technicalities of streaming technology, which enables players to share video gameplay with a wider audience online.

## 2.2 Understanding Video Game Streaming

Online video gaming has become immensely popular worldwide. The video games market is expected to be worth \$200 billion by 2023, from nearly \$160 billion in 2020.<sup>160</sup> Matsui notes that one of the reasons for the ever-increasing popularity of online video gaming is that it is available for live game streaming.<sup>161</sup> He continues, ‘live game streaming allows game players to upload live gameplay or live stream it online’.<sup>162</sup> Matsui incorporates both video game live streaming and pre-recorded playthroughs, known as ‘Let’s Play’ (LP) videos, within the definition of live game streaming. A distinction has to be made at this point between live streaming and LP videos. Coogan explains that LP videos refer to videos of someone playing a video game, with audio commentary of the gameplay, which is edited to entertain the

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<sup>159</sup> Case C-355/12 *Nintendo Co Ltd v PC Box Srl* [2014] 1 WLUK 506 ECDR 6, para 22.

<sup>160</sup> WePC, ‘2020 Video Game Industry Statistics, Trends and Data January 2020’ (*WePC*, 17 November 2021) <<https://www.wepc.com/news/video-game-statistics/>> last accessed on 4 February 2022.

<sup>161</sup> S Matsui, ‘Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright’ (2016) 24 *Tex Intell Prop LJ* 215.

<sup>162</sup> *ibid.*

audience.<sup>163</sup> More recently, Lee<sup>164</sup> and Mejia<sup>165</sup> have defined LP videos and it is apparent that there are two characteristics, or common denominators, that all LP videos share: gameplay footage and commentary by the player. Game players can either record and subsequently upload live gameplay on Internet platforms or they can live stream their play while they are playing, so that everyone else, the wider audience, can enjoy watching them play in real time.<sup>166</sup>

Online video games are those video games that can be played using a computer network, generally by using an Internet connection with high-speed access. The most popular types of online video games are MORPGs/MMORPGs.<sup>167</sup> These two types differ as a MMORPG allows a large number of players to share the same environment, while a MORPG limits the number of players sharing the same game environment.<sup>168</sup> Amongst MMORPG titles enjoying the most popularity are *League of Legends*, *World of Warcraft*, and *DOTA 2*.<sup>169</sup>

In order to play an online video game, players may have to pay a fixed monthly charge.<sup>170</sup> Some online video games are free of charge but give players the option to pay to purchase an item.<sup>171</sup> Sometimes, players may pay a fixed charge every month to play the game and at the same time may have to pay additional charges to purchase items.<sup>172</sup> These items are mainly used to improve one's combat ability or to change the character's appearance.

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<sup>163</sup> K Coogan, 'Let's Play: A Walkthrough of Quarter-Century-Old Copyright Precedent as Applied to Modern Video Games' (2018) 28(2) *Fordham Intellectual Property, Media and Entertainment Law Journal* 381, 391.

<sup>164</sup> Y Harn Lee, 'Copyright and Gaming' in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020) 60.

<sup>165</sup> SC Mejia, 'Fair Play: Copyright Issues and Fair Use in YouTube "Let's Plays" and Videogame Livestreams' (2015) 7 *Intell Prop Brief* 2.

<sup>166</sup> S Matsui, 'Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright' (2016) 24 *Tex Intell Prop LJ* 215.

<sup>167</sup> MORPG stands for Multiplayer Online Role-Playing Game and MMORPG stands for Massively Multiplayer Online Role-Playing Game.

<sup>168</sup> Matsui (n 166).

<sup>169</sup> Statista, 'Most Played PC Games on Gaming Platform Raptr in November 2015, by Share of Playing Time' (*Statista*, December 2015) <<http://www.statista.com/statistics/251222/most-played-pc-games/>> last accessed on 4 February 2022.

<sup>170</sup> For example, the video game *World of Warcraft* developed by Blizzard Entertainment has a monthly subscription fee of \$14.99. See Tyler Colp, 'What Does a World of Warcraft Subscription Cost?' (*Blizzard Watch*, 21 August 2019) <<https://blizzardwatch.com/2019/08/21/world-of-warcraft-subscription-cost/>> last accessed on 4 February 2022.

<sup>171</sup> For example, the famous video game *Fortnite* developed by Epic Games is free; however, there is virtual currency called V-Bucks, exchanged for real money, with which you can purchase items. See Epic Games, 'Fortnite' <<https://www.epicgames.com/fortnite/en-US/vbuckscard>> last accessed on 4 February 2022.

<sup>172</sup> N Gibson, '10 of the Most Expensive Virtual Items in Video Games' (*The Richest*, 15 November 2014) <<https://www.therichest.com/most-popular/10-of-the-most-expensive-virtual-items-in-video-games/>> last accessed on 4 February 2022.

### 2.2.1 LP Videos and Live Streaming

In order to upload the recorded gameplay, the first step is to record the video game. This could be achieved through a capture board connected to a computer. This capture board will capture the video game screen and the video game will be recorded on the computer.<sup>173</sup> If the video game is played on a computer, the video game screen will be recorded using capture software.<sup>174</sup> At a later stage, game players can edit the video and add their voices using a microphone, commenting on the play and explaining their moves or thoughts while playing. Apart from their voices, players can add impressions or background music and, in general, they can use editing software to edit the gameplay. In order for a video to be uploaded to websites, such as YouTube and Twitch.tv, the video should be converted to the required file format. Platforms impose time and size limits on each video clip to be uploaded.<sup>175</sup> Therefore, players have to cut down the video clip to comply with these limits. After the upload has been completed, a player using a PS console has to click the 'Share' button on the controller to make the video clip available to other Internet users.

For those game players who would rather live stream their gameplay than upload it to streaming platforms, they can also use capture software to capture the game screen on their device and then use transmission software in order to connect with open broadcasting platforms and broadcast their gameplay.<sup>176</sup> This can be achieved via the 'Share' button on the PS controller. Accessing an LP video or live stream on streaming platforms, such as Twitch.tv and YouTube, one can see on the screen the audio-visual elements of a game, a live video feed from the streamer's web-camera, and a chat where viewers interact with the player and with each other.<sup>177</sup> After it has been streamed, the video may or may not be stored by broadcasting platforms for future access (as video on demand).

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<sup>173</sup> S Matsui, 'Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright' (2016) 24 Tex Intell Prop LJ 215

<sup>174</sup> I Paul, 'The Best Game Capture Software' (*PCWorld*, February 2019) <<https://www.peworld.com/article/419927/the-best-pc-game-video-capture-software-5-top-recording-tools-compared.html>> last accessed on 4 February 2022, recommends the top gameplay capture tools, starting with 'Open Broadcast Software Studio' and 'Plays' from Plays.tv.

<sup>175</sup> Based on information at the time of writing, YouTube's maximum file size that someone can upload is 256GB or 12 hours, whichever is less. YouTube Help, 'Upload Videos' <<https://support.google.com/youtube/answer/71673?co=GENIE.Platform%3DAndroid&hl=en>> last accessed on 4 February 2022.

<sup>176</sup> Twitch.tv suggests, on its official website, free broadcasting applications for live streaming <<https://dashboard.twitch.tv/broadcast>> last accessed on 4 February 2022.

<sup>177</sup> E Jungar, 'Streaming Video Games: Copyright Infringement or Protected Speech?' (2016) 3(2) Press Start <<https://press-start.gla.ac.uk/index.php/press-start/article/view/63>> last accessed on 4 February 2022.

PlayStation 4 (PS4) and 5 (PS5) controllers have the ability to record gameplay and upload it directly to services such as Twitch and YouTube or even live broadcast it on these services.<sup>178</sup> This could be achieved by clicking on the Share button, which can be found on DualShock 4 (PS4 controller), or by clicking on the Create button, which is the updated version of the Share button in DualSense (PS5 controller). By clicking on the Share button, one would automatically access the ‘How do you want to share your experience’ menu, which presents three options: ‘Upload a video clip’, ‘Upload screenshot’, or ‘Broadcast gameplay’. Ascher points out that Sony intends to provide an easy way for players to share content (images and videos ) online.<sup>179</sup> Uploading live gameplay is much simpler on this gaming device, which renders the sophisticated steps described above inapplicable.

The ‘Share’ or ‘Create’ service is similar to the ‘record’ button that Sony introduced on the Betamax players in the 1980s, as both functions allow users to record a copy of copyrighted works displayed on their screen and replay this copy. The United States Supreme Court dealt with whether the Betamax recorder led to secondary liability for copyright infringement, and dismissed the rightholders’ claim on the ground that the recorder could be used for unlawful purposes but it could also be used for substantial non-infringing uses.<sup>180</sup> Therefore, it could be argued that to a certain extent PS4 and PS5 have the potential to materially assist copyright infringement, by providing the physical facilities for such an infringement. The relevant CJEU case law provides more clarity. In *Filmspeler*, the CJEU held that the service enabled access to infringing works; access was not impossible without the service but was made easier by it.<sup>181</sup> In other words, a wide range of other actors/services can be found to play an indispensable role, and hence carry out a communication to the public. In a previous case, *SGAE v Rafael Hoteles*, the CJEU by reference to the InfoSoc Directive held that the greater provision of physical facilities is not a communication to the public but that an installation of such a facility would make it possible from a technical perspective.<sup>182</sup> In the context of video game streaming, the functionality of PS controllers makes it easier for users to share content with a wider audience.

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<sup>178</sup> A step by step guide on how to save and share PS4 gameplay videos can be found on the official PlayStation website <[https://support.playstation.com/s/article/Save-and-Share-PS4-Gameplay-Videos?language=en\\_US](https://support.playstation.com/s/article/Save-and-Share-PS4-Gameplay-Videos?language=en_US)> last accessed on 4 February 2022.

<sup>179</sup> S Ascher, ‘Will Sony’s Fourth Playstation Lead to a Second Sony v Universal’ (2014) 12 Duke L & Tech Rev 231.

<sup>180</sup> *Sony Corp. of America v Universal City Studios Inc.*, 464 US 417 (1984)

<sup>181</sup> Case C-527/15 *Stichting Brein v Jack Frederik Wullems* [2017] ECDR 14, para 41.

<sup>182</sup> Case C-306/05 *Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA* [2006] ECR I-11519, para 46.

However, even if there were not this function, there are alternative options for capturing and sharing video game footage, as explained in the previous paragraphs.

One would wonder if this function could serve as a defence to a copyright claim. In order to address this consideration, a distinction has to be made between the video games developed by PlayStation Studios and those that are developed by other companies. In the first category (video games developed by PlayStation Studios) one would find the following titles: *Marvel's Spider-Man*, *Uncharted*, *The Last of Us*, *God of War*, and *Ghost of Tsushima*. A gamer who shares footage of those games via the 'Share' or 'Create' button would be able to do so without the 'shadow' of a copyright claim against them, as those games were developed by one of the PlayStation Studios and it was shared with the audience via a function available on a PS controller. However, this was not the case for David Jaffe, a gamer and developer of *God of War* (developed by Santa Monica Studio, which belongs to PlayStation Studios) who played and live streamed the gameplay of *Sackboy* (also developed by a PlayStation Studio) via the 'Share' button, and for which he received a copyright claim.<sup>183</sup> After careful analysis of the evidence provided by the gamer, one can see that the claim at hand refers to the content found at a specific time frame and does not refer to the three hours of live streaming, but might be for another copyrighted work. This example demonstrates that although manufacturers and developers enable gamers to share their gameplay experience (and video game footage) with the wider audience, gamers are not immune to copyright claims, even by the same company. This may also mean that live streams of video games developed by a non-PlayStation Studio, for example, would be subject to copyright claims. Therefore, whether or not the 'Share' or 'Create' button would serve as a defence to a copyright claim would depend to a certain extent on who the developer is.

In either case (uploading recorded gameplay or live broadcasting it), the video can be viewed using streaming technology.<sup>184</sup> Streaming is a way to download a file from the Internet. While traditional downloading opens or plays the file after the download has been completed, streaming allows the file to be played as it downloads.<sup>185</sup> Generally, streaming technology will

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<sup>183</sup> D Jaffe, 'PlayStation Share Function and Copyright Claim' (*Twitter*, 12 December 2020) <[https://twitter.com/davidscottjaffe/status/1337738321846366209?ref\\_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwtterm%5E1337738321846366209%7Ctwgr%5Ee4f87a8517f82a2f0a9936c83d5853f6bbcbf3b7%7Ctwnon%5Es1\\_&ref\\_url=https%3A%2F%2Fin.ign.com%2Fps5%2F161369%2Fnews%2Fps5-gameplay-twitter-copyright-account-lock](https://twitter.com/davidscottjaffe/status/1337738321846366209?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwtterm%5E1337738321846366209%7Ctwgr%5Ee4f87a8517f82a2f0a9936c83d5853f6bbcbf3b7%7Ctwnon%5Es1_&ref_url=https%3A%2F%2Fin.ign.com%2Fps5%2F161369%2Fnews%2Fps5-gameplay-twitter-copyright-account-lock)> last accessed on 1 September 2022.

<sup>184</sup> S Matsui, 'Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright' (2016) 24 *Tex Intell Prop LJ* 215.

<sup>185</sup> *ibid.*

not leave any files remaining after they are watched. Nevertheless, some platforms, such as YouTube, use progressive downloading instead of streaming. While both forms of streaming allow the file to be played as it downloads, progressive downloading leaves the file formatted as a temporary file after it plays.

### 2.2.2. Different Kinds of Streams and their Characteristics

While game streaming is available for all types of video games, online video games attract the most popularity. Online video games allow multiple players to take part in a battle simultaneously and it thus gives motivation for gamers to share their gameplay experience. Players can compete with each other and share their experience with the wide audience.

There are three kinds of streams: tournament streams, streams of professional players, and variety streams.<sup>186</sup> National and international tournaments have been held between participants and are often streamed live, so that everyone can watch the video gameplay.<sup>187</sup>

Competitive video gaming is also known as ‘electronic sports’ or ‘e-sports’. Gaming companies (such as Blizzard Entertainment and Riot Games), although initially indifferent to e-sports, are now officially involved, with tournaments offering prizes exceeding \$10,000 (approximately £8,214).<sup>188</sup> Activision Blizzard has created a league for its game *Overwatch*, which has a \$20 million (£16 million) entry fee per team.<sup>189</sup> Moreover, their professional players earn a salary of approximately \$50,000 (£41,000) with various benefits.<sup>190</sup> This successful venture has been expanded and requires the new expansion teams to buy in at up to \$60 million (approximately £49 million).<sup>191</sup>

Streams of professional players show players practicing their gaming techniques. In most cases, these streams are watched by other players with the hope of improving at that particular

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<sup>186</sup> E Jungar, ‘Streaming Video Games: Copyright Infringement or Protected Speech?’ (2016) 3(2) Press Start <<https://press-start.gla.ac.uk/index.php/press-start/article/view/63>> last accessed on 4 February 2022.

<sup>187</sup> S Matsui, ‘Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright’ (2016) 24 Tex Intell Prop LJ 215.

<sup>188</sup> A Silady, ‘The Economics of Competitive Video Gaming’ (*Smartasset*, 10 February 2020) <<https://smartasset.com/insights/the-economics-of-competitive-video-gaming>> last accessed on 4 February 2022.

<sup>189</sup> J Wolf, ‘Overwatch League Expansion Will Face Serious Stumbling Blocks Overseas’ (*ESPN*, 10 February 2018) <[https://www.espn.co.uk/esports/story/\\_/id/22386533/overwatch-league-expansion-face-serious-stumbling-blocks-overseas](https://www.espn.co.uk/esports/story/_/id/22386533/overwatch-league-expansion-face-serious-stumbling-blocks-overseas)> last accessed on 4 March 2023.

<sup>190</sup> Nathan Hill, ‘The Overwatch Videogame League Aims to Become the New NFL’ (*WIRED*, 5 December 2017) <<https://www.wired.com/story/overwatch-videogame-league-aims-to-become-new-nfl/>> last accessed on 4 February 2022.

<sup>191</sup> Wolf (n 189).

game.<sup>192</sup> For instance, *League of Legends* players would watch *League of Legends* streams. At the other end of the spectrum, variety streamers broadcast a variety of games. While Internet users would watch professional streamers looking to develop their skills and strategy, variety streamers' fans would watch their favourite streamer regardless of which game is played.<sup>193</sup>

One would wonder whether streaming is a profit-making venture. One of the most popular streamers on YouTube, Felix Kjellberg, known as PewDiePie, earned \$13 million dollars in 2019.<sup>194</sup> However, it is fair to mention that YouTube keeps a substantial part of the advertisement revenue. More specifically, the split between YouTube and content creators is about 45% to YouTube and 55% to the creator.<sup>195</sup>

### 2.3 The Role of Intermediary Service Providers

Discussion of the revenues earned by users and platforms is relevant for determining the obligation placed on a content-sharing service provider to obtain authorisation (via licensing), pursuant to Article 17(2) of the DSM Directive, which provides that:

Member States shall provide that, where an online content-sharing service provider obtains an authorisation, for instance by concluding a licensing agreement, that authorisation shall also cover acts carried out by users of the services falling within the scope of Article 3 of Directive 2001/29/EC when they are not acting on a commercial basis or where their activity does not generate significant revenues.<sup>196</sup>

The Article provides that the extension of the authorisation would apply if the acts of users of the online content-sharing service provider (OCSSP) (namely, video game streamers) are not carried out on a 'commercial basis' or if such acts do not generate 'significant revenues'.

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<sup>192</sup> E Jungar, 'Streaming Video Games: Copyright Infringement or Protected Speech?' (2016) 3(2) *Press Start* <<https://press-start.gla.ac.uk/index.php/press-start/article/view/63>> last accessed on 4 February 2022.

<sup>193</sup> The most popular variety Twitch streamers as of December 2021 are 'karljacobs' with 116,216 average viewers, 'xQcOW' with 74,166 average viewers and 'tommyinnitalt' with 68,607 average viewers. <<https://www.twitchmetrics.net/channels/popularity?game=Variety>> last accessed on 4 February 2022.

<sup>194</sup> M Berg, 'The Highest-Paid YouTube Stars of 2019: The Kids are Killing it' (Forbes, 18 December 2019) <<https://www.forbes.com/sites/maddieberg/2019/12/18/the-highest-paid-youtube-stars-of-2019-the-kids-are-killing-it/?sh=4383426238cd>> last accessed on 28 January 2023.

<sup>195</sup> K Wagner, 'YouTube Beware: Facebook Will Start Sharing Ad Revenue With Video Creators No coincidence Here: Facebook's Revenue Split is the Same as YouTube's' (*Vox*, 1 July 2015) <<https://www.vox.com/2015/7/1/11564024/youtube-beware-facebook-will-start-sharing-ad-revenue-with-video>> last accessed on 28 January 2023; RJ Aguiar, 'The Hidden Costs of YouTube's Controversial Revenue Split' (*Dailydot*, 11 March 2014) <<https://www.dailydot.com/unclick/youtube-content-creator-split/>> last accessed on 4 February 2022.

<sup>196</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (DSM Directive) [2019] OJ L 130/92, art 17(2).

Therefore, it is important to clarify the meaning of ‘commercial basis’ and ‘significant revenues’. Quintais acknowledges that the term ‘non-commercial’ is difficult to define in the online environment as it encompasses various meanings, including ‘economic’, ‘for profit’, and ‘business’.<sup>197</sup> It is a focal point to distinguish between direct and indirect commercial acts and to define non-commercial use by using subjective and objective criteria. For example, the subjective criteria are intent-based, as they emphasise the intention of the user, whereas objective criteria focus on the character or nature of the use per se.

Recital 69 of the DSM Directive assists with the understanding and interpretation of ‘non-commercial’ use. The Recital states that the authorisation granted to the OCSSP should also cover uploads by the users, provided that ‘those users act for non-commercial purposes, such as sharing their content without any profit-making purpose, or where the revenue generated by their uploads is not significant in relation to the copyright relevant acts of the users covered by such authorisations’.<sup>198</sup> Referring to the users’ profit-making ‘purpose’ suggests that the DSM Directive favours the subjective criterion, while ‘significant revenues’ seems to adopt the objective criterion. For instance, a user who uploads content on a platform without the intention of generating profits, but who nevertheless receives a significant number of views, will generate significant revenue through sharing in the advertising revenue of the platform.

As discussed previously, PewDiePie earned \$13 million dollars in 2019. This is an example of revenue that might be generated provided that the uploaded video received many views. In the video game streaming context, Twitch and YouTube Gaming are the largest platforms. Twitch achieved 2.67 million concurrent viewers in August 2022,<sup>199</sup> and YouTube Gaming had an average of 518 thousand concurrent viewers in the second quarter of 2022.<sup>200</sup>

To better understand who qualifies as a service provider, it is important to consider what an information society service (ISS) is. An intermediary service provider is any natural or legal person that provides an ISS for remuneration via electronic means, for the processing and

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<sup>197</sup> JP Quintais, ‘Copyright in the Age of Online Access: Alternative Compensation Systems in EU Copyright Law’ (PhD thesis, University of Amsterdam 2017) 186.

<sup>198</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (DSM Directive) [2019] OJ L 130/92, Recital 69.

<sup>199</sup> Twitch Tracker, ‘Twitch Statistics and Charts’ <<https://twitchtracker.com/statistics>> last accessed on 24 August 2022.

<sup>200</sup> J Clement, ‘Average Number of Concurrent Viewers on YouTube Gaming Live from 2nd Quarter 2018 to 2nd Quarter 2022’ (Statista, 12 August 2022) <<https://www.statista.com/statistics/761100/average-number-streamers-on-youtube-gaming-live-and-twitch/>> last accessed on 24 August 2022.



storage of data relying on any platform of electronic communication.<sup>201</sup> The Directive 98/48/EC defines an ISS as ‘any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services’.<sup>202</sup>

The definition consists of three main elements: remuneration, distance, and electronic communication. The remuneration criterion is met if the service provided is part of an economic activity.<sup>203</sup> For example, the service itself may be provided free of charge, but the intermediary could make profit by the advertisements on the page. The distance criterion is met if the service provider and the user are not present at the same place, while the third criterion of electronic communication is satisfied where the service is provided through electronic equipment.<sup>204</sup> The electronic means of distribution results in the feasibility of the information reaching an indeterminable area, as long as there is Internet access. Among the services that fall under the definition of ISS are the online sale of goods, video on demand, and information hosting by a recipient of the service.<sup>205</sup>

Accordingly, the definition of a service provider includes natural and legal persons providing services, such as web hosting and Internet access, to name a few. A question arises regarding the liability of those service providers for hosting infringing content, pursuant to the e-Commerce Directive<sup>206</sup> and the DSM Directive.<sup>207</sup> The question is two-fold, as the first step would be to answer if there is indeed any liability for hosting infringing LP videos and, if the answer is affirmative, then one would proceed with the determination of primary or secondary liability. Online platforms should be liable for hosting infringing content for two main reasons: they benefit the most from traffic on their websites, and they acquire the technical knowledge and skills to prevent copyright infringement.<sup>208</sup>

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<sup>201</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 2(a) and (b).

<sup>202</sup> Council Directive 98/48/EC of the European Parliament and of the Council of 20 July 1998 amending Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations [1998] OJ L 217/18, art 2(2).

<sup>203</sup> L Edwards, *The New Legal Framework for eCommerce in Europe* (Hart Publishing, 2005) 95.

<sup>204</sup> *ibid.*

<sup>205</sup> A Adeyemi, ‘Liability and Exemptions of Internet Service Providers (ISPs): Assessing the EU Electronic Commerce Legal Regime’ (2018) 24(1) CTLR 2.

<sup>206</sup> Directive on electronic commerce (n 201).

<sup>207</sup> Council Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92.

<sup>208</sup> GA Gabison and MC Buiten, ‘Platform Liability in Copyright Enforcement’ (2020) 21 Colum Sci & Tech L Rev 237, 248.

The EU legislation governing intermediaries' liability tries to strike a fair balance between copyright holders' rights, on the one hand, and the freedom of online platforms to conduct business, on the other. Intermediaries enjoy a safe harbour regime for their activities of mere conduit, caching, and hosting. The safe harbour will only be applied if the provider has not played an active role in the initiation of the transmission<sup>209</sup> or modification of the information<sup>210</sup> and can prove that they do not have actual knowledge of any illegal activity or information or, upon obtaining such knowledge, act expeditiously to remove or disable access to the information.<sup>211</sup> The e-Commerce Directive recognises that the safe harbour provisions shall not affect the possibility of a court or administrative authority requiring the service provider to terminate or prevent any infringement, including its removal or disabling access to it.<sup>212</sup> In addition, the InfoSoc Directive<sup>213</sup> and Directive 2004/48 on the enforcement of intellectual property rights<sup>214</sup> establish that rightholders are able to apply for an injunction against Internet Service Providers (ISPs) whose services are used by a third party to infringe a copyright or related right, due to the fact that ISPs are technically equipped to terminate infringing activities.

Intermediaries are, therefore, obliged to take measures for the termination of any infringing activity, as well as to prevent the recurrence of such activities. In practice, ISPs have adopted filtering systems and other tools to block access to infringers; however, these measures challenge the freedom of expression of Internet users and the freedom of platforms to conduct business.

The effectiveness of algorithmic filters to detect (potentially) infringing content in the context of LP videos and live streams as well as the effectiveness of blocking injunctions as a remedy to tackle unauthorised LP videos and live streams are urgent matters for discussion, analysis, and reform. Chapters 4 and 5 address those issues, respectively.

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<sup>209</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') [2000] OJ L 178/1, art 12.

<sup>210</sup> *ibid*, art 13.

<sup>211</sup> *ibid*, art 14.

<sup>212</sup> *ibid*, arts 13 and 14.

<sup>213</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10.

<sup>214</sup> Council Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L 157/45.

## 2.4 Understanding the Need of a Fair Balance Among Different Rightholders

After the Charter of Fundamental Rights of the EU entered into force,<sup>215</sup> and the InfoSoc Directive made reference to the ‘fair balance’ doctrine,<sup>216</sup> the number of cases increased dramatically. Freedom of expression and the right to conduct business have been employed to interpret provisions on exclusive rights, exceptions and limitations, blocking injunctions, and fair compensation.

The main concern is whether it is possible to maintain an adequate level of protection for intellectual property rights without compromising the freedom of Internet users to receive or impart information and the freedom of intermediaries to conduct a business. The legal mechanisms that should be used to achieve a fair balance between copyright and other fundamental rights are contained in a number of legislative acts: the Charter of Fundamental Rights of the EU, the Agreement of Trade-Related Aspects of Intellectual Property Rights, the InfoSoc Directive, the Enforcement Directive, and the e-Commerce Directive.<sup>217</sup>

Before delving into a thorough examination, an effort will be made to trace the doctrine of ‘fair balance’ to its legal, theoretical, and jurisprudential roots. The theory of balancing originated in German constitutional law<sup>218</sup> and spread globally after World War II.<sup>219</sup> In the German understanding, balancing is part of the larger principle of proportionality (*Verhältnismäßigkeitsgrundsatz*), which encompasses three sub-principles: suitability, necessity, and proportionality *stricto sensu* or balancing (*Güterabwägung*).<sup>220</sup> Alexy, a prominent German legal philosopher, defines proportionality *stricto sensu* as a rule that states ‘the greater the non-satisfaction of or harm to one principle, the greater the importance of

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<sup>215</sup> Charter of Fundamental Rights of the European Union [2012] OJ C 326/391.

<sup>216</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recital 31.

<sup>217</sup> Charter of Fundamental Rights of the European Union (n 215); Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 UNTS 299, 33 ILM 1197 (1994) (TRIPS Agreement), arts 41, 42, 47; Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 5; Council Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L 157/45, art 3; and Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1.

<sup>218</sup> C Angelopoulos, ‘Sketching the Outline of a Ghost: The Fair Balance between Copyright and Fundamental Rights in Intermediary Liability’ (2015) 17(6) *Info – The Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media* 72, 77.

<sup>219</sup> S Gardbaum, ‘Limiting Constitutional Rights’ (2007) 54 *UCLA Law Review* 789, 810.

<sup>220</sup> Angelopoulos (n 218).

satisfying the other'.<sup>221</sup> While balancing focuses on the legal possibilities, necessity and suitability are concerned with what is factually feasible. Therefore, even though proportionality consists of three separate tests, balancing can be regarded as its core and the focal point of the discussion of legal optimisation.<sup>222</sup>

The balancing exercise occurs in different contexts and stages. For example, balancing by the judiciary will be conducted at different stages of the judicial process. At a factual level, judges consider whether they are convinced, while at the normative level, they weigh different arguments, such as goals or rights, to determine the validity or scope of a provision or its applicability in a particular case. These arguments are referred to as principles because they are considered valid only in theory.<sup>223</sup> This form of balancing takes place when courts determine whether a particular norm is fair in considering various rights and interests involved or if it should be disregarded for infringing a fundamental right.

For copyright law, proportionality is becoming more and more desirable. In this setting, proportionality has become synonymous with the notion of a 'fair balance'.<sup>224</sup> Geiger and Jütte analyse the triangular relationship/structure of fundamental rights, and opine that proportionality is crucial, especially in a digital or online environment, because the relationship between the various interests of rightholders, users, and intermediaries cannot be explicitly articulated into legal conventions.<sup>225</sup> The European copyright acquis is regularly interpreted with reference to proportionality.<sup>226</sup> The CJEU utilises proportionality to examine the internal balance of copyright law and to assist national courts in developing suitable remedies to address copyright infringements due to the nature of harmonisation (i.e., mostly through the use of

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<sup>221</sup> R Alexy, 'Balancing, Constitutional Review, and Representation' (2005) 3(4) IJCL 572.

<sup>222</sup> W Sauter, 'Proportionality in EU Law: A Balancing Act?' (2013) 15 Cam Yrbk Euro Legal Stud 439, 461; X Groussot, 'Rock the KaZaA: Another Clash of Fundamental Rights' (2008) 45 CMLR 1745, 1760.

<sup>223</sup> D Jongsma, 'Creating EU Copyright Law: Striking a Fair Balance' (DPhil thesis, Hanken School of Economics 2019) 65.

<sup>224</sup> Case C-283/11 *Sky Österreich GmbH v Österreichischer Rundfunk* [2013] 1 WLUK 387, [2013] 2 CMLR 25, paras 50–68; P Oliver and C Stothers, 'Intellectual Property under the Charter: Are the Court's Scales Properly Calibrated?' (2017) 54(2) CMLR 517, 546; P Teunissen, 'The Balance Puzzle: the ECJ's Method of Proportionality Review for Copyright Injunctions' (2018) 40(9) EIPR 579, 581.

<sup>225</sup> C Geiger and BJ Jütte, 'Platform Liability Under Article 17 of the Copyright in the Digital Single Market Directive, Automated Filtering, and Fundamental Rights: An Impossible Match' (2021) 64 PIJP/TLS Research Paper Series No 64 <<https://digitalcommons.wcl.american.edu/research/64>> last accessed 25 February 2023.

<sup>226</sup> C Geiger, 'The Role of the Court of Justice of the European Union: Harmonizing, Creating and sometimes Disrupting Copyright Law in the European Union' in I Stamatoudi (ed), *New Developments in EU and International Copyright Law* (Kluwer Law International 2016) 435–446; *Fredrik Neij and Peter Sunde Kolmisoppi (The Pirate Bay) v Sweden* App No 40397/12 (ECtHR, 19 February 2013) CE:ECHR:2013:0219DEC004039712.

Directives).<sup>227</sup> It is also important to note that the CJEU frequently emphasises the need to ‘strike a fair balance’ while describing the functional steps of the proportionality principle without explicitly referring to it.<sup>228</sup> Proportionality serves a crucial function in considering the limitations on fundamental rights of rightholders, platform operators, and users, particularly in Article 17 of the DSM Directive. Prior to applying the proportionality analysis to the legal framework of Article 17, it is essential to map the relevant fundamental rights in order to undertake a proportionality assessment.

Advocate General Saugmandsgaard most recently enumerated the competing fundamental rights in copyright law, particularly in relation to Internet enforcement, in the *YouTube* case:

I note in this regard that in *SABAM* the Court ruled that imposing on a platform operator a general obligation to filter the information that it stores would not only be incompatible with Article 15(1) of Directive 2000/31, but also would not strike a ‘fair balance’ between the protection of the intellectual property right enjoyed by rightholders and that of the freedom to conduct a business enjoyed by service providers pursuant to Article 16 of the Charter. Such an injunction would result in a serious infringement of that freedom since it would require that operator to install a complicated, costly, permanent computer system at its own expense. In addition, such an obligation to carry out general filtering would undermine the freedom of expression of the users of that platform under Article 11 of the Charter, since the filtering tool might not distinguish adequately between illegal content and legal content, with the result that its introduction could lead to the blocking of the latter category of content. I will add that such a result would introduce a risk of undermining online creativity, which would be contrary to Article 13 of the Charter. The danger in that regard is that maximum protection of certain forms of intellectual creativity is to the detriment of other forms of creativity which are also positive for society.<sup>229</sup>

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<sup>227</sup> Case C-275/06 *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-00271; Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs SCRL (SABAM)* [2012] ECDR 4; Case C-360/10 *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Netlog NV* [2012] 2 WLUK 519, [2012] 2 CMLR 18; Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541; Case C-484/14 *Tobias Mc Fadden v Sony Music Entertainment Germany GmbH* [2016] ECDR 26, [2017] Bus LR 430.

<sup>228</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs SCRL (SABAM)* [2012] ECDR 4, paras 45–46.

<sup>229</sup> Cases C-682/18 and C-683/18 *Frank Peterson v Google LLC, YouTube LLC, YouTube Inc., Google Germany GmbH (C-682/18) and Elsevier Inc. v Cyando AG (C-683/18)* [2020] ECDR 16, Bus LR 1196, Opinion of AG Saugmandsgaard Øe, para 243.

The *Promusicae* case signalled the start of the development of case law and emphasised the challenging nature of balancing intellectual property rights with other fundamental rights during enforcement.<sup>230</sup> The court had previously used balancing to reconcile conflicting rights and freedoms, but the *Promusicae* case was the first to specifically address the need for balance between intellectual property rights and other fundamental rights.<sup>231</sup> Cases such as *Scarlet Extended*<sup>232</sup> and *SABAM v Netlog*<sup>233</sup> showcase the common issues that arise from copyright infringement in the digital world.

Sganga highlights the development of a conceptual map by the courts to balance copyright protection with other rights and freedoms.<sup>234</sup> According to this map, the fair balance doctrine consists of three steps: identifying the conflicting right/freedom with the provision/injunction at stake, outlining the interaction between them, and determining the presence of a fair balance. The final step entails a preliminary check to assess whether the measure has a detrimental impact on the core of the conflicting right/freedom. If in the affirmative, the lack of fair balance is presumed. If the essence is preserved, a real proportionality assessment is undertaken, which is adapted to the specific situation.

The use of the balancing approach in copyright law, including by the CJEU, has faced significant criticism. Some view it as a flawed and arbitrary method that undermines democracy, human rights, and the rule of law. Critics, such as Peukert, opine that balancing lacks normative criteria,<sup>235</sup> while Burrell and Coleman argue that ‘the notion of balance tells us very little about how to proceed in practice... how weight is to be attributed to differing interests or even as to which interests are to enjoy a place on the scales’.<sup>236</sup> Similarly, Helfer states that the existing European legal framework does not provide a coherent basis, a blueprint,

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<sup>230</sup> Case C-275/06 *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-00271.

<sup>231</sup> C Angelopoulos, ‘Sketching the Outline of a Ghost: The Fair Balance between Copyright and Fundamental Rights in Intermediary Liability’ (2015) 17(6) *Info – The Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media* 72.

<sup>232</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs Scrl (SABAM)* [2011] ECR 2011 -00000.

<sup>233</sup> Case C-360/10 *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Netlog NV* [2012] 2 WLUK 519, [2012] 2 CMLR 18.

<sup>234</sup> C Sganga, ‘A Decade of Fair Balance Doctrine, and How to Fix It: Copyright versus Fundamental Rights before the CJEU from *Promusicae* to *Funke Medien*, *Pelham* and *Spiegel Online*’ (2019) 41(11) *EIPR* 683, 688.

<sup>235</sup> A Peukert, ‘The Fundamental Right to (Intellectual) Property and the Discretion of the Legislature’ in C Ceiger (ed), *Research Handbook on Human Rights and Intellectual Property* (Edward Elgar 2015) 135.

<sup>236</sup> R Burrell and A Coleman, *Copyright Exceptions in Europe: The Digital Impact* (Cambridge University Press 2005) 190.

for balancing different rights in intellectual property cases, resulting in ad hoc decisions.<sup>237</sup> These criticisms necessitate the development and consistent use by the CJEU of a framework for balancing that provides a rational and transparent decision-making process.

Although the ‘fair balance’ doctrine’s exact meaning is still unknown, the literature suggests that balancing can be interpreted in two ways.<sup>238</sup> The first way is ‘ad hoc balancing’, where courts weigh competing interests in individual cases, while the second way is ‘equilibrium balancing’, where courts aim to find a compromise that balances conflicting interests, resulting in a more principled and abstract solution that can guide future cases.<sup>239</sup> Angelopoulos and Smet propose a compromise approach to the issue of intermediary liability, where all parties involved in a clash of fundamental rights must share responsibility and make sacrifices to find an equilibrium.<sup>240</sup> This approach ensures that no party’s fundamental rights are maximally protected at the expense of others. The authors argue that assigning sole responsibility to intermediaries to prevent or remove alleged infringing activities is disproportionate and a compromise solution where each party bears part of the burden is preferable.<sup>241</sup> This compromise solution is already implicit in the existing European legal framework on intermediary liability.

The CJEU regularly emphasises the necessity for a fair balance between rights and interests in interpreting and applying copyright law, including fair interpretation and application, fair enforcement against intermediaries, and fair compensation. The balancing of conflicting rights can be taken into account during the interpretation or application of limitations and exceptions in copyright law. This could occur while identifying the initial scope of these provisions or assessing if their use in a particular case maintains a fair balance between rights. The concept of fair balance is also widely used in enforcement proceedings, particularly between copyright holders and ISPs acting as intermediaries.

Striking a fair balance between the rights of copyright holders, Internet users (streamers), and intermediaries in video game streaming could involve several measures. Firstly, video game developers and publishers could provide clearer guidelines on what content is permissible to be streamed and what is not. This could be done through a clear and concise streaming policy

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<sup>237</sup> L Helfer, ‘The New Innovation Frontier? Intellectual Property and the European Court of Human Rights’ (2008) 29 Harv Int’l LJ 1, 49.

<sup>238</sup> T Aleinikoff, ‘Constitutional Law in the Age of Balancing’ (1987) 96 Yale LJ 983, 946.

<sup>239</sup> *ibid*; S Smet, *Resolving Conflicts Between Human Rights: The Judge’s Dilemma* (Routledge 2016).

<sup>240</sup> C Angelopoulos and S Smet, ‘Notice-and-Fair-Balance: How to Reach a Compromise Between Fundamental Rights in European Intermediary Liability’ (2016) 8(2) JML 266, 278.

<sup>241</sup> *ibid*, 279.

that outlines what copyrighted materials can be used and under what circumstances. This would help streamers avoid unknowingly infringing on copyright, and help game developers and publishers enforce their rights more effectively.

Secondly, game developers and publishers could consider implementing more flexible licensing arrangements for streamers. This could involve granting licences for a limited time or a certain number of streams, or allowing for revenue sharing between the streamer and the game developer/publisher. This would help incentivise streamers to create content while still protecting the intellectual property of game developers and publishers.

Thirdly, platforms that host video game streams could be more proactive in enforcing copyright laws and preventing infringement. This could involve implementing automated content recognition tools to identify infringing content, or providing better resources and support for streamers to help them understand their rights and obligations.

Overall, a fair balance between the rights of video game developers and publishers, streamers, and intermediaries can be achieved through a combination of clear guidelines, flexible licensing arrangements, and proactive enforcement measures. The aforementioned considerations will be further discussed in Chapters 3, 4, and 5.

## 2.5 A Truce between Users and Video Game Copyright Holders: Current Practices, Licence Agreements, and Blockchain Technology

Both game developers and streamers have so far co-existed peacefully. Online video games, like any other software, are equipped with End-User Licence Agreements (EULAs), to which players must assent.<sup>242</sup> EULAs list the terms of use between video game developers and users, covering a wide range of topics. In the majority of cases, EULAs are ‘click wrap’ agreements,<sup>243</sup> which allow streaming on the condition that it is ‘non-commercial’.<sup>244</sup>

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<sup>242</sup> C Kind, ‘Forcing Players to Walk the Plank: Why End-User Licences Agreements Improperly Control Players’ Rights regarding Microtransactions in Video Games’ (2017) 58 Wm & Mary L Rev 1365, 1373.

<sup>243</sup> RJ Girasa, ‘Click-Wrap, Shrink-Wrap, and Browse-Wrap Agreements: Judicial Collision with Consumer Expectations’ (2002) 10 Ne J Legal Stud 102; J Smlalova, ‘Shrink-Wrap/Click-Wrap Agreements and English Contract Law’ (2007) 8 Common L Rev 13.

<sup>244</sup> Non-commercial means the stream is provided for free. Valve Video Policy <[https://store.steampowered.com/video\\_policy](https://store.steampowered.com/video_policy)> last accessed on 7 January 2023; Ubisoft Video Policy <<https://www.ubisoft.com/en-us/videopolicy.html>> last accessed on 7 January 2023; Riot Legal Jibber Jabber <<https://www.riotgames.com/en/legal>> last accessed on 7 January 2023; Microsoft Rules <<https://www.xbox.com/en-US/developers/rules>> last accessed on 7 January 2023; Blizzard End-User License Agreement <<https://www.blizzard.com/en-us/legal/fba4d00f-c7e4-4883-b8b9-1b4500a402ea/blizzard-end-user-license-agreement>> last accessed on 7 January 2023.



Nevertheless, game developers reserve the right to deny streaming of their video game at their sole discretion, for any or no reason.

However, there have been signs that this truce is breaking down. Back in 2013, Nintendo pushed back on LP videos and issued takedown notices to well-known streamers and YouTubers.<sup>245</sup> Then, Nintendo released their partner programme that permitted the streaming of some games, under the provision that streamers would share the advertisement revenue.<sup>246</sup> More specifically, Nintendo and YouTube would split the revenue as 55/45 and then Nintendo would give back 60% of that 55% to the content creator. Games outside of the partnership programme cannot be streamed at all. However, in 2018 Nintendo lifted some of its restrictions regarding the way YouTube creators could monetise gameplay with a new set of guidelines for creators. Content creators on YouTube who want to monetise their content no longer have to join Nintendo's partnership programme; they will work within YouTube's partner programme.<sup>247</sup>

While Nintendo prefers to retain control over the company's intellectual property, other gaming companies have embraced the LP videos as a way of engagement with their products, which serves as free marketing as well.<sup>248</sup> For LP videos and live streams to continue to exist, without the risk that they will be taken down after a request made by the rightholders, licence agreement is a potential solution. In light of the DSM Directive, service providers are obligated to obtain authorisation from rightholders, which can be achieved via a licence agreement between platforms and rightholders.<sup>249</sup>

The possibility of licensing has already been embraced by several video game companies. For instance, Sony implemented an option in its PS4 console for gamers to share their videos and live stream video game footage,<sup>250</sup> and Sony Online Entertainment, the division focusing

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<sup>245</sup> J Bailey, 'Nintendo's Copyright Blunder' (*Plagiarism Today*, 9 April 2015) <<https://www.plagiarismtoday.com/2015/04/09/nintendos-copyright-blunder/> accessed 27/03/2020> last accessed on 4 February 2022.

<sup>246</sup> E Jungar, 'Streaming Video Games: Copyright Infringement or Protected Speech?' (2016) 3(2) *Press Start* <<https://press-start.gla.ac.uk/index.php/press-start/article/view/63>> last accessed on 4 February 2022.

<sup>247</sup> J Alexander, 'Nintendo's New Content Guidelines Make It Easier for YouTube Creators to Get Paid' (*The Verge*, 28 November 2018) <<https://www.theverge.com/2018/11/28/18117172/nintendo-youtube-monetization-partner-program-super-smash-bros-ultimate-lets-play-livestream>> last accessed on 4 February 2022.

<sup>248</sup> Ph Warr, 'Player-generated Gaming Videos Run Into Copyright Wall' (*Internet Policy Review*, 11 June 2014) <<https://policyreview.info/articles/news/player-generated-gaming-videos-run-copyright-wall/298>> last accessed on 4 February 2022.

<sup>249</sup> Council Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17.

<sup>250</sup> PlayStation 4 User's Guide, 'Uploading a Video Clip' <<https://manuals.playstation.net/document/en/ps4/share/videoclip.html>> last accessed on 4 February 2022.

on PC games, allows video creators to monetise their videos on hosting platforms under the condition that creators follow the policy constrains.<sup>251</sup> The list of video game companies and their unique terms of use is long for the purposes of this research. What is remarkable, though, is that each of those companies has its own terms of use, allowing LP videos or not, monetising those videos or not.

The types of video games for which licence agreements can be concluded and the remuneration arrangements are important elements of the agreement. As previously discussed under 2.1.1, there are five main genres of video games: FPS games, RTS games, RPGs, MMORPGs, and MOBA games. The majority of contemporary video games are based on a plot, regardless of their genre. For example, *The Last of Us*, an RPG developed by Naughty Dog, and *World of Warcraft*, an MMORPG developed by Blizzard, feature their own story. For the purposes of the licence agreement, a distinction has to be made between pure story-driven video games on the one hand, and competitive, re-playable games on the other. Puddington explains that pure story-driven video games follow a linear set of events from which players cannot deviate, thus enjoying a similar experience with each playthrough.<sup>252</sup> Story-based games are designed in such a way as to offer a cinematic and yet interactive experience, presenting a linear progression to their story. At the other end of the spectrum, competitive and re-playable games, such as RPGs, MMORPGs, and MOBAs, allow players to explore an ‘open-world’ environment and showcase their skills, choosing where to go and what to do. These games have a re-playable value, as the players’ performance and interaction with other online gamers will vary each time the game is played. Therefore, LP videos and live streams of pure story-driven video games would showcase a playthrough revealing the content, story, and progression of the game, whereas an LP video and live stream of a re-playable game would provide viewers with a critique and strategic ideas unique for each playthrough. The above categorisation of video games will assist in the determination of which video games should be included and excluded from a licence agreement in Chapter 6.

The vast majority of gamers showcase not only their gaming skills but also their technological competency and creativity through gaming modifications, or ‘mods’. Game modification is a rather niche area, where users change a game, through computer

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<sup>251</sup>Sony Online Entertainment Player Direct <<https://www.vgoemulator.net/archive/VGOOfficialForums/www.soe.com/player-direct.html>> last accessed on 4 February 2022.

<sup>252</sup> J Puddington, ‘Fair Play: Economic Justifications for Applying Fair Use to the Online Streaming of Video Games’ (2015) 21 B U J ScT & Tech L 413, 433.

programming, with the use of tools that are not part of the game. Wallace explains that users modify game content either by creating new content or altering the existing one by utilising tools provided by the developer of the original game, or by utilising third-party ‘modding’ programs.<sup>253</sup> Wallace<sup>254</sup> and Kretzschmar and Stanfill<sup>255</sup> are among the proponents of the benefits of modding, arguing that some forms of modding are frequently allowed and encouraged. For example, works towards diversity, inclusion, and self-expression would spark interest in the original game, incentivising people to purchase it. Certain mods, such as malicious or cheating mods, would, however, cause more harm than benefits as they give players an unfair advantage over their opponents.<sup>256</sup>

Regardless of the potential socio-economic benefits, mods potentially constitute a copyright infringement, as well as a violation of the EULA concerning the circumvention of copy protection technologies. However, the author of ‘Spare the Mod’ has argued that total conversion mods (which in essence rely on the game’s underling code/engine but produce a ‘new’ game) would not compromise the world, story, or characters of the original game, which would result in no damage to the copyright holder’s ability to create derivative works, thus supporting a fair use defence.<sup>257</sup> An opposite view was presented by Wallace, who argued that mods should be considered as derivative works, supporting the finding against fair use defences, unless for purposes such as parody, criticism, or education. Recently, Lindstrom focused on total conversion mods and their ability to transform games, and argued that since they depart from the original story, characters, and setting, they are not derivative works.<sup>258</sup> However, total conversion mods can still be considered as derivative works as copyrighted work from the original game has been used in order to create the new work. In other words,

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<sup>253</sup> R Wallace, ‘Modding: Amateur Authorship and How the Video Game Industry is Actually Getting it Right’ (2014) 14(1) *BYU Law Review* 219, 229–230.

<sup>254</sup> *ibid.*

<sup>255</sup> M Kretzschmar and M Stanfill, ‘Mods as Lightning Rods: A Typology of Video Game Mods, Intellectual Property, and Social Benefit/Harm’ (2019) 28(4) *Soc Leg Stud* 517, 532.

<sup>256</sup> *ibid* 525.

<sup>257</sup> Note, ‘Spare the Mod: In Support of Total-Conversion Modified Video Games’ (2012) 125(3) *Harv L Rev* 789, 802 <[https://www-jstor-org.ezproxy.brunel.ac.uk/stable/pdf/41349887.pdf?refreqid=excelsior%3A83cc1bacd2ee6dcd0c0a7ec9f4d8d059&ab\\_segments=&origin=&acceptTC=1](https://www-jstor-org.ezproxy.brunel.ac.uk/stable/pdf/41349887.pdf?refreqid=excelsior%3A83cc1bacd2ee6dcd0c0a7ec9f4d8d059&ab_segments=&origin=&acceptTC=1)> last accessed on 28 January 2023.

<sup>258</sup> C Lindstrom, ‘Mod Money, Mod Problems: A Critique of Copyright Restrictions on Video Game Modifications and an Evaluation of Associated Monetization Regimes’ (2020) 11 *Wm & Mary Bus LRev* 811, 828.

and as Johnson described, mods would require the downloading of the original game first, in order for users to be able to work on the existing code.<sup>259</sup>

Kretzschmar and Stanfill emphatically mention that ‘how a modding happens technologically is often illegal regardless of whether what modders do textually would otherwise be legal – regardless of whether, for example, the content may be commentary or criticism’.<sup>260</sup> For LP videos and live streams, a heavily modifiable game should not be treated differently in terms of licensing granted by the copyright holders. Game modifications (partial or total) are (unauthorised) derivative works that should be subject to specific EULAs with the copyright holders.

For the purposes of this thesis, emphasis will be given to the authorisation requirement, with the conclusion of a licence agreement, between rightholders and an OCSSP. The DSM Directive provides in Article 17 that the primary obligation to obtain authorisation is placed on OCSSPs, and such authorisation will be automatically extended to users (video game streamers) under the proviso that acts carried out by the users are not done so on a commercial basis and do not generate significant revenues. In case the acts of users qualify as such, users require a separate authorisation. Recital 69 of the DSM Directive provides that where rightholders have explicitly authorised users to upload or make available works on an OCSSP, the act of communication to the public of the service provider is authorised.<sup>261</sup> In a recent study conducted by Woznica on video game licensing practices with a focus on Blizzard Entertainment, Epic Games, and Stardew Valley, it is apparent that the licensing terms are vague and outdated.<sup>262</sup> For example, Blizzard’s Video Policy states that ‘Blizzard Entertainment reserves the right to use its products for all commercial purposes. The only exceptions to this rule are if you participate in partner programs with YouTube, Justin.tv, Blip.tv, Own3d.tv, or Ustream.tv... whereby a Production Website may pay you for views of a Production if you are accepted into their partner program’.<sup>263</sup> Two observations can be made here; first, the ‘pay you for views’ is very limited and does not reflect current practices in

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<sup>259</sup> S Johnson, ‘Threats to Copyrighted Code: Bots, Mods, and Reverse Engineering’ (2019) 3 Bus Entrepreneurship & Tax L Rev 175, 187.

<sup>260</sup> M Kretzschmar and M Stanfill, ‘Mods as Lightning Rods: A Typology of Video Game Mods, Intellectual Property, and Social Benefit/Harm’ (2019) 28(4) Soc Leg Stud 517, 518.

<sup>261</sup> Council Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, Recital 69.

<sup>262</sup> O Woznica, ‘Video Game Streaming: How Poor Licensing Undermines Creators’ (2022) 5(1) IELR 32, 40.

<sup>263</sup> Blizzard Video Policy <<https://www.blizzard.com/en-sg/legal/dd76b654-f2c4-4aaa-ba49-ca3122de2376/blizzard-video-policy>> last accessed on 07 September 2022.

certain platforms, for example Twitch, as advertisements, subscriptions, and donations generate revenue. This demonstrates an example of licensing terms that leave streamers in (legal) uncertainty whether or not they violate licensing terms. Second, from the platforms enumerated above, only YouTube operates today. Blip.tv, Own3d.tv, and Ustream.tv no longer exist, and Justin.tv has been transformed into Twitch, which demonstrates the inclusion of outdated information in the terms.

Regarding a user's direct licence and their extension to OCSSPs, one could argue that this extension may happen, but OCSSPs should not rely on this option as it might be insufficient for the requirement of Article 17(4)(a) in regard to best efforts to obtain authorisation. Therefore, this thesis focuses on licence agreements between rightholders and OCSSPs. A licence agreement between users (streamers) and rightholders as well as its extension to the OCSSPs is beyond the scope of this thesis.

For the facilitation of the licence agreement, the thesis explores the promising area of blockchain technology. Blockchain technology bears some unique features,<sup>264</sup> and, although it is still in its infancy, it is hard to underestimate the potential of this technology. A blockchain is a database, a type of distributed ledger, in which all the transactions are grouped into blocks.<sup>265</sup>

Rightholders and service providers can conclude a licence agreement benefiting from this type of technological development. Boshier opines that when it comes to actual licensing, this would be a type of smart contract, which is a computer protocol enabling the facilitation, verification, and enforcement of performance of a contract (for instance agree the licence and make the payment).<sup>266</sup> One of the advantages of employing blockchain technology is the possibility of recording and processing huge amounts of data and metadata associated with a copyright-protected work and the potential to register works into this ledger, which can solve issues around authorship. Once a work is registered into the blockchain, a digital certificate will be issued containing all the relevant information about a work, such as the identity of the author(s), and any licence attached to it. In terms of monitoring, this technology enables the

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<sup>264</sup> F Mostert, 'Digital Tools of Intellectual Property Enforcement: Their Intended and Unintended Norm Setting Consequences' in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020) 554.

<sup>265</sup> F Yang and others, 'The Survey of Intellectual Property Based on Blockchain Technology' (IEEE International Conference on Industrial Cyber Physical Systems, Taiwan, 2019) 743, 744 <doi: 10.1109/ICPHYS.2019.8780125> last accessed on 4 February 2022.

<sup>266</sup> H Boshier, *Copyright in the Music Industry* (Edward Elgar Publishing 2021) 227–28.

tracking and tracing of uses of copyright material, giving control back to the rightholders (video game developers).

## 2.6 Conclusion

Chapter 2 defined the key concepts of the thesis. After gaining a better understanding regarding what video games are and the copyright protection afforded to them, one can conclude that video games are not protected per se, but their individual elements are. National legislation and case law converge – to some extent – with each other and agree that video games are complex works of authorship. The chapter also explained the technicalities of streaming technology. It made a distinction between LP videos and live stream videos, and described that LP videos are made available for on-demand streaming, while live streaming is similar to broadcasting. Chapter 2 introduced the intermediary service providers that store or transmit LP videos or live stream videos, and described the current practice and arrangements between platforms and content creators. The research now moves on to the next chapter, where light will be shed on the debate about whether streaming could be considered as an ‘act of communication to the public’, within the meaning of Article 3(1) of the InfoSoc Directive.

### Chapter 3: The Debate over Streaming as an ‘Act of Communication to the Public’ Concerning Video Game Streaming

The right of communication to the public was initially designed to address acts of terrestrial broadcasting.<sup>267</sup> However, digital technological development in the 21st century led to the introduction of on-demand content and advanced the means of disseminating content via the Internet. Sharing online has been encouraged by developments in technology such as streaming, hyperlinking, and peer-to-peer (P2P) file sharing, whose use could infringe the communication to the public right.<sup>268</sup>

For the purpose of this research, the right of communication to the public will be examined through Article 3(1) of the Information Society Directive (‘InfoSoc Directive’), which provides that

Member States shall provide authors with the exclusive right to authorise or prohibit any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access them from a place and at a time individually chosen by them.<sup>269</sup>

Streaming technology has played a vital role in the success of sharing content online, especially in the video game sector.

Despite its wide use from users and platforms, there is no extensive body of literature and jurisprudence in Europe on the copyright implications of this technology within the video game context.<sup>270</sup> It is important to reiterate that this thesis does not undertake a comparative analysis between the US and European regimes on streaming and copyright law, similar to the research conducted by Lu<sup>271</sup> and Makeen.<sup>272</sup> However, reference to American journals is necessary to provide a better analysis on streaming technology in the video game industry, as the European

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<sup>267</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 1.

<sup>268</sup> *ibid.*

<sup>269</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 3(1).

<sup>270</sup> Y Harn Lee, ‘Copyright and Gaming’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing 2020) 62.

<sup>271</sup> T Lu, ‘Understanding Streaming and Copyright: A Comparison of the United States and European Regimes’ (2018) 13(2) *Journal of Business and Technology Law* 185.

<sup>272</sup> MF Makeen, ‘Video Streaming and the Communication to the Public Right in the United States and European Union’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020).

journals have not published a similar volume of articles. The legal research conducted by Matsui,<sup>273</sup> Mejia,<sup>274</sup> Larkey,<sup>275</sup> Caguioa,<sup>276</sup> and Brusa<sup>277</sup> has focused on the US legal landscape. In the European legal regime, Borghi emphasises streaming in general and argues that the public communication is an umbrella term, which encapsulates the right to broadcast the work to the public and the right to make the work available from a place and at a time individually chosen by the public.<sup>278</sup> In his article, Borghi explains the difference between ‘broadcasting’ and ‘making available’, stating that in broadcasting users can access the work only at the time it is transmitted, while in ‘making available’ the user can access the work any time it is wanted. Lee has highlighted the lack of scholarly analysis in the forms of user-generated content associated specifically with video games.<sup>279</sup> Taking into consideration the debate above, this thesis seeks clarification on the applicability of ‘the communication to the public right’ concerning video game streaming.

This chapter will address the following questions: Does the communication to the public right apply to video game streaming? Does the evolution of the communication to the public right present convergence or divergence in the legislation and jurisprudence of the selected jurisdictions? And do LP videos and live streams fall within the exceptions to or limitations of the communication to the public right? Firstly, the chapter discusses whether streaming activity constitutes an ‘act of communication to the public’. After examining the origin of the communication to the public right as well as the transposition of the right into the national law of the EU Member States and the UK, the chapter also considers the right’s individual elements, namely the ‘act of communication’, ‘the public’, ‘knowledge’, and ‘profit-making’ criteria. The last part of the chapter provides an analysis of the exceptions to and limitations of the communication to the public right, as well as the freedom of expression defence, and assesses whether these defences could be raised in potential litigation regarding unauthorised streaming of video games. To answer the questions posed above, the doctrinal method will be employed for the identification, synthesis, and analysis of the relevant articles of the InfoSoc Directive

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<sup>273</sup> S Matsui, ‘Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright’ (2016) 24 *Tex Intell Prop LJ* 215.

<sup>274</sup> SC Mejia, ‘Fair Play: Copyright Issues and Fair Use in YouTube “Let’s Plays” and Videogame Livestreams’ (2015) 7 *Intellectual Property Brief* 1.

<sup>275</sup> M Larkey, ‘Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcasts’ (2015) 13 *Rutgers JL & Pub Pol’y* 52.

<sup>276</sup> IAC Caguioa, ‘Recent Copyright Issues in Video Games, Esports and Streaming’ (2019) 63 *Ateneo LJ* 882.

<sup>277</sup> E Brusa, ‘Professional Video Gaming: Piracy that Pays’ (2015) 49 *J Marshall L Rev* 217.

<sup>278</sup> M Borghi, ‘Chasing Copyright Infringement in the Streaming Landscape’ (2011) 42(3) *IIC* 316.

<sup>279</sup> Y Harn Lee, ‘Copyright and Gaming’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020) 61.



and the case law of the CJEU and national courts, as well as a comparative analysis of the transposition of the InfoSoc Directive and the interpretation of the communication to the public right in the national legislation of the selected jurisdictions.

### 3.1 Video Game Streaming and the Communication to the Public Right

Without a doubt, the features of streaming technology have played a key role in determining the success of this form of digital transmission, which is now widely used in the video game sector.<sup>280</sup> Live streaming and on-demand streaming can be used for all kinds of video games; however, online video games allow multiple players to participate in a game simultaneously, giving more incentives for gamers to share their gameplay.<sup>281</sup> Taylor argues that live streaming, in particular, allows gamers to transform their private play into public entertainment.<sup>282</sup>

As discussed in Chapter 2, there are two types of streaming that are used for the online distribution of digital works: live streaming and LP videos (on-demand streaming). In live streaming the digital work is delivered simultaneously to multiple users from a single source in real time, while on-demand streaming is used to make digital works available to users upon request.<sup>283</sup> In these two types of streaming the process of transmission is similar but the initiation of the transmission is different. In essence, in live streaming the data are captured from a source, processed to a digital signal, and transmitted to multiple users simultaneously, whereas in on-demand streaming the data are stored on a central server from where the transmission is initiated upon a user's request.<sup>284</sup>

Borghgi argues that the public communication is an umbrella term, which includes the right to broadcast the work to the public and the right to make the work available from a place and at a time individually chosen by the public.<sup>285</sup> He also explains the difference between 'broadcasting' and 'making available', as in broadcasting users can access the work only at the time it is transmitted, while in 'making available' the user can access the work any time it is wanted.<sup>286</sup> Similarly, Makeen differentiates between webcasting and on-demand streaming, and explains that while webcasting refers to 'real time' streaming, on-demand streaming

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<sup>280</sup> M Borghgi, 'Chasing Copyright Infringement in the Streaming Landscape' (2011) 42(3) IIC 316.

<sup>281</sup> S Matsui, 'Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright' (2016) 24 Tex Intell Prop LJ 215.

<sup>282</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 6.

<sup>283</sup> Borghgi (n 280).

<sup>284</sup> *ibid.*

<sup>285</sup> *ibid.*

<sup>286</sup> *ibid.*

requires that users are geographically and chronologically dispersed.<sup>287</sup> Under international copyright instruments, the WIPO Copyright Treaty 1996 (hereafter WCT) introduced the ‘making available’ aspect of the communication to the public right in order to extend copyright protection to cover people who are chronologically dispersed.<sup>288</sup> At a European level, the ‘making available’ right is part of the wider communication to the public right of the InfoSoc Directive,<sup>289</sup> with the scope of covering on-demand streaming. This right covers works that are made available in such a way that members of the public may access them from a place and at a time individually chosen by them (on demand). The CJEU clarified in *C More Entertainment AB v Linus Sandberg* that “‘making available to the public”, for the purposes of Article 3 of the Directive, is intended to refer to “interactive on-demand transmissions” characterised by the fact that members of the public may access them from a place and at a time individually chosen by them’<sup>290</sup> and ‘the EU legislature sought to overcome the legal uncertainty regarding the nature and the level of protection of acts of on-demand transmission by providing for harmonised protection at Community level for that type of act’.<sup>291</sup> Therefore, as Ficsor<sup>292</sup> and Hanuz<sup>293</sup> observe, the making available right is regarded as an extension of copyright protection to cover on-demand services. Examples of on-demand services that are covered by ‘making available to the public’, include video on demand, pay per view TV, and the selection of works from online databases of films or songs at a chosen place and time.<sup>294</sup>

Indeed, there is a debate about whether streaming video games constitutes an act of communication to the public and, as such, an online copyright infringement. The broad scope of the communication to the public right, the lack of a formal definition of the elements of the right, and the introduction of additional criteria, such as the ‘knowledge’ criterion and profit-

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<sup>287</sup> MF Makeen, ‘Video Streaming and the Communication to the Public Right in the United States and European Union’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020) 247, 252, 253.

<sup>288</sup> WIPO Copyright Treaty (adopted 20 December 1996, entered into force 6 March 2002) 2186 UNTS 121 (WCT), art 8.

<sup>289</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 3(1).

<sup>290</sup> Case C-279/13 *C More Entertainment AB v Linus Sandberg* [2015] 3 WLUK 769, [2015] ECDR 15, para 26.

<sup>291</sup> *ibid*, para 30.

<sup>292</sup> M Ficsor, *The Law of Copyright and the Internet: The 1996 WIPO Treaties, Their Interpretation and Implementation* (OUP 2002) 183, 498, 499.

<sup>293</sup> B Hanuz, ‘Direct Copyright Liability as Regulation of Hosting Platforms for the Copyright-Infringing Content Uploaded by Their Users: Quo Vadis?’ (2020) 11 JIPITEC 315, 320 <<https://www.jipitec.eu/issues/jipitec-11-3-2020/5186>> last accessed on 28 January 2023.

<sup>294</sup> C Geiger and F Schönherr, ‘The Information Society Directive’ in I Stamatoudi and P Torremans (eds), *EU Copyright Law: A Commentary* (Edward Elgar Publishing Limited 2021) 294.

making pursuit in the decision-making process, have contributed to the uncertainty around Article 3(1) of the InfoSoc Directive.

Within the gaming community, gamers who may be content creators themselves are not familiar with the provisions of copyright laws. Taylor provides a part of her interview with a streamer who explained that ‘So when I’m playing a game and I’m sitting there, I’m on stream, everything. And what is mine is anything, any content I create whenever I turn on my stream. That is my content. That is me. This is mine.’<sup>295</sup> The streamer distinguished this form of media, saying ‘I totally get the legality of not sharing or streaming music and movies or books because those art forms, those mediums, they are very much set. When you watch a film, it is the same film beginning to end every time. Yeah, you can copyright that. For me, the act of watching somebody play a game, you are not experiencing a game.’ Instead, the streamer argued that viewers watch a specific entertainment product, which was produced by the streamer’s ‘unique actions assembled for a broadcast’.<sup>296</sup>

Uploading a copyrighted work onto the Internet, either via live streaming or making the gameplay available for on-demand streaming, constitutes a copyright infringement if it is done without prior authorisation.<sup>297</sup> The CJEU confirmed in the *Filmspeler* case, concerning the sale of a media device customised with links giving access to content published without the rightholders’ consent, that the streaming of works protected by copyright falls within the scope of ‘communication to the public’ within the meaning of Article 3 of the InfoSoc Directive,<sup>298</sup> and it addressed the temporary reproduction by end users during the streaming of copyright-protected works.<sup>299</sup> However, this will not be further investigated by this thesis, as the emphasis is on rightholders, streamers, and intermediaries. Smith and Silver note that the *Filmspeler* decision will have an impact on business operation and liability, as it was decided that unlawful streaming is as infringing as unlawful downloading.<sup>300</sup> The judgement is very important for the European market, as an online streaming business is liable if it does not acquire licences from

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<sup>295</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 244.

<sup>296</sup> *ibid.*

<sup>297</sup> S Matsui, ‘Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright’ (2016) 24 *Tex Intell Prop LJ* 215; E Brusa, ‘Professional Video Gaming: Piracy That Pays’ (2015) 49 *J Marshall L Rev* 217.

<sup>298</sup> Case C-527/15 *Stichting Brein v Jack Frederik Wullems* [2017] ECDR 14, para 52.

<sup>299</sup> *ibid.*, paras 70 and 71.

<sup>300</sup> J Smith and J Silver, ‘Unlawful Streaming is as Infringing as Unlawful Downloads – Further Guidance from the CJEU on “Communication to the Public”’ (*Herbert Smith Freehills*, 28 April 2017) <<https://hsfnotes.com/ip/2017/04/28/unlawful-streaming-is-as-infringing-as-unlawful-downloads-further-guidance-from-the-cjeu-on-communication-to-the-public/>> last accessed on 4 February 2022.

copyright holders.<sup>301</sup> For hosting platforms, such as YouTube, which employ automatic processes and where the operators are not directly involved, their operators have only general knowledge that infringing content is hosted and shared on its platform.<sup>302</sup> The ‘knowledge’ criterion, along with ‘profit making pursuits’, will be further discussed under 3.4.

The analysis above addressed the first branch of the research question for Chapter 3 regarding the applicability of the communication to the public right to video game streaming in the affirmative. The following sections (3.2 and 3.3) will consider the second branch: Does the evolution of the communication to the public right present convergence or divergence in the legislation and jurisprudence of the selected jurisdictions? To that end, the thesis will first discuss the evolution of the communication to the public right under 3.2, and the transposition of the InfoSoc Directive into the national legislation of the selected jurisdiction in 3.3.

### 3.2 The Origin of the Communication Right: from the Berne Convention to the Information Society Directive

The right of communication to the public has been subjected to considerable judicial interpretation. Technological advancements over recent years have had a great impact on the way the communication is facilitated: from direct communication, such as performance, to an on-demand communication.<sup>303</sup> Although performance is a form of communication to the public, the Berne Convention distinguishes between the right of public performance and the right of communication to the public.<sup>304</sup>

The concept of communication to the public is not new.<sup>305</sup> The right was established in Article 11bis(1) of the Berne Convention and, as Advocate General Sharpston stated,

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<sup>301</sup> T Lu, ‘Understanding Streaming and Copyright: A Comparison of the United States and European Regimes’ (2018) 13(2) *Journal of Business and Technology Law* 185, 213.

<sup>302</sup> B Hanuz, ‘Direct Copyright Liability as Regulation of Hosting Platforms for the Copyright-Infringing Content Uploaded by Their Users: Quo Vadis?’ (2020) 11 *JIPITEC* 315, 337 <<https://www.jipitec.eu/issues/jipitec-11-3-2020/5186>> last accessed on 28 January 2023.

<sup>303</sup> P Mysoor, ‘Unpacking the Right of Communication to the Public: A Closer Look at International and EU Copyright Law’ (2013) 2 *IPQ* 166.

<sup>304</sup> Berne Convention for the Protection of Literary and Artistic Works 1886 (completed at Paris on 4 May 1896, revised at Berlin on 13 November 1908, completed at Berne on 20 March 1914, revised at Rome on 2 June 1928, at Brussels on 26 June 1948, at Stockholm on 14 July 1967, and at Paris on 24 July 1971, and amended on 28 September 1979). The Berne Convention currently has 179 contracting parties and is one of the oldest treaties relating to international copyright law. <[https://www.wipo.int/treaties/en/ShowResults.jsp?country\\_id=ALL&start\\_year=ANY&end\\_year=ANY&search\\_what=C&treaty\\_id=15](https://www.wipo.int/treaties/en/ShowResults.jsp?country_id=ALL&start_year=ANY&end_year=ANY&search_what=C&treaty_id=15)> last accessed on 4 February 2022.

<sup>305</sup> After 1886 the Berne Convention was revised several times. See BH Malkawi, ‘A Long “TRIP” Home: How the Berne Convention, TRIPS Agreement and Other Instruments Completed the International Copyright System’ (2013) 35(2) *EIPR* 93.

The history of Article 11bis(1)... can be seen as a series of attempts to enhance protection of authors' rights in the light of technological developments. The author's right to authorise a performance of his dramatic or musical work had been granted from the outset in 1886.<sup>306</sup>

Article 13 of the Rome Convention sets the basis of the right of broadcasting organisations. The right of communication to the public is granted under the condition that such communication is made in places accessible to the public against payment of an entrance fee.<sup>307</sup> During the Brussels revision of the Berne Convention in 1948 the communication right was considered to take into account the different methods by which it could be exploited. The Brussels revision provided authors with the exclusive right to authorise communication by:

- (i) the radio-diffusion<sup>308</sup> of their works or the communication thereof to the public by any other means of wireless diffusion of signs, sounds or images;
- (ii) any communication to the public, whether over wires or not, of the radio-diffusion of the work, when this communication is made by a body other than the original one;
- (iii) the communication to the public by loudspeaker or any other similar instrument transmitting, by signs, sounds or images, the radio-diffusion of the work.<sup>309</sup>

The Berne Convention did not provide a definition of the communication to the public as such. However, judicial interpretation has provided a greater understanding of different types of the act. In particular, in the *FAPL* cases,<sup>310</sup> the CJEU understood the three acts described above as different forms of communication to the public. However, Advocate General Kokott suggested in her Opinion that the third act (communication by loudspeaker) may not constitute communication to the public at all.<sup>311</sup>

The subsequent revisions to the Berne Convention with the Stockholm Act 1967 and the Paris Act 1971 made no change to this understanding of the communication right. They

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<sup>306</sup> Case C-306/05 *Sociedad General de Autores y Editores de Espana (SGAE) v Rafael Hoteles SL* [2006] ECR I-11519, Opinion of AG Sharpston, para 47.

<sup>307</sup> International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention) 1961, art 13.

<sup>308</sup> WIPO, *Guide to The Copyright and Related Rights Treaties Administered by WIPO and Glossary Of Copyright and Related Rights Terms* (Switzerland, 2003) 69.

<sup>309</sup> Berne Convention for the Protection of Literary and Artistic Works 1886, as revised by the Brussels Act 1948, art 11bis.

<sup>310</sup> Cases C-403/08 and C-429/08 *FA Premier League Ltd and Others v QC Leisure and Others; and Karen Murphy v Media Protection Services Ltd* [2011] ECR I-9083, [2012] Bus LR 1321, para 190.

<sup>311</sup> *ibid*, Opinion of AG Kokott, paras 134 and 143.

provided a more suitable translation in the newly authentic English text.<sup>312</sup> It is evident that the purpose of the Berne Convention was to protect traditional, offline communication, which was becoming ‘obsolete in the context of new technology’ that facilitated online digital transmission, interactivity, and new intermediaries.<sup>313</sup>

The development of these new digital online technologies signalled the need to update the rights established under the Berne Convention. Article 8 of the WCT<sup>314</sup> perceived the right of the communication to the public as a general right, including the elements of ‘making a work available to the public from a place and at a time individually chosen by the public in question’.<sup>315</sup> Ginsburg argued that WCT ‘rationalised and synthesised protection by establishing full coverage of the communication right for all protected works of authorship’.<sup>316</sup> Although the Berne Convention and the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention)<sup>317</sup> covered traditional technologies, the WCT’s ‘making available’ right expanded the protection to cover on-demand digital transmission.<sup>318</sup>

At a European Union level, the right of communication to the public is incorporated in Article 3(1) of the Information Society Directive as follows:

Member States shall provide authors with the exclusive right to authorise or prohibit any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that

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<sup>312</sup> WIPO, *Guide to the Berne Convention for the Protection of Literary and Artistic Works, Paris 1971* (Geneva, 1978) 66.

<sup>313</sup> H Haque, ‘Is the Time Ripe for Another Exclusive Right? A Proposal’ (2008) 30(9) EIPR 371.

<sup>314</sup> WIPO Copyright Treaty (adopted 20 December 1996, entered into force 6 March 2002) 2186 UNTS 121 (WCT), art 8.

<sup>315</sup> P Mysoor, ‘Unpacking the Right of Communication to the Public: A Closer Look at International and EU Copyright Law’ (2013) 2 IPQ 166.

<sup>316</sup> JC Ginsburg, ‘The (New?) Right of Making Available to the Public’ in D Vaver and L Bently (eds), *Intellectual Property In The New Millennium, Essays In Honour Of William R Cornish* (Cambridge University Press 2004) 234.

<sup>317</sup> International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome, 26 October 1961) (Rome Convention).

<sup>318</sup> Case C-279/13 *C More Entertainment AB v Linus Sandberg* [2015] 3 WLUK 769, [2015] ECDR 15, para 30; J Reinbothe and SV Lewinski, ‘The WIPO Treaties 1996: Ready to Come Into Force’ (2002) 24(4) EIPR 199; MF Makeen, ‘Video Streaming and the Communication to the Public Right in the United States and European Union’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020) 252, 253, 254.

members of the public may access them from a place and at a time individually chosen by them.<sup>319</sup>

While the Directive did not provide a specific definition of the communication to the public, its Recitals elaborated on the scope of protection. More specifically, Recital 23 stated that the right should be understood in a ‘broad sense’ and it covered ‘any such transmission or retransmission of a work to the public by wire or wireless means’.<sup>320</sup> Recital 25 stated that rightholders should have the ‘exclusive right to make available to the public copyright works or any other subject-matter by way of interactive on-demand transmissions’.<sup>321</sup>

Based on the definition provided, the communication right is infringed when a protected work is made available to the public by any means, while it is irrelevant whether the work is actually transferred to any member of the public. In order to better comprehend the different notions of ‘available to’ and ‘transferred to’, the CJEU case of *SGAE v Rafael Hoteles SA* clearly stated that:

For there to be communication to the public it is sufficient that the work is made available to the public in such a way that the persons forming that public may access it. Therefore, it is not decisive, contrary to the submissions [of the defendants], that customers who have not switched on the television have not actually had access to the works.<sup>322</sup>

Generally, the communication right is understood to be infringed whenever a protected work is made available to the public in such a way that the members of the public may access it.<sup>323</sup> Nevertheless, it should be noted that, according to UK case law, the mere provision of physical facilities is not sufficient to constitute communication to the public.<sup>324</sup> In *SGAE*, the CJEU was required to assess whether the mere installation of TV sets in hotel rooms was a form of communication to the public. The CJEU held that while the mere provision of physical facilities does not in itself constitute a communication to the public within the meaning of the InfoSoc

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<sup>319</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 3(1).

<sup>320</sup> *ibid*, Recital 23.

<sup>321</sup> *ibid*, Recital 25

<sup>322</sup> Case C-306/05 *Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA* [2006] ECR I-11519, para 43.

<sup>323</sup> *ibid*.

<sup>324</sup> *Football Dataco Limited, The Scottish Premier League Limited, The Scottish Football League, PA Sport UK Ltd v Sportradar GmbH (a Company Registered in Germany), Sportradar AG (a Company registered in Switzerland)* [2010] EWHC 2911 (Ch) [74].

Directive, the installation of such facilities may make it possible from a technical perspective for the public to have access to the broadcasts in question.<sup>325</sup>

In the recent case of *Stichting Brein v Filmspelers*,<sup>326</sup> the CJEU expanded the concept of communication to the public to cover the sale of multimedia players pre-installed with add-ons that contain hyperlinks to websites hosting unauthorised copyright work. This case concerned not merely the provision of physical facilities for enabling a communication, which according to Recital 27 does not in itself amount to a communication to the public,<sup>327</sup> but a sale with full knowledge that the hyperlinks gave access to illegally published works and this was done to make a profit.

In addition, when the communication is facilitated over the Internet, it is sufficient that the work is made available by any means (such as hyperlinking),<sup>328</sup> in order to be infringed. In the *Newzbin* case,<sup>329</sup> the court found that an infringement of the communication to the public right occurs by merely providing access to an otherwise inaccessible protected work, regardless of whether the act of providing access is ‘passive’.

However, the CJEU held in 2009 that the television broadcasting of the graphic user interface of a website does not constitute communication to the public of that work because the broadcasting of a graphic user interface does not allow recipients to use it in order to interact with a computer.<sup>330</sup> This argument has been criticised.<sup>331</sup> It is challenging to identify the reasoning for the CJEU’s approach. The international and European legal frameworks do not provide copyright protection of functional works exclusively for acts that would permit recipients to use the functionality of the work. Mencl suggests that the lack of analysis of what

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<sup>325</sup> Case C-306/05 *Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA* [2006] ECR I 11519, paras 45 and 46.

<sup>326</sup> Case C-527/15 *Stichting Brein v Jack Frederik Wullems* [2017] ECDR 14.

<sup>327</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recital 27.

<sup>328</sup> Hyperlinks have a functional and a visual dimension. Starting with their functional dimension, the term ‘hypertext link’ means a ‘hypertext markup language’ (ie, HTML) which contains the instruction to type in the browser so as to get to a specific web resource. Apart from their functional dimension, they usually appear as a set of words comprising the domain name of a particular webpage or it may be an image or even a single word, typically underlined and highlighted, which indicates that it can be clicked on. E Arezzo, ‘Hyperlinks and Making Available Right in the European Union: What Future for the Internet after *Svensson*?’ (2014) 45 IIC 524.

<sup>329</sup> *Twentieth Century Fox Film Corp v Newzbin Ltd* [2010] EWHC 608 (Ch).

<sup>330</sup> Case C-393/09 *Svaz Softwarové Ochrany Bezpečnostní Softwarová Asociace v Ministerstvo Kultury* [2010] ECDR 3, para 57.

<sup>331</sup> H Laddie, P Prescott, and M Vitoria, *The Modern Law of Copyright and Designs* (4th edn, Butterworths 2011) 17.16; J Mencl, ‘When the Court of Justice Interferes with Interfaces – Case C-393/09 *Bezpečnostní Softwarová Asociace – Svaz Softwarové Ochrany v Ministerstvo Kultury*, Court of Justice of the European Union (Third Chamber), 22 December 2010’ (2012) 2 Queen Mary J Intell Prop 90.



constitutes a graphic user interface might be the cause of the problem.<sup>332</sup> It seems that the CJEU did not consider the graphical design of the graphic user interface, but rather focused on the structure and technical features thereof.

Recital 23 of the InfoSoc Directive defines the scope of the communication to the public right, covering ‘all communication to the public not present at the place where the communication originates’.<sup>333</sup> Thus, ‘public communication’ is considered to be an umbrella term including the right to broadcast the work to the public and the right to make the work available from a place and at a time individually chosen by them.<sup>334</sup>

This two-fold nature of the ‘public communication’ right is evident in the national implementation of Article 3 of the InfoSoc Directive. For instance, the corresponding provision of the UK’s CDPA 1988 stipulates that

reference in this Part to communication to the public are to communication to the public by electronic transmission, and in relation to a work include (a) the broadcasting of the work; (b) the making available to the public of the work by electronic transmission in such a way that the members of the public may access it from a place and at a time individually chosen by them.<sup>335</sup>

Similarly, the French Copyright Act<sup>336</sup> states that ‘the communication of the work to the public by any process (shall consist of) particularly: 1. Public recitation, lyrical performance, dramatic performance, public presentation, public projection and transmission in a public place of a telediffused work; 2. telediffusion.’<sup>337</sup>

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<sup>332</sup> J Mencl, ‘When the Court of Justice Interferes with Interfaces - Case C-393/09 *Bezpečnostní Softwarová Asociace – Svaz Softwarové Ochrany v Ministerstvo Kultury*, Court of Justice of the European Union (Third Chamber), 22 December 2010’ (2012) 2 Queen Mary J Intell Prop 90, 93.

<sup>333</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recital 23.

<sup>334</sup> *ibid*, Recital 25; Case C-135/10 *Società Consortile Fonografici (SCF) v Marco Del Corso* [2012] ECDR 16, [2012] Bus LR 1870, para 59; Case C-279/13 *C More Entertainment AB v Linus Sandberg* [2015] 3 WLUK 769, [2015] ECDR 15, para 26.

<sup>335</sup> Copyright, Designs and Patent Act 1988, s 20(2).

<sup>336</sup> Code de la Propriété Intellectuelle 1994, Article L122-22.

<sup>337</sup> M Ficsor, ‘Collective Management of Copyright and Related Rights’ (WIPO, 2002) <[https://www.wipo.int/edocs/pubdocs/en/copyright/855/wipo\\_pub\\_855.pdf](https://www.wipo.int/edocs/pubdocs/en/copyright/855/wipo_pub_855.pdf)> 107. The word ‘tele-diffusion’ or ‘radio-diffusion’ first appeared in Article 11*bis* of the Rome revision of the Berne Convention 1928, stating that ‘Authors of literary and artistic works shall enjoy the exclusive right of authorizing the communication of their works to the public by radio-diffusion’. The WIPO Guide suggested that radio-diffusion was a synonym of broadcasting ‘communication to the public by radio-diffusion’, which was, at that time, a synonym of ‘broadcasting’. See WIPO, *Guide to The Copyright and Related Rights Treaties Administered By WIPO And Glossary Of Copyright And Related Rights Terms* (Switzerland, 2003) 69. The word radio-diffusion was amended to broadcasting in the Berne Convention 1886, revised by the Paris Act 1971, art 11*bis*.

The German Copyright Act introduced a new legal term originating from Article 3 of the InfoSoc Directive so the newly introduced section 19a of the German Copyright Law reads as follows:

The right to make available to the public is the right to make publicly accessible the work, on a wired or wireless basis, and in such a way that it is accessible for members of the public from places and at times of their choice.<sup>338</sup>

The term of ‘making available to the public’ has been put into context in section 15 of the German law, which provides that ‘a work is publicly reproduced when it is made available to the members of the public or when it is made perceptible simultaneously’.<sup>339</sup> As a consequence, there is no legal difference between broadcasting a work and posting it online, as the provisions for radio broadcasts can also be applied for online content.<sup>340</sup>

While the ‘making available to the public’ applies to posting content online, the German law contained no provisions dealing with file transmission on a P2P basis. Dietl argues that it was for the courts to decide whether file sharing falls under the ‘making available to the public’,<sup>341</sup> considering section 15(3) of the German Copyright Law, which states that ‘a member of the public is anyone who is not connected by personal links to the person exploiting the work or to the other persons who have access to or can perceive the work in a non-physical manner’.<sup>342</sup>

The following part considers how the right of communication to the public has been transposed into the selected national jurisdictions.

### 3.3 Transposing the Information Society Directive into National Laws

The InfoSoc Directive should have been implemented by 22 December 2002. Most Member States transposed the Directive over the course of 2003 and 2004, while only Greece and Denmark met the deadline for implementation.<sup>343</sup>

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<sup>338</sup> Gesetz über Urheberrecht und verwandte Schutzrechte – Urheberrechtsgesetz 1965, s 19a.

<sup>339</sup> *ibid.*, s 15.

<sup>340</sup> Foundation for Information Policy Research, ‘Implementing the EU Copyright Directive’ (2003) 73 <<https://www.fipr.org/copyright/guide/eucd-guide.pdf>> last accessed on 8 April 2023.

<sup>341</sup> *ibid.*

<sup>342</sup> Urheberrechtsgesetz 1965 (n 338), s 15(3).

<sup>343</sup> Foundation for Information Policy Research (n 340).

The content of the Directive was considered to be vague,<sup>344</sup> and therefore debate and political compromise was required in the drafting of the laws. The vagueness originates from the transposition process itself, which would have involved the inherent difficulty of rule-making coupled with political deals and compromises, the translation of documents into various languages, the complicated decision-making procedure, the influence of national interests, and a lack in drafting expertise.<sup>345</sup> When analysing the transposition of the law, the implementation theory emphasises three considerations: the institutional factors, the political factors, and the substantive factors.<sup>346</sup> Among the institutional factors affecting the transposition process are the assessment of legislative changes required for the transposition of Directives (especially in Member States with a large number of laws, e.g. Greece), the difference between Continental Europe's and the UK's politico-administrative structure (the majority of officials in Continental Europe are lawyers, while the UK distinguishes between operational administrators and department lawyers), the national civil servants' education on EU law, and the lack of properly trained personnel. For example, it was not until the late 1990s that the French Ecole Nationale d'Administration offered courses on European law,<sup>347</sup> while Greece is an illustrative example of a Member State lacking properly trained staff for the coordination of European policy.<sup>348</sup>

Politics, in the strict sense of the term, could affect the transposition process in two ways: either by rejecting the Directive, which is not common considering the Commission's gatekeeping role in the EU, or by facilitating, delaying, or undermining the transposition.<sup>349</sup> National officials could, then, either copy the Directive into national law (as in the case of the UK, which will be addressed below) or 'elaborate by trying to facilitate subsequent steps in the implementation chain'.<sup>350</sup> Substantive factors also affect the transposition process, especially where new concepts are to be introduced into the legal framework of Member States, considering the technological progress and development in the market. The InfoSoc Directive was first envisaged in the European Commission's 1988 Green Paper, 'Copyright and the Challenge of Technology', which aimed to strike a balance between rightholders' and authors'

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<sup>344</sup> DG Dimitrakopoulos, 'The Transposition of EU Laws Post-Decisional Politics and Institutional Autonomy' (2001) 7(4) ELJ 442.

<sup>345</sup> R Thomas and G Lynch-Wood, 'Transposing European Union Law in the United Kingdom: Administrative Rule-Making, Scrutiny and Better Regulation' (2008) 14(2) EPL 177, 181.

<sup>346</sup> Dimitrakopoulos (n 344), 445.

<sup>347</sup> *ibid.*, 448.

<sup>348</sup> Y Valinakis, 'Greece's European Policy Making' (October 2012) Hellenic Observatory Papers on Greece and Southeast Europe 21, 22, 23 <<https://core.ac.uk/download/pdf/9693289.pdf>> last accessed on 28 January 2023.

<sup>349</sup> Dimitrakopoulos (n 344), 449.

<sup>350</sup> *ibid.*

rights, on the one hand, and the changes and challenges of the Internet, on the other.<sup>351</sup> Germany was one of the Member States who introduced a new legal provision (section 19a of the German Copyright Act) to define the legal term of ‘communication to the public’ in accordance with Article 3 of the InfoSoc Directive. The following subchapter will discuss the institutional, political, and substantive factors that affected the transposition of InfoSoc Directive into the national laws of Germany, France, Greece, and the UK.

### 3.3.1 Transposition into the EU Member States: Germany, France, and Greece

Germany completed the transposition of the mandatory provisions of the InfoSoc Directive in 2003, four months after the deadline set by the EU.<sup>352</sup> Although Bundesrat, the Second Chamber in Germany’s federal system, criticised the first draft of the law, the law found support from the majority of political parties in the Bundestag (the German Parliament).<sup>353</sup> As mentioned above, the German Copyright Law adopted section 19a, which defines the legal term of ‘communication to the public’ in accordance with Article 3 of the InfoSoc Directive, redefining the right to make works available to the public by differentiating on-demand services from broadcasting, while sections 15 and 22 of the Copyright Act put the communication right in context.<sup>354</sup>

France was the last Member State to transpose the Directive. The delay has been attributed to the Presidential elections of 2002 and to the fact that the transposition had been seen as an opportunity to modify or introduce provisions.<sup>355</sup> Conversely, Greece was the first EU Member State to incorporate the Directive into its intellectual property legislation.<sup>356</sup> Maroulis explains that the provision for implementing the Directive was inserted into an unrelated bill and, during the Parliament discussion of the sections, the tight time schedule led the MPs to debate other sections and ignore the implementation of the Directive.<sup>357</sup> The then Minister of Culture

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<sup>351</sup> Commission of the European Communities, ‘Green Paper on Copyright and the Challenge of Technology – Copyright Issues Requiring Immediate Action’ COM (88) 172 final, 7 June 1988 <[http://aei.pitt.edu/1209/1/COM\\_\(88\)\\_172\\_final.pdf](http://aei.pitt.edu/1209/1/COM_(88)_172_final.pdf)> last accessed on 8 April 2023.

<sup>352</sup> Foundation for Information Policy Research, ‘Implementing the EU Copyright Directive’ (2003) 71 <<https://www.fipr.org/copyright/guide/eucd-guide.pdf>> last accessed on 8 April 2023.

<sup>353</sup> *ibid.*

<sup>354</sup> Gesetz über Urheberrecht und verwandte Schutzrechte – Urheberrechtsgesetz 1965, s 15(3).

<sup>355</sup> Foundation for Information Policy Research (n 352), 56.

<sup>356</sup> The implementation was achieved through Law 3057/2002 ‘Amendment and Completion of Law 2725/99, regulation of matters pertaining to the Ministry of Culture and other provisions’ and specifically s 81 entitled ‘Implementation of the Directive 2001/29 EC of the European Parliament and of the Council of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society and other provisions’.

<sup>357</sup> V Maroulis, ‘The Implementation of the Directive in Greece’ (*fipr.org*) <<https://fipr.org/copyright/guide/greece.htm>> last accessed on 28 January 2023.

informed the Parliament that section 81 consisted – in essence – of a translation of the Directive to be implemented, implying that in reality there was no need to extensively debate it. Section 81 was unanimously voted into law in September 2002. Section 81 of Law 3057/2002 specified the various methods of presentation to the public, by listing the transmission by wire or wireless means or by any other means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.<sup>358</sup>

### 3.3.2 Transposition into the UK

The InfoSoc Directive was transposed into the UK law in 2003.<sup>359</sup> The transposition process was burdensome, and affected by the institutional, political, and substantive factors discussed above. Firstly, it was not an easy task for UK drafters to cope with the volume of Directives adopted by the European Commission.<sup>360</sup> Secondly, the EU Directives possess characteristics that are different to UK legislation in terms of the system of drafting, which causes more problems for the drafters.<sup>361</sup> The nature of Directives creates considerable problems for drafters, as Directives contain the result or the effect to be achieved and ultimately it remains the individual Member State's responsibility to design the implementing framework.<sup>362</sup> As well as Directives being drafted in a style different to primary UK legislation,<sup>363</sup> they are a product of the civil law system of drafting. The multiplicity of languages within the EU<sup>364</sup> and the technicality in drafting European instruments and transpose them into the UK legal system are additional factors affecting the transposition process.<sup>365</sup>

The Copyright and Related Rights Regulations 2003 covered various aspects of copyright law. One of the main areas of change was the introduction of new rights for authors to control 'the communication to the public' of their works as well as the 'making available' of their works, with amendments to the act of broadcasting and the removal of the 'cable programme

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<sup>358</sup> Foundation for Information Policy Research, 'Implementing the EU Copyright Directive' (2003) 81 <<https://www.fipr.org/copyright/guide/eucd-guide.pdf>> last accessed on 8 April 2023.

<sup>359</sup> The Copyright and Related Rights Regulations 2003, SI 2003/2498.

<sup>360</sup> LE Ramsey, 'The Copy out Technique: More of a Cop Out Than a Solution?' (1996) 17(3) Statut Law Rev 218, 221.

<sup>361</sup> *ibid.* Directives are a product of the civil law system of drafting.

<sup>362</sup> Consolidated version of the Treaty on the Functioning of the European Union [2012] OJ C 326/47, art 288; M Horspool, M Humphreys, and M Wells-Greco, *European Union Law* (11th edn, OUP 2021) 122.

<sup>363</sup> D Greenberg, 'The Copy-out Debate in the Implementation of European Union Law in the United Kingdom' (2012) 6 *Legisprudence* 243, 245.

<sup>364</sup> R Thomas and G Lynch-Wood, 'Transposing European Union Law in the United Kingdom: Administrative Rule-Making, Scrutiny and Better Regulation' (2008) 14(2) *EPL* 177.

<sup>365</sup> DG Dimitrakopoulos, 'The Transposition of EU Laws Post-Decisional Politics and Institutional Autonomy' (2001) 7(4) *ELJ* 447.

right’.<sup>366</sup> Section 20 of the CDPA 1988 did not mirror the wording of Article 3 of the InfoSoc Directive. In particular, while Article 3 referred to ‘communication by wire or wireless means’,<sup>367</sup> section 20 of the CDPA referred to communication by ‘electronic transmission’.<sup>368</sup> Copy-out is a solution, but, as Ramsey highlighted, this could create new legal problems, including the lack of certainty, legal (in)compatibility, and the interpretation of the copied out material by the UK courts.<sup>369</sup> The debate between those arguing for copy-out and those arguing for re-write as approaches to transposition of Directives into UK law was won by the copy-out movement in previous decades. The judicial antipathy towards the re-write approach was voiced by Jacob J,<sup>370</sup> and similarly the UK government accepted that they would use copy-out for transposition ‘where it is available, except where doing so would adversely affect United Kingdom interests’.<sup>371</sup> However, this position is no longer relevant after Brexit. There were, inevitably, objections to the copy-out technique,<sup>372</sup> similar to the ones raised by Ramsey in 1996, but the arguments for the copy-out approach prevailed. Greenberg suggested a possible compromise by adopting the interpretive approach, which ‘aims to produce law of the same degree of precision as that with which our domestic courts regularly deal, and to make it unnecessary for the courts or the citizens to whom the legislation is primarily addressed to have to discover the terms and probable intention of the underlying European legislation’.<sup>373</sup>

Renda and others argue that the InfoSoc Directive is the most comprehensive piece of legislation in the EU in the copyright sector, because it redefined the subject, removed to a certain extent the disparities between national jurisdictions, and paved the way for the ‘Digital Single Market’.<sup>374</sup> Similarly, Sakhivel confirm that the concept of the communication to the public right has been construed broadly in both the EU and UK legal frameworks in order to

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<sup>366</sup> The Copyright and Related Rights Regulations 2003, SI 2003/2498, reg 6.

<sup>367</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 3(1).

<sup>368</sup> Copyright, Designs and Patents Act 1988, s 20.

<sup>369</sup> Copy-out is a drafting technique that replicates the language used in the Directive. See LE Ramsey, ‘The Copy out Technique: More of a Cop Out Than a Solution?’ (1996) 17(3) Statut Law Rev 218.

<sup>370</sup> *Customs And Excise v Century Life Plc* [2000] EWCA Civ 336 [7]; *Beloit Technologies v Valmet Paper* [1995] RPC 705 [35].

<sup>371</sup> HM Government, ‘Transposition Guidance: How to Implement European Directives Effectively’ (February 2018) 11  
<[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/949143/with-drawn-eu-transposition-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/949143/with-drawn-eu-transposition-guidance.pdf)> last accessed on 8 April 2023.

<sup>372</sup> D Greenberg, ‘The Copy-out Debate in the Implementation of European Union Law in the United Kingdom’ (2012) 6 *Legisprudence* 243, 252.

<sup>373</sup> *ibid* 256.

<sup>374</sup> A Renda and others, ‘The Implementation, Application and Effects of the EU Directive on Copyright in the Information Society’ (2015) CEPS Special Report No 120, 17.

cover all possible communication methods.<sup>375</sup> The CJEU has played a significant role in the interpretation of the communication to the public right since the middle of the 2000s, by answering the questions it has been asked, but also deciding on issues that had not been raised, such as the concept of ‘originality’ in the case . In the area of copyright, the CJEU has applied the concept of ‘autonomous notions of Community law’ that should be interpreted in a uniform manner in all EU Member States, and affirmed its exclusive competence to provide interpretations, which have binding effect in all Member States. To a great extent, copyright laws have been harmonised across Europe. For example, convergence can be observed on the European concept of originality, under the influence of the *Infopaq* decision,<sup>376</sup> which lies between the British ‘skill and labour’ test and the German requirement of a certain level of creativity (*Gestaltungshöhe*),<sup>377</sup> through which the work should reflect the author’s personality.<sup>378</sup> Regarding the communication to the public right, judicial interpretation has clarified the nuances of ‘communication’ and ‘public’. The following sections address each of these issues.

### 3.4 The Individual Elements of Article 3(1) of the InfoSoc Directive

The notion of communication to the public forms one of the exclusive rights of copyright holders that have been harmonised by the InfoSoc Directive.<sup>379</sup> Despite the lack of an explicit definition, the communication to the public right must be given an ‘autonomous and uniform interpretation’ across the EU.<sup>380</sup> Subsequent CJEU judgements began to bring some clarity to the right, but new questions have risen.

The ‘communication to the public’ right involves two cumulative criteria, namely an ‘act of communication’ of a work and the communication of that work to the ‘public’.<sup>381</sup> In *Ziggo* the CJEU confirmed that an ‘act of communication’ covers ‘any transmission or retransmission of

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<sup>375</sup> M Sakthivel, *Broadcasters’ Rights in the Digital Era: Copyright Concerns on Live Streaming* (BRILL 2020) 179.

<sup>376</sup> Case C-5/08 *Infopaq International A/S v Danske Dagblades Forening* [2009] ECR I-6569; [2012] Bus LR 102; [2009] 7 WLUK 441.

<sup>377</sup> A Lucas Schloetter, ‘Is There a Concept of European Copyright Law? History, Evolution, Policies and Politics and the Acquis Communautaire’ in I Stamatoudi and P Torremans (eds), *EU Copyright Law: A Commentary* (Edward Elgar Publishing Limited 2021) 10.

<sup>378</sup> German Copyright Act – Gesetz über Urheberrecht und verwandte Schutzrechte – Urheberrechtsgesetz 1965, s 2(2); A Rahmatian, ‘Originality in UK Copyright Law: The Old “Skill and Labour” Doctrine Under Pressure’ (2013) 44 IIC 4, 17.

<sup>379</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10.

<sup>380</sup> Case C-306/05 *Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA* [2006] ECR I-11519 *SGAE*, para 31.

<sup>381</sup> Case C-527/15 *Stichting Brein v Jack Frederik Wullems* [2017] ECDR 14, para 29.

a work to the public by wire or wireless means, including broadcasting’, and established that ‘any act by which a user, with full knowledge of the relevant facts, provides its clients with access to protected works is liable to constitute an “act of communication” for the purposes of Article 3(1) of Directive 2001/29’.<sup>382</sup> The Court accepted that the works were made available on The Pirate Bay platform by its users rather than by its operators.<sup>383</sup> However, the operators of The Pirate Bay, ‘by making that platform available and managing it, provide their users with access to the works concerned. They can therefore be regarded as playing an essential role in making the works in question available.’<sup>384</sup> The Court considered The Pirate Bay operators’ intervention of indexing torrent files in order to allow users to locate those works. As the Court observed, without such intervention, ‘the works could not be shared by the users or, at the very least, sharing them on the internet would prove to be more complex’.<sup>385</sup> Considering the operators’ undertaking in indexing, categorising, deleting, or filtering the works available on the platform, one could argue that the operators did not merely provide physical facilities for enabling or making a communication to the public.<sup>386</sup> The following part considers in detail the two elements of the right, meaning the ‘act of communication’ and the ‘public’.

#### 3.4.1 An Act of Communication

The definition of what constitutes communication to the public has not been given in either the InfoSoc Directive or the WCT. The InfoSoc Directive explains that ‘communication takes place when it is directed to a public not present at the place at which the communication originates’.<sup>387</sup> One would reasonably wonder where the communication actually originates. In the UK High Court case of *FAPL v QC Leisure*, Kitchin J was faced with the question of whether there was an act of communication to the public through showing the broadcast of Premier League matches on a television set to the customers in a pub, using a foreign decoder.<sup>388</sup> Kitchin J noted that the publicans ‘simply received the signal, decoded it and displayed it on the television’ and therefore, in his provisional view, he explained that they had not communicated the broadcast to the public.<sup>389</sup> Kitchin J, having given a provisional view,

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<sup>382</sup> Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19, paras 30 and 34.

<sup>383</sup> *ibid*, para 36.

<sup>384</sup> *ibid*, para 37.

<sup>385</sup> *ibid*, para 36.

<sup>386</sup> *ibid*, para 38.

<sup>387</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recital 23.

<sup>388</sup> *Football Association Premier League v QC Leisure* [2008] EWHC 1411 (Ch).

<sup>389</sup> *ibid*, [262].



referred the question to the CJEU. Advocate General Kokott expressed a similar view, arguing that the public was present at the place where the broadcast originated (namely, on the television screen).<sup>390</sup> However, the CJEU adopted a different view and stated that Recital 23 excludes the audiences of direct representation and performances. The Court held that the transmission of a match on a television screen, broadcasting to the people present at a public house, did constitute an act of communication to the public.<sup>391</sup>

A discussion about the emission theory and the transmission theory is particularly important at this point. According to the emission theory, the communication takes place where the subject matter is ‘emitted’, while the transmission theory states that the communication takes place where the subject matter is ‘received’.<sup>392</sup> *Football Dataco Ltd v Sportsradar GmbH* was further referred to the CJEU,<sup>393</sup> which was asked whether the infringement of a database by way of extraction and/or re-utilisation occurred at the place from where the data was emitted (as per the emission theory) or the place where the data was received (as per the transmission theory). The CJEU decided that the making available online should also mean reception of the data,<sup>394</sup> as communication entails arrival as well as departure. According to the Court, the act of re-utilisation occurred in all places, starting with the place where data was sent and ending with the place where it was received, ruling against the emission theory.<sup>395</sup>

It has been stated that the ‘communication’ entails an active role played by the user of the content to ensure that the content reaches the public.<sup>396</sup> In *Sociedad General de Auditores y Editores (SGAE) v Rafael Hoteles SL*,<sup>397</sup> the first case in which the CJEU addressed substantively the communication to the public right,<sup>398</sup> it was found that the mere installation of television sets in hotel rooms does not as such constitute a communication to the public; however, this installation may make it technically possible for the public to access the

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<sup>390</sup> Cases C-403/08 and C-429/08 *FA Premier League Ltd and Others v QC Leisure and Others; and Karen Murphy v Media Protection Services Ltd* [2011] ECR I-9083, [2012] Bus LR 1321, Opinion of AG Kokott, para 144.

<sup>391</sup> *ibid.*, paras 200–03.

<sup>392</sup> Floyd J defined the term ‘emission theory’ in *Football Dataco Ltd v Sportsradar GmbH* [2010] EWHC 2911 (Ch), [2011] ECDR 2 at [66]. Jacob LJ defined the term ‘transmission theory’ in *Football Dataco Ltd v Sportsradar GmbH* [2011] EWCA Civ 330, [2011] 1 WLR 3044 at [42].

<sup>393</sup> Case C-173/11 *Football Dataco Ltd v Sportsradar GmbH* [2013] 1 CMLR 29.

<sup>394</sup> *ibid.*, para 44.

<sup>395</sup> *ibid.*, paras 44 and 47.

<sup>396</sup> *ibid.*

<sup>397</sup> It was the first time that the CJEU addressed substantively the communication to the public right. J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 48.

<sup>398</sup> *ibid.*

broadcast.<sup>399</sup> The Court continued that if the hotel distributed the signal to its customers, then communication to the public would take place.<sup>400</sup> A similar approach was taken by the CJEU in the *FAPL* case, in the sense that without the intentional intervention of providing customers with access to broadcasts, the customer could not have had access to the broadcast.<sup>401</sup>

A question may arise in cases where the public has lawful access to original content, but the user provides an alternative method to access the content by means of live streaming. Although in *ITV v TVCatchup* Floyd J gave a preliminary finding that there had been a communication to the public,<sup>402</sup> the CJEU did not address the debate over whether the defendant's role should be indispensable. Mysoor opines that the role of the person communicating the work does not have to be indispensable for the public to access the content and that each intervention should be viewed separately.<sup>403</sup>

One of the most recent cases dealing with the right of communication to the public was *Stichting Brein v Ziggo*,<sup>404</sup> where the CJEU held that an 'act of communication to the public' would depend on whether the user has played an 'indispensable role' through a 'deliberate intervention'.<sup>405</sup> The Court applied this principle to the facts of the case and concluded that the management of an online platform that enabled users to locate the torrent files and download them amounted to a 'deliberate intervention', as absent the online platform (The Pirate Bay) it would be impossible or difficult for users to share the work online.

Koo suggests that the communication to the public right should be analysed in two faces: the first concerns the initial interpretation of the right pre-Svensson era, while the second face began with *Svensson* and can be distinguished by its Internet context.<sup>406</sup> While the criteria for identifying an act of communication to the public, as established in *Rafael Hoteles*, remained the same until *Svensson*, in *ITV v TVCatchup* – the first case concerning the communication to the public right and the Internet – the court treated Internet retransmission as a 'specific technical means different from that of the original communication' requiring new authorisation

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<sup>399</sup> Case C-306/05 *Sociedad General de Autores y Editores de Espana (SGAE) v Rafael Hoteles SL* [2006] ECR I-11519, para 45.

<sup>400</sup> *ibid*, paras 46–47.

<sup>401</sup> Cases C-403/08 and C-429/08 *FA Premier League Ltd and Others v QC Leisure and Others; and Karen Murphy v Media Protection Services Ltd* [2011] ECR I-9083, [2012] Bus LR 1321, paras 195–96.

<sup>402</sup> *ITV Broadcasting Ltd & Ors v TV Catchup Ltd* [2011] EWHC 1874 (Pat).

<sup>403</sup> P Mysoor, 'Unpacking the Right of Communication to the Public: A Closer Look at International and EU Copyright Law' (2013) 2 IPQ 166.

<sup>404</sup> Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19.

<sup>405</sup> *ibid*, para 26.

<sup>406</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 47.

regardless of the fact that the content in the retransmission is already freely available through ordinary broadcast.<sup>407</sup> Hence, *ITV v TVCatchup* provided an additional criterion to those already established in *Rafael*.<sup>408</sup>

The dawn of Internet cases, beginning with *Svensson*,<sup>409</sup> changed the initial criteria for the communication to the public right, as introduced in *Rafael*. While the *ITV v TVCatchup* case introduced the ‘specific technical means’, the changes required in *Svensson* and beyond affected the core of the exclusive right.<sup>410</sup> The *Svensson* case and the subsequent cases of *Bestwater*,<sup>411</sup> *GS Media*,<sup>412</sup> *Filmspeler*,<sup>413</sup> *Ziggo*,<sup>414</sup> *VCAST*,<sup>415</sup> and *Renckhoff*<sup>416</sup> address four important issues: the adoption of the ‘access approach’, the harmonisation of the right, the criterion of the ‘new public’ on the Internet, and the requirement of ‘for profit’ and/or knowledge.<sup>417</sup>

### 3.4.2 Who Is the ‘Public’?

In *Rafael Hoteles*, the Court held that the term ‘public’ refers to an ‘indeterminate number of potential viewers’.<sup>418</sup> Groups that are too small or insignificant are excluded.<sup>419</sup> The Court has faced difficulties and inconsistencies in interpreting the ‘public’ in cases where the group of people is small or closed. For instance, the clientele of a hotel who receive retransmissions of TV signals in their rooms were a public,<sup>420</sup> but patients at a dentist surgery were not.<sup>421</sup>

In Germany, there have been uncertainties in determining what constitutes a large number of persons. Examining the German case law, in particular the German Federal Court of Justice

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<sup>407</sup> Case C-607/11 *ITV Broadcasting Ltd and Others v TVCatchUp Ltd* [2013] Bus LR 1020, [2013] ECDR 9, paras 26 and 39.

<sup>408</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 51.

<sup>409</sup> Case C-466/12 *Sveinsson Nils & Ors v Retriever Sverige AB* [2014] 3 CMLR 4.

<sup>410</sup> Koo (n 408) 52.

<sup>411</sup> Case C-348/13 *BestWater International GmbH v Michael Mebes and Stefan Potsch* [2014] 10 WLUK 615 (ECJ).

<sup>412</sup> Case C-160/15 *GS Media BV v Sanoma Media Netherlands BV and others* [2016] Bus LR 1231, [2016] ECDR 25.

<sup>413</sup> Case C-527/15 *Stichting Brein v Jack Frederik Wullems* [2017] ECDR 14.

<sup>414</sup> Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19.

<sup>415</sup> Case C-265/16 *VCAST Ltd v RTI SpA* [2017] 11 WLUK 694, [2018] ECDR 5.

<sup>416</sup> Case C-161/17 *Land Nordrhein-Westfalen v Dirk Renckhoff* [2018] Bus LR 1815, [2018] ECDR 21.

<sup>417</sup> Koo (n 408) 52.

<sup>418</sup> Case C-306/05 *Sociedad General de Autores y Editores de Espana (SGAE) v Rafael Hoteles SL* [2006] ECR I-11519, para 37.

<sup>419</sup> *ibid.*

<sup>420</sup> *ibid.*, para 54; Case C-136/09 *Organismos Sillogikis Diacheirisis Dimiourgon Theatrikon kai Optikoakoustikon Ergon v Divani Acropolis Hotel* [2010] ECR I-37, para 38.

<sup>421</sup> Case C-135/10 *Societa Consortile Fonografici (SCF) v Del Corso* [2012] Bus LR 1870, [2012] 3 WLUK 494 (ECJ (3rd Chamber)).

(BGH) decision in *Hintergrundmusik in Zahnarztpraxen* and the Regional Court of Cologne decision in the *Rehabilitationszentrum*, one could observe the controversial approach and interpretation of what a public is. While in *Hintergrundmusik in Zahnarztpraxen* the BGH held that playing background music in dentists' waiting rooms does not reach a large number of people,<sup>422</sup> the Regional Court of Cologne decided in the *Rehabilitationszentrum* that playing background music in a rehabilitation centre reached in fact a fairly large number of people.<sup>423</sup> The BGH, with reference to the CJEU decision on *Del Corso*,<sup>424</sup> provided a detailed analysis of the reasons patients in a dentist's practice are not a large number of people, a determination that would depend on how many people had access to the same work at the same time and one after the other. The number of people present at the same time in the practice is limited, and any background music does not serve any commercial purpose, but instead it would enable patients' enjoyment. Such activity, on the side of a dentist, would not increase the number of patients or the price of the treatment that they provide, hence there would be no impact on their income. Receiving dental care is the only reason patients visit a dental practice, and any background music is not a component of dental care. The Regional Court of Cologne, however, compared the guests and patients of the rehabilitation centre to the guests of a hotel, mainly because there is a large number of people in the waiting rooms and consultation rooms, and this group of patients changes constantly; patients arrive before their treatment and are on site at the same time as those who are already waiting and those whose treatment has ended and who are waiting for their follow up consultation and to book a new appointment, in addition to persons accompanying the patients. An additional consideration can be given regarding the two German cases; the Regional Court of Cologne in the second instance exercised its right to refer to the CJEU,<sup>425</sup> while in *Hintergrundmusik in Zahnarztpraxen* the BGH, as the highest civil court, did assume an *acte clair*, at least with regard to background music in dentists' practices,<sup>426</sup> and did not request a preliminary ruling.

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<sup>422</sup> German Federal Court of Justice (BGH) I ZR 14/14, 18 June 2015, paras [32]–[36] <https://lexetius.com/2015,3988>.

<sup>423</sup> Regional Court of Cologne 14 S 30/14, 20 February 2015, paras [88]–[90] <https://openjur.de/u/853262.html>.

<sup>424</sup> Case C-135/10 *Societa Consortile Fonografici (SCF) v Del Corso* [2012] Bus LR 1870, [2012] 3 WLUK 494 (ECJ (3rd Chamber)).

<sup>425</sup> Case C-117/15 *Reha Training Gesellschaft für Sport- und Unfallrehabilitation mbH v Gesellschaft für musikalische Aufführungs- und mechanische* [2016] Bus LR 933; [2017] ECDR 1.

<sup>426</sup> J Bernd Nordemann, 'Communication to the Public in Copyright Law – the German Struggle with the CJEU Concept' (*Kluwer Copyright Blog*, 28 April 2016) <<http://copyrightblog.kluweriplaw.com/2016/04/28/communication-to-the-public-in-copyright-law-the-german-struggle-with-the-cjeu-concept/>> last accessed on 12 October 2022.

The CJEU also explained what constitutes a ‘new public’, namely a ‘public different from the public at which the original act of communication of the work is directed’, given that the communication is made by ‘a broadcasting organisation other than the original one’.<sup>427</sup> In other words, it is important to show either that the public is a ‘new public’, which means that the rightholders did not take it into account when they authorised the initial communication of the work to the public, or that the communication takes place via different technical means than those used in the initial communication.<sup>428</sup>

The decisions in *Svensson* and *Renckhoff* were considered to be ‘flatly contradictory’ in this regard.<sup>429</sup> While in both cases the rightholders had authorised the works to be freely accessible on the Internet, in *Svensson*, the original public was the whole Internet (users) and thus any subsequent online communication could not be to a new public, but in *Renckhoff*, the original public was only the users of the Spanish travel website, meaning that a new public would be anyone who was not a user of that website.<sup>430</sup> McWhirter explained that the contradictory position in *Svensson* and *Renckhoff* was attributed to the functioning of hyperlinking. Hyperlinking, unlike re-posting a photo, helps Internet users navigate and locate online content. On the contrary, in cases where the work is copied, Internet users do not access the work on the original page and the rightholder loses control as to whom the work is communicated.<sup>431</sup>

The analysis of the ‘public’ criterion leads to the admission that the concept of the public is three-fold, referring to:<sup>432</sup> an indeterminate number of potential viewers and a fairly large number of people;<sup>433</sup> using specific technical means, different from those previously used;<sup>434</sup> or communicating to a ‘new public’ that had not already been taken into account by the copyright holders when they authorised the initial communication of their work to the public.<sup>435</sup>

Taking the example of the *Ziggo* case, where the Court observed that the communication on The Pirate Bay online sharing platform was aimed at an indeterminate number of potential

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<sup>427</sup> Case C-306/05 *Sociedad General de Autores y Editores de Espana (SGAE) v Rafael Hoteles SL* [2006] ECR I-11519, paras 40–41.

<sup>428</sup> C Angelopoulos, ‘Communication to the Public and Accessory Copyright Infringement’ (2017) CLJ 496.

<sup>429</sup> *Warner Music UK Ltd v TuneIn Inc* [2019] EWHC 2923 (Ch) [99].

<sup>430</sup> A McWhirter, ‘Communication to the Public Online: Protecting Copyright or Breaking the Internet’ (2020) 15(5) *JIPLP* 390, 394.

<sup>431</sup> *ibid.* McWhirter stated that a hyperlink is parasitic to the authorised posting of the work and as such by removing the original work, the hyperlink will no longer function.

<sup>432</sup> F Wang, ‘*Stichting Brein, AG Media and Svensson* Cases: Comments on the Interpretation of an “Act of Communication to the Public”’ (2017) 110 *Journal of Intellectual Property Forum* 97.

<sup>433</sup> Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19, para. 27; see also Case C-527/15 *Stichting Brein v Jack Frederik Wullems* [2017] ECDR 14, para. 32.

<sup>434</sup> *ibid* *Ziggo*, para 28; and *Stichting Brein*, para 33.

<sup>435</sup> *ibid.*

recipients and involved a large number of persons,<sup>436</sup> there can be no doubt that communication to over 2 million concurrent viewers on streaming platforms, such as Twitch, is communication to a large and indeterminate number of people, which constitutes a public.<sup>437</sup>

### 3.4.3 The ‘Knowledge’ Criterion

It was mentioned before that in the *Svensson* case the Court held that hyperlinking to freely accessible works on the Internet would not amount to an act of communication to the public.<sup>438</sup> In an effort to limit the *Svensson* precedent, the CJEU introduced the ‘knowledge’ criterion in the *GS Media* case.<sup>439</sup>

It is of the utmost importance to distinguish between ‘actual’ and ‘presumed’ knowledge. In cases where the communicator has received notice that communication of the work is unauthorised, it will be held to have actual knowledge.<sup>440</sup> Presumed knowledge can be found in cases where the communication is done ‘for profit’.<sup>441</sup> On the contrary, where an act does not have a profit-making nature, it is presumed that the communicator does not know and cannot reasonably know whether the work was published on the Internet with consent.<sup>442</sup> In the absence of knowledge, there can be no communication and as such no communication to the public.<sup>443</sup>

The ‘knowledge’ criterion has been linked to the ‘new public’ criterion. In *GS Media*, the CJEU stated that if there is knowledge that the work is unauthorised, there will be a new public.<sup>444</sup> Similarly, in *Ziggo* the Court held that there must be a communication to a new public because the operators of The Pirate Bay could not be unaware that their platform provided access to unauthorised works.<sup>445</sup>

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<sup>436</sup> Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19, para. 27; see also Case C-527/15 *Stichting Brein v Jack Frederik Willems* [2017] ECDR 14, para. 42.

<sup>437</sup> Twitch Tracker, ‘Twitch Statistics and Charts’ <<https://twitchtracker.com/statistics>> last accessed on 24 August 2022.

<sup>438</sup> Case C-466/12 *Svensson Nils & Ors v Retriever Sverige AB* [2014] 3 CMLR 4.

<sup>439</sup> Case C-160/15 *GS Media BV v Sanoma Media Netherlands BV and others* [2016] Bus LR 1231, [2016] ECDR 25, paras 47–51.

<sup>440</sup> *ibid*, para 54; Case C-527/15 *Stichting Brein v Jack Frederik Willems* [2017] ECDR 14, para 50 and Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19, para 45.

<sup>441</sup> Case C-160/15 *GS Media* (n 439), para 51. The CJEU stated that where an act is done for profit, there is a rebuttable presumption that the communicator has knowledge of the nature of the work, including any lack of authorisation.

<sup>442</sup> *ibid*, para 47.

<sup>443</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 108.

<sup>444</sup> Case C-160/15 *GS Media* (n 439), para 52.

<sup>445</sup> *ibid*, para 45.

Koo argues that the introduction of the ‘knowledge’ criterion is questionable because ‘knowledge’ was not a requirement for primary copyright infringement, but it was an element of secondary liability.<sup>446</sup> However, based on the judgements in *GS Media*, *Filmspelers*, and *Ziggo*, it is evident that the ‘knowledge’ criterion has been decisive in determining infringement.<sup>447</sup>

#### 3.4.4 The Economic Aspect of the Communication to the Public Right

The concept of ‘for profit’ has been transformed over the course of the pre-*GS Media* era and post-*GS Media* era. Prior to *GS Media*, ‘for profit’ was considered to be relevant but not essential for proving an act of communication to the public.<sup>448</sup> However, the concept ‘for profit’ was transformed in *GS Media*, where the CJEU considered it as a key element by linking it with the ‘knowledge’ requirement.

In *GS Media* the CJEU held that where a person shares a hyperlink without having a ‘profit making’ pursuit, in the absence of actual knowledge that the work is unauthorised, it is presumed that the person ‘does not know and cannot reasonably know, that the work has been published on the Internet without the consent of the copyright holder’.<sup>449</sup> On the other end of the spectrum, where a person shares a hyperlink to an authorised work pursuing profit, it is presumed that the person has knowledge or ought to have known that the hyperlink provides access to an authorised work.<sup>450</sup> Therefore, in the absence of knowledge, actual or presumed, there is no act of communication, and in turn no communication to the public.

In the pre-*GS Media* cases, the application of the ‘for profit’ criterion was inconsistent. For instance, in *FAPL v QC Leisure*, the Court held that an act of communication would be for profit where it will affect the financial results of the establishment (such as a pub).<sup>451</sup> Subsequently, in *Marco Del Corso* the CJEU stated that the playing of music in a dentist’s office was not ‘for profit’, because the music would not attract new clients or affect the

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<sup>446</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 116.

<sup>447</sup> *ibid* 56.

<sup>448</sup> Case C-306/05 *Sociedad General de Autores y Editores de Espana (SGAE) v Rafael Hoteles SL* [2006] ECR I-11519, para 44; Cases C-403/08 and C-429/08 *FA Premier League Ltd and Others v QC Leisure and Others; and Karen Murphy v Media Protection Services Ltd* [2011] ECR I-9083, [2012] Bus LR 1321, para 204 and Case C-117/15 *Training v GEMA* [2016] 3 CMLR, para 49.

<sup>449</sup> Case C-160/15 *GS Media BV v Sanoma Media Netherlands BV and others* [2016] Bus LR 1231, [2016] ECDR 25, para 47.

<sup>450</sup> *ibid*, paras 49–51.

<sup>451</sup> Cases C-403/08 and C-429/08 *FA Premier League Ltd* (n 448), para 204 and Case C-117/15 *Training* (n 448) para 205.

treatment.<sup>452</sup> Surprisingly, the CJEU held in a similar case of *Reha Training* that the playing of television broadcasts in the waiting and training rooms of a rehabilitation centre was ‘for profit’, because – although it had no medical benefit – it was an additional service that made the centre more attractive.<sup>453</sup>

Following the uncertainty of the ‘for profit’ criterion, Dusollier has argued that the criterion should be removed as a criterion of the communication to the public right, because copyright law does not require profitability as a precondition for liability.<sup>454</sup> Koo argues that the ‘for profit’ requirement should not play any role in determining copyright infringement but that it can be viewed in the context of whether the act of communication to the public is in conflict with the normal exploitation of the work.<sup>455</sup> As the meaning of the normal exploitation of a work is that the action would ordinarily require the copyright holder’s licence, then infringement should be established when the rightholders are ‘injured’.<sup>456</sup> Based on this approach, if there is a committed infringement but there is no damage caused to the copyright holder, it would be justifiable for infringers to be exempt from liability.<sup>457</sup> In the context of video game streaming, this approach is not pertinent. An act, such as video game streaming, may or may not cause economic ‘injury’ to the video game developer, when it is unauthorised. As video game streaming breaches End-User Licence Agreements (EULAs) and/or the Terms of Service, the key is that the act is unauthorised, and whether or not economic injuries are caused is irrelevant.

The broad interpretation of the communication to the public right is unjustified because it creates an imbalance between rightholders’ protection and fundamental rights. Rightholders have a high level of protection, which prejudices individuals’ rights to freedom of expression and information and freedom to conduct a business.<sup>458</sup> Koo criticises the broad interpretation

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<sup>452</sup> Case C-135/10 *Societa Consortile Fonografici (SCF) v Del Corso* [2012] Bus LR 1870, [2012] 3 WLUK 494 (ECJ 3rd Chamber), paras 97–98.

<sup>453</sup> Case C-117/15 *Training v GEMA* [2016] 3 CMLR, para 63.

<sup>454</sup> S Dusollier, ‘Realigning Economic Rights with Exploitation of Works: The Control of Authors over the Circulation of Works in the Public Sphere’ in B Hugenholtz (ed), *Copyright Reconstructed: Rethinking Copyright’s Economic Rights in a Time of Highly Dynamic Technological and Economic Change* (Information Law Series, Kluwer Law International 2018) 183.

<sup>455</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 5(5).

<sup>456</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 112.

<sup>457</sup> A similar suggestion was made in *Renckhoff* by AG Campos Sanchez-Bordona; however, this approach was not followed by the CJEU. See Case C-161/17 *Land Nordrhein-Westfalen v Dirk Renckhoff* [2018] Bus LR 1815, [2018] ECDR 21, Opinion of AG Campos Sanchez-Bordona, para 123.

<sup>458</sup> Charter of Fundamental Rights of the European Union [2012] OJ C 326/391, arts 10 and 16



of the communication to the public right, including the introduction of the access approach when interpreting the term ‘communication’. He states that ‘the access approach means that any use of a work that allows an individual to interact with that work can amount to an act of “communication”’.<sup>459</sup> In addition, the broad interpretation of the right has led to the introduction of new requirements, such as the ‘knowledge’ criterion, despite the maximal harmonisation of Article 3(1) of the InfoSoc Directive throughout the EU.<sup>460</sup>

#### 3.4.5 Inconsistencies of the Communication to the Public Right

Having examined the individual elements of the communication to the public right, it can be observed that there are contrasting definitions of what constitutes a communication. Although in *Rafael* it was held that ‘the work is made available to the public in such a way that they may access it’,<sup>461</sup> in the subsequent case of *FAPL* it was stated that a communication refers ‘to any transmission of the protected works, irrespective of the technical means or process used’.<sup>462</sup> It is apparent that the CJEU created two different approaches, the access approach and the transmission approach.

The dilemma between the access approach and the transmission approach became apparent in the *Svensson* case. Prior to *Svensson*, the courts had to deal with traditional broadcasting or retransmission. *Svensson* introduced the act of hyperlinking, which does not necessarily involve the transmission of the work.<sup>463</sup> The CJEU applied the access approach referring to *Rafael* and held that acts of hyperlinking were ‘communications’.<sup>464</sup>

Adopting the access approach contradicts the background to the communication to the public right. In 1996, the Basic Proposal for the WCT stated in para 10.15 that ‘communication always involves transmission’.<sup>465</sup> Thus, it is more reasonable to define communication according to the transmission approach. The adoption of the access approach would also be detrimental to the use of Internet technologies, such as hyperlinking, P2P networks, and cloud

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<sup>459</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 69.

<sup>460</sup> *ibid* 70.

<sup>461</sup> Case C-306/05 *Sociedad General de Autores y Editores de Espana (SGAE) v Rafael Hoteles SL* [2006] ECR I-11519, paras 42–43.

<sup>462</sup> Cases C-403/08 and C-429/08 *FA Premier League Ltd and Others v QC Leisure and Others; and Karen Murphy v Media Protection Services Ltd* [2011] ECR I-9083, [2012] Bus LR 1321, para 193.

<sup>463</sup> Koo (n 459) 71.

<sup>464</sup> Case C-466/12 *Svensson Nils & Ors v Retriever Sverige AB* [2014] 3 CMLR 4, paras 19–20.

<sup>465</sup> WIPO, *Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works to be Considered by the Diplomatic Conference* (CRNR/DC/4) (1996) 46, para 10.15 <[https://www.wipo.int/edocs/mdocs/diplconf/en/crnrcr\\_dc/crnrcr\\_dc\\_4.pdf](https://www.wipo.int/edocs/mdocs/diplconf/en/crnrcr_dc/crnrcr_dc_4.pdf)> last accessed on 4 February 2022.

storage.<sup>466</sup> Restrictions on the use of technologies would negatively affect the use and dissemination of works by the end users.

The broad interpretation of the notion of ‘communication’ and the adoption of the access approach by the CJEU have affected the second element of the communication to the public right, the public.<sup>467</sup> In an effort to limit the reach of the communication right, the CJEU used the ‘new public’ criterion. In *Svensson* it was held that the act of hyperlinking to freely available newspaper articles was not an act of communication to the public because there was no new public, as the work was already available to all Internet users.<sup>468</sup> Koo argues that it would be more effective to limit what counts as communication, rather than to rely on the ‘new public’ criterion.<sup>469</sup>

The ‘new public’ criterion has had a dramatic impact on the communication to the public right and its use was detrimental for the development of the right.<sup>470</sup> Koo is of the opinion that the Court should have adopted the ‘organisation other than the original one’ criterion.<sup>471</sup> The ‘new public’ has been defined as ‘a public different from the public at which the original act of communication of the work is directed, that is, to a new public’.<sup>472</sup> This definition has similarities with the proposed definition in the Brussels revision of the Berne Convention in 1948; however, the ‘new public’ criterion was rejected due to being unclear and vague.<sup>473</sup> Koo argues that it is difficult to distinguish the ‘original public’ intended by the rightholder and the ‘new public’.<sup>474</sup> Based on these arguments the ‘new public’ criterion was rejected and instead ‘the organisation other than the original one’ was adopted by Article 11bis(1)(ii).

The application of the ‘new public’ criterion has been inconsistent within the EU case law. The CJEU applied incorrectly the new public criterion in the *Rafael* case, because this case concerned a cable retransmission of a television broadcast and therefore the ‘organisation other

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<sup>466</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 74.

<sup>467</sup> *ibid* 76.

<sup>468</sup> Case C-466/12 *Svensson Nils & Ors v Retriever Sverige AB* [2014] 3 CMLR 4, paras 25–28.

<sup>469</sup> Koo (n 466) 77.

<sup>470</sup> J Rosén, ‘How Much Communication to the Public Is “Communication to the Public”?’ in IA Stamatoudi (ed), *New Developments in EU and International Copyright Law, Info Law Series, Volume 35* (Kluwer Law International 2016) 331, 347.

<sup>471</sup> Koo (n 466) 93.

<sup>472</sup> C-306/05 *Sociedad General de Autores y Editores de Espana (SGAE) v Rafael Hoteles SL* [2006] ECR I-11519, para 40.

<sup>473</sup> ‘Any retransmission of a work to a new audience or a fresh circle of listeners should be subject to the authorisation of the right holder’ (M Makeen, ‘The Controversy of Simultaneous Cable Retransmission to Hotel Rooms Under International and European Copyright Laws’ (2010) 57 J Copyright Soc’y USA 59).

<sup>474</sup> Koo (n 466) 93.

than the original one' criterion of Article 11bis(1)(ii) should have been applied.<sup>475</sup> The CJEU applied the 'new public' criterion in various retransmission cases, such as *Airfield v SABAM*,<sup>476</sup> *PPL v Ireland*,<sup>477</sup> *OSA*,<sup>478</sup> and *AKM*.<sup>479</sup> However, in *ITV v TVCatchup*, the 'new public' was not taken into consideration, because the Internet transmission was made 'under specific technical conditions, using a different means of transmission' and therefore it was unnecessary to consider the 'new public' criterion.<sup>480</sup> In other words, the CJEU created an exception to the 'new public' criterion in cases where the retransmission occurs via different technical means compared to the original transmission.<sup>481</sup>

Another inconsistency can be found in the *AKM* case.<sup>482</sup> The Court held that the cable retransmission of works by a third party to a public already taken into account by the initial broadcaster was not made to a 'new public'.<sup>483</sup> Although the CJEU stated that the cable transmission was a different technical means to that used for the original broadcast, it did not follow either the 'new public' criterion or the 'specific technical means' criterion.<sup>484</sup>

Koo argues that the 'organisation other than the original one' criterion is restricted to traditional forms of retransmission and, in an effort to consider whether this criterion can be expanded to accommodate acts of Internet transmission, suggests that the extension of the 'organisation other than the original one' is desirable, as it will achieve international compliance and consistency with the communication to the public right landscape, with one criterion for all acts of subsequent communication.<sup>485</sup> This would mean that any subsequent communication, both analogue and digital, would require authorisation if it were made by an organisation different from the original one. The adoption of this criterion would be beneficial

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<sup>475</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019) 94 and 103. It has been argued that the 'organisation other than the original one' is restricted to traditional forms of retransmission.

<sup>476</sup> Cases C-431/09 and C-432/09 *Airfield NV v Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM)* and *Airfield NV v Agicoa Belgium BVBA* [2011] ECR I-9363, [2012] ECDR 3.

<sup>477</sup> Case C-162/10 *Phonographic Performance (Ireland) Limited v Ireland, Attorney General* [2012] 3 WLUK 489, [2012] ECDR 15.

<sup>478</sup> Case C-351/12 *OSA – Ochranný svaz autorský pro práva k dílům hudebním o.s. v Léčebné lázně Mariánské Lázně a.s.* [2014] ECLI:EU:C:2014:110.

<sup>479</sup> Case C-138/16 *Staatlich Genehmigte Gesellschaft der Autoren, Komponisten und Musicverlegerregistrierte Genossenschaft mbH (AKM) v Z ü rs.net Betriebs GmbH* [2017] OJ C 222/2.

<sup>480</sup> Case C-607/11 *ITV Broadcasting Ltd and Others v TVCatchUp Ltd* [2012] Bus LR 1020, [2013] ECDR 9, paras 26 and 39.

<sup>481</sup> Koo (n 475) 96.

<sup>482</sup> Case C-138/16 *Staatlich* (n 479).

<sup>483</sup> *ibid*, paras 28–29.

<sup>484</sup> *ibid*, para 26.

<sup>485</sup> Koo (n 475) 103.

because it is already internationally accepted, despite the fact that the CJEU chose not to take it into consideration, instead favouring the ‘new public’ criterion.<sup>486</sup>

On the other end of the spectrum, a potential criticism would be on the reduced amount of available works, if copyright holders either refuse to provide authorisation or require unreasonably high fees and bureaucracy to obtain a licence.<sup>487</sup> A second criticism could be found on the definition of the notion of ‘organisation other than the original one’. The concept is not defined, and it would require clarification on what constitutes an ‘organisation’ for it to be certain and effective. Koo advocates that ‘organisation’ should mean any party that engages with an act of retransmission or subsequent transmission.<sup>488</sup> Thirdly, the criterion would be criticised as it provides a disproportionately high level of protection to the copyright holders, on the basis that any act of subsequent communication would require authorisation.<sup>489</sup> It has been suggested that the ‘new public’ criterion should be abandoned when determining whether there is an act of communication to the public. However, it can be developed into an exception to or limitation on the communication to the public right under Article 5(3) of the InfoSoc Directive.<sup>490</sup>

Game streaming presents serious copyright infringement issues.<sup>491</sup> Nevertheless, many users/gamers live stream their games or upload LP videos on platforms, a conduct that has only been challenged by video game companies in limited cases. In addition, there are many platforms that allow gamers to live stream their plays or upload them; video game companies have not taken massive action against online platforms, either. As part of their enforcement strategy, platforms such as YouTube scan all live streams for matches to third-party content, and replace the potentially infringing content with a placeholder image notifying the streamer with a warning.<sup>492</sup> The stream can only continue after the warning is addressed. Until now, the major concern on behalf of the platforms has been associated with the copyrighted music contained in video games.<sup>493</sup> While game developers, such as Ubisoft and Microsoft, have

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<sup>486</sup> J Koo, *The Right of Communication to the Public in EU Copyright Law* (Hart Publishing 2019).

<sup>487</sup> *ibid* 104.

<sup>488</sup> *ibid*.

<sup>489</sup> *ibid*.

<sup>490</sup> *ibid* 106.

<sup>491</sup> S Matsui, ‘Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright’ (2016) 24 *Tex Intell Prop LJ* 215.

<sup>492</sup> YouTube Help, ‘Copyright Issues with Live Streams’ <<https://support.google.com/youtube/answer/3367684?hl=en-GB>> last accessed on 13 October 2022.

<sup>493</sup> The systems being employed by YouTube and Twitch are Content ID and Audible Magic, respectively. YouTube Help, <<https://support.google.com/youtube/answer/3244015?hl=en-GB>> last accessed on 4 February

expressed their willingness to work with users/gamers, encouraging them to stream their games, Nintendo has enforced its copyright in this area.<sup>494</sup> The following part analyses the absence of litigation on this matter, as well as considering the applicability and relevance of exceptions and limitations for the purposes of criticism or review, or the defence of freedom of expression.

### 3.5 Video Game Streaming: Tolerated Infringement and Absence of Litigation

Despite its potentially infringing nature, users/gamers continue to live stream or upload LP videos online, while platforms continue to host the content. Matsui argues that the apathy shown by the platforms has originated from the attitude of the game companies, who have generally not filed any complaints or civil actions against platforms, with Nintendo being one of the exceptions that has reacted to the upload of their copyrighted work online, deciding to allow it on the condition that they will share any profit obtained from advertisements between the user, Google, and Nintendo.<sup>495</sup>

Back in 2015 a controversy emerged between Twitch and another streaming platform, Azubu, as a Twitch user exploited the matches of a professional e-sports player, who had signed a contract with Azubu to exclusively stream the game *League of Legends* on their service.<sup>496</sup> In response, Azubu attempted to issue a takedown notice to Twitch, but it was Riot Games, the developer of *League of Legends*, who owned the copyright in the stream and therefore was the only party entitled to issue takedown notices.<sup>497</sup>

It is unlikely that video game developers would enforce their rights to terminate video game streaming practices, mainly for economic reasons. There is no doubt that streaming is a very useful advertising tool.<sup>498</sup> It could be incorporated into the video game companies' digital marketing strategy, because streams can highly influence consumers' purchasing decisions.<sup>499</sup>

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2022; J Kastrenakes, 'Twitch Will Begin Scanning and Deleting Clips That Contain Copyrighted Music' (*The Verge*, June 2020) <<https://www.theverge.com/2020/6/11/21288220/twitch-scan-clips-copyrighted-music-dmca-takedowns-audible-magic>> last accessed on 4 February 2022.

<sup>494</sup> W Clark, 'The (still) Uncertain State of Video Game Streaming Online' (*Ars Technica*, January 2018) <<https://arstechnica.com/gaming/2018/01/to-stream-or-not-to-stream-how-online-streaming-game-videos-exist-in-an-ip-world/>> last accessed on 4 February 2022.

<sup>495</sup> S Matsui, 'Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright' (2016) 24 *Tex Intell Prop LJ* 215.

<sup>496</sup> K Coogan, 'Let's Play: A Walkthrough of Quarter-Century-Old Copyright Precedent as Applied to Modern Video Games' (2018) 28(2) *Fordham Intellectual Property, Media and Entertainment Law Journal* 381.

<sup>497</sup> *ibid.*

<sup>498</sup> Matsui (n 495).

<sup>499</sup> Z Pearson, 'Why Twitch Is Worth Watching for Digital Marketers' (*Greenough*, August 2014) <<https://greenough.biz/2014-08-why-twitch-is-worth-watching-for-digital-marketers-html/>> last accessed on 4 February 2022.

Johnson and Woodcock have used the game *Rocket League* to show the impact of streaming on the video game industry.<sup>500</sup> *Rocket League*, a combination of football played with cars instead of human players, was launched on Twitch in 2015 and escalated from the 165th most watched game to the top five, resulting in over five million download sales.<sup>501</sup> Apart from *Rocket League*, there are many titles that have experienced the same impressive sales rate due to their popularity on the platform, which proves that the success of many video games is highly associated with their marketing via a live streaming platform.<sup>502</sup>

The impact of streaming on the video game industry is evident by the fact that developers and publishers agree with popular streamers and offer them payment in exchange for the broadcasting of their newly released game.<sup>503</sup> Streamers strongly argue that they advertise the game during every single stream.<sup>504</sup> It is, therefore, undeniable that the video game industry recognises the importance of video game streaming as an advertising tool.

However, video game streaming could negatively affect consumer behaviour and purchase intention. Unlike traditional video game reviews, written reviews, or short video reviews, viewers can now access any stream available on the platform and watch the entire game being played and feel satisfied, to the extent that they do not purchase the game.<sup>505</sup> Johnson and others have argued that viewers, although not having played the game themselves, have participated in game playing options, while the game was unfolding, minimising the potential time for leisure activity.<sup>506</sup> The negative impact of LP videos on the sales of video games was also confirmed in the 2022 study on copyright infringement in the video game industry published by WIPO.<sup>507</sup> Dimita, Lee, and Macdonald argue that LP videos not only undermine the sales of video games, as the audience is able to view the events of the entire game without needing

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<sup>500</sup> M Johnson and J Woodcock, 'The Impact of Live Streaming and Twitch.tv on the Video Game Industry' (2019) 41(5) *Media Cult Soc* 670.

<sup>501</sup> *ibid.*

<sup>502</sup> *ibid.* Other titles that achieved impressive sales are *HIZI* (2015) and *Player Unknown's Battlegrounds* (2017).

<sup>503</sup> *ibid.*

<sup>504</sup> W Clark, 'The (Still) Uncertain State of Video Game Streaming Online' (*Ars Technica*, 28 January 2018) <<https://arstechnica.com/gaming/2018/01/to-stream-or-not-to-stream-how-online-streaming-game-videos-exist-in-an-ip-world>> last accessed on 4 February 2022.

<sup>505</sup> Johnson and Woodcock (n 500).

<sup>506</sup> M Johnson and Y Luo, 'Gaming-value and Culture-value: Understanding How Players Account for Video Game Purchase' (2019) 25(5-6) *Convergence: The International Journal of Research into New Media Technologies* 868.

<sup>507</sup> G Dimita, Y Harn Lee, and M Macdonald, 'Copyright Infringement in the Video Game Industry' Advisory Committee on Enforcement (30 August 2022) WIPO/ACE/15/4 <[https://www.wipo.int/edocs/mdocs/enforcement/en/wipo\\_ace\\_15/wipo\\_ace\\_15\\_4.pdf](https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_15/wipo_ace_15_4.pdf)> last accessed on 13 October 2022.

to purchase the game, but also negatively impact a user's experience and engagement, as the element of surprise and discovery no longer exists.<sup>508</sup>

There is a contrast between companies that encourage streaming of their games,<sup>509</sup> companies that believe that streaming would be detrimental to their sales, and companies such as Nintendo that have been documented for their aggressive approach towards asserting copyright over LP videos.<sup>510</sup> Matsui believes that the potential benefit of permitting game streaming would outweigh the potential cost.<sup>511</sup> This contrast, combined with intellectual property concerns on how the gameplay can be shared, will be contested in the coming years.<sup>512</sup>

Matsui suggests that cases of theoretical and technical copyright infringement that are tolerated by the rightholder should be labelled as 'tolerated infringement',<sup>513</sup> a notion that is accepted and adopted in this research. The lack of legal precedent regarding online video game copyright infringement provides minimal guidance regarding how courts would rule on this issue.<sup>514</sup> The following part considers whether users could argue exceptions and limitations to the communication to the public right, or freedom of expression defence, in potential litigation.

### 3.5.1 Exceptions and Limitations to the Communication to the Public Right

The InfoSoc Directive regulates the circumstances in which exceptions to the communication right may be recognised.<sup>515</sup> The Directive provides 'numerous exceptions',<sup>516</sup>

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<sup>508</sup> G Dimita, Y Harn Lee, and M Macdonald, 'Copyright Infringement in the Video Game Industry' Advisory Committee on Enforcement (30 August 2022) 47 WIPO/ACE/15/4 <[https://www.wipo.int/edocs/mdocs/enforcement/en/wipo\\_ace\\_15/wipo\\_ace\\_15\\_4.pdf](https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_15/wipo_ace_15_4.pdf)> last accessed on 13 October 2022.

<sup>509</sup> Valve Video Policy <[https://store.steampowered.com/video\\_policy](https://store.steampowered.com/video_policy)> last accessed on 7 January 2023; Ubisoft Video Policy <<https://www.ubisoft.com/en-us/videopolicy.html>> last accessed on 7 January 2023; Riot Legal Jabber Jabber <<https://www.riotgames.com/en/legal>> last accessed on 7 January 2023; Microsoft Rules <<https://www.xbox.com/en-US/developers/rules>> last accessed on 7 January 2023; Blizzard End-User License Agreement <<https://www.blizzard.com/en-us/legal/fba4d00f-c7e4-4883-b8b9-1b4500a402ea/blizzard-end-user-license-agreement>> last accessed on 7 January 2023.

<sup>510</sup> M Larkey, 'Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcasts' (2015) 13 Rutgers JL & Pub Policy 52, 102; D Hagen, 'Fair Use, Fair Play: Video Game Performances and Let's Plays as Transformative Use' (2018) 13 Wash JL Tech & Arts 245, 258; N Marfo, 'Playing Fair: Youtube, Nintendo, and the Lost Balance of Online Fair Use' (2019) 13 Brook J Corp Fin & Com L 465, 483.

<sup>511</sup> S Matsui, 'Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright' (2016) 24 Tex Intell Prop LJ 215.

<sup>512</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 245.

<sup>513</sup> Matsui (n 511).

<sup>514</sup> E Brusa, 'Professional Video Gaming: Piracy That Pays' (2015) 49 J Marshall L Rev 217.

<sup>515</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 5.

<sup>516</sup> Case C-467/08 *Padawan SL v SGAE* [2010] ECR I-10555, para 43.

which aim to strike a ‘fair balance’ between rightholders and users.<sup>517</sup> Setting aside the only mandatory exception regarding transient or incidental acts of reproduction, Member States can decide whether and how to implement the optional exceptions.<sup>518</sup> International treaties and EU Directives use the terms ‘exceptions’ and ‘limitations’ interchangeably.<sup>519</sup> Rendas highlighted that the term ‘exceptions’ refers to circumstances in which the use is unrestricted, or in other words, neither authorisation nor payment of compensation is required, whereas ‘limitations’ refer to non-voluntary licences, in which ‘the exclusive right is replaced by a compensated exception’.<sup>520</sup> The CJEU expressed a similar view in *VG Wort*, by stating that the distinction between exceptions and limitations in the title of Article 5 should be given effect.<sup>521</sup> Other decisions, however, suggest that the CJEU perceives the two terms interchangeably.<sup>522</sup>

The term ‘exceptions or limitations’ has been used in Article 5 of the InfoSoc Directive considering that certain countries use slightly different terminology. Semantic differences can be found in the legislation of the four national jurisdictions that have been selected for the purposes of the present research; for example, the word ‘limitation’ is used in Germany and Greece, France does not use the term at all, while the UK uses ‘acts permitted’. The French legislature has preferred circumlocutions, such as ‘once a work has been disclosed, the author cannot prohibit...’.<sup>523</sup>

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<sup>517</sup> Case C-110/15 *Microsoft Mobile Sales International Oy v Ministero per I beni e le attivita culturali* [2016] ECLI:EU:C:2016:717, para 20.

<sup>518</sup> J Griffiths, ‘Recent Developments Relating to Exceptions and Limitations in EU Copyright Law’ (2013) 18 *Media & Arts L Rev* 268, 276.

<sup>519</sup> International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Entry into force 18 May 1964) (Rome Convention), art 15; Agreement on Trade-Related Aspects of Intellectual Property Rights, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 UNTS 299, 33 ILM 1197 (1994) (TRIPS Agreement), art 13; WIPO Copyright Treaty (adopted 20 December 1996, entered into force 6 March 2002) 2186 UNTS 121 (WCT), art 10; Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases [1996] OJ L 77/20, arts 6 and 9; Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs (Codified version) [2009] OJ L 111/16, art 5; Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recitals 14, 31–45, and 51–52 and arts 5 and 6; Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services [2019] OJ L 136/1, Recitals 3 and 5–43, arts 4, 5, 8(2)–(5), 9(2), 10, 12(4), 16, 17(7)–(10), and 25.

<sup>520</sup> T Rendas, ‘Are Copyright-Permitted Uses “Exceptions”, “Limitations” or “User Rights”? The Special Case of Article 17 CDSM Directive’ (2022) 17(1) *JiPLP* 54, 55.

<sup>521</sup> Case C-457/11 *Verwertungsgesellschaft Wort (VG Wort) v Kyocera Mita Deutschland GmbH* [2013] ECDR 13, paras 33 and 35.

<sup>522</sup> Case C-435/12 *ACI Adam BV v Stichting de Thuiskopie* [2014] ECDR 13, paras 28 and 31; Case C-265/16 *VCAST Ltd v RTI SpA* [2017] 11 *WLUK* 694, [2018] ECDR 5, paras 34 and 39.

<sup>523</sup> P Sirinelli, *Exceptions and Limits to Copyright and Neighbouring Rights* (WIPO 1999) 2 <[https://www.wipo.int/meetings/en/doc\\_details.jsp?doc\\_id=1266](https://www.wipo.int/meetings/en/doc_details.jsp?doc_id=1266)> last accessed on 4 February 2022.



The UK copyright exceptions have been heavily influenced by international and EU copyright law. Brown and others argue that the UK system has diverged from the Continental ones in regard to how exceptions or limitations operate, with the former considering them to be rather a limit, whereas the latter views them as an exception.<sup>524</sup> Similarly, the way exceptions or limitations operate in domestic law also differs, with the UK favouring broadly drafted fair dealing provisions for a number of statutory purposes, while systems in Continental Europe focus on specific, narrow categories.<sup>525</sup> The InfoSoc Directive did not succeed in achieving harmonisation on the matter, as it provided Member States with the option to enact some, all, or none of the possible exceptions.

The InfoSoc Directive sets forth a closed list of exceptions and limitations to the communication to the public right.<sup>526</sup> The European Audio-visual Observatory classifies the exceptions and limitations into three main categories, based on their underlying foundations: the exceptions and limitations in favour of the public interest; the exceptions and limitations in favour of fundamental freedoms, including freedom of expression; and the exceptions and limitations for the benefit of private use.<sup>527</sup> For the purposes of this research, emphasis is given to the exceptions based on fundamental freedoms, and in particular the exception for quotations for purposes such as criticism or review, as LP videos and live streams incorporate commentary or criticism of the video game story and mechanics, with gamers critiquing or reviewing the video game developer's original work. Article 5(3)(d) of the InfoSoc Directive states that one can use

quotations for purposes such as criticism or review, provided that they relate to a work or other subject-matter which has already been lawfully made available to the public, that, unless this turns out to be impossible, the source, including the author's name, is indicated, and that their use is in accordance with fair practice, and to the extent required by the specific purpose.<sup>528</sup>

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<sup>524</sup> A Brown and others, *Contemporary Intellectual Property: Law and Policy* (Oxford University Press 2019) 168.

<sup>525</sup> *ibid.*

<sup>526</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recital 32 refers to an 'exhaustive enumeration of exceptions and limitations to the right of reproduction and the right of communication to the public'.

<sup>527</sup> European Audiovisual Observatory, 'Exceptions and Limitations to Copyright' (2017) <<https://rm.coe.int/168078348b>> last accessed on 4 February 2022.

<sup>528</sup> Council Directive 2001/29/EC (n 526), art 5(3)(d).

It is apparent that four cumulative conditions apply: first, the quotation relates to a work or subject matter made lawfully available to the public; second, the source and the author are indicated whenever possible; third, the use complies with fair practice; and fourth, the quotation is no longer than what is required for the specific purpose.

The defences enumerated in the Directive shall only be applied according to the three-step test.<sup>529</sup> Article 5(5) of the InfoSoc Directive provides that ‘the exceptions and limitations provided for in paragraphs 1, 2, 3 and 4 shall only be applied in certain special cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightholder’.<sup>530</sup>

Bently and others argue that it is unclear whether this test: 1. constitutes an additional limitation, 2. is directed at the application of the defences by the legislature of Member States, 3. is directed at the courts of Member States when applying the defences, or 4. is directed at both the legislature and the courts of Member States.<sup>531</sup> Case law of the CJEU has provided guidance in this respect. The CJEU treated the three-step test as an additional requirement in *Infopaq I*,<sup>532</sup> *FAPL*,<sup>533</sup> *VG Wort*,<sup>534</sup> and *Public Relations Consultants Association Ltd*.<sup>535</sup> While in *Stichting de ThuisKopie v Mijndert van der Lee* the Court recognised that Article 5(5) is aimed at national legislatures,<sup>536</sup> in *Painer*,<sup>537</sup> *ACI Adam BV v Stichting de ThuisKopie*,<sup>538</sup> and *Deckmyn and Vrijheidsfonds v Vandersteen*<sup>539</sup> the CJEU confirmed that national courts must consider it when applying an exception. The view that the three-step test is directed at both the national legislators and the courts seems to prevail. In *VCAST v RTI SpA*, Advocate General Szpunar confirmed that ‘it can therefore be used as guidance for the interpretation of the

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<sup>529</sup> P Bernt Hugenholtz and M Senftleben, ‘Fair Use in Europe. In Search of Flexibilities’ (2012) Amsterdam Law School Research Paper No 2012-39, Institute for Information Law Research Paper No 2012-33, 1, 13 and 28.

<sup>530</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 5(5). The three-step test corresponds to the international provisions, Article 9(2) of the Berne Convention, Article 13 of the TRIPS Agreement, and Article 10 of the WCT.

<sup>531</sup> L Bently and others, *Intellectual Property Law* (5th edn, Oxford University Press 2018) 228.

<sup>532</sup> Case C-5/08 *Infopaq International A/S v Danske Dagblades Forening* [2009] ECR I-6569, [2012] Bus LR 102, para 58.

<sup>533</sup> Cases C-403/08 and C-429/08 *FA Premier League Ltd and Others v QC Leisure and Others; and Karen Murphy v Media Protection Services Ltd* [2011] ECR I-9083, [2012] Bus LR 1321, para 181.

<sup>534</sup> Case C-457/11 *Verwertungsgesellschaft Wort (VG Wort) v Kyocera Mita Deutschland GmbH* [2013] ECDR 13, Opinion of AG Sharpston, para 68.

<sup>535</sup> Case C-360/13 *Public Relations Consultants Association Ltd v Newspaper Licensing Agency Ltd* [2014] ECDR 22, para 53.

<sup>536</sup> Case C-462/09 *Stichting de ThuisKopie v Mijndert van der Lee* [2011] ECR I-5331, Opinion of AG Jääskinen, para 42.

<sup>537</sup> Case C-145/10 *Painer v Standard Verlags GmbH* [2011] ECDR 13, Opinion of AG Trstenjak, 148.

<sup>538</sup> Case C-435/12 *ACI Adam BV v Stichting de ThuisKopie* [2014] ECDR 13, paras 24 and 25.

<sup>539</sup> Case C-201/13 *Deckmyn v Vandersteen* [2014] Bus LR 1368, Opinion of AG Cruz Villallón, para 29.

exceptions when they are applied in the Member States' domestic law, but also for the purposes of the interpretation of the provisions of Directive 2001/29 by the Court'.<sup>540</sup> Even before this judgement, Rosati and Arnold argued that the three-step test should be applied not only by the legislature but also by national courts.<sup>541</sup> From a practical point of view, national courts directly applying the three-step test would need to conduct an in-depth examination of the actual availability of national exceptions and limitations for the acts in question. National courts would have to determine whether the acts in question would be eligible for protection under the relevant national exceptions.

The Centre for European Policy Studies (CEPS) has noted that the national implementation of this exception is uniform and there are only minor differences.<sup>542</sup> More specifically, in Germany quotations of musical works should be limited to a few passages and the source should be indicated.<sup>543</sup> In France the exception allows short quotations of lawfully divulged works, justified by the critical, polemic, pedagogical, scientific, or informational nature of the work where they are incorporated and short quotations cannot involve works of visual art.<sup>544</sup> In Greece, quotations of short extracts of a lawfully published work of an author for the purpose of providing support for a case advanced by the person making the quotation or a critique of the position of the author shall be permissible without the consent of the author and without payment, provided the quotation is in accordance with good morals and that the extent of the extracts is essential to the purposes of the quotation; the quotation of the extract must be accompanied by an indication of its source and of the names of the author and of the publisher, provided the said names appear on the source.<sup>545</sup> In the UK the exception allows the use of a quotation from a work made available to the public (in compliance with fair dealing), for criticism or review or other purposes and to the extent that the quotation is no more than what is required by the specific purpose for which it is used.<sup>546</sup>

In the UK, the most significant concept is that of 'fair dealing'. The term 'dealing' means that the defendant has made use of the work and does not imply any kind of transaction between

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<sup>540</sup> Case C-265/16 *VCAST Ltd v RTI SpA* [2017] 11 WLUK 694, [2018] ECDR 5, Opinion of AG Szpunar, para 58.

<sup>541</sup> E Rosati, 'Copyright in the EU: In Search of (In)Flexibilities' (2014) 9 *JIPLP* 585; R Arnold and E Rosati, 'Are National Courts the Addressees of the InfoSoc Three-Step Test?' (2015) 10(10) *JIPLP* 741.

<sup>542</sup> A Renda and others, 'The Implementation, Application and Effects of the EU Directive on Copyright in the Information Society' (2015) CEPS Special Report No 120.

<sup>543</sup> Gesetz über Urheberrecht und verwandte Schutzrechte – Urheberrechtsgesetz 1965, s 51.

<sup>544</sup> Code de la Propriété Intellectuelle 1994, art L122-5 (2).

<sup>545</sup> Greek Copyright Law 2121/1993, art 19.

<sup>546</sup> Copyright, Designs and Patents Act 1988, s 30.

the parties.<sup>547</sup> Under the provisions of the CDPA 1988, the dealing must be fair for the purposes outlined in its sections.<sup>548</sup> The restricted approach followed by the UK should be contrasted with the US general defence of fair use.<sup>549</sup>

In order to determine whether the ‘use’ or ‘dealing’ in question is fair, there are several factors that should be assessed. The first factor is the quantity and the quality of what is taken. In *Hubbard v Vosper*, Lord Denning MR stated that ‘you must consider the number and the extent of the extracts’.<sup>550</sup> Using numerous and lengthy extracts, or extracts of the most important part of the work, would have an impact on the expected returns to the copyright owner.<sup>551</sup>

The second factor to be taken into consideration is the use that is made of the work in question. Bently and others have opined that a use is more likely to be fair if the defendant proves that the dealing was transformative, or in other words that they have added to or re-contextualised the part taken.<sup>552</sup> This raises the question of whether playthrough LP videos could be regarded as transformative enough to qualify for a fair dealing defence. Taylor argues that playthroughs with commentary are transformative by virtue of the new content, which is the commentary.<sup>553</sup> However, works are not transformative if they present the same material in a different form.<sup>554</sup> In the context of LP videos, and in particular playthrough videos with commentary, the mere addition of a commenter’s audio and a small box showing the commenter’s face, do not transform the original work.

The third factor is the consequences of the dealing upon the market for the work. This is in line with the second step of the three-step test of the InfoSoc Directive, which considers the ‘conflict with the normal exploitation of the work’. As analysed, the impact of streaming on the market is debatable. This factor is particularly important when the defendant’s use of the

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<sup>547</sup> L Bently and others, *Intellectual Property Law* (5th edn, Oxford University Press 2018) 229.

<sup>548</sup> Copyright, Designs and Patents Act 1988, s 29ff.

<sup>549</sup> Bently (n 547) 229.

<sup>550</sup> *Hubbard v Vosper* [1972] 2 WLR 389.

<sup>551</sup> Bently (n 547) 230.

<sup>552</sup> *ibid.*

<sup>553</sup> IO Taylor Jr, ‘Video Games, Fair Use and the Internet: The Plight of the Let’s Play’ (2015) U Ill JL Tech & Pol’y 247, 260; TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 76.

<sup>554</sup> C Postel, ‘Let’s Play: YouTube and Twitch’s Video Game Footage and a New Approach to Fair Use’ (2017) 68 Hastings LJ 1169.

work acts as a substitute for the purchase of the original work, as would be the case of someone showing the entire film in their effort to criticise it.<sup>555</sup>

Before proceeding with the analysis of whether the different types of LP videos qualify for the exception in Article 5(3)(d) of the InfoSoc Directive, it is important to distinguish the different types of LP videos, because the element of commentary is crucial for the analysis. There are three basic categories: reviews, playthroughs with commentary, and playthroughs without commentary.<sup>556</sup>

The first category of LP videos constitutes reviews of video games. Unlike traditional, written video game reviews, where a game journalist will provide a review within an available word count, video reviews give a great range of audio-visual content.<sup>557</sup> A video review will show recorded game content accompanied by the reviewer's critical opinion. The review LP videos may be eligible for copyright exceptions and limitations as outlined in the InfoSoc Directive, as creating a short video displaying parts of a video game and the critical opinion of the reviewer would not conflict with the normal exploitation of the work and would not unreasonably prejudice the legitimate interests of the rightholder.

Live streaming has, however, opened a new dimension of game reviews, where the potential buyer would tune into a streamer's video, comment over the game, and engage in the review, which in essence takes the form of a dialogue instead of a traditional monologue review.<sup>558</sup> Taylor opines that live streaming not only entertains viewers but also conveys to the audience independent analysis of the game.<sup>559</sup> Accepting live streaming as a new form of review would be rather challenging. Undoubtedly, it offers viewers the ability to interact and communicate with the reviewer directly as well as the ability to see elements of the game before making a choice to purchase the game or not. Nevertheless, a live review cannot guarantee a 'spoiler-free' experience for the audience.<sup>560</sup> Johnson and Woodcock argue that some video game companies are against live streaming of their content and for the purposes of a review the

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<sup>555</sup> L Bently and others, *Intellectual Property Law* (5th edn, Oxford University Press 2018) 231.

<sup>556</sup> C Postel, 'Let's Play: YouTube and Twitch's Video Game Footage and a New Approach to Fair Use' (2017) 68 *Hastings LJ* 1169.

<sup>557</sup> M Johnson and J Woodcock, 'The Impact of Live Streaming and Twitch.tv on the Video Game Industry' (2019) 41(5) *Media Cult Soc* 670.

<sup>558</sup> *ibid.*

<sup>559</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 70.

<sup>560</sup> Johnson and Woodcock (n 557) 678.

audience would prefer experienced reviewers than players, focusing on the important elements of the game.<sup>561</sup>

The second category of LP videos are playthroughs with commentary. In this type of video, a viewer can watch the entire or part of the video game being played, while the gamer provides commentary on their experience rather than on the features of the game.<sup>562</sup> There is a debate on whether playthroughs with commentary qualify for the exception for the purposes of criticism or review. The arguments in favour point out that the commentary's purpose is different from that of the original work's story. In addition, Puddington opines that the purpose of playthroughs with commentary is to demonstrate the game strategy and does not interfere with the original work.<sup>563</sup> However, the arguments against are stronger. The fact that gamers make use of the original work, broadcasting or making available the entire game or in other words 'the heart of the game' with its plot twists and climaxes has as a consequence that Article 5(3)(d) is less favourable for this type of LP video.<sup>564</sup>

To corroborate the argument that playthrough videos with commentary are unlikely to qualify for the exception of criticism or review, the second step of the InfoSoc Directive's three-step test, the 'conflict with the normal exploitation of the work', would be of great help. As discussed, showing the entire video game could serve as a great advertisement for the video game company, given the millions of viewers and potential buyers.<sup>565</sup> However, watching the video game being played could influence buyer conduct in a negative way. It has been contended that Internet users might feel so fulfilled by watching a LP video that they will not consider purchasing the game.<sup>566</sup>

This type of video is not likely to fall under the exception of Article 5(3)(d). The courts require a connection between the part taken from a protected work and the comments of the reviewer. The German Court (Cologne Court of Appeal) denied the exception applied in a case concerning the publication of excerpts from a protected film that were not linked to the

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<sup>561</sup> M Johnson and J Woodcock, 'The Impact of Live Streaming and Twitch.tv on the Video Game Industry' (2019) 41(5) *Media Cult Soc* 670.

<sup>562</sup> C Postel, 'Let's Play: YouTube and Twitch's Video Game Footage and a New Approach to Fair Use' (2017) 68 *Hastings LJ* 1169.

<sup>563</sup> J Puddington, 'Fair Play: Economic Justifications for Applying Fair Use to the Online Streaming of Video Games' (2015) 21 *BU J ScT & Tech L* 413, 425.

<sup>564</sup> S Carlisle, 'The Strange World of "Let's Play" Videos and the Copyright Problems They Create' (NOVA South-Eastern University, 2 April 2015) <<http://copyright.nova.edu/lets-play-videos/>> last accessed on 4 February 2022.

<sup>565</sup> Johnson and Woodcock (n 561).

<sup>566</sup> *ibid.*

comments or questions about the film, made by an operator on YouTube, stating that the freedom to quote should not be ‘exploited as a vehicle’ for publishing entire works or parts.<sup>567</sup>

The third category of LP videos are the playthroughs with no commentary. One example of this type of video is the ‘full game walkthrough’ of the video game *Bloodborne* (developed by FromSoftware), where viewers can watch a 10-hour-and-20-minute video of the entire game being played, with no commentary from the gamer.<sup>568</sup> In these LP videos, Postel notes, it is as if the viewer is playing the game, except the viewer is not causing the action on the screen.<sup>569</sup> Publications of the entire work would rarely be permitted for the purposes of criticism or review.<sup>570</sup> Therefore, the third category of LP videos will not fall under the exception of Article 5(3)(d).

### 3.5.2 In Search of Applicable Exceptions: Freedom of Expression

This part considers whether freedom of expression could be employed to provide for a limitation to copyright law. Freedom of expression and copyright law are diametrically opposed to one another. While copyright allows for a limited monopoly of works, freedom of expression, as incorporated into Article 19 of the Universal Declaration on Human Rights (UDHR)<sup>571</sup> and Article 10 of the European Convention on Human Rights (ECHR),<sup>572</sup> is a freedom to hold opinions and to receive and impart information and ideas.<sup>573</sup> In the British case of *Ashdown v Telegraph Group Ltd*, Lord Phillips stated categorically:

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<sup>567</sup> Judgment of the Cologne Court of Appeal (Oberlandesgericht Köln), 13 December 2013 (available in German only) <[http://www.justiz.nrw.de/nrwe/olgs/koeln/j2013/6\\_U\\_114\\_13\\_Urteil\\_20131213.html](http://www.justiz.nrw.de/nrwe/olgs/koeln/j2013/6_U_114_13_Urteil_20131213.html)>. See M Rupp, ‘Cologne Appeal Court Limits Quotation Right Under Art. 51 UrhG for YouTube Excerpts’ (2014) 17(3) IRIS <<http://merlin.obs.coe.int/iris/2014/3/article17.en.html>>.

<sup>568</sup> *Bloodborne* – Full Game Walkthrough <<https://www.youtube.com/watch?v=VJyc-sD1DiY>> last accessed on 4 February 2022.

<sup>569</sup> C Postel, ‘Let’s Play: YouTube and Twitch’s Video Game Footage and a New Approach to Fair Use’ (2017) 68 Hastings LJ 1169.

<sup>570</sup> M De Zwart, ‘A Historical Analysis of the Birth of Fair Dealing and Fair Use: Lessons for the Digital Age’ (2007) IPQ 1, 60

<sup>571</sup> Universal Declaration of Human Rights (adopted 10 December 1948) UNGA Res 217 A (III) (UDHR), art 19.

<sup>572</sup> European Convention on Human Rights, signed in Rome on 4 November 1950, Article 10 reads:

Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. ... 2. The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary.

<sup>573</sup> P Bernt Hugenholtz, ‘Copyright and Freedom of Expression in Europe’ (2000) in R Cooper Dreyfuss, H First, and D Leenheer Zimmerman (eds), *Innovation Policy in an Information Age* (Oxford University Press 2000) 2.

Copyright is antithetical to freedom of expression. It prevents all, save the owner of the copyright, from expressing information in the form of the literary work protected by the copyright.<sup>574</sup>

Angelopoulos considers the internal and external conflict of the two rights, emphasising the fact that the body of copyright law is a ‘balancing exercise, an attempt to accommodate both contradictory goals’.<sup>575</sup> Not that long ago, the national courts in the EU regarded external restrictions of copyright as impossible, since copyright law has its own mechanisms to balance exclusive rights with competing rights, through the exceptions and limitations to copyright.<sup>576</sup> At EU level, the CJEU started to admit that intellectual property law needed to be interpreted in the ‘light of fundamental rights’.<sup>577</sup> In 2013 the European Court of Human Rights (ECtHR) ruled in two important cases on the possibility that sanctions for copyright infringement may violate freedom of expression and it subjected copyright law to an external freedom of expression assessment.<sup>578</sup> The ECtHR confirmed that a freedom of expression review of copyright is not just possible but obligatory in Europe on a case-by-case basis.<sup>579</sup>

In his Opinion, Advocate General Szpunar considered in *Funke Medien NRW GmbH v Federal Republic of Germany* (also known as the *Afghanistan Papers* case)<sup>580</sup> that an external freedom of expression check of copyright law is legitimate when the circumstances of the case require so. Advocate General Szpunar, in two subsequent cases – *Pelham* and *Spiegel Online*, concerning the conflict of copyright with freedom of expression – adopted a more restrictive position, stating that any balancing of these rights should be undertaken by the legislature.<sup>581</sup>

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<sup>574</sup> *Ashdown v Telegraph Group Ltd* [2002] Ch 149.

<sup>575</sup> C Angelopoulos, ‘Freedom of Expression and Copyright: The Double Balancing Act’ (2008) 3 IPQ 328.

<sup>576</sup> German Federal Court of Justice, *CB-Infobank I*, 16 January 1997, *GRUR* 459 (1997); *Hyde Park Residence Ltd v Yelland* [2000] EWCA Civ 37.

<sup>577</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs SCRL (SABAM)* [2012] ECDR 4, paras 44–45; Case C-145/10 *Painer v Standard Verlags GmbH* [2011] ECDR 13; Case C-360/10 *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Netlog NV* [2012] 2 WLUK 519, [2012] 2 CMLR 18; Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541; Case C-201/13 *Deckmyn v Vandersteen* [2014] Bus LR 1368; Case C-160/15 *GS Media BV v Sanoma Media Netherlands and Others BV* [2016] Bus LR 1231, [2016] ECDR 25, para 31; Case C-484/14 *Tobias Mc Fadden v Sony Music Entertainment Germany GmbH* [2016] ECDR 26, [2017] Bus LR 430.

<sup>578</sup> *Asby Donald and others v France* App No 36769/08 (ECtHR, 10 January 2013) CE:ECHR:2013:0110JUD003676908; *Fredrik Neij and Peter Sunde Kolmisoppi (The Pirate Bay) v Sweden* App No 40397/12 (ECtHR, 19 February 2013) CE:ECHR:2013:0219DEC004039712.

<sup>579</sup> C Geiger and E Izyumenko, ‘Freedom of Expression as an External Limitation to Copyright Law in the EU: The Advocate General of the CJEU Shows the Way’ (2019) 41(3) EIPR 131.

<sup>580</sup> Case C-469/17 *Funke Medien NRW GmbH v Federal Republic of Germany* [2019] ECDR 25, [2020] 1 WLR 1573, Opinion of AG Szpunar, delivered on 25 October 2018.

<sup>581</sup> Case C-476/17 *Pelham GmbH, Moses Pelham, Martin Haas v Ralf Hutter and Florian Schneider-Esleben* [2019] ECDR 26, [2019] Bus LR 2159, Opinion of AG Szpunar, para 94; and Case C-516/17 *Spiegel Online GmbH v Volker Beck* [2019] ECDR 24, [2019] Bus LR, Opinion of AG Szpunar, para 62.



However, he did not exclude the external application of freedom of expression to copyright, emphasising that ‘exceptional circumstances’ might arise making such application indispensable.<sup>582</sup> More recently, Advocate General Saugmandsgaard Øe issued his Opinion in the joined cases *Frank Peterson v YouTube LLC* and *Elsevier v Cyando AG* and emphasised that the fundamental rights of platform users, including their freedom of expression, cannot be ignored.<sup>583</sup> From the video game streaming perspective, in order to balance these rights, there are important factors that should be taken into consideration.

### 3.5.2.1 Streaming as Protected Speech

Undoubtedly, LP videos contain different expressions. Streamers and audience engage in discussions whose content is not limited to gameplay. Characteristic examples of streaming videos that have ‘departed’ from purely gameplay discussion are the streams ‘Twitch Plays Pokémon’ and ‘Heartstone’. In the first case, a programmer created a stream that allowed viewers to control the game by typing commands in the chat. Although the game progressed at a slow pace, it became immensely popular and inspired the creation of images, moving pictures, and Internet memes.<sup>584</sup> In the second case, the video game developer Blizzard prohibited its *Heartstone* professional player from competing in the tournament for one year (later reduced to six months), on the grounds that he expressed a statement in support of protestors in Hong Kong, during a period of massive protests in summer 2019.<sup>585</sup> Across the video game industry, Riot Games<sup>586</sup> (which publishes *League of Legend*) has stated that personal views on sensitive

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<sup>582</sup> Case C-476/17 *Pelham GmbH, Moses Pelham, Martin Haas v Ralf Hutter and Florian Schneider-Esleben* [2019] ECDR 26, [2019] Bus LR 2159, Opinion of AG Szpunar, para 94-98; and Case C-516/17 *Spiegel Online GmbH v Volker Beck* [2019] ECDR 24, [2019] Bus LR, Opinion of AG Szpunar, para 62, 64 and 71.

<sup>583</sup> Case C-682/18 *Frank Peterson v Google LLC, YouTube LLC, YouTube Inc, Google Germany GmbH and Elsevier Inc v Cyando AG* [2020] ECDR 16, Bus LR 1196, Opinion of AG Saugmandsgaard Øe, paras 238–41.

<sup>584</sup> A Frank, ‘Five Years Ago, Twitch Plays Pokémon Changed Twitch Forever’ (*Polygon*, 12 February 2019) <<https://www.polygon.com/2019/2/12/18221792/twitch-plays-pokemon-anniversary>> last accessed on 4 February 2022. The term ‘Internet meme’ has been described by L Shifman as ‘the propagation of content items such as jokes, rumours, videos or websites from one person to others via the Internet’. L Shifman, ‘Memes in a Digital World: Reconciling with a Conceptual Troublemaker’ (2013) 18(3) *Journal of Computer-Mediated Communication* 362–77.

<sup>585</sup> B Stephen, ‘Blizzard is Banning People in Its Hearthstone Twitch Chat for Spamming Pro-Hong Kong Statements’ (*The Verge*, 18 October 2019) <<https://www.theverge.com/2019/10/18/20921301/blizzard-bans-hearthstone-twitch-chat-pro-hong-kong>> last accessed on 4 February 2022.

<sup>586</sup> As of 2015 Riot Games is fully owned by the Chinese company Tencent Holdings Ltd. P Li and B Goh, ‘Exclusive: Tencent and Riot Games Developing Mobile Version of *League of Legends* – Sources’ (*Reuters*, 22 May 2019) <<https://www.reuters.com/article/us-tencent-holdings-videogames-exclusive/exclusive-tencent-and-riot-games-developing-mobile-version-of-league-of-legends-sources-idUSKCN1SS0ZJ>> last accessed on 4 February 2022.

issues should be kept separate, while Epic Games, the developer of *Fortnite*, supported everyone's right to express their views on politics and human rights.<sup>587</sup>

Geiger and Izyumenko argue that copyright should serve as an engine of free expression, instead of serving the purposes of blocking access to information in order to avoid unwelcome criticism.<sup>588</sup> Indeed, in the past, there have been a number of judicial cases where rightholders have used copyright law as a recourse to stifle criticism.<sup>589</sup> In the 'video game world', video game developers have used takedown tools to censor unfavourable opinions of their game.<sup>590</sup> For instance, in the 2013 case of John Bain, known as TotalBiscuit, where he provided a negative review of the game *Day One: Garry's Incident* (developed by Wild Games Studio), the latter filed a takedown notice.<sup>591</sup> They alleged that John Bain had an advertisement in front of the game and thus gained advertisement revenue, taking advantage of the game's image. Although Wild Game Studios withdrew their takedown notice, this action confirms the legitimate concerns that LP producers have.

The ECtHR has stated in numerous cases the importance of freedom of expression and its role in a democratic society,<sup>592</sup> as well as its importance from a public interest perspective. Analysing the *Ashby Donald and others v France* and *Fredrik Neij and Peter Sunde Kolmisoppi (The Pirate Bay) v Sweden* cases, the ECtHR considered whether the expression was 'commercial' and whether it contributed to a political expression or a debate in the general interest.<sup>593</sup> Geiger and Izyumenko point out that the crucial criterion for valuing speech is whether it contributes to a debate in the general interest.<sup>594</sup>

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<sup>587</sup> M Kelly, 'Riot Doesn't Want *League of Legends* Broadcasters Discussing "Sensitive Topics" on the Air' (*The Verge*, 11 October 2019) <<https://www.theverge.com/2019/10/11/20908325/league-of-legends-riot-games-epic-games-blizzard-hearthstone-hong-kong-protests>> last accessed on 4 February 2022.

<sup>588</sup> C Geiger and E Izyumenko, 'Freedom of Expression as an External Limitation to Copyright Law in the EU: The Advocate General of the CJEU Shows the Way' (2019) 41(3) EIPR 131.

<sup>589</sup> Austrian Supreme Court, *Medienprofessor*, 12 June 2001, *GRUR Int* 341 (2002) (the use by the rightholders of their copyright 'with the sole objective of hindering any criticism towards their media campaign'); The Hague Court of Appeals, *Church of Scientology v XS4ALL*, 4 September 2003, 6 *AMI* 222 (2003) (unsuccessful attempts of the Church of Scientology to invoke copyright protection over its internal documents in order to prevent their publication on a website for the purposes of criticism).

<sup>590</sup> SC Mejia, 'Fair Play: Copyright Issues and Fair Use in YouTube "Let's Plays" and Videogame Livestreams' (2015) 7 *Intell Prop Brief* 17.

<sup>591</sup> K Ligman, 'Developer Accused of Using Copyright Takedown to Censor Critic (Updated)' (*Gamasutra*, 21 October 2013) <<https://www.gamasutra.com/view/news/202810/Developer>> last accessed on 4 February 2022.

<sup>592</sup> *Lingens v Austria Judgment, Merits and Just Satisfaction* App No 9815/82 (ECtHR, 8 July 1986); *Sener v Turkey* App No 28436/02 (ECtHR, 26 June 2007).

<sup>593</sup> *Asby Donald and others v France* App No 36769/08 (ECtHR, 10 January 2013), paras 34, 41–43; *Fredrik Neij and Peter Sunde Kolmisoppi (The Pirate Bay) v Sweden* App No 40397/12 (ECtHR, 19 February 2013).

<sup>594</sup> C Geiger and E Izyumenko, 'Copyright on the Human Rights' Trial: Redefining the Boundaries of Exclusivity through Freedom of Expression' (2014) 45(3) *IIC* 316.

In order to evaluate video game streaming, one should consider whether LP videos are commercial or cultural and, as such, whether they promote democratic values or not. LP videos are not commercial speech. While this activity generates revenue, the main purpose of the speech is to entertain the audience.<sup>595</sup> It is more challenging to evaluate whether streaming video games contributes to a debate in the general interest. As a first step, one should interpret what ‘a debate in the general interest’ is. The ECtHR held that political discussions,<sup>596</sup> sporting events, and performing artists<sup>597</sup> have been matters of general interest.

While traditional mass media are viewed as mere entertainment, contemporary Internet media allow for discussion between the parties involved. According to Balkin, freedom of speech should protect democratic culture where different people participate in, create, and discuss topics they find important, shaping in turn the understanding of society.<sup>598</sup> In the context of a stream, video games are the basis upon which viewers and streamers interact and participate in the expression of a streamer using a chat function. In addition, one should not disregard that streaming platforms and LP videos are highly appealing to young people, who perceive these platforms as political fora to discuss and debate. Young people rarely take part in traditional ways of democratic deliberation. Churchill and Xu argue that streaming platforms, Twitch in particular, have become ‘more than just an entertainment medium; it is the home of the largest gaming community history’.<sup>599</sup> Setting aside their entertainment mission, Taylor explained that streaming platforms provide viewers and gamers with a ‘civic space, political domain and site of critical work’.<sup>600</sup>

### 3.6 Conclusion

When analysing the debate over whether LP videos and live streams are acts of communication to the public, one could not overlook the asymmetry between the exclusive rights and exceptions as outlined in the InfoSoc Directive. The InfoSoc Directive and

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<sup>595</sup> C Geiger and E Izyumenko, ‘Copyright on the Human Rights’ Trial: Redefining the Boundaries of Exclusivity through Freedom of Expression’ (2014) 45(3) IIC 316.

<sup>596</sup> *Ceylan v Turkey* App No 23556/94 (ECtHR, 8th July 1999), para 34.

<sup>597</sup> *Von Hannover v Germany (No 2)* App No 40660/08 (ECtHR, 7 February 2012), para 109; *Axel Springer AG v Germany* App No 39954/08 (ECtHR, 7 February 2012), para 90.

<sup>598</sup> JM Balkin ‘Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society’ (2004) NYU L Rev 1, 38.

<sup>599</sup> B Churchill and W Xu, ‘The Modem Nation: A First Study on Twitch.TV Social Structure and Player/Game Relationships’ (IEEE International Conferences on Big Data and Cloud Computing (BDCloud), Social Computing and Networking (SocialCom), Sustainable Computing and Communications (SustainCom) 2016).

<sup>600</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 13.

accordingly the CJEU gave a broad scope to the communication to the public right in terms of interpretation, introducing new elements or criteria in the decision-making process.

Meanwhile, the closed list of copyright exceptions enumerated in Article 5 have been interpreted strictly. The three-step test in Article 5(5) limits the judicial application of the exceptions listed in Article 5(1)–(4). Rendas emphatically states that although the EU framework lacks flexibility, the courts have been deciding flexibly by way of analogy or by referring to other instruments.<sup>601</sup> A characteristic example of the CJEU’s flexibility in the decision-making process is the *GS Media* case, where the court moved away from the *Svensson* precedent and ruled in a rather creative way.<sup>602</sup>

The uncertainty around the communication to the public right is also evident in the gaming community. Among the gamers/users there is no clear understanding of whether video games are copyright-protected works, and as such should be protected from unauthorised communication to the public. They claim that they have contributed creative input to the gameplay.

Having considered the financial factors that have resulted in reluctance on the part of video game companies to initiate legal proceedings on the grounds of unauthorised communication to the public, this chapter examined the ‘legal arsenal’ that could be put forward in the event of potential litigation. Setting aside review videos, which are short in length and characterised by critical opinion on a particular game, the other two types of LP videos – playthrough videos with and without commentary – are unlikely (or definitely not likely) to qualify for the exceptions and limitations of copyright, respectively.

Copyright can be restricted for the purposes of safeguarding free speech, and free speech in turn is not absolute and can be limited if rightholders have a legitimate interest in enforcing their rights.<sup>603</sup> Copyright and the right to freedom of expression must be balanced on a case-by-case basis, but the ECtHR offered little direction for this exercise. The CJEU and the ECtHR continue to grant Member States a wide margin of discretion to strike a balance at the national level. In contrast to speech having commercial motives, which is likely to lose to copyright claims, political speech or speech that adds to a public conversation is likely to be given

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<sup>601</sup> T Rendas, ‘Copyright, Technology and the CJEU: An Empirical Study’ (2018) 49(2) IIC 153.

<sup>602</sup> Case C-160/15 *GS Media BV v Sanoma Media Netherlands BV and others* [2016] Bus LR 1231, [2016] ECDR 25.

<sup>603</sup> B Justin Jütte, ‘The Beginning of a (Happy) Relationship: Copyright and Freedom of Expression in Europe’ (2016) 38(1) EIPR 11.

priority. With no current legal precedent in the field of video game streaming and potential copyright infringement, it remains to be seen how national and European courts will assess a case before them and evaluate the defences discussed in this chapter.

## Chapter 4: The Determination of Responsibility and Liability of Intermediary Service Providers Performing Streaming Functions

The industry of video game streaming is based on the advancements of online platforms that host the streaming content. One of the main protagonists of the streaming platforms, Twitch.tv, provides video gamers with a virtual location – a website – to stream and share their experience with other users. The streaming platforms enable streamers to host their own channel and interact with a wide audience while playing the video game.

The rapid growth of the Internet and the massive amount of content available online have raised legal and practical issues. On the Internet, potential infringing material is transmitted or stored through a third party's network. Qiu highlights that in the video game streaming industry the problem is that the streaming content on platforms, such as Twitch.tv, involves copyrightable video games, which infringe copyright holders' rights, if the streaming platform lacks authorisation.<sup>604</sup> Internet Service Providers (ISPs)<sup>605</sup> provide a wide range of services and therefore play a vital role in the Internet industry. ISPs' services can be categorised according to their performance: access providers, host providers, and content providers.<sup>606</sup> Access providers are the ISPs that connect the user to the Internet through a telecommunication line or link.<sup>607</sup> Host providers perform the hosting of a customer's website on their technical facilities and connect the website with the Internet.<sup>608</sup> These providers provide a platform where users can transact with each other and exchange information. Characteristic examples are eBay, where users can buy and sell items via eBay's platform, and YouTube and Twitch.tv, which offer their users the platform to upload their content, without prior control or permission by the website operators. Thus, the services carried out by eBay, YouTube, and Twitch.tv are hosting services. Content providers offer information, illustrations, entertainment, goods, and services on websites and the content is created and offered on their own behalf.<sup>609</sup> Therefore, their main performance is the creation and the offer of digital content online.

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<sup>604</sup> Y Qui, 'A Cure for Twitch: Compulsory License Promoting Video Game Live-Streaming' (2017) 21 *Marquette Intellectual Property Law Review* 31, 42.

<sup>605</sup> A possible definition of ISPs that encompasses their activities would be 'An organisation that provides access to the Internet... ISPs often host a small Web site for their customers, allowing you to have a presence on the Web'. See B Kleinschmidt, 'An International Comparison of ISP's Liabilities for Unlawful Third-Party Content' (2010) 18(4) *IJLIT* 332, 333.

<sup>606</sup> *ibid.*

<sup>607</sup> *ibid.*

<sup>608</sup> *ibid.*

<sup>609</sup> *ibid.*, 334.

In providing these services, the service provider could be potentially liable as a result of the misuse of the service by the recipient – third parties.<sup>610</sup> In the context of video games, the responsibility and liability for uploading and storing ‘Let’s Play’ (LP) videos is an unclear issue: on the one hand, primarily liable is the user who uploads the infringing content, while, on the other hand, the operator of the platform could be indirectly liable. To protect ISPs from ‘unlimited liability’ emerging from the users’ copyright-infringing activities, safe harbour was created with the enactment of Directive 2000/31/EC (the Directive on Electronic Commerce, or ‘e-Commerce Directive’). ISP liability is enumerated in Articles 12–15 of the e-Commerce Directive. In cases where an ISP provides information society services, the ISP will come under the liability exceptions.

In 2019, Directive (EU) 2019/790 (the EU Directive on Copyright in the Digital Single Market, or ‘DSM Directive’) limited the applicability of safe harbours where ISPs have not obtained authorisation from the rightholders.<sup>611</sup> Therefore, ISPs are now obligated by the Directive to obtain authorisation from the rightholders, by concluding a licence agreement, to communicate copyright-protected works to the public.

This chapter will address the following questions: Are intermediaries liable for hosting infringing LP videos and/or live streams pursuant to Articles 12 to 15 of the e-Commerce Directive and Article 17 of the DSM Directive? What are the obligations imposed on online content-sharing service providers (OCSSPs) by the DSM Directive, and how might they be implemented by the providers? What are the limitations of existing content moderation methods for detecting unauthorised video game streaming, and how to overcome the challenges of deploying algorithmic filters in the detection of infringing content?

In this chapter, further consideration of the ISPs’ liability and immunity pursuant to the e-Commerce Directive and the DSM Directive will be provided. The chapter also considers the deployment of algorithmic content moderation systems for the detection of infringing content and the challenges associated with copyright law. The last part is dedicated to the remedies available to rightholders against those intermediaries. The Notice and Takedown procedure

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<sup>610</sup> The recipient of the service is defined as a natural or legal person who uses an information society service to seek information or to make such information accessible. Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, arts 2(d) and 3.

<sup>611</sup> Council Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17.

will be analysed in terms of its effectiveness and application in the selected EU Member States (Germany, France, and Greece) and the UK.

#### 4.1 Further Considerations on Intermediary Service Providers

Based on the categorisation of ISPs into access providers, content providers, and host providers, as illustrated in the introduction to this chapter, one could argue that it is not an easy task to transfer these definitions to the service providers conducting business on the Internet, because an ISP may offer multiple services simultaneously.<sup>612</sup> While the services provided by an access provider are unquestionable, the differentiation between content and hosting providers is a more challenging task. The content provider offers information, entertainment, or the purchase of goods or services and the host provider is the party that hosts the web site for the content provider.<sup>613</sup> The differentiation of the two providers could be more easily understood by the wording of Article 14 of the e-Commerce Directive, which provides that a hosting service ‘consists of the storage of information’.<sup>614</sup> This criterion distinguishes the hosting provider from the content provider, because the former is not involved in the creation of the content, whereas the latter is involved in the creation of the content.<sup>615</sup> In light of the above, websites, such as YouTube and Twitch.tv, that host pre-recorded and uploaded LP videos perform hosting services. The issue of live streaming is slightly different; therefore, it will be further analysed below in section 4.2, which discusses the liability of intermediaries acting as mere conduit, caching, or hosting service providers.

The case law of national and European courts shows that divergences exist among Member States.<sup>616</sup> Services provided for remuneration – among other criteria – are exempt from liability. In France, the Paris Court of Appeal defended the Wikimedia Foundation’s (a free platform) status as a hosting provider,<sup>617</sup> whereas the CJEU held that online publishers of news could be

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<sup>612</sup> FF Wang, *Law of Electronic Commercial Transactions: Contemporary issues in the EU, US and China* (2nd edn, Taylor and Francis Group 2014) 207. See also B Kleinschmidt, ‘An International Comparison of ISP’s Liabilities for Unlawful Third-Party Content’ (2010) 18(4) IJLIT 332, 333.

<sup>613</sup> B Kleinschmidt, ‘An International Comparison of ISP’s Liabilities for Unlawful Third-Party Content’ (2010) 18(4) IJLIT 332.

<sup>614</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 14.

<sup>615</sup> DLA Piper, ‘Liability of Online Intermediaries EU Study on the Legal Analysis of a Single Market for the Information Society: New Rules for a New Age?’ (2009) 16 <<https://op.europa.eu/en/publication-detail/-/publication/a856513e-ddd9-45e2-b3f1-6c9a0ea6c722>> last accessed on 4 February 2022.

<sup>616</sup> Cour d’appel de Paris, Pôle 1 – Ch 3, arrêt du 14 juin 2016, *Teissier v Wikimedia Foundation* no 15/57276; Case C-291/13 *Papasavvas v O Fileleftheros Dimosia Etairia Ltd* [2014] WLR(D) 393, [2015] 1 CMLR 24.

<sup>617</sup> M Paulson and J Rogers, ‘Victory in France: Court Rules in Favour of the Wikimedia Foundation’ (*Wikimedia Foundation*, 20 June 2016) <<https://diff.wikimedia.org/2016/06/20/france-legal-victory/>> last accessed on 4 February 2022.



liable, regardless of whether the content was free or paid for by the users.<sup>618</sup> In addition, the liability regime of hyperlinks and search engines is also not harmonised. Courts in the UK held that hyperlinking is a mere conduit activity, while courts in Germany considered it to be hosting activity.<sup>619</sup>

The uncertainties around the e-Commerce Directive came to the surface when the European Commission launched a public consultation on the regulatory environment for platforms and online intermediaries.<sup>620</sup> The reports coming from respondents under the section on ‘Tackling illegal content online and the liability of online intermediaries’ varied depending on their interests. Rightholders reported the growing use of protected content without their authorisation by online platforms, the lack of clarity in copyright law regarding the notion of the communication to the public right, and the limited liability for intermediaries and they asked for clarification at an EU level of the rules applicable to online platforms using protected content.<sup>621</sup> It is remarkable though that the video game industries considered the use of their content by online platforms to have a positive effect.<sup>622</sup> Online platforms<sup>623</sup> and ISPs<sup>624</sup> expressed a different view. According to the responses coming from intermediaries, the liability regime under Articles 12–15 of the e-Commerce Directive was fit for purpose and

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<sup>618</sup> Case C-291/13 *Papasavvas v O Fileleftheros Dimosia Etairia Ltd* [2014] WLR(D) 393, [2015] 1 CMLR 24.

<sup>619</sup> European Commission, ‘Summary of the Results of the Public Consultation on the Future of Electronic Commerce in the Internal Market and the Implementation of the Directive on Electronic Commerce (2000/31/EC)’, 15 <[https://ec.europa.eu/information\\_society/newsroom/image/document/2017-4/consultation\\_summary\\_report\\_en\\_2010\\_42070.pdf](https://ec.europa.eu/information_society/newsroom/image/document/2017-4/consultation_summary_report_en_2010_42070.pdf)> last accessed on 8 April 2023.

<sup>620</sup> European Commission, ‘Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy’ (2015) <<https://digital-strategy.ec.europa.eu/en/consultations/public-consultation-regulatory-environment-platforms-online-intermediaries-data-and-cloud-computing>> last accessed on 8 April 2023.

<sup>621</sup> Among the rightholders, *France Televisions* opined that audio-visual platforms play an active role in the monetisation of content and influence user choices, hence they could not be considered as mere intermediary service providers within Articles 12–15 of the e-Commerce Directive. See European Commission, ‘Responses to the Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy’ (2 February 2016) <<https://ec.europa.eu/digital-single-market/en/news/responses-public-consultation-regulatory-environment-platforms-online-intermediaries-data-and>> last accessed on 8 April 2023.

<sup>622</sup> European Commission, ‘Full Report on the Results of the Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy’ (2016), 11 <<https://ec.europa.eu/digital-single-market/en/news/results-public-consultation-regulatory-environment-platforms-online-intermediaries-data-and>> last accessed on 8 April 2023.

<sup>623</sup> DSM Platform Consultation, ‘Facebook Responses to the Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy’ (2016) <[https://ec.europa.eu/information\\_society/newsroom/image/document/2016-7/facebook\\_dsm\\_platform\\_consultation\\_facebook\\_responses\\_6\\_january\\_2016\\_13926.pdf](https://ec.europa.eu/information_society/newsroom/image/document/2016-7/facebook_dsm_platform_consultation_facebook_responses_6_january_2016_13926.pdf)> last accessed on 8 April 2023.

<sup>624</sup> EuroISPA Response to the Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy (2016) <[https://ec.europa.eu/information\\_society/newsroom/image/document/2016-7/euroispa\\_european\\_association\\_of\\_internet\\_services\\_providers\\_online\\_platform\\_consultation\\_13924.pdf](https://ec.europa.eu/information_society/newsroom/image/document/2016-7/euroispa_european_association_of_internet_services_providers_online_platform_consultation_13924.pdf)> last accessed on 8 April 2023.

‘future-proof’, which meant that there was no need for further categories of intermediary services to be established.<sup>625</sup> Nevertheless, governmental respondents<sup>626</sup> had not disregarded that the Internet had changed since the enactment of the e-Commerce Directive and thought further clarification should be given at an EU level on the criterion of ‘actual knowledge’ as well as on what types of online businesses fell under the category of mere conduit, caching, and hosting. Do hosting services of the e-Commerce Directive accommodate the services of Web 2.0? Based on the mere definition of information society services, one could opine that not only the traditional electronic communications providers but also new online intermediaries (e.g., social media companies, game, and cloud providers) potentially fall under the scope of the e-Commerce Directive. Further analysis will be given below under section 4.2.3.

#### 4.2 The Liability of Intermediary Service Providers and the Exceptions

Intermediary service provider liability is enacted in Articles 12–15 of the e-Commerce Directive. In cases where a provider provides an information society service (ISS), it will come under the liability exceptions. Practically, this is crucial for an intermediary, because exceptions provide protection from legal liability for its activities and the activities of its users. A quick review of the content of the Articles shows that the immunity applies to the activity or service and not to the provider of the said service.<sup>627</sup> This activity-based regime means that an intermediary could be liable for infringing content relevant to some of its activities, whereas it may be able to claim exemption from liability regarding illegal content stored or transmitted through its platform if the services fall within Articles 12–14 of the e-Commerce Directive.<sup>628</sup> In the *L’Oréal v eBay* case, Advocate General Jääskinen stated that while some activities of the intermediary are exempt from liability, others are not.<sup>629</sup>

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<sup>625</sup> European Commission, ‘Full Report on the Results of the Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy’ (2016) 16 <<https://ec.europa.eu/digital-single-market/en/news/results-public-consultation-regulatory-environment-platforms-online-intermediaries-data-and>> last accessed on 8 April 2023.

<sup>626</sup> HM Government, ‘UK Government Response to EU Public Consultation on Digital Platforms’ (2016) 20 <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/491736/bis-16-74-digital-platforms-eu-consultation-response.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/491736/bis-16-74-digital-platforms-eu-consultation-response.pdf)> last accessed on 8 April 2023.

<sup>627</sup> EU Commission, ‘First Report on the Application of Directive 2000/31/EC’ (2003) 12 <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52003DC0702&from=EN>> last accessed on 4 February 2022.

<sup>628</sup> A Adeyemi, ‘Liability and Exemptions of Internet Service Providers (ISPs): Assessing the EU Electronic Commerce Legal Regime’ (2018) 24(1) CTLR 2, 6.

<sup>629</sup> Case C-324/09 *L’Oréal SA and others v eBay International AG and others* [2012] Bus LR 1369, [2011] 7 WLUK 313, Opinion of AG Jääskinen, para 149.

#### 4.2.1. Mere Conduit

Article 12 of the e-Commerce Directive relates to the activities that could result in liability for intermediaries as well as the exemptions available in cases where they act as mere conduits. An intermediary is considered to act as a mere conduit where it ‘plays a transient and passive role in aiding the transmission of information on behalf of content providers’.<sup>630</sup> An intermediary can claim exemption from liability where three requirements are met: it does not initiate the transmission; it refrains from selecting the person receiving the information; and it does not select or modify the transmission.

One of the main platforms for video game content, Twitch.tv, is a provider of online services that offers the transmission of live streaming videos, chosen by the gamer/streamer, between streamers and viewers.<sup>631</sup> Twitch.tv does not initiate the transmission, it does not select the person receiving the information, and it does not modify the transmitted content. As analysed in the previous chapters, in the course of live streaming the digital work is delivered simultaneously to multiple users from a single source in real time.<sup>632</sup> The data is captured from a source, processed to a digital signal, and transmitted to multiple users simultaneously.<sup>633</sup> Thus, according to this point of view, Twitch.tv acts as a ‘mere conduit’ for the transmission of live streaming video game content.

Nevertheless, paragraph 3 of Article 12 has a great impact on Article 12(1), because it provides that the limitation of liability shall not affect the ability of courts or administrative authorities in Member States to require the intermediary service provider to terminate the infringement.<sup>634</sup> To date, Germany, the UK, and Belgium have implemented the provision of Article 12(3) to issue blocking orders to access providers. Germany and the UK, in particular, have issued access-blocking orders for websites containing child pornography and hate speech.<sup>635</sup> In Germany, the issue of access blocking appeared in a 2002 case where the access-blocking order was issued for a Nazi website, which contained severe criminally offensive

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<sup>630</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 12; L Edwards, *The New Legal Framework for eCommerce in Europe* (Hart Publishing 2005) 112.

<sup>631</sup> M Larkey, ‘Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcasts’ (2015) 13 Rutgers JL & Pub Policy 52, 75.

<sup>632</sup> M Borghi, ‘Chasing Copyright Infringement in the Streaming Landscape’ (2011) 42(3) IIC 316, 317.

<sup>633</sup> *ibid.*

<sup>634</sup> Directive on electronic commerce (n 630), art 12(3).

<sup>635</sup> B Kleinschmidt, ‘An International Comparison of ISP’s Liabilities for Unlawful Third-Party Content’ (2010) 18(4) IJLIT 332, 338–40.

material.<sup>636</sup> In the UK, British Telecom (BT) was the first provider to block child pornography websites by introducing ‘Clean Feed’.<sup>637</sup>

At this point, it is also important to discuss the legality of directing service providers to employ technology for the purposes of blocking illegal file sharing. In the Belgian case of *SABAM v SA Tiscali (Scarlet)* the court ordered Scarlet, an ISP, to install filtering software for the purposes of identifying and blocking access to copyrighted music.<sup>638</sup> The court decision contradicts Article 12, which recognises and grants service providers immunity when acting as ‘mere conduits’. When the issue was referred to the CJEU for a preliminary ruling, the Luxembourg Court stated that it is unreasonable to order a service provider to install filtering software for the purposes of copyright enforcement, also emphasising the infringement of fundamental rights of freedom of expression.<sup>639</sup> The issue of blocking access to copyright content and its effectiveness in tackling copyright infringements will be further analysed in the next chapter.

#### 4.2.2. Caching

Caching is defined as the automatic, intermediate, and temporary storage of data, performed for the sole purpose of making more efficient the information’s onward transmission to other recipients of the service upon their request (for example, a proxy server).<sup>640</sup> The e-Commerce Directive enumerates provisions to maintain immunity for ISPs engaging in caching. The service provider is not liable on condition that it does not modify the information, complies with conditions on access to the information, complies with rules regarding the updating of the information, does not interfere with the lawful use of technology widely recognised and used by industry, and promptly removes or disables access to copyright-infringing material upon obtaining actual knowledge of the fact that the information has been removed from the initial

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<sup>636</sup> Oberverwaltungsgericht (Administrative Court of Appeal) Muenster [19 March 2003] 8 B 2567/02, para 68 <<https://openjur.de/u/97818.html>> last accessed on 8 April 2023.

<sup>637</sup> M Bright, ‘BT Puts Block on Child Porn Sites’ (*The Guardian*, 6 June 2004) <<https://www.theguardian.com/technology/2004/jun/06/childrenservices.childprotection>> last accessed on 4 February 2022.

<sup>638</sup> *SABAM v SA Tiscali (Scarlet)* (2007) No 04/8975/A (District Court of Brussels).

<sup>639</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs Scrl (SABAM)* [2011] ECR 2011 -00000, paras 50–52.

<sup>640</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 13(1); European Parliament Research Service, ‘Reform of the EU Liability Regime for Online Intermediaries’ (May 2020) <[https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/649404/EPRS\\_IDA\(2020\)649404\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/649404/EPRS_IDA(2020)649404_EN.pdf)> last accessed on 8 April 2023.

source, has been disabled, or where such removal was ordered by an administrative authority.<sup>641</sup>

The storage of information for a longer period would require stricter rules for any excuse from liability.<sup>642</sup> In essence, the aim of Article 13 on caching is to grant intermediaries protection for the materials that are temporarily stored on their servers and to ensure the availability of material and the functionality of the Internet.<sup>643</sup>

Caching is an integral part of the live streaming process from a technical point of view. On the backstage of any live stream (including the live stream of video game content), one could observe the following steps: segmentation, compression, encoding, Content Delivery Network (CDN) distribution, CDN caching, decoding, and video playback.<sup>644</sup> After the live stream has been segmented, compressed, and encoded, it will be available to the millions of viewers who want to watch it. A CDN will cache (temporarily save) the segments of the live stream and the viewers will receive the live stream from the CDN cache rather than from the origin server, a process that makes live stream closer to real time.<sup>645</sup>

#### 4.2.3 Hosting Liability

Unlike the act of caching, hosting pertains to an extended or permanent storage of information. To better understand the wording of Article 14, it is important to consider the meaning of hosting, the level of knowledge required, and how quickly an intermediary is expected to take down infringing content.

Article 14 refers to a wide range of providers, including social networking platforms<sup>646</sup> and blog services.<sup>647</sup> Hosting is where service providers store information provided by the recipient of the service<sup>648</sup> and usually consists of websites including html pages put up by users.<sup>649</sup> In other words, the recipient of the service generates the content and places it on a server (provided

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<sup>641</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') [2000] OJ L 178/1, art 13(1)(a)-(e).

<sup>642</sup> *Bunt v Tilley* [2006] EWHC 407 [51].

<sup>643</sup> A Adeyemi, 'Liability and Exemptions of Internet Service Providers (ISPs): Assessing the EU Electronic Commerce Legal Regime' (2018) 24(1) CTLR 2, 11.

<sup>644</sup> Cloudflare, 'What is Live Streaming? How Live Streaming Works', <<https://www.cloudflare.com/learning/video/what-is-live-streaming/>> last accessed on 4 February 2022.

<sup>645</sup> *ibid.*

<sup>646</sup> Case C-360/10 *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Netlog NV* [2012] 2 WLUK 519, [2012] 2 CMLR 18, para 27.

<sup>647</sup> *Kaschke v Gray* [2010] EWHC 690 (QB); *Tamiz v Google* [2012] EWHC 449 (QB).

<sup>648</sup> B Kleinschmidt, 'An International Comparison of ISP's Liabilities for Unlawful Third Party Content' (2010) 18(4) IJLIT 332, 332.

<sup>649</sup> Adeyemi (n 643), 12.

by the host) so that it can be accessed by users. Although users have the possibility to upload the content without prior monitoring by the host, the latter can retroactively remove such content from its servers.<sup>650</sup> Hence, the Twitch.tv service, which allows gamers/streamers to upload their LP videos on Twitch and select which video will remain available upon users' request as archived video (on-demand streaming), falls within the wording of hosting provider.

An intermediary should meet four requirements to claim immunity under Article 14. First, the service in question is an ISS; second, the service consists of the storage of information; third, it is provided by the recipient of the information; and fourth, the provider of the service does not have actual knowledge or is not aware of the illegal nature of the information or upon obtaining such knowledge or awareness acts expeditiously to remove or to disable access to the information.<sup>651</sup>

The Directive grants immunity to intermediaries that provide an ISS that consists of the storage of information. The meaning of storage is very important in this respect. Storage has been interpreted as 'holding, keeping or storing information on a server'.<sup>652</sup> Hosts do not approve content hosted on their servers in advance. For intermediaries, it is important to remain 'neutral' to be able to claim immunity. Therefore, the criterion of 'knowledge' is one of the most significant criteria for assessment.

The CJEU in *Google France v Louis Vuitton*<sup>653</sup> and *L'Oréal v eBay*<sup>654</sup> provided some insights on how to interpret Article 14. According to the Court, service providers would be exempted from liability if their conduct was merely technical, automatic, and passive. In contrast, if the service provider had control over the illegal information, they should have been held liable for their active role.<sup>655</sup> Where the service provider has not played an active role, it could be held liable if it has obtained knowledge of facts or circumstances and, notwithstanding

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<sup>650</sup> B Kleinschmidt, 'An International Comparison of ISP's Liabilities for Unlawful Third Party Content' (2010) 18(4) IJLIT 332, 345.

<sup>651</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') [2000] OJ L 178/1, art 14(1). See also Case C-236/08 *Google France SARL and another v Louis Vuitton Malletier SA* [2011] Bus LR 1, [2010] ECR I-2417, para 128.

<sup>652</sup> *ibid*, paras 111–13.

<sup>653</sup> *ibid*.

<sup>654</sup> Case C-324/09 *L'Oréal SA and others v eBay International AG and others* [2012] Bus LR 1369, [2011] 7 WLUK 313.

<sup>655</sup> Case C-236/08 *Google France* (n 651), para 114.

this awareness, has not acted expeditiously to prevent its recurrence by removing infringing content or by disabling access to the information online.<sup>656</sup>

Upon notification of infringing material, service providers have a reasonable time to remove the content. The opportunity to retroactively remove infringing content hosted on a server means that service providers are exempt from liability from the actions of third parties, up to the point it is shown that they have actual knowledge of the infringing content and did not remove it.<sup>657</sup>

Following the introduction of the e-Commerce Directive in 2000, the interpretation of Article 14 caused various discussions regarding the ambiguous concepts contained in its provision. First and foremost, according to Article 14, a hosting service ‘consists of the storage of information provided by a recipient of the service’. The EU study on the legal analysis of a single market for the information society highlighted that the wording ‘consists of’ is used to distinguish hosting providers from content providers, as the former are not involved in the creation of the content, whereas the latter are creating the content themselves.<sup>658</sup> While this criterion may be suitable for the traditional services,<sup>659</sup> its limitations come to the surface if applied to other services, such as e-mail services, cloud computing services, and other Web 2.0 services, where storage is only one aspect of the service package.<sup>660</sup>

Courts in Member States have been confronted with the limitations of the ‘consist of’ criterion in cases where they were asked to specify to what extent a service is a hosting service: Is it sufficient that all aspects, most aspects, or some aspects deal with hosting? The French Commercial Court of Paris ruled in 2008 that ‘the essence of eBay’s service is to mediate between buyers and sellers’ and ‘it deploys a commercial, auction-related activity that is not limited to hosting’, excluding Article 14 when the hosting aspects are not the most important

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<sup>656</sup> G Colangelo and M Maggolino, ‘ISPs’ Copyright Liability in the EU Digital Single Market Strategy’ (2018) 26 IJLIT 142, 144.

<sup>657</sup> B Kleinschmidt, ‘An International Comparison of ISP’s Liabilities for Unlawful Third-Party Content’ (2010) 18(4) IJLIT 332, 345.

<sup>658</sup> DLA Piper, ‘EU Study on Liability of Online Intermediaries EU Study on the Legal Analysis of a Single Market for the Information Society: New Rules for a New Age?’ (2009) <<https://op.europa.eu/en/publication-detail/-/publication/a856513e-ddd9-45e2-b3f1-6c9a0ea6c722>> last accessed on 28 January 2023.

<sup>659</sup> *ibid.*

<sup>660</sup> Web 2.0 is a term that describes the developments in the use of World Wide Web technology that aims to enhance creativity and information sharing. Examples of Web 2.0 technology include hosting services, such as social networking sites (e.g., Facebook) and video-sharing sites (e.g., YouTube). See SJ Caruso, ‘Toward Understanding the Role Of Web 2.0 Technology In Self-Directed Learning And Job Performance’ (2018) 11(3) CIER 89.

aspects of the service.<sup>661</sup> However, an opposite view was taken by the Rodopi court of first instance in Greece, qualifying a blog as a hosting service given that there is some storage activity involved.<sup>662</sup>

Secondly, according to Article 14, hosting providers can only benefit from the limited liability regime when they act expeditiously to remove or disable access to illegal information as soon as they obtain ‘actual knowledge’ or ‘are aware of facts or circumstances’ regarding this illegal information.<sup>663</sup> Although the concept of ‘actual knowledge’ is crucial to determine liability for hosting providers, the Directive does not provide a definition of what should be considered as ‘knowledge’. As a result, it is left to the courts to determine the scope of these criteria. For instance, the German courts have placed more emphasis on the preconditions of knowledge (positive knowledge or negligent ignorance) and the formal requirements for notifying the illicit content, in particular the requirement of an official communication.<sup>664</sup> The German courts have focused on actual, positive human knowledge instead of automated computer knowledge as well as on the ‘knowledge’ of specific illegal content, as the provider is able to remove or block access to specific identifiable content.

Article 14(3) of the e-Commerce Directive provides for further obligations that can be imposed by the courts or administrative authorities of Member States. In this context, German courts are of the opinion that host providers’ liability should not be limited to the Notice and Takedown obligation, but should also prevent future abuses on their platforms. In the *Rolex v eBay* case, the court held that eBay should not only remove the infringing content but also take measures to prevent further infringements in the future, if such measures are possible and economically reasonable.<sup>665</sup> However, the UK courts have rejected attempts by rightholders to compel eBay to prevent infringements by their customers. Arnold J delivered his judgement on *L’Oréal v eBay* by stating that ‘eBay Europe are under no legal duty or obligation to prevent infringement of third parties’ registered trademarks’.<sup>666</sup> Article 14(3) has been criticised because it allows Member States to rely on domestic law.<sup>667</sup> For example, in Germany the

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<sup>661</sup> Commercial Court of Paris, First Chamber *Louis Vuitton Malletier / Christian Dior Couture and Parfums Christian Dior, Kenzo, Givenchy et Guerlain v eBay* 30 June 2008.

<sup>662</sup> Rodopi Court of First Instance, case No 44/2008.

<sup>663</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 14(1)(a)(b).

<sup>664</sup> German Federal Court of Justice (BGH) VI ZR 335/02, 23 September 2003, NJW 2003, 3764; the requirement of positive knowledge is found on the German decision as ‘positive Kenntnis’.

<sup>665</sup> German Federal Court of Justice (BGH) I ZR 304/01, 11 March 2004.

<sup>666</sup> *L’Oréal v Ebay* [2009] EWHC 1094 (Ch), [375] and [381].

<sup>667</sup> B Kleinschmidt, ‘An International Comparison of ISPs’ Liabilities for Unlawful Third Party Content’ (2010) 18(4) IJLIT 332, 348.



intermediary contribution to copyright infringement committed by others is dealt with by the doctrine of *Störerhaftung* (interferer), which is a form of strict liability, with the only factor to be the unlawfulness of the conduct per se. Angelopoulos explains that *Störerhaftung* is available in cases where the direct infringer is unknown or not within legal reach, or where the nature of the infringement would require action to be taken against the interferer so as to ensure an immediate relief.<sup>668</sup> Indeed, this is likely in cases of online infringement, because the online networked environment allows for copies of infringing content to emerge in different online locations.

The common law doctrine of joint tortfeasance holds multiple persons liable provided that they are connected or associated with the same infringement.<sup>669</sup> Copyright infringement is a tort, and courts in the national jurisdictions have turned to tort law principles to address this issue. While the UK courts fall back onto the doctrine of joint tortfeasance, Germany mainly relies on the doctrine of *Störerhaftung*. Based on this consideration, one could conclude that differences between national jurisdictions in their liability regimes are due to the difference in their tort law traditions. The fundamental division between civil and common law in the concept of duty of care could also explain the different approaches to intermediary liability. While in civil law systems there is a general rule that persons' actions should not prejudice third parties, in common law systems such a duty does not exist, unless it is provided by precedent or statute.<sup>670</sup> The harmonisation of intermediary liability is a challenging task, as the issue is linked to tort law, an area in which divergence between national systems is firm.

After the presentation of the different services carried out by service providers, it is undeniable that the terminology and different categories of intermediary service providers is not clear. The lines between mere conduit and hosting service providers are blurred. More specifically, in the context of the e-Commerce Directive, live streaming is hard to be categorised under either mere conduit or hosting services. Different opinions have been expressed on this matter. While Borghi is of the opinion that 'both kinds of websites offering live and on-demand streaming can also be hosting services',<sup>671</sup> Larkey has differentiated the two activities as 'mere conduit service providers offering live streaming services and hosting

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<sup>668</sup> C Angelopoulos, 'Beyond the Safe Harbours: Harmonising Substantive Intermediary Liability for Copyright Infringement in Europe' (2013) 3 IPQ 253, 267.

<sup>669</sup> H Carty, 'Joint Tortfeasance and Assistance Liability' (1999) 19 Legal Stud 489.

<sup>670</sup> Angelopoulos (n 668) 272.

<sup>671</sup> M Borghi, 'Chasing Copyright Infringement in the Streaming Landscape' (2011) 42(3) IIC 316, 317.

service providers offering on-demand streaming’.<sup>672</sup> A similar view has been adopted by the European Commission, indicating in their 2018 report that ‘for instance, a Web streaming service may offer the ability of live streaming, which to the extent that it amounts to live streaming, may have to be considered a “mere conduit” activity’.<sup>673</sup>

A more recent report conducted by Schwemer and others for the European Commission in the summer of 2020 places live streaming in a grey area. From a functional point of view, live streaming is similar to hosting, but it does not fall under the definition of Article 14 of the e-Commerce Directive since the streamed content is not stored before the communication.<sup>674</sup> From a technical perspective, live streaming resembles mere conduit because it involves the element of transmission, but the temporal characteristic of live streaming is not what the EU legislators intended when enacting Article 12 (mere conduit). According to their view, live streaming ‘is somewhat comparable to hosting because the live streaming service hosts the live stream, which is not necessarily a stored file but a continuous content stream’.<sup>675</sup> In a period of three years, different reports regarding intermediary services liability present divergence in their opinions.

Based on the above analysis, Twitch.tv acts as a mere conduit for live streaming video game content and as a hosting provider for archived videos that are available via on-demand streaming. The next and more challenging step is to consider that platforms may store the ‘live stream’ video for a couple of days for later viewing. Would they still be mere conduit service providers? The answer would be in the negative. Platforms, such as Twitch.tv, that will store live stream videos for future access will perform hosting activities.<sup>676</sup>

This lack of unanimity in the opinions and understandings among legal academics and the European Commission around live streaming necessitates further clarification or an upgrade of the legislation, in order to accommodate this type of service. A clarifying Recital should introduce a new typology regarding intermediary functions, including a non-exhaustive list of

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<sup>672</sup> M Larkey, ‘Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcasts’ (2015) 13 Rutgers JL & Pub Policy 52, 75.

<sup>673</sup> European Commission, ‘Hosting Intermediary Services and Illegal Content Online: An Analysis of the Scope of Article 14 ECD in Light of Developments in the Online Services Landscape’ 2018 <[https://www.ivir.nl/publicaties/download/hosting\\_intermediary\\_services.pdf](https://www.ivir.nl/publicaties/download/hosting_intermediary_services.pdf)> last accessed on 28 January 2023.

<sup>674</sup> S Schwemer, T Mahler, and H Styri, ‘Legal Analysis of the Intermediary Service Providers of Non-Hosting Nature’ (Final Report prepared for the European Commission 2020) 58 <<https://op.europa.eu/en/publication-detail/-/publication/3931eed8-3e88-11eb-b27b-01aa75ed71a1/language-en>> last accessed on 28 January 2023.

<sup>675</sup> *ibid.*

<sup>676</sup> European Commission (n 673) 14.

examples for each category.<sup>677</sup> Taking as an example the live streaming services, it is apparent that the e-Commerce Directive of 2000 cannot mirror the emerging technologies. There are also other examples, such as cloud computing, demonstrating that updated legislation is of great importance. The e-Commerce Directive has proven to be not ‘future-proof’.

#### 4.2.4 Monitoring Obligation

The e-Commerce Directive does not provide for a general obligation on service providers to monitor the information they transmit or store on their platforms.<sup>678</sup> Service providers should not be burdened with the investigation of the information that could amount to sharing infringing content. The content of Article 15 was analysed by the CJEU in the *Scarlet Extended* and *SABAM v Netlog* cases.<sup>679</sup> The question before the court referred to whether service providers could be obligated to install filtering software on their platforms to prevent intellectual property rights infringement. The court noted that monitoring at this level would require effort, resources, and time to ensure that the number of data/files passing through the platform were not infringing. In addition, if the court had granted an injunction, it would have implications on the right to privacy, because the filtering system would have collected the Internet Protocol (IP) addresses of the users, as well as undermining freedom of information, since the system would not be able to distinguish between infringing and non-infringing content.<sup>680</sup>

Despite this, platforms have implemented filtering systems to detect infringing content. Automated filtering systems, such as YouTube’s Content ID or Twitch.tv’s Audible Magic,<sup>681</sup> are widely used to detect infringing content, especially for music. In LP videos, Content ID identifies original video game soundtracks.<sup>682</sup> More analysis on filtering systems and their challenges will be provided below in section 4.5.

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<sup>677</sup> S Schwemer, T Mahler, and H Styri, ‘Legal Analysis of the Intermediary Service Providers of Non-Hosting Nature’ (Final Report prepared for the European Commission 2020) 62 <<https://op.europa.eu/en/publication-detail/-/publication/3931eed8-3e88-11eb-b27b-01aa75ed71a1/language-en>> last accessed on 28 January 2023.

<sup>678</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 15.

<sup>679</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs SCRL (SABAM)* [2012] ECDR 4 ; Case C-360/10 *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Netlog NV* [2012] 2 WLUK 519, [2012] 2 CMLR 18.

<sup>680</sup> L Edwards, *The New Legal Framework for eCommerce in Europe* (Hart Publishing 2005) 74.

<sup>681</sup> J Kastrenakes, ‘Twitch Will Begin Scanning and Deleting Clips That Contain Copyrighted Music’ (*The Verge*, June 2020) <<https://www.theverge.com/2020/6/11/21288220/twitch-scan-clips-copyrighted-music-dmca-takedowns-audible-magic>> last accessed on 4 February 2022.

<sup>682</sup> YouTube Help <<https://support.google.com/youtube/answer/2605065?hl=en>> last accessed on 4 February 2022.

### 4.3 Intermediary Liability: Lessons from National Jurisdictions

This part considers the intermediary liability in the selected national jurisdictions of Germany, France, Greece, and the UK. As all four jurisdictions transposed the e-Commerce Directive's provisions into their national law, it is of the utmost importance to examine how the national legislators implemented the e-Commerce Directive as well as how national courts interpreted and applied it, accordingly.

#### 4.3.1 Germany

The e-Commerce safe harbour provisions were transposed into the German legal order with the Telemediengesetz (TMG) in 2007.<sup>683</sup> Article 8 on mere conduit, 9 on caching, and 10 on hosting services transposed the equivalent Articles of the e-Commerce Directive verbatim. Article 7(2) of the TMG implemented Article 15 of the e-Commerce Directive, which provides that service providers have no obligation to monitor the information transmitted or stored by them.

The German legislator deals with the intermediary contribution to copyright infringement by application of the doctrine of *Störerhaftung*. This term is a German idiosyncrasy and is hard to translate into English. From a practical point of view, this doctrine permits cease and desist orders to be imposed on the immediate wrongdoer and the one who knowingly and causally contributes to the infringement. This doctrine will be available in cases where 1. the direct infringer is unknown or not within legal reach or 2. where – irrespective of the identity of the infringer – the nature of the infringement requires action against the disturber (*Störer* = disturber).<sup>684</sup> As such, this seems to be likely in cases of online infringements, because in an online environment infringing copies of a protected work can be found in different sources and the identity of the infringer is not known.

National courts have produced rich and contradictory judgements over the years. One of the most characteristic examples of this contradiction is the *Rapidshare* saga.<sup>685</sup> In *Rapidshare I*, the Düsseldorf OLG held that the Notice and Takedown procedure is sufficient, and intermediaries have no duty to examine any content, in order to prevent similar infringement.<sup>686</sup>

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<sup>683</sup> Telemediengesetz, 26 February 2007 (BGBl. IS. 179).

<sup>684</sup> A Bayer, 'Liability 2.0 – Does the Internet Environment Require New Standards for Secondary Liability? An Overview of the Current Legal Situation in Germany' in MJ Adelman and others (eds), *Patents and Technological Progress in a Globalized World* (Springer 2009) 365.

<sup>685</sup> Rapidshare was an online file hosting service that stored copyright-infringing files uploaded onto the cloud by its users.

<sup>686</sup> OLG Düsseldorf, *Rapidshare I*, 27 April 2010, I-20 U 166/09.

A similar approach was taken in *Atari v Rapidshare (Rapidshare III)* where the same court found a duty to automatically filter online content uploaded by users as ‘arbitrary’.<sup>687</sup> The landscape changed with the judgement in *Rapidshare II* by the Hamburg OLG.<sup>688</sup> According to the ruling, active monitoring is needed to identify and remove any future hyperlinks.

In 2012, the Hamburg District Court concluded in the case of *GEMA v YouTube* that the platform had infringed its duty to take down allegedly infringing videos seven months after receipt of notification, which is in line with the provisions of the e-Commerce Directive. The court went a step further, though, by finding that YouTube had an obligation to carry out automated filtering of the platform to unveil any future infringement and that YouTube was under the obligation to use its ‘Content ID’ system.<sup>689</sup>

#### 4.3.2 France

The safe harbour provisions were implemented into French law in 2004 with loi n° 2004-575 du 21 juin 2004 pour la confiance dans l’économie numérique (hereafter LCEN). Article 9 covers ISPs that benefit from safe harbour for mere conduit and caching activities,<sup>690</sup> the hosting service providers’ immunity is embodied in Article 6-I-2,<sup>691</sup> and Article 6-I-7 transposed Article 15 of the e-Commerce Directive.<sup>692</sup>

Article 6-I-2 recognises the Notice and Takedown procedure but gives a strict interpretation as to the circumstances under which a hosting service provider is obliged to remove content notified as illegal. This is when it is ‘manifestly unlawful’ or it is ordered by a court to be removed.<sup>693</sup> There is not a clear definition of the ‘manifestly unlawful’ content, but one could refer to Article 6-I-7 and draw from there instances where the content is illegal, including cases of ‘apology for crimes against humanity, the incitement to the commission of acts of terrorism and their apology, the incitement to racial hatred, to hatred against persons on grounds of their sex, sexual orientation, gender identity or disability as well as child pornography, incitement to violence, including incitement to sexual and gender-based violence, as well as attacks on

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<sup>687</sup> OLG Düsseldorf, *Rapidshare III*, 21 December 2010, I-20U 59/10.

<sup>688</sup> OLG Hamburg, *Rapidshare II*, 14 March 2012, 5 U 87/09.

<sup>689</sup> LG Hamburg, 20 April 2012, 310 O 461/10.

<sup>690</sup> Loi n° 2004-575 du 21 juin 2004 pour la confiance dans l’économie numérique, art 9.

<sup>691</sup> *ibid*, art 6-I-2.

<sup>692</sup> *ibid*, art 6-I-7.

<sup>693</sup> Conseil Constitutionnel, Décision No 2004-496 DC du 10 juin 2004, Journal officiel du 22 juin 2004 <[https://www.conseil-constitutionnel.fr/sites/default/files/as/root/bank\\_mm/decisions/2004496dc/2004496dc.pdf](https://www.conseil-constitutionnel.fr/sites/default/files/as/root/bank_mm/decisions/2004496dc/2004496dc.pdf)> last accessed on 8 April 2023.

human dignity’. Cases of copyright infringement are not included in the list because they are not considered ‘manifestly unlawful’.<sup>694</sup> Hence, copyright-infringing content will be removed after a court has ordered its removal, as per the second instance discussed at the beginning of this paragraph.

Article 6-I-5 lists the elements that are required to be notified to the host service provider in order to fulfil the ‘knowledge’ criterion, namely the notification date, details of the notifying person (natural or legal), description of the illegal information and precise location, the legal grounds for the removal, and a copy of the letter sent to the content provider.<sup>695</sup> Such notification is necessary – even mandatory – because if the intermediary receives a notice that lacks basic elements, the intermediary cannot be said to have had ‘knowledge’.

It is worth mentioning that Article 6-I-7, which implemented Article 15 of the e-Commerce Directive, differentiates the prohibited ‘general monitoring’ from the ‘targeted and temporary’ surveillance ordered by a judicial authority.<sup>696</sup> It could be said that the French legislation sets a higher standard than the e-Commerce Directive, which only provides for obligations ‘in a specific case’, failing to mention temporary restrictions.

As far as the judicial understanding of the hosting service providers is concerned, the French courts gave a very strict interpretation to the notion of hosting service providers. For instance, back in 2007 in *Lafasse v MySpace*, the French Tribunal de Grande Instance de Paris denied protection to MySpace (a social networking site) as hosting provider, because MySpace did not limit itself to hosting services only.<sup>697</sup> The landscape changed in 2010, when the CJEU handed down the judgement for the *Google Adwords* case, ruling that host service providers will benefit from the immunity as long as they have not played an active role in conveying or controlling the stored information.<sup>698</sup> A couple of months after the ruling from the CJEU, the French courts issued four judgements on the same issue, but this time in accordance with the CJEU guidance.<sup>699</sup>

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<sup>694</sup> *Omar & Fred et autres v Dailymotion*, Tribunal de Grande Instance de Paris (3ème chambre, 1ère section) jugement du 15 avril 2008; *Jean Yves Lafesse v Dailymotion*, Tribunal de Grande Instance de Paris (3ème chambre, 1ère section) jugement du 15 avril 2008.

<sup>695</sup> Loi n° 2004-575 du 21 juin 2004 pour la confiance dans l’économie numérique, art 6-I-5.

<sup>696</sup> *ibid*, art 6-I-7.

<sup>697</sup> Tribunal de Grande Instance de Paris, *Jean Yves L dit Lafesse v Myspace*, Ordonnance de référé 22 juin 2007.

<sup>698</sup> Case C-236/08 *Google France SARL and another v Louis Vuitton Malletier SA* [2011] Bus LR 1, [2010] ECR I-2417, para 120.

<sup>699</sup> Cour de Cassation (Chambre commerciale, financière et économique), *Google France v Louis Vuitton Malletier* (06-20.230); *Google France v GIFAM* (08-13944); *Google France v CNRRH* (06-15136); *Google France v SA Viaticum* (05-14331), 13 July 2010.

Having established the importance of an ‘active role’ being played by the service provider, the Cour de Cassation refused to protect eBay under hosting safe harbour, because eBay played an active role when it enabled sellers to optimise their sales, assisting them defining and describing the items for sale and by sending unsolicited (spam) emails to potential buyers.<sup>700</sup>

Meanwhile, the national and European courts were faced with the issue whether service providers have the obligation to a priori implement a technical filtering system to prevent online infringements. The French court held in this regard that the video-sharing platform Dailymotion was under an obligation to control a priori the information to prevent copyright infringement.<sup>701</sup> The compatibility with Article 15 of the e-Commerce Directive is debatable. From a practical standpoint, if service providers wish to avoid liability, they must act fast to search and takedown infringing content. However, in a digital environment, regardless of how many notices are received and video takedowns have been completed, online copyright infringement resembles the Lernaean Hydra, the many-headed mythical monster. Every time someone cut off one of the heads, two more would grow out of the stump.

One could argue that the French courts moved from ‘notice and takedown’ to ‘notice and stay down’ by obliging service providers to monitor information. The emergence and application of automated filtering systems, such as YouTube’s Content ID, was embraced by the courts. In *YouTube v Omar et Fred*, the Tribunal de Grande Instance in Paris did not find YouTube liable for its users’ uploads because YouTube offers a filtering system and as such has fulfilled their obligation.<sup>702</sup> However, following the lead of the CJEU in *SABAM*,<sup>703</sup> the French Cour de Cassation issued three judgements putting an end to the extended liability regime.<sup>704</sup> It is the copyright holders’ responsibility to monitor the content themselves and notify service providers in case new infringements have been found.

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<sup>700</sup> Cour de Cassation, *La société eBay Inc v la société Parfums Christian Dior* (11-10.508), 3 May 2012.

<sup>701</sup> Tribunal de Grande Instance de Paris, *Christian C, Nord Ouest Production v Dailymotion, UGC Images*, 13 July 2007.

<sup>702</sup> Tribunal de Grande Instance de Paris, ADAMI, *Omar S, Fred T et al v Sté YouTube*, 22 September 2009.

<sup>703</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs SCRL (SABAM)* [2012] ECDR 4, para 54.

<sup>704</sup> Cour de Cassation, *La société Google France v la société Bach films (L’affaire Clearstream)* (11-13.669); *La société Google Francec. La société Bac films (Les dissimulateurs)* (11-13666); *La société Google France v André Rau (Auféminin)* (11-15.165; 11-15.188), 12 July 2012.

#### 4.3.3 Greece

The e-Commerce Directive was transposed into national law in 2003 with Presidential Decree 131/2003.<sup>705</sup> The safe harbour provisions were implemented in Articles 11 to 14 verbatim. The notion of ‘hosting’ presented challenges in almost all Member States. As described earlier in section 4.2.3, a hosting service ‘consists of the storage of information provided by a recipient of the service’, wording that is used to distinguish hosting providers from content providers. The Greek legislation implemented Article 14 of the e-Commerce Directive through Article 13 of the Presidential Decree, which stipulates:

Where an information society service is provided that consists of the storage of information provided by a recipient of the service, the service provider is not liable for the information stored at the request of a recipient of the service, on condition that...<sup>706</sup>

The wording of Article 13 of the Presidential Decree ‘συνισταμένης στην αποθήκευση πληροφοριών’, which corresponds to the wording ‘consists of the storage of information’ of Article 14 of the e-Commerce Directive, is not clear. To what extent is a service a hosting service: Is it sufficient that all aspects, most aspects, or some aspects deal with hosting? It was discussed in the previous paragraphs that the French Cour de Cassation ruled in 2008 that ‘the essence of eBay’s service is to mediate between buyers and sellers’ and ‘it deploys a commercial, auction-related activity that is not limited to hosting’, excluding Article 14 when the hosting aspects are not the most important aspects of the service.<sup>707</sup> However, an exact opposite view was taken by a Greek court, qualifying a blog as a hosting service given that there is some storage activity involved.<sup>708</sup> As such, the blog as a hosting service enjoyed the immunity of the hosting safe harbour.

#### 4.3.4 The UK

The Electronic Commerce (EC Directive) Regulations 2002 implemented the e-Commerce Directive into the UK law. Sections 17 to 19 – almost verbatim – implemented the safe harbour

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<sup>705</sup> Presidential Decree 131/2003.

<sup>706</sup> *ibid*, art 13. The Greek text reads: ‘Σε περίπτωση παροχής μιας υπηρεσίας της κοινωνίας της πληροφορίας συνισταμένης στην αποθήκευση πληροφοριών παρεχόμενων από ένα αποδέκτη υπηρεσίας, δεν υφίσταται ευθύνη του φορέα παροχής της υπηρεσίας για τις πληροφορίες που αποθηκεύονται μετά από αίτηση αποδέκτη της υπηρεσίας, υπό τους όρους ότι...’

<sup>707</sup> Commercial Court of Paris, First Chamber *Louis Vuitton Malletier / Christian Dior Couture and Parfums Christian Dior, Kenzo, Givenchy et Guerlain v eBay* 30 June 2008.

<sup>708</sup> Rodopi Court of First Instance, case No 44/2008.



provisions. As can be seen, only three out of the four Articles of the e-Commerce Directive were transposed; Article 15 seems to have not been adopted by the UK legislator. However, this does not mean that judges in the UK courts have ignored it. For example, in *Cartier v Sky*, Arnold J stated that:

The fourth condition (actual knowledge) is not contained in Article 11, but in my view, it follows from Article 15 of the E-Commerce Directive and by analogy with Articles 13(1)(e) and 14(1)(a) of the E-Commerce Directive. If ISPs could be required to block websites without having actual knowledge of infringing activity, that would be tantamount to a general obligation to monitor.<sup>709</sup>

The UK courts have dealt with the issue of the ‘notice’ requirement. In the cases of *Tamiz v Google* and *Davison v Habeeb*, Google argued that they did not have sufficient notice. It was made clear that a mere complaint about the content is not notice, as there has to be enough evidence proving the unlawfulness before the allegedly unlawful content will be taken down.<sup>710</sup>

In *Newzbin (No 1)*, Kitchin J found Newzbin liable for copyright infringement because it provided sophisticated tools, it hosted a large amount of commercial content, there was a weekly payment fee for members, there was no filtering system, it guided users to include URLs in their film reports, and, most importantly, it failed to remove editors who posted reports of infringing content, although it had knowledge of this.<sup>711</sup> Two years later, in *Dramatico Entertainment*, the court found that the operators of The Pirate Bay approved the infringement of copyright committed by its users.<sup>712</sup> It is worth mentioning that neither case made any reference to the safe harbour provisions, but in any event, those provisions would not apply because – in both cases – operators of websites disregarded the notices of infringement received.

One of the most interesting cases the UK courts dealt with is *L’Oréal v eBay*. Although Arnold J recognised that eBay has knowledge of trademark infringements and makes profit out of such infringements, he stated that this is not enough to establish liability as a joint tortfeasor.<sup>713</sup> The case was subsequently referred to the CJEU, which emphasised the ‘active

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<sup>709</sup> *Cartier International AG & Ors v British Sky Broadcasting Ltd & Ors* [2014] EWHC 3354 (Ch), [141].

<sup>710</sup> *Tamiz v Google* [2012] EWHC 449 (QB) and *Davison v Habeeb* [2011] EWHC 3031 (QB).

<sup>711</sup> *Twentieth Century Fox Film Corporation & Anor v Newzbin Ltd* [2010] EWHC 608 (Ch).

<sup>712</sup> *Dramatico Entertainment Ltd & Ors v British Sky Broadcasting Ltd & Ors* [2012] EWHC 268 (Ch).

<sup>713</sup> *L’Oréal SA v eBay International AG* [2009] EWHC 1094 (Ch).

role' played by the website operator.<sup>714</sup> This ruling from the CJEU poses a higher burden to online marketplace operators to control the content of their users' posts.

#### 4.4 Live Streaming Platforms under the EU Directive on Copyright in the Digital Single Market (Directive 2019/790)

'Europe just approved new copyright rules that could change the Internet.'<sup>715</sup> This title was one of the many newspaper headlines, published in September 2018, announcing the upcoming amendments in the copyright sphere. The Proposal for a Directive on Copyright in the Digital Single Market<sup>716</sup> was strongly criticised. Article 13 of the Proposal for a Directive was one of the most controversial provisions, placing obligations on service providers to filter the content uploaded by users to avoid copyright infringement.<sup>717</sup> However, this provision was deleted and the final version of the DSM Directive limits the applicability of safe harbours in cases where service providers do not obtain authorisation from the rightholders.<sup>718</sup>

Article 17(3) of the DSM Directive provides that safe harbour for hosting services will not be applied where an OCSSP performs an act of communication to the public or an act of making available to the public.<sup>719</sup> OCSSPs perform an act of communication to the public or an act of making available to the public for the purposes of the Directive when they give the public access to copyright-protected works or other protected subject matter uploaded by its users. The fact that online services provide access to copyright-protected content without rightholders being involved has affected the ability of rightholders to determine whether and under what circumstances their works are used and accordingly whether they can get appropriate remuneration, also known as a value gap.<sup>720</sup> Therefore, service providers are obligated by the

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<sup>714</sup> Case C-324/09 *L'Oréal SA and others v eBay International AG and others* [2012] Bus LR 1369, [2011] 7 WLUK 313, para 123.

<sup>715</sup> I Kottasova, 'Europe Just Approved New Copyright Rules that Could Change the Internet' (*CNN Business*, 12 September 2018) <<https://edition.cnn.com/2018/09/30/tech/eu-copyright-law/index.html>> last accessed on 4 February 2022.

<sup>716</sup> Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market COM/2016/0593 final 2016/0280 (COD) published on 14 September 2016, and finally approved on 15 April 2019.

<sup>717</sup> Original version of Article 13 of the Proposal for a Directive on Copyright in the Digital Single Market COM/2016/0593.

<sup>718</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17.

<sup>719</sup> *ibid*, art 17(3).

<sup>720</sup> European Commission, Communication 'Online Platforms and the Digital Single Market. Opportunities and Challenges for Europe' COM (2016) 288 Final, 8. The 'value gap' refers to the market distortion created by safe harbour provisions for user-generated content platforms, leading these platforms to pay less than the market rate for copyright permissions. M Lambrecht, 'Free Speech by Design: Algorithmic Protection of Exceptions and Limitations in the Copyright DSM Directive' (2020) 11 J Intell Prop Info Tech & Elec Com L 68, 70.

Directive to obtain authorisation from the rightholders. This authorisation may be granted by concluding a licence agreement. From a practical standpoint, platforms hosting user-generated content, such as LP videos on YouTube, would be required to obtain licences for every piece of uploaded content on its website.<sup>721</sup>

The licence agreement would entail the negotiation of a licence rate to compensate rightholders.<sup>722</sup> However, in cases where the rightholder is unknown, service providers will be required to diligently carry out ‘best efforts’ research to request a licence.<sup>723</sup> There are inherent difficulties in implementing these licences. First, it is not clear how to determine the price of the licence; second, the definition of ‘best efforts’ per se is vague;<sup>724</sup> and third, it is difficult to prove that ISPs used their best efforts to identify the rightholder and obtain the licence. Schanze examined the EU vaccine contracts as an example of the problematic use of ‘best efforts’ clauses in commercial contracts, and highlighted that the ‘best efforts’ clause is a ‘bilateral standard if both parties are interested in an individual obligation commitment of the same kind... to do their best that the specified individual targets in the contract are being met’ and that ‘best efforts is a matter of the individually specified obligation and its performance’.<sup>725</sup> The ‘best efforts’ concept is rooted in the divergence of the different legal orders, as has been highlighted by comparative law scholars.<sup>726</sup>

The ‘best efforts’ concept remains controversial in the context of the DSM Directive.<sup>727</sup> Having assessed the two extreme positions – either that the OCSSP must proactively search for

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<sup>721</sup> L Shikhiashvili, ‘The Same Problem, Different Outcome: Online Copyright Infringement and Intermediary Liability under US and EU Laws’ (2019) 24 *Intell Prop & Tech LJ* 125, 137.

<sup>722</sup> N Curto, ‘EU Directive on Copyright in the Digital Single Market and ISP liability: What’s Next at International Level?’ (2019) 11(3) *JOLTI* 86, 89.

<sup>723</sup> K Erickson, ‘The European Copyright Directive: License First, Ask Questions Later’ (*Media Policy Project Blog*, 2 April 2019) <<https://blogs.lse.ac.uk/medialse/2019/04/02/the-european-copyright-directive-license-first-ask-questions-later/>> last accessed on 4 February 2022.

<sup>724</sup> The term ‘best efforts’ has been translated slightly different in the selected jurisdictions. The English (best efforts), the French (meilleurs efforts), and the Greek (κάθε δυνατή προσπάθεια) versions follows the term ‘best efforts’ of the DSM Directive. However, the German translation reads ‘all efforts’ (alle Anstrengungen), instead of ‘best efforts’. These differences will likely result in challenges in the national transposition and interpretation, which is further complicated because the Directive does not define the concept of ‘best efforts’. E Rosati, ‘DSM Directive Series #5: Does the DSM Directive Mean the Same Thing in all Language Versions? The Case of “Best Efforts” in Article 17(4)(a)’ (*The IPKat*, 22 May 2019) <<https://ipkitten.blogspot.com/2019/05/dsm-directive-series-5-does-dsm.html>> last accessed on 4 February 2022.

<sup>725</sup> E Schanze, ‘Best Efforts in the Taxonomy of Obligation – The Case of EU Vaccine Contracts’ (2021) 22 *Ger Law J* 1133, 1142.

<sup>726</sup> K Zweigert and H Kötz, *An Introduction to Comparative Law* (Tony Weir tr, 3rd edn, Oxford University Press 1998) 470, 473, 474, 501.

<sup>727</sup> The European Copyright Society, ‘Comment of the European Copyright Society on Selected Aspects of Implementing Article 17 of the Directive on Copyright in the Digital Single Market into National Law’ (2020) 11 *J Intell Prop Info Tech & Elec Com L* 115; J Halek and M Hrachovina, ‘Directive on Copyright in the Digital

protected materials and their rightholders and offer licence conditions or that rightholders should inform the OCSSP – the European Copyright Society suggested that legislators and courts should balance the interests of both stakeholders as follows: OCSSPs must contact publicly known rightholders in a proactive manner and negotiate licensing terms, while, in the event that the rightholder is not publicly known, in order to meet the ‘best efforts’ criterion it would suffice that the OCSSP reacts immediately to a notice by the rightholder.<sup>728</sup>

Failing to obtain a licence, pursuant to Article 17, would render service providers primarily liable. As Frosio explains, hosting providers would be directly/primarily liable – instead of secondarily liable – because they will perform an act of communication to the public.<sup>729</sup> The passage from secondary or indirect liability and the safe harbour regime, to the primary or direct liability of online platform operators for making available copyright-protected works, is one of the developments in European copyright law over the past few years. The CJEU has acknowledged the direct liability of platform operators, where the platform makes available to the public third-party uploaded protected subject matter and provides functions, such as indexing, categorisation, deletion, and filtering of content.<sup>730</sup>

Questions have arisen whether the conclusion reached in the *Ziggo* case may also be applied to platforms that do not engage in ‘piracy’ activities. National case law from Germany has found platform operators directly liable for the making available of unlawful user-uploaded content. The Regional Court of Hamburg ruled that the Usenet provider UsenetXT would be liable if it promoted an unauthorised third party making available and sharing protected content.<sup>731</sup> The Federal Court of Justice in Germany (BGH) delivered its decision on whether YouTube should be considered as primarily responsible for acts of communication to the public.<sup>732</sup> There are two main points to note in this judgement: first, the BGH amended its own case law on the concept of ‘*Störerhaftung*’, and second, it ordered the Courts of Appeal to take into consideration Article 17 of the DSM Directive. The BGH revised its own case law regarding the German *Störerhaftung*, and held that ‘For the area fully harmonised by Art. 3

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Single Market: A Challenge for the Future’ (2020) 16 Common L Rev 44; Z Krokida, ‘Supervising the Gatekeepers? An Alternative EU Framework for the Liability of Internet Intermediaries for Copyright Infringement’ (2022) 2 IPQ 62.

<sup>728</sup> The European Copyright Society, ‘Comment of the European Copyright Society on Selected Aspects of Implementing Article 17 of the Directive on Copyright in the Digital Single Market into National Law’ (2020) 11 J Intell Prop Info Tech & Elec Com L 115, 119–20.

<sup>729</sup> G Frosio, ‘To Filter, or Not to Filter? That Is the Question in EU Copyright Reform’ (2018) 36 Cardozo Arts & Ent LJ 331, 343.

<sup>730</sup> Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19, paras 36–38.

<sup>731</sup> Regional Court of Hamburg, LG Hamburg, 308 O 314/16.

<sup>732</sup> German Federal Court of Justice (BGH) I ZR 140/15, 2 June 2022.

para. 1 and 2 of Directive 2001/29/EC, liability as a perpetrator thus replaces the previous liability for disturbance'.<sup>733</sup> The BGH referred the cases back to the Courts of Appeal. It is interesting to note that the Copyright Service Provider Act (*Urheberrechts-Diensteanbieter-Gesetz* – 'UrhDaG'), which has been in effect in Germany since 1 August 2021, is the law implementing Article 17 of the DSM Directive. The BGH examined the requirements of communication to the public in conjunction with this law, by stating that

Letters a and b of Directive 2001/29/EC, it will have to be examined whether the claims asserted are also at the time of the decision pursuant to Section 97 (1) UrhG in conjunction with the law on copyright liability that has been in force since August 1, 2021 by service providers for sharing online content.<sup>734</sup>

In July 2020, Advocate General Saugmandsgaard Øe issued his Opinion on the *YouTube* and *Cyando* joined cases, in which he advised that platforms, such as YouTube and Uploaded, are not liable for making available infringing user-uploaded content.<sup>735</sup> In June 2021, the CJEU gave its preliminary ruling<sup>736</sup> and held that 'the operator of a video-sharing platform or a file-hosting and -sharing platform, on which users can illegally make protected content available to the public, does not make a "communication to the public" of that content, within the meaning of that provision, unless it contributes, beyond merely making that platform available, to giving access to such content to the public in breach of copyright'.<sup>737</sup> Throughout the judgement, the CJEU enumerated the factors that characterise a deliberate intervention in the illegal communication of the content,<sup>738</sup> and clarified for the referring court that YouTube does not intervene in the creation or selection of the content; it informs its users about copyright laws and has implemented technological measures to prevent and terminate copyright infringements on its platform.<sup>739</sup>

The factors listed above are clarifications for the referring court to take into consideration. However, the way by which the CJEU provided the list of factors could lead to the admission that there was not much left to be decided by the national court. The CJEU focused on the provision of technological measures by the platform, but the mere provision of such tools

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<sup>733</sup> German Federal Court of Justice (BGH) I ZR 140/15, 2 June 2022, paras 113 and 114.

<sup>734</sup> *ibid.*, para 124.

<sup>735</sup> Cases C-682/18 and C-683/18 *Frank Peterson v Google LLC, YouTube LLC, YouTube Inc, Google Germany GmbH* (C-682/18) and *Elsevier Inc v Cyando AG* (C-683/18) [2020] ECDR 16, Bus LR 1196, Opinion of AG Saugmandsgaard Øe, para 256.

<sup>736</sup> *ibid.*

<sup>737</sup> *ibid.*, para 102.

<sup>738</sup> *ibid.*, para 84.

<sup>739</sup> *ibid.*, paras 91–96.

should not be sufficient. What is more important is the effective implementation of those tools. In addition, the CJEU noted that the ‘search results on YouTube’s platform in the form of rankings, content categories and overviews of recommended videos are not intended to facilitate the illegal sharing’,<sup>740</sup> while previously in the *Ziggo* case it highlighted the platform’s search engine function and categorisation system.<sup>741</sup>

Currently, there are two references for preliminary ruling pending before the CJEU regarding the intermediaries’ active or passive role when they provide access to copyright-protected works without the authorisation of the copyright holder.<sup>742</sup> The first reference (*Stichting Brein v News-Service Europe*) is from the Netherlands, and the national court lodged a reference for a preliminary ruling in regard to the liability of a file-sharing service provider, while the second reference (*Puls 4 TV GmbH & Co KG v YouTube*) comes from Austria and the national court is concerned with the role played by YouTube in disseminating infringing works. The national court emphasised the content optimisation, search options, and content promotion activities offered by YouTube to its users.

Surprisingly, national courts have followed a different approach in regard to categorising online platforms’ conduct as ‘active’ or ‘passive’. Although the CJEU held that YouTube’s conduct is passive, the Court of Rome held that Twitch.tv, which contained TV broadcasts owned by MediaSet and made them available as videos on demand, qualifies as an ‘active’ hosting provider.<sup>743</sup> Twitch did not remove the infringing content even after it became aware of it, and the Italian court emphasised certain activities, including ‘filtering, selecting, indexing, organising, cataloguing, rating, using, modifying, extracting and promoting content to individual users’. Gautier opines that the active role played by an intermediary can be found in activities such as those listed above, expressing the view that hosts ‘should not hide behind their alleged neutrality’.<sup>744</sup>

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<sup>740</sup> Cases C-682/18 and C-683/18 *Frank Peterson v Google LLC, YouTube LLC, YouTube Inc, Google Germany GmbH* (C-682/18) and *Elsevier Inc v Cyando AG* (C-683/18) [2020] ECDR 16, Bus LR 1196, para 95.

<sup>741</sup> Case C-610/15 *Stichting Brein v Ziggo BV, XS4ALL Internet BV* [2017] Bus LR 1899, [2017] ECDR 19, para 38.

<sup>742</sup> Case C-442/19 *Stichting Brein v News-Service Europe BV* ECLI:EU:C:2021:769 and Case C-500/19 *Puls 4 TV GmbH & Co KG v YouTube LLC and Google Austria GmbH* ECLI:EU:C:2021:692.

<sup>743</sup> Tribunale di Roma, Decreto – RG 20859/2021, *RTI s.p.a. v Twitch Interactive Inc.* (April 2021), available at EUIPO, ‘Recent European Case-Law On The Infringement And Enforcement Of Intellectual Property Rights’ (June 2021) <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/New\\_Case\\_Law\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/New_Case_Law_en.pdf)> last accessed on 8 April 2023.

<sup>744</sup> PY Gautier, ‘Why Internet Services which Provide Access to Copyright Infringing Works should not be Immune to Liability’ (2020) 42(8) EIPR 464, 466.

A navigation of the Twitch.tv platform will provide more clarity. Not only does the platform provide a search tool, where users can search for a specific video, but LP videos are also categorised by the name of the video game.<sup>745</sup> For instance, one can see categories such as ‘*League of Legends*’, ‘*Fortnite*’ and ‘*Counter Strike*’. Users can search for a particular video, browse on the ‘categories’ section and select the video they want to watch or click on the ‘Live Channels’ button, where they will have access to live streamed content.

Another interesting aspect is that the CJEU noted, as a preliminary point, that the interpretation given by the court for the joined cases does not concern the rules established in Article 17 of the DSM Directive.<sup>746</sup> Giancarlo and Mendis argued that Article 17 paves the way for the gradual shift in the perception of ISPs ‘from mere conduits to active gate keepers’ of content uploaded and shared by Internet users.<sup>747</sup> Indeed, during these 23 years since the enactment of e-Commerce Directive in 2000, the rapid use of the Internet, the huge amount of data transmitted or stored online, and the operation of service providers per se have necessitated an increase in surveillance. The service providers are not the same as 20 years ago, neither are the online activities. The CJEU concluded that the YouTube operator would not be liable for the illegal content uploaded on its platform, but Article 17 introduces direct liability for OCSSPs. YouTube is an OCSSP for the purposes of the DSM Directive, and therefore it remains to be seen how the national courts and the CJEU will adjudicate for similar cases in the future.

Streaming platforms may retain the content uploaded by users and make it available upon request or may not retain the content in the form of a live stream beyond the time needed to make such live stream available to end users. The DSM Directive in Article 2(6) defines an OCSSP as a provider of the ISS of which the main purpose is to store protected works.<sup>748</sup> Does this mean that live streaming providers are excluded? The answer would be in the negative. If the legislature intended to exclude live streaming providers, the Directive would have expressly stated so. The DSM Directive differs from the e-Commerce Directive, which distinguishes

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<sup>745</sup> Twitch.tv Home Page <<https://www.twitch.tv/directory>> last accessed on 8 April 2023.

<sup>746</sup> Cases C-682/18 and C-683/18 *Frank Peterson v Google LLC, YouTube LLC, YouTube Inc, Google Germany GmbH* (C-682/18) and *Elsevier v Cyando AG* (C-683/18) [2020] ECDR 16, Bus LR 1196, para 59.

<sup>747</sup> F Giancarlo and S Mendis, ‘Monitoring and Filtering: European Reform or Global Trend?’ in F Giancarlo (ed), *The Oxford Handbook of Online Intermediary Liability* (OUP 2020) 118.

<sup>748</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 2(6).

providers into mere conduits and caching and hosting providers (based on the duration of the storage).<sup>749</sup>

The Directive introduces a new safe harbour provision under Article 17(4), in case the service providers do not obtain authorisation from the rightholders. In order to avoid liability, they must prove that they have made their best efforts to obtain an authorisation and have made, in accordance with high industry standards of professional diligence, their best efforts to ensure the unavailability of specific works and other subject matter, for which the rightholders have provided the service providers with the relevant and necessary information and in any event acted expeditiously, upon receiving a sufficiently substantiated notice by the rightholders, to remove from their websites or to disable access to the notified works and subject matters, and made best efforts to prevent their future uploads in accordance with paragraph (b).<sup>750</sup> In order to determine whether service providers have complied with the above-mentioned obligations, the following factors will be considered: (a) the type, the audience, and the size of services and the type of works or other subject matter uploaded by the users; (b) the availability of suitable and effective means and their cost for service providers.<sup>751</sup>

In addition, service providers will have to be compliant with different conditions depending on their volume of visits. Article 17(6) reads

Member States shall provide that, in respect of new online content-sharing service providers the services of which have been available to the public in the Union for less than three years and which have an annual turnover below 10 million Euros, calculated in accordance with the Commission Recommendation 2003/361/EC, the conditions under the liability regime set out in paragraph 4 are limited to compliance with point (a) of paragraph 4 and to acting expeditiously, upon receiving a sufficiently substantiated notice, to disable access to the notified works or other subject matter or to remove those works or other subject matter from their websites. Where the average number of monthly unique visitors of such service providers exceeds 5 million, calculated based on the previous calendar year, they shall also demonstrate that they have made best efforts to prevent further uploads of

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<sup>749</sup> E Rosati, 'Does the Duration of the Storage Matter? Live Streaming Providers as "Online Content Sharing Service Providers" under Directive 2019/790' (2020) 42(10) EIPR 652, 654.

<sup>750</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17(4).

<sup>751</sup> *ibid*, art 17(5).



the notified works and other subject matter for which the right holders have provided relevant and necessary information.<sup>752</sup>

Article 17(8) of the Directive clearly states that it will not lead to any general monitoring obligation.<sup>753</sup> However, service providers may still be obligated to implement filtering measures to comply with the requirements of Article 17(4). More specifically, ‘to ensure the unavailability of specific works... for which the right holders have provided the service providers with the relevant and necessary information’ and ‘to prevent their future uploads in accordance with paragraph (b)’ (section 17.4 letters (b) and (c)) to be able to qualify for the exemption from liability in case they did not get authorisation from the rightholders.<sup>754</sup>

Based on the analysis above, platforms that perform live streaming and/or host LP videos are obligated by the Directive to obtain authorisation from the rightholders. The Directive also requires service providers to ensure the ‘unavailability of specific works’ and ‘prevent’ future uploads, a task that may necessitate the deployment of algorithms. The next section will discuss the algorithmic content moderation system and the inherent challenges associated with it.

#### 4.5 Algorithmic Content Moderation System

More and more platforms are implementing algorithmic filtering systems to detect infringing content and to notify the respective rightholders of its existence on the said platforms. According to recent research conducted by Quintais and others on copyright content moderation in the EU,<sup>755</sup> as part of the reCreating Europe project, there are a number of technical choices for the automatic identification of content, including hashing, watermarking, fingerprinting, and Artificial Intelligence (AI)-based or enhanced solutions.<sup>756</sup> All systems use

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<sup>752</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17(6).

<sup>753</sup> As described under 4.2.4, a general monitoring obligation would be opposed to Article 15 of the e-Commerce Directive and against CJEU case law. See Case C-70/10, *Scarlet Extended SA v Soc Belge des auteurs (SABAM)* [2012] ECDR 4, para 29.

<sup>754</sup> N Curto, ‘EU Directive on Copyright in the Digital Single Market and ISP liability: What’s Next at International Level?’ (2019) 11(3) JOLTI 86, 92.

<sup>755</sup> JP Quintais and others, ‘Copyright Content Moderation in the EU: An Interdisciplinary Mapping Analysis’ (2022) *Recreating Europe Report*, <[https://www.ivir.nl/publicaties/download/Copyright\\_Content\\_Moderation\\_In\\_The\\_EU.pdf](https://www.ivir.nl/publicaties/download/Copyright_Content_Moderation_In_The_EU.pdf)> last accessed on 9 November 2022.

<sup>756</sup> EUIPO, ‘Automated Content Recognition: Discussion Paper. Phase 1, Existing Technologies and Their Impact on IP’ (Publications Office 2020) 4 <<https://data.europa.eu/doi/10.2814/52085>> accessed 09 November 2022. Artificial Intelligence (AI) has been defined as the ‘capability of a machine to imitate intelligent human behaviour’ and its use in online content moderation has been the subject of extensive research. See also L Solomon, ‘Fair Users or Content Abusers: The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube’ (2015)

fingerprinting as the main technique for content recognition. Digital fingerprinting algorithms analyse media files to produce a set of data known as the digital fingerprint, which allows a piece of content to be individually identified in a manner similar to how fingerprints uniquely identify individuals. The digital fingerprint is then compared against a database of reference fingerprints to discover a potential match. As reported in the case of Content ID,<sup>757</sup> it is highly likely that the systems use AI to carry out and optimise at least some of their tasks.<sup>758</sup>

Content ID, which was introduced in 2007, is the automated right management tool for YouTube, which allows rightholders to block, monetise, mute, or track videos containing their work.<sup>759</sup> This system uses digital fingerprints<sup>760</sup> of copyrighted works and compares them to every single video uploaded on the website. If a video matches in full or in part to any copyrighted work contained in certain algorithms, then the system flags the video and notifies the rightholder. A notification is sent to original uploaders, too. In turn, they are able to mute the song or sound, which is copyright protected, or even dispute the claim.<sup>761</sup> In reality, though, most users do not dispute Content ID claims, because either they are not aware of their rights under copyright law or they are afraid of copyright infringement litigation.<sup>762</sup>

Gray and Suzor investigated automated copyright enforcement on YouTube and provided a large-scale analysis of removal rates from Content ID's automated detection system.<sup>763</sup> First, they classified the categories of videos that were removed: 'full movies', 'gameplay', 'sports',

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44 Hofstra L Rev 237; S Macdonald, S Giro Correia, and AL Watkin, 'Regulating Terrorist Content on Social Media: Automation and the Rule of Law' (2019) 15 Int JL C 183; Cambridge Consultants, 'Use of AI in Online Content Moderation' (2019) <[https://www.ofcom.org.uk/data/assets/pdf\\_file/0028/157249/cambridge-consultants-ai-content-moderation.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0028/157249/cambridge-consultants-ai-content-moderation.pdf)> last accessed on 5 February 2023; FF Wang, 'Resolving Online Content Disputes in the Age of Artificial Intelligence: Legal and Technological Solutions in Comparative Perspective' (2022) 17(2) The Journal of Comparative Law 491; and JP Quintais and others, 'Copyright Content Moderation in the EU: an Interdisciplinary Mapping Analysis' (2022) Recreating Europe Report, 267 <[https://www.ivir.nl/publicaties/download/Copyright\\_Content\\_Moderation\\_In\\_The\\_EU.pdf](https://www.ivir.nl/publicaties/download/Copyright_Content_Moderation_In_The_EU.pdf)> last accessed on 9 November 2022.

<sup>757</sup> JP Titlow, 'YouTube Is Using AI to Police Copyright—to the Tune of \$2 Billion in Payouts' (*Fast Company*, 13 July 2016) <<https://www.fastcompany.com/4013603/youtube-is-using-ai-to-police-copyright-to-the-tune-of-2-billion-in-payouts>> last accessed 09 November 2022.

<sup>758</sup> Quintais and others (n 756).

<sup>759</sup> L Solomon, 'Fair Users or Content Abusers: The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube' (2015) 44 Hofstra L Rev 237, 255. YouTube Help, 'How Content ID Works' <<https://support.google.com/youtube/answer/2797370?hl=en>> last accessed 4 February 2022.

<sup>760</sup> Digital fingerprints, also known as steganography, is a cryptographic method that digitally embeds or encodes one item of information in another. P Gao and others, 'Approaches to Obtaining Fingerprints of Steganography Tools which Embed Message in Fixed Positions' (2019) Forensic Science International: Reports 1, 1.

<sup>761</sup> YouTube Creator Academy <[https://creatoracademy.youtube.com/page/lesson/respond-to-content-id-claims\\_content-id-claims-overview\\_video#strategies-zippy-link-1](https://creatoracademy.youtube.com/page/lesson/respond-to-content-id-claims_content-id-claims-overview_video#strategies-zippy-link-1)> last accessed on 4 February 2022.

<sup>762</sup> Solomon (n 759) 256.

<sup>763</sup> J Gray and N Suzor, 'Playing with Machines: Using Machine Learning to Understand Automated Copyright Enforcement at Scale' (2020) 7(1) Big Data and Society 1.

and ‘hacks’. While they reported high rates of removal of film and sports content, the researchers found that game publishers are not enforcing their rights against gameplay streams (live and recorded videos) and that when these videos are removed it is usually due to music rightholders’ claims.<sup>764</sup>

In order to ensure the ‘unavailability of specific works’ and ‘prevent future uploads’, OCSSPs would have to filter all files that are uploaded from every user and check them against a database of digital fingerprints, supplied by rightholders. Article 17(8) of the DSM Directive and Article 15 of the e-Commerce Directive expressly state that there is no general monitoring obligation. However, these Articles seem to contradict Article 17(4), which stipulates that OCSSP will have to ensure the unavailability of works and prevent future uploads.

As discussed above, service providers are required to implement some form of content filtering technology, so as to comply with Article 17(4). Service providers will probably introduce algorithmic filters, because it would be difficult, even impossible, for humans to review huge amounts of content available online. Lambrecht estimated that if YouTube wanted to ensure a ‘human review’ of the 432,000 hours of video uploaded daily, it would need to hire 70,000 full-time employees.<sup>765</sup>

#### 4.5.1 Forms of Algorithmic Regulations

Yeung and Lodge note that algorithmic regulation ‘points to regulatory governance systems that utilise algorithmic decision making, in which “algorithmic decision making” refers to the use of algorithmically generated knowledge systems to execute or inform decisions’.<sup>766</sup> Murray summarises the algorithmic regulation as a three-part process;<sup>767</sup> the first part is the algorithmic process, by which algorithms are encoded to transform inputs into outputs. The second part is the algorithmic decision-making, where a sophisticated system is able to execute or inform decisions, and the third part is the algorithmic regulation, which encodes ‘the values – legal or community values – into software code with a process of making decisions based on input data leading to an output result’.

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<sup>764</sup> J Gray and N Suzor, ‘Playing with Machines: Using Machine Learning to Understand Automated Copyright Enforcement at Scale’ (2020) 7(1) *Big Data and Society* 1, 6–7.

<sup>765</sup> M Lambrecht, ‘Free Speech by Design: Algorithmic Protection of Exceptions and Limitations in the Copyright DSM Directive’ (2020) 11 *J Intell Prop Info Tech & Elec Com L* 68, 71.

<sup>766</sup> K Yeung and M Lodge, ‘Algorithmic Regulation: An Introduction’ in K Yeung and M Lodge (eds), *Algorithmic Regulation* (Oxford University Press 2019) 3.

<sup>767</sup> A Murray, *Information Technology Law: The Law and Society* (4th ed, Oxford University Press 2019) 80.

The forms of algorithmic regulation have been classified into fixed (or code-based) and adaptive.<sup>768</sup> The fixed model entails simple Notice and Takedown procedures, which can be found in YouTube's Content ID, which uses digital fingerprints of copyrighted works and compares them to every single video uploaded on the platforms.<sup>769</sup> At the other end of the spectrum, adaptive algorithms are learning through feedback loops from the environment they operate in.<sup>770</sup> Examples of these adaptive algorithms include smart transportation systems, which teach themselves through machine learning processes to identify the most suitable route, or systems detecting credit card fraud by profiling the spending patterns of the card holder. Adaptive algorithms are in use on online platforms for the detection of terrorist content,<sup>771</sup> and it is anticipated that similar systems will be able to detect hate speech in the future.<sup>772</sup> Currently, it is admitted that the detection of hate speech content is a difficult task, mainly due to its inherent linguistic nuances.<sup>773</sup>

#### 4.5.2 Can Algorithms Recognise Exceptions and Limitations to Copyright Infringement?

Automated filtering systems, such as YouTube's Content ID or Twitch.tv's Audible Magic,<sup>774</sup> although widely used, are lacking in a very crucial aspect of copyright law: they are unable to recognise exception and limitation cases. The challenge of identifying exception and limitation cases has also been raised and recognised by providers of content recognition technologies, who agreed that 'copyright exceptions require a high degree of intellectual judgement'.<sup>775</sup>

In a recent study on AI-assisted content recognition tools, Wang conducted a test on YouTube and observed that the platform's copyright check feature runs a test on a video after it has been uploaded but before it is made publicly available.<sup>776</sup> Wang found that a video clip

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<sup>768</sup> K Yeung, 'Algorithmic Regulation: A Critical Interrogation' (2018) 12 *Regul Gov* 505, 507.

<sup>769</sup> L Solomon, 'Fair Users or Content Abusers: The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube' (2015) 44 *Hofstra L Rev* 237, 255.

<sup>770</sup> A Murray, *Information Technology Law: The Law and Society* (4th ed, Oxford University Press 2019) 82.

<sup>771</sup> S Macdonald, S Giro Correia, and AL Watkin, 'Regulating Terrorist Content on Social Media: Automation and the Rule of Law' (2019) 15 *Int JL C* 183, 186.

<sup>772</sup> Murray (n 770) 82.

<sup>773</sup> S MacAvaney and others, 'Hate Speech Detection: Challenges and Solutions' (2019) 14 *PLOS ONE* <<https://doi.org/10.1371/journal.pone.0221152>> last accessed on 8 April 2023.

<sup>774</sup> J Kastrenakes, 'Twitch Will Begin Scanning and Deleting Clips That Contain Copyrighted Music' (*The Verge*, June 2020) <<https://www.theverge.com/2020/6/11/21288220/twitch-scan-clips-copyrighted-music-dmca-takedowns-audible-magic>> last accessed on 4 February 2022.

<sup>775</sup> Fourth meeting of the Stakeholder Dialogue on Article 17 of the Directive on Copyright in the Digital Single Market (Audible Magic) <<https://webcast.ec.europa.eu/copyright-stakeholder-dialogues-16-12#>> last accessed on 4 February 2022.

<sup>776</sup> FF Wang, 'Resolving Online Content Disputes in the Age of Artificial Intelligence: Legal and Technological Solutions in Comparative Perspective' (2022) 17(2) *The Journal of Comparative Law* 491.

under 15 seconds with copyrighted music did not result in a copyright claim, but a 2-minute video with copyrighted audio (even as background music to a personal commentary) resulted in ‘Copyright claim found. The copyright owner is allowing you to use the claimed content and will run ads on your video’, and concluded that the test suggests that YouTube may be monitoring their platform for copyright issues, but their algorithms may not be able to automatically detect instances of ‘fair use’.<sup>777</sup> The copyright summary and status provided the name of the artist and track, listed the time range containing the copyright-protected audio, and indicated that the uploader would not be able to monetise the video and that the copyright owner would receive ad revenue.

Since filtering systems are automated in nature, they flag every video that matches either in whole or in part a copyright-protected work, regardless of whether this video may be under the umbrella of exception and limitation cases. Article 17(7) subsection 2 provides that

Member States shall ensure that users in each Member State are able to rely on any of the following existing exceptions or limitations when uploading and making available content generated by users on online content-sharing services: (a) quotation, criticism, review; (b) use for the purpose of caricature, parody or pastiche.<sup>778</sup>

Game review videos or playthrough videos with commentary that potentially benefit from the exceptions and limitations have been heavily affected by Content ID. Back in 2013, a sudden crackdown emerged on gameplay videos, as YouTube tried to ‘shield itself’ from liability.<sup>779</sup> At this point, it is worth mentioning that it was not the video game companies that initiated the ‘flag’ over a video, but unrelated third parties, who eventually benefited from the advertisement revenue.<sup>780</sup>

#### 4.5.3 How to Overcome the Obstacles: A Four-Tier Approach

As automated filtering systems are unable to recognise exception and limitation cases, there have been many solutions proposed to this issue; however, all of them required a human review

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<sup>777</sup> FF Wang, ‘Resolving Online Content Disputes in the Age of Artificial Intelligence: Legal and Technological Solutions in Comparative Perspective’ (2022) 17(2) *The Journal of Comparative Law* 491, 493–94.

<sup>778</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17(7).

<sup>779</sup> L Solomon, ‘Fair Users or Content Abusers: The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube’ (2015) 44 *Hofstra L Rev* 237, 260.

<sup>780</sup> *ibid.* When the videos were flagged, regardless of who sent the notice, they were able to choose among: take the video down, monetise it, or otherwise.

of all flagged videos, which is an unrealistic endeavour.<sup>781</sup> Human review, apart from being unachievable, would also be biased by the algorithmic assessment. Recent research has shown that people tend to trust algorithmic judgements better than human judgements.<sup>782</sup> Setting aside human review, Solomon proposed that service providers should be required to educate content creators on their rights under fair use, which in turn would give confidence to creators to dispute false claims.<sup>783</sup> In addition, Solomon proposed an amendment to the monetisation practice, which would ensure that any monetisation on videos would be proportionate to the amount of copyrighted material used in it.<sup>784</sup>

In order to resolve the issue of fair use for uploaded videos (on-demand streaming), this research proposes a combination of the proposed solutions and introduces a four-tier approach. As a starting point, content creators, such as LP players/streamers and video reviewers, should be familiar with the concept of copyright law, infringement, and exceptions. Platforms should be responsible for educating their users upon the creation of the account on the said platform. Short courses, online materials, and case law examples could be included in the ‘syllabus’ of the online platform. Currently, both YouTube<sup>785</sup> and Twitch.tv<sup>786</sup> provide their users with information and educational tools on copyright law. However, users have to navigate to the website in order to be able to find the information. On the contrary, the proposed solution requires platforms to educate their users upon the creation of their accounts, by displaying ‘mandatory’ educational video content. Thus, well-informed and confident users would be in a better position to understand what constitutes a copyright infringement and how to counter-argue a false claim.

A second step would include a notification or action point by the user before the upload of the content. Users should be able to select from a list the type of content they upload, such as a review video, or playthrough video with commentary, or playthrough video without

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<sup>781</sup> D Halbert, ‘Mass Culture and the Culture of the Masses: A Manifesto for User-Generated Rights’ (2009) 11 Vand J Ent & Tech L 921, 959; DE Ashley, ‘Note, the Public as Creator and Infringer: Copyright Law Applied to the Creators of User-Generated Video Content’ (2010) 20 Fordham Intellectual Property, Media and Entertainment Law Journal 563, 602–06.

<sup>782</sup> JM Logg, JA Minson, and DA Moore, ‘Algorithmic Appreciation: People Prefer Algorithmic to Human Judgement’ (2019) 151 Organisational Behaviour and Human Decision Processes 90, 93.

<sup>783</sup> L Solomon, ‘Fair Users or Content Abusers: The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube’ (2015) 44 Hofstra L Rev 237, 263.

<sup>784</sup> *ibid*, 264.

<sup>785</sup> YouTube, ‘Rules and Policies on Copyright’ <<https://www.youtube.com/howyoutubeworks/policies/copyright/#making-claims>> last accessed on 4 February 2022.

<sup>786</sup> Twitch, ‘Copyrights and Your Channel’ <<https://www.twitch.tv/creatorcamp/en/learn-the-basics/copyrights-and-your-channel/>> last accessed on 4 February 2022.

commentary. In addition to the selection of the type of content, the platform could also impose time limits on each video to be uploaded (third step). For instance, setting as a maximum time limit 20 or 25 minutes per video would eliminate the phenomena of 15-hour playthrough videos without commentary. The proactive disclaimer of the type of video along with the time limitation would minimise the possibilities of the algorithm flagging review videos or playthrough videos.

The fourth step would be a content recognition tool, which would be employed to detect the gamer's voice. As review videos and playthrough videos with commentary require a gamer's comments and expressions, a voice recognition tool could easily detect voice and as such could easily classify if a video falls under the category of a review video or a playthrough with commentary, leaving the category of playthrough videos without commentary to a further layer of scrutiny.

A playthrough video without commentary is next to impossible to fall under any of the exceptions and limitation to online copyright infringement. In this case, algorithms will detect the infringing content, as there will be no streamer intervention under the form of commentary. AI will then flag the uploaded video as 'potentially infringing', as the footage of the LP video will match with the copyright-protected work. Based on the proposed solution, there will be minimal human intervention. The proactive classification of the type of video, the time restrictions, and the voice-detector algorithm have the potential to identify infringing content and flag it when necessary.

One might wonder whether AI can be trained to better assess the differences between infringing and non-infringing content. Lester and Pachamano<sup>787</sup> argued that it is indeed feasible to train algorithms to be more effective through keeping record of the biases introduced by algorithms when they studied the characteristics of infringing content and comparing them with the characteristics of content that was eventually false positive.<sup>787</sup> Elkin-Koren provided two different ways to achieve a better algorithmic assessment of fair use. The first one refers to 'programming factors into an automated process by translating them into a set of instructions that can be executed on certain data sources'<sup>788</sup> and the second one consists of training machine learning algorithms to assess factors that 'involve the exercise of judgement'.<sup>789</sup> What is

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<sup>787</sup> T Lester and D Pachamano, 'The Dilemma of False Positives: Making Content ID Algorithms More Conducive to Fostering Innovative Fair Use in Media Creation' (2017) 24 UCLA Ent L Rev 51, 69.

<sup>788</sup> N Elkin-Koren, 'Fair Use by Design' (2017) 64(22) UCLA L Rev 1095.

<sup>789</sup> *ibid*, 1097.

challenging is to train an algorithm to assess the elements contained in the copyright exceptions and limitations. For instance, an algorithm should be required to assess the ‘purpose of the use’ pursuant to Article 5(2)(d) of the InfoSoc Directive.<sup>790</sup> This purpose could be easily verified if users voluntarily confirmed (through a click) that such use was made for the ‘purposes of criticism or review’.<sup>791</sup>

On the same wavelength, an algorithm would be able to assess a quotation for the purposes of criticism or review by assessing and comparing the length of the quotation to the length of the copyright-protected work. Pursuant to Article 5(5) of the InfoSoc Directive, the three-step test provides that a quotation should not ‘conflict with the normal exploitation of the work or another subject matter or prejudices unreasonably the legitimate interests of the rightholder’.<sup>792</sup> Therefore, setting a time limit on the continuous excerpts of a video compared to the length of the original one would be rather beneficial.<sup>793</sup>

Although algorithmic filters have the potential to classify on-demand LP videos, the cases of live streaming are posing challenges. An automated filtering system would have to be sophisticated enough to identify and block live streamed content. Back in 2012, early attempts to automatically ‘catch and shut down’ content resulted in the wrongful flagging of Michelle Obama’s Democratic National Convention speech live stream on YouTube as well as the Hugo Awards’ broadcast at Ustream.<sup>794</sup> It is a rather challenging task for automated systems to detect infringing content during a live stream, however, and as the recent report published by the EU Intellectual Property Office (EUIPO) shows, it is feasible for machine learning to increase the efficiency of content recognition tools (images, video, and audio), expert systems to generate requests for live blocking orders, and computer vision to identify the content and its similarity to the original one.<sup>795</sup>

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<sup>790</sup> The Article provides a non-exhaustive list of purposes, such as criticism or review.

<sup>791</sup> M Lambrecht, ‘Free Speech by Design: Algorithmic Protection of Exceptions and Limitations in the Copyright DSM Directive’ (2020) 11 J Intell Prop Info Tech & Elec Com L 68, 83.

<sup>792</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, art 5(5).

<sup>793</sup> Lambrecht (n 791) 85.

<sup>794</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 248; G Dayal, ‘The Algorithmic Copyright Cops: Streaming Video’s Robotic Overlords’ (*Wired*, 09 June 2012) <<https://www.wired.com/2012/09/streaming-videos-robotic-overlords-algorithmic-copyright-cops/>> last accessed on 4 February 2022.

<sup>795</sup> EUIPO, ‘Study on the Impact of Artificial Intelligence on the Infringement and Enforcement of Copyright and Designs’ (March 2022) <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2022\\_Impact\\_AI\\_on\\_the\\_Infringement\\_and\\_Enforcement\\_CR\\_Designs/2022\\_Impact\\_AI\\_on\\_the\\_Infringement\\_and\\_Enforcement\\_CR\\_Designs\\_FullR\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2022_Impact_AI_on_the_Infringement_and_Enforcement_CR_Designs/2022_Impact_AI_on_the_Infringement_and_Enforcement_CR_Designs_FullR_en.pdf)> last accessed on 8 April 2023.



It is difficult for automated systems to handle live content effectively. In the case of LP videos, in particular, there are multiple layers of audio and video content, which should be individually examined. As Taylor points out, gameplay content occupies only a portion of any given broadcast.<sup>796</sup>

DiLorenzo and Werner propose a retroactive monitoring system for any live streaming content, or, as they call it, ‘after-the-fact’ monitoring.<sup>797</sup> According to their view, even where live streaming content is not stored online, it can still be recorded and archived by intermediary service providers, giving the rightholder the possibility to issue notices against the streamers and receive compensation to which they are entitled.<sup>798</sup> Nevertheless, this proposed solution treats live streamed content in the same way as on-demand streaming content, because the monitoring system could not scan and detect any potential infringement in live streaming content, but would ‘have to wait’ until the content is archived. Therefore, although this proposal is a step towards finding a solution to resolve the issue of fair use in live streaming content, it is not efficient enough, because in reality it does not tackle copyright infringement in live streaming videos.

An alternative solution would be an initial licence agreement between platforms and video game developers. A platform would therefore obtain an authorisation from the video game developers to communicate to the public or make available to the public video game content. The DSM Directive provides for such a licence agreement to be concluded between rightholders and OCSSPs.<sup>799</sup> Platforms that obtain a licence to host live streaming videos would be shielded from copyright infringement claims. If platforms secured a licence to host such content, then users would not have to notify them of the type of video they intended to stream and there would not be any time restrictions. In that case, AI would merely have to scan the whole video to identify the title of the game and would match it against a database of the ‘licensed to stream’ video games. For instance, the video game developer Activision Blizzard has announced that its e-sport leagues will be exclusively streamed on YouTube.<sup>800</sup> Video

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<sup>796</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 249.

<sup>797</sup> L DiLorenzo and M Werner, ‘I (DRM) Robot: How DRM systems Threaten the Viability of Online Live-Streaming Content’ (2013) 26(4) *Geo J Legal Ethics* 631, 641.

<sup>798</sup> *ibid.*, 642.

<sup>799</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17.

<sup>800</sup> M Perez, ‘Report: YouTube dropped \$160 million to steal Activision Blizzard’s Esports from Twitch’ (*Forbes*, 13 February 2020) <<https://www.forbes.com/sites/mattperez/2020/02/13/report-youtube-dropped-160-million-to-steal-activision-blizzards-esports-from-twitch/?sh=58d9ee1fa4f8>> last accessed on 4 February 2022.

game companies could secure similar agreements with platforms, giving confidence to users/streamers that their content and effort will not be targeted for copyright infringement. The proposed solution of licence agreements between platforms and video game companies (Safe Stream project) will be further analysed in Chapter 6, which will consider whether blockchain technology could be employed for the conclusion of this type of agreement.

As far as the judicial approach to filtering system is concerned, the CJEU ruled in *Scarlet* that EU legislation does not allow the set-up of a filtering system that would check all the electronic communications passing through their platforms, even in cases where these communications are facilitated through a peer-to-peer (P2P) program.<sup>801</sup> The Court explained that, in order for a filtering system to work, it should be able to distinguish the P2P traffic and identify and block illegal content. In other words, it should guarantee prior surveillance on the possible infringing files<sup>802</sup> and, being unlimited in time, would also concern any future violation. Therefore, the Court ruled that a filtering system would limit the service providers' freedom to conduct business, by obliging it to install a complicated, costly, and permanent system, and would also violate the freedom of information of the service provider's users. Hence, it would not guarantee a fair balance between the protection of intellectual property rights, the freedom to conduct business, and the fundamental rights of the customers (right to protection of their personal data and their freedom to receive or impart information).<sup>803</sup> The Court affirmed the same ruling in *Netlog*, deciding that a filtering system could not guarantee a fair balance among the many opposing interests.<sup>804</sup>

On the contrary, the CJEU adopted a different approach in the *Telekabel* case, ruling that an injunction would work to defend the copyright as a fundamental right, which deserves the maximum amount of protection possible.<sup>805</sup> Therefore, the measures taken should be sufficient to ensure copyright protection, by preventing unauthorised access to the protected material or at least making it difficult to achieve and discouraging users from accessing the subject matter.<sup>806</sup> The Court also ruled that an injunction to block a website would not limit any freedom to conduct business, because service providers are free to determine the measures to

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<sup>801</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs SCRL (SABAM)* [2012] ECDR 4.

<sup>802</sup> *ibid*, paras 39 and 40.

<sup>803</sup> *ibid*, para 50.

<sup>804</sup> Case C-360/10 *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Netlog NV* [2012] 2 WLUK 519, [2012] 2 CMLR 18.

<sup>805</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541.

<sup>806</sup> *ibid*, para 62.

be taken, and nor would it limit the users' freedom of information if the measures were targeted to terminate the illegal behaviour without affecting other Internet users.<sup>807</sup> Chapter 5 will provide a detailed analysis of the effectiveness of blocking injunctions.

Article 17(5) of the Directive lists certain factors that will be taken into consideration in the assessment of whether OCSSPs satisfied the requirements of Article 17(4), including the filtering system.<sup>808</sup> Various factors (such as the principle of proportionality; the type, the audience, and the size of the service; the type of works uploaded by users; and the availability of suitable and effective means) will be weighed up when considering if OCSSPs have to filter the content. Therefore, small OCSSPs will not be required to implement filtering technologies to ensure the unavailability of the unlicensed/ unauthorised content.

However, these situations will only be assessed on a case-by-case basis, so they seem to be exceptional and uncertain.<sup>809</sup> Article 17(6) provides that small and new companies are not required to apply filtering systems; if a new OCSSP operates for less than three years and if its annual turnover is below 10 million Euros (cumulative), their liability is limited to compliance with the requirements of making best efforts to conclude a licence agreement and provide an efficient Notice and Takedown system. However, if the OCSSPs number of unique visitors exceeds five million per month, they do not benefit from the exception.<sup>810</sup>

The requirements for exception from liability have been criticised, because small and new companies that try to compete with big tech companies (e.g. YouTube/Google) will be held directly liable at the latest three years after their incorporation.<sup>811</sup> Taking as an example the music streaming platform Soundcloud and YouTube, the first had an estimated annual turnover of over 100 million Euro in 2017<sup>812</sup> and currently an estimated 76 million visitors per month,<sup>813</sup>

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<sup>807</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541, paras 52, 53, and 57.

<sup>808</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17(4).

<sup>809</sup> T Murri, 'On Upload-Filters and Other Competitive Advantages for Big Tech Companies under Article 17 of the Directive on Copyright in the Digital Single Market' (2019) 10 (2) JIPITEC <<https://www.jipitec.eu/issues/jipitec-10-2-2019/4914/#ftn.N1036F>> last accessed on 4 February 2022.

<sup>810</sup> DSM Directive (n 808), art 17(6).

<sup>811</sup> T Spoerri, 'On Upload-Filters and Other Competitive Advantages for Big Tech Companies under Article 17 of the Directive on Copyright in the Digital Single Market' (2019) 10(2) JIPITEC <<https://www.jipitec.eu/issues/jipitec-10-2-2019/4914/#ftn.N1036F>> last accessed on 4 February 2022.

<sup>812</sup> B Houghton, 'SoundCloud Revenues up 80%, Tops \$100 million' (*Hypebot*, 29 January 2019) <<https://www.hypebot.com/hypebot/2019/01/soundcloud-revenues-up-80-tops-100-million.html>> last accessed on 4 February 2022.

<sup>813</sup> C Smith, '16 SoundCloud Statistics and Facts 2020' (*DMR*, 1 July 2020) <<https://expandedramblings.com/index.php/soundcloud-statistics/>> last accessed on 4 February 2022.

whereas YouTube had an estimated revenue of over 15 billion USD in 2019 with 8.6 billion visitors per month.<sup>814</sup> Based on this data, it is evident that small and new companies, although not able to achieve the revenue of big tech platforms, with the passage of three years will be liable in the same way that big tech platforms are.

The cost of developing and maintaining filtering systems is extremely high. For example, YouTube has already invested over 100 million USD in ‘Content ID’.<sup>815</sup> Such costs may be unbearable for small and new companies. The European Commission claimed that the cost of filtering systems would be low for start-up companies, estimating that a small-scale OCSSP can obtain such services for less than 900 Euros per month.<sup>816</sup> However, this estimate was based on Audible Magic’s comments submitted in a study and it is only accurate for a small number of service providers.<sup>817</sup> Audible Magic’s website stated that this price applies to tools that filter audio files and is available only for service providers hosting less than 5,000 song files per month. This number is very restrictive, bearing in mind the huge amount of content hosted by service providers.

An additional challenge exists in the fact that Article 17 applies to copyright-protected works at large, without specifying the copyright-protected works.<sup>818</sup> As rightholders provide OCSSPs with information about any kind of copyrighted work, a filter would have to be able to recognise any kind of copyrighted content. However, these tools can recognise particular media types. For example, an audio fingerprinting tool would be unable to match text files. Due to the fact that LP videos feature the gameplay of a video game, which consists of individual copyright-protected works (texts, image, video, and audio), additional costs would be needed because each of the individual copyright-protected works would require a separate and tailor-made tool.

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<sup>814</sup> M Iqbal, ‘YouTube Revenue and Usage Statistics 2020’ (*Business of Apps*, 30 October 2020) <<https://www.businessofapps.com/data/youtube-statistics/>> last accessed on 4 February 2022.

<sup>815</sup> T Spoerri, ‘On Upload-Filters and Other Competitive Advantages for Big Tech Companies under Article 17 of the Directive on Copyright in the Digital Single Market’ (2019) 10(2) JIPITEC <<https://www.jipitec.eu/issues/jipitec-10-2-2019/4914/#ftn.N1036F>> last accessed on 28 January 2023.

<sup>816</sup> European Commission, ‘Commission Staff Working Document Impact Assessment’ (Brussels, 16 September 2016) SWD (2016) 301 final Part 1/3, 152, <[https://www.eumonitor.eu/9353000/1/j4nvgs5kkg27kof\\_j9vvik7m1c3gyxp/vk7k8gzqvpwy/f=/12254\\_16\\_add\\_1.pdf](https://www.eumonitor.eu/9353000/1/j4nvgs5kkg27kof_j9vvik7m1c3gyxp/vk7k8gzqvpwy/f=/12254_16_add_1.pdf)> last accessed on 8 April 2023.

<sup>817</sup> E Engstrom and N Feamster, ‘The Limits of Filtering: A Look at the Functionality and Shortcomings of Content Detection Tools’ (*Engine*, March 2017) <<https://www.engine.is/the-limits-of-filtering>> 26 last accessed on 4 February 2022.

<sup>818</sup> Spoerri (n 815).

This automatically raises the question of cost allocation. Gabison and Buiten opine that the ‘least cost avoider’ principle would better determine which party should be burdened with the cost of implementation.<sup>819</sup> According to that principle, the liability should be assigned to the party that can avoid the costs of harm at the lowest cost. Therefore, as online platforms benefit the most from operating their sites and they are in a better position to detect infringing content and remove it accordingly, they should be burdened with the implementation cost. The online platforms range from big tech online platforms to small online platforms. Imposing the cost of technical implementation to online platforms would act as a deterrent for new start-up companies wishing to enter the market. Existing small companies would be financially affected as well. Online platforms and businesses alike should not bear all the financial costs and risks associated with their businesses.

Rightholders and intermediaries can collaborate to develop and maintain filtering systems, because their interests in copyright enforcement are aligned. A solution could be found in rightholder associations, such as collecting societies for copyright, that can combine resources for the development of a common technological solution. For the purposes of LP videos, it is important to reiterate that video games are not protected per se, but copyright protection is afforded to individual elements, such as music, artistic work, and literary works to name a few. Thus, collecting societies protecting the individual elements could work together at a national and European level, or a collecting society dedicated solely to video games could be established.

Following the discussion on how service providers can be ‘shielded’ from liability pursuant to the e-Commerce Directive and the DSM Directive, and after having analysed how algorithms can be of great assistance to those providers by detecting and notifying infringing content, the next section considers the remedy of the Notice and Takedown procedure for notifying and acting on infringing content available for rightholders.

#### 4.6 Notice and Takedown Procedures for Notifying and Acting on Infringing Content Hosted by Online Intermediaries

Rightholders and intermediaries engage in the enforcement of exclusive rights online. Rightholders will identify and notify the infringing content and intermediaries will evaluate the received notices and will act accordingly to take the infringing content down. The focus now

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<sup>819</sup> GA Gabison and MC Buiten, ‘Platform Liability in Copyright Enforcement’ (2020) 21 Colum Sci & Tech L Rev 237, 250.

shifts to the Notice and Takedown procedure for notifying and acting on illegal content hosted by online intermediaries and whether the traditional Notice and Takedown can develop accommodating automation in the process.

Back in 2012, the European Commission opened a public consultation regarding the procedure to be followed on notification and action on illegal content hosted by online intermediaries.<sup>820</sup> The main question of the public consultation was whether hosting service providers should have a specific procedure for the notification of illegal content as well as what type of actions they should take against illegal content.

The Notice and Takedown procedures, also known as Notice and Action procedures,<sup>821</sup> start with the notification of the illegal content and conclude when the online intermediary takes down the alleged illegal content. The Notice and Takedown procedures have been ‘horizontally’ applied to various legal subject matters, from the fight against counterfeit goods to the fight against other IP rights infringement, terrorism-related content, child abuse content, or violence on the basis of origin and religion.<sup>822</sup> However, this horizontal application of Notice and Takedown procedures has been heavily criticised by the European Consumer Organisation, because it places child abuse and user-generated content at the same position.<sup>823</sup> Indeed, it is not appropriate to treat child abuse content in the same way as intellectual property right infringement. To date, the European Commission has recommended a holistic approach to online illegal content at large, except for terrorist content, for which there are certain recommendations relating to tackling terrorist content online.<sup>824</sup>

Despite the development of the Notice and Takedown procedures in the EU, Member States have faced challenging issues pertaining to the interpretation of the notion of ‘actual

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<sup>820</sup> European Commission, ‘A Clean and Open Internet: Public Consultation on Procedures for Notifying and Acting on Illegal Content Hosted by Online Intermediaries’ (2012) <<https://www.etno.eu/datas/positions-papers/2012/etnoc01-dsm-notice-and-action-consultation-sep-2012.pdf>> last accessed on 28 January 2023.

<sup>821</sup> The Notice and Action procedure is a more justifiable term in the sense that it not only entails the notification and the takedown of the content, but also involves actions including counter-notice and assessment of the content. However, the term Notice and Takedown has prevailed universally. See FF Wang, ‘Response to Public Consultation on Procedures for Notifying and Acting on Illegal Content Hosted by Online Intermediaries’ (2012) 91 *Journal of Intellectual Property Forum* 93, 98.

<sup>822</sup> FF Wang, *Law of Electronic Commercial Transactions: Contemporary issues in the EU, US and China* (2nd edn, Taylor and Francis Group 2014) 210.

<sup>823</sup> The European Consumer Organisation, ‘Notice-and-Action on Illegal Content’ (BEUC, September 2012) <<https://www.beuc.eu/publications/2012-00543-01-e.pdf>> last accessed on 4 February 2022.

<sup>824</sup> European Commission, ‘Recommendations on Measures to Effectively Tackle Illegal Content Online’ (2018) COM (2018) 1177 final, 7 and 14.

knowledge’ and ‘act expeditiously’, as per Article 14 of the e-Commerce Directive.<sup>825</sup> <sup>826</sup> Service providers will acquire ‘actual knowledge’ via notification of the infringing content. Normally, the notification of infringing content is required to follow a specific format to make the hosting provider aware of the infringing content. The requirement of sufficient notification was discussed by the CJEU in the case of *L’Oréal v eBay*, where it was ruled that the notification should be ‘sufficiently precise’, allowing hosting service providers to identify the illegal content and take actions expeditiously to remove it or disable access to it.<sup>827</sup>

In practice, some hosting service providers, such as eBay and Amazon, have put in place mechanisms for the Notice and Takedown process. For instance, eBay has implemented a programme called the ‘Verified Rights Owner Program’, which allows rightholders to report to eBay listings that may infringe their rights.<sup>828</sup> In order to report infringing content, rightholders have to submit a ‘Notice of Claimed Infringement’ to eBay by e-mail or by fax.<sup>829</sup>

The infringement notification procedure on YouTube is more compliant with the requirements of ‘sufficient notification’. The rightholders can submit the complaint form online, after completing several mandatory fields, designated to assist the hosting provider to identify the illegal content.<sup>830</sup> More specifically, the rightholder is asked to select, from a list of issues, the nature of the complaint, such as copyright infringement, trademark infringement, and inappropriate content. Upon the selection of ‘copyright infringement’, the next question is about the person who is affected by this infringement, including the rightholders themselves, the company or client, or another owner. Then, the platform requires details of the infringing video, the URL of the allegedly infringing video to be removed, and a description of the work infringed (e.g. song, artwork, software). The last sections of the form are dedicated to the personal information of the rightholder, including the name, e-mail address, full street address, and telephone number. The online complaint form would therefore protect the rightholders’

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<sup>825</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 14.

<sup>826</sup> FF Wang, *Law of Electronic Commercial Transactions: Contemporary Issues in the EU, US and China* (2nd edn, Taylor and Francis Group 2014) 210.

<sup>827</sup> Case C-324/09 *L’Oréal SA and others v eBay International AG and others* [2012] Bus LR 1369, [2011] 7 WLUK 313, para 122.

<sup>828</sup> eBay Verified Rights Owner Program Information <<https://pages.ebay.com/seller-center/listing-and-marketing/verified-rights-owner-program.html>> last accessed on 4 February 2022.

<sup>829</sup> *ibid.* The submission of the ‘Notice of Claimed Infringement’ by fax has been criticised as non-user friendly, given that e-mail and other electronic communications are commonly used by users. Wang (n 826) 212–13.

<sup>830</sup> YouTube Copyright Infringement Notification Information <[https://www.youtube.com/copyright\\_complaint\\_form](https://www.youtube.com/copyright_complaint_form)> last accessed on 4 February 2022.

rights and would ‘minimise the possibility of avoidance of responsibility by hosting service providers’.<sup>831</sup>

In the video game sector there are not many cases where rightholders would file a Notice and Takedown procedure against YouTube or Twitch.tv, because LP videos play a vital role in advertising the video game to the general public. However, the video game developer Campo Santo recently filed a Notice and Takedown claim on YouTube for copyright infringement committed by the gamer Felix ‘PewDiePie’ Kjellberg for his stream of the video game *Firewatch*.<sup>832</sup>

Upon notification of the illegal content, the hosting service provider is expected to act ‘expeditiously’ to remove the content or disable access to information pursuant to the e-Commerce Directive.<sup>833</sup> Nevertheless, the term ‘expeditiously’ has not been defined. Wang points out that there is a similarity between this term and the ‘without undue delay’ principle for data breach found in the General Data Protection Regulation<sup>834</sup> and provides a ‘four-step approach’ for the Notice and Takedown procedure. The first step is for hosting providers to send confirmation of receipt within 24 hours to the notice parties (rightholders) when they receive a notice; the second step is to consult the notice parties for additional information within 24 hours after the confirmation of receipt of the notice; the third step is the consultation with the users regarding the allegation of illegal content (known as counter-notice) within 24 hours; and the fourth step is to inform both parties of any action taken without undue delay.<sup>835</sup> This proposed four-step approach and the counter-notice in particular would balance the users’ rights and the rightholders’ rights, providing an out-of-court dispute resolution forum.

The Notice and Takedown procedure has been criticised for the fact that the intermediaries determine the legality or illegality of content, influenced by their own potential liability.<sup>836</sup> The removal of the content subjected to a takedown notice is the safest way for intermediaries to

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<sup>831</sup> FF Wang, ‘Response to Public Consultation on Procedures for Notifying and Acting on Illegal content hosted by Online Intermediaries’ (2012) 91 *Journal of Intellectual Property Forum* 93, 95

<sup>832</sup> J Alexander, ‘YouTube Accepts Campo Santo’s Copyright Strike against PewDiePie, Could Lead to Bigger Issues’ (*Polygon*, 14 September 2017) <<https://www.polygon.com/2017/9/14/16309430/pewdiepie-campo-santo-strike>> last accessed on 4 February 2022.

<sup>833</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 14(1).

<sup>834</sup> FF Wang, *Law of Electronic Commercial Transactions: Contemporary issues in the EU, US and China* (2nd edn, Taylor and Francis Group 2014) 214; Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L 119/1, arts 33 and 34.

<sup>835</sup> *ibid* Wang, 214.

<sup>836</sup> A Marsoof, ‘The Blocking Injunction – A Critical Review of Its Implementation in the United Kingdom Within the Legal Framework of the European Union’ (2015) 46 *IIC* 632.



avoid liability. The intermediaries remove the content that they believe is infringing, acting in their own best interest. Another issue exists with the notice submitters, who may or may not undertake quality control of what they notify as infringing content.<sup>837</sup>

It is undeniable that the rightholders are in a better position to identify infringing content, since they can establish the ownership status and they know what is protected, who has licensed the content from them, and if they acted as users themselves.<sup>838</sup> A study conducted in 2006 by Urban and Quilter showed that companies and businesses were the primary users of the Notice and Takedown system, with the music industry to be the dominant player.<sup>839</sup> Ten years later, in 2016, another study by Urban and others found that the notification process was ‘professionalised’, as notices were sent by right enforcement organisations, trade associations, and law firms.<sup>840</sup> Therefore, rightholders are asked to actively participate, in order to achieve the highest enforcement of their exclusive rights.

Automation in the process could provide for the rise of enforcement. Husovec has described ‘a battle of two or more algorithms’, a process where algorithmically generated notices sent by rightholders are processed by algorithms of intermediaries.<sup>841</sup> He has also suggested that, since both rightholders and intermediaries are involved in the Notice and Takedown process, their interests in developing filtering technology are aligned.<sup>842</sup> This is a very interesting approach. The automation in the process will not only bring the Notice and Takedown procedures up to date, but will also produce significant results in terms of the volume of notices to be sent and assessed and the quality of such notices.

Therefore, the lack of a mechanism for determining legality in an independent and unbiased way led to a new and popular approach in the EU where rightholders could apply to court seeking an injunction compelling the ISPs to block access to infringing websites. The characteristics and the effectiveness of blocking injunctions will be further assessed in the following chapter.

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<sup>837</sup> M Husovec, ‘The Promises of Algorithmic Copyright Enforcement: Takedown or Stay Down? Which is Superior? And Why?’ (2018) 42 *Colum JL & Arts* 53, 59.

<sup>838</sup> *ibid*, 66.

<sup>839</sup> JM Urban and L Quilter, ‘Efficient Process or “Chilling Effects”? Takedown Notices under Section 512 of the Digital Millennium Copyright Act’ (2006) 22 *Santa Clara Computer & High Tech LJ* 621, 650–52.

<sup>840</sup> J Urban and others, ‘Notice and Takedown in Everyday Practice’ (2017) UC Berkeley Public Law Research Paper No 2755628, 84.

<sup>841</sup> Husovec (n 837) 71.

<sup>842</sup> *ibid* 76.

## 4.7 Conclusion

This chapter considered the liability and the exception to that liability of service providers, under the e-Commerce Directive. The definition of information society service providers should be reconsidered. Since the time of the e-Commerce Directive's adoption in 2000, new technologies and new services have emerged, which in turn necessitated the amendment of the legislation to cover these new categories of providers. While many opine that the Directive is future proof, accommodating new digital service providers, a revised definition could provide clarification whether these new digital service providers could benefit from a safe harbour regime.

The DSM Directive limits the applicability of safe harbours if service providers do not obtain authorisation from the rightholders. More specifically, Article 17(3) provides that the safe harbour for hosting services will not be applied where service providers perform an act of communication to the public or an act of making available to the public. The authorisation could be achieved with the conclusion of a licence agreement between the platform and the rightholder.

The DSM Directive allows for and necessitates the implementation of filtering systems, with the introduction of algorithmic filters. Algorithmic filtering systems, although widely used by the streaming platforms, lack a very crucial aspect of copyright law: they are unable to identify if review videos, playthrough videos with commentary, and playthrough videos without commentary fall under the exception and limitation to the communication to the public right. There are proposed solutions on how to train algorithms to identify and differentiate infringing and non-infringing content.

Although the Notice and Takedown procedures have been widely used by rightholders for notification of and action against illegal content, there are not many cases where this procedure was followed by video game rightholders. The potential backlash from the gaming community acts as a deterrent to the rightholders. The next chapter considers whether blocking injunctions against ISPs is an effective remedy to tackle copyright infringement committed through LP video games.

## Chapter 5: Blocking Injunctions against ISPs in Respect of Video Game Online Copyright Infringement

In the digital environment, the services of intermediaries may increasingly be used by third parties for infringing activities. In many cases such intermediaries are best placed to bring such infringing activities to an end.<sup>843</sup>

The previous chapter considered the responsibility and liability of online intermediaries who host or transmit potentially infringing content. Besides being able to target online intermediaries, initiating Notice and Takedown procedures requesting intermediaries to take down the infringing content, rightholders have a special type of remedy in the context of intellectual property enforcement. This remedy is the blocking injunction against Internet Service Providers (ISPs). For the purposes of this thesis, the chapter considers whether injunctions against ISPs ordering them to block access to infringing 'Let's Play' (LP) videos or live streams is an effective remedy available to video game companies as rightholders. Although blocking injunctions have been widely used for copyright infringement issues, the issue of their feasibility for infringements stemming from LP videos or video game live streams is not clear. What distinguishes copyright infringements at large from the infringing LP videos and live streams is the fact that the latter type of infringement entails the users' creative input.

Blocking injunctions were first used in the copyright context. In the EU, the legislative basis for blocking injunctions is Directive 2001/29/EC (the Information Society Directive, or 'InfoSoc Directive')<sup>844</sup> and Directive 2004/48 on the enforcement of intellectual property rights.<sup>845</sup> Article 8(3) of the InfoSoc Directive has been transposed into the EU Member States' legal orders.<sup>846</sup>

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<sup>843</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recital 59.

<sup>844</sup> *ibid.* Article 8(3) obligates EU Member States to ensure that aggrieved parties (rightholders) are allowed to seek injunctions against ISPs, in order to mitigate the effects of online copyright infringement.

<sup>845</sup> Council Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L 157/45. Recital 23 provides that right holders are able to apply for injunctions against an intermediary whose services are used by a third party in order to infringe the right holder's industrial property right. Article 3 provides that 'Member States should provide for the measures, procedures and remedies... to ensure the enforcement of the intellectual property rights' and Article 11 states that 'Member States shall ensure that the judicial authorities may issue against the infringer an injunction' with the aim to prohibit the continuation of the infringement.

<sup>846</sup> In the UK, s 97A of the Copyright, Designs and Patents Act 1988 provides that the High Court of England and Wales shall have the power to grant an injunction against a service provider, where that service provider has actual knowledge of another person using their services to infringe copyright. In Greece, Article 8(3) of the Information Society Directive has been implemented into national law in Article 64A of the Greek Copyright Act 1993, which

‘Bringing actions against individual users is expensive... regulating access via intermediaries is more cost effective’.<sup>847</sup> The concealment of a user’s identity behind anonymity and the origin of online content from places outside of the jurisdiction’s reach complicate the enforcement.<sup>848</sup> Apart from being cost-effective, online intermediaries are in an advantageous position to enable and disable access to online content by blocking access to such content or even terminating the infringers’ accounts.<sup>849</sup> Therefore, online intermediaries are a focal point in respect of moderating online content.

There are various blocking methods that can be adopted to block access to a website or online location. This chapter considers Domain Name System (DNS) blocking, Internet Protocol (IP) blocking, and Deep Packet Inspection (DPI)-based Uniform Resource Locator (URL) blocking as well as the two-stage systems. There are different costs, effects, and risks associated with these technical methods. Their suitability depends on several factors, including the speed of implementation, cost, blocking effectiveness, difficulty in circumvention, compatibility with judicial processes, integrity of network performance, and impact on legitimate services.<sup>850</sup> Further analysis on the functionality and effectiveness of the blocking techniques will be given in the following section.

National and European case law has also given a specific dimension to blocking injunctions in terms of their scope and conditions. Starting with the scope, blocking injunctions serve a dual function: to remove and to prevent. Injunctions against intermediaries not only aim at the removal of third-party infringing content but also serve a preventive function, in the sense that ‘they take measures that contribute not only to ending infringement committed through that (marketplace), but also to preventing further infringements’.<sup>851</sup> The preventive character of

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provides that the right holders are able to grant injunctions against intermediaries, whose services are used by a third party to infringe copyright or related rights. Article 8(3) of the InfoSoc Directive was implemented into the French law in Article L 336-2 of the French Intellectual Property Code.

<sup>847</sup> D Lindsay, ‘Website Blocking Injunctions to Prevent Copyright Infringement: Proportionality and Effectiveness’ (2017) 40 U New S Wales LJ 1507, 1507.

<sup>848</sup> M Perel, ‘Digital Remedies’ (2020) 35 Berkeley Tech LJ 1, 17.

<sup>849</sup> *ibid*, 18.

<sup>850</sup> Ofcom, ‘“Site Blocking to Reduce Online Copyright Infringement: A Review of Sections 17 and 18 of the Digital Economy Act’ (May 2011), 5–8 <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/78095/Ofcom\\_Site-Blocking-report\\_with\\_redactions\\_vs2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78095/Ofcom_Site-Blocking-report_with_redactions_vs2.pdf)> last accessed on 4 February 2022.

<sup>851</sup> Case C-324/09 *L’Oréal SA and others v eBay International AG and others* [2012] Bus LR 1369, [2011] 7 WLUK 313, paras 127–34.

injunctions was also confirmed in subsequent cases, including *Scarlet Extended*,<sup>852</sup> *SABAM*,<sup>853</sup> *UPC Telekabel*,<sup>854</sup> and *Tommy Hilfiger*.<sup>855</sup>

In *UPC Telekabel*, the CJEU confirmed that blocking injunctions against ISPs are compatible with the EU law.<sup>856</sup> According to the Court, blocking injunctions should be balanced and proportionate, taking into account the intellectual property rights of the rightholder, the ISP's right to conduct business, and the user's right to access to information.<sup>857</sup>

In the UK case of *Twentieth Century Fox v BT*, Arnold J outlined the conditions that should be met for a court to grant blocking injunctions against ISPs for copyright infringements.<sup>858</sup> The first condition refers to the defendants, who must be service providers. Secondly, the users and/or operators of the website must have committed copyright infringement. Thirdly, the website's users and/or operators must have used the defendant's services to commit a copyright infringement, and lastly, the defendant must have had actual knowledge of the infringing content. The four conditions, or 'threshold conditions', are also incorporated in section 97A of the Copyright, Designs and Patents Act (CDPA) 1988.<sup>859</sup>

In addition to the four conditions outlined above, in *Cartier v British Sky Broadcaster*,<sup>860</sup> Arnold J provided the eight principles to be applied when the courts are asked to grant blocking injunctions. The relief must be necessary, effective, and dissuasive, must not be unnecessarily complicated or costly, must avoid barriers to legitimate trade, must be fair and equitable and strike a 'fair balance' between the applicable fundamental rights, and must be proportionate.<sup>861</sup>

Given that the selected jurisdictions do not follow a harmonised practice on the employment of blocking methods, there is a debate over the issue of whether a site-blocking injunction from

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<sup>852</sup> Case C-70/10 *Scarlet Extended SA v Société Belge Des Auteurs, Compositeurs Et Éditeurs SCRL (SABAM)* [2012] ECDR 4, paras 30 and 31.

<sup>853</sup> Case C-360/10 *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Netlog NV* [2012] 2 WLUK 519, [2012] 2 CMLR 18, para 8.

<sup>854</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541, para 54.

<sup>855</sup> Case C-494/15 *Tommy Hilfiger Licensing LLC, Urban Trends Trading BV, Rado Uhren AG, Facion Kft, Lacoste SA and Burberry Ltd v Delta Center AS* [2016] Bus LR 1008, [2016] 7 WLUK 168, [2017] CEC 182, para 22.

<sup>856</sup> Case C-314/12 *UPC Telekabel* (n 854).

<sup>857</sup> *ibid*, paras 46 and 47.

<sup>858</sup> *Twentieth Century Fox and others v British Telecom Plc* [2011] EWHC 1981 (Ch).

<sup>859</sup> R Arnold, 'Website-Blocking Injunctions: The Question of Legislative Basis' (2015) 37 EIPR 623, 626.

<sup>860</sup> *Cartier International AG & Ors v British Sky Broadcasting* [2014] EWHC 3354 (Ch); [2015] 1 All ER 949

<sup>861</sup> *ibid*, [158].

the court should specify the specific technical measures.<sup>862</sup> In the case of *UPC Telekabel*,<sup>863</sup> the CJEU held that intermediaries are responsible for choosing and implementing appropriate technical measures to protect rightholders, because they are in a better position to know and best adopt resources and abilities available to them. However, this is not an easy endeavour, since the choice of the blocking measure should strike a fair balance between the copyright holders, the freedom to conduct business, and the freedom of information.

Blocking access to online content may have unwelcome effects or ‘collateral damage’ on the fundamental right of freedom of expression. Website blocking can lead to over-blocking of online content, part of which may not be infringing whatsoever. The co-existence of infringing and non-infringing content poses a significant obstacle on the enforcement of intellectual property rights.

Recital 59 of the InfoSoc Directive provides that ‘conditions and modalities relating to such injunctions should be left to the national law of Member States’.<sup>864</sup> The importance of the ‘actual knowledge’ condition was raised by Arnold J in the *Cartier* case; if ISPs could block websites without having ‘actual knowledge’ of the infringing activity that ‘would be tantamount to a general obligation to monitor’.<sup>865</sup> Following the *Twentieth Century Fox v BT* case, blocking injunctions were granted in subsequent cases, such as *Dramatico v Sky*,<sup>866</sup> *EMI Records v Sky*,<sup>867</sup> *Football Association v Sky*,<sup>868</sup> *Paramount Entertainment v Sky*,<sup>869</sup> *Football Association v BT*,<sup>870</sup> *Nintendo v Sky*,<sup>871</sup> and *Nintendo v BT*.<sup>872</sup>

Among the cases outlined above, *Football Association v BT*, *Nintendo v Sky*, and *Nintendo v BT* are of particular importance for the purposes of this research. In the former case, the claimant and copyright owner of the footage of all Premier League matches, FAPL, sought and obtained a blocking injunction against six ISPs in the UK, requiring them to block access to

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<sup>862</sup> FF Wang, ‘Site Blocking Orders in the EU: Justification and Feasibility’ (14th Annual Intellectual Property Scholars Conference (IPSC), Boalt Hall School of Law, University of California, Berkeley, 2014) 2.

<sup>863</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541, paras 52 and 53.

<sup>864</sup> Council Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10, Recital 59.

<sup>865</sup> *Cartier International AG & Ors v British Sky Broadcasting Ltd & Ors* [2014] EWHC 3354 [141].

<sup>866</sup> *Dramatico Entertainment Ltd v British Sky Broadcasting Ltd* [2012] EWHC 268 (Ch).

<sup>867</sup> *EMI Records Ltd v British Sky Broadcasting Ltd* [2013] EWHC 379 (Ch).

<sup>868</sup> *The Football Association Premier League Ltd v British Sky Broadcasting Ltd* [2013] EWHC 2058 (Ch).

<sup>869</sup> *Paramount Home Entertainment International Ltd v British Sky Broadcasting Ltd* [2013] EWHC 3479 (Ch).

<sup>870</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch).

<sup>871</sup> *Nintendo Co Ltd v Sky UK Ltd & Ors* [2019] EWHC 2376 (Ch).

<sup>872</sup> *Nintendo Co Ltd v British Telecommunications Plc & Ors* [2021] EWHC 3488 (IPEC)

streaming servers that delivered infringing live streams of Premier League footage to UK consumers.<sup>873</sup> Arnold J emphasised the ‘growing problem’ of live Premier League footage being streamed without the consent of FAPL, which has been exacerbated because consumers turn to alternative media to access infringing streams and a significantly higher proportion of UK consumers believes – regrettably – that it is lawful to access unauthorised streams using such devices and software than believes that it is lawful to access unauthorised content via file-sharing websites.<sup>874</sup> Therefore, this case was one of the first to consider a live blocking order, a particular type of website blocking limited to the ‘time window’ during which the infringing content had been streamed.<sup>875</sup>

In *Nintendo v Sky*, the claimant (a company that designs, manufactures, and sells video game consoles) sought and obtained an injunction against five ISPs to take measures to block access to four websites that advertise, distribute, offer for sale, and sell devices that allow technological protection measures on Nintendo’s popular Nintendo Switch games console to be circumvented.<sup>876</sup> The technological protection measures employ symmetric and asymmetric encryption to protect the copyright works of the rightholder.<sup>877</sup> Although this case concerned the circumvention of copyright protection measures, it paved the way for *Nintendo v BT*, where the applicant sought and obtained a blocking injunction for trademark and copyright infringement of their protected works by means of copying and communication to the public right.

This chapter focuses on blocking injunctions against ISPs and will assess the effectiveness of the different technological methods of blocking, taking into consideration the hindering of the freedom of expression and the possibility of circumvention. Emphasis will be given to the response of the selected jurisdictions (Germany, France, Greece, and the UK) to website-blocking injunctions. The reasons why these four jurisdictions have been chosen are the following: first and foremost, throughout this research, the focus is on the four jurisdictions, starting with how video games are protected under their national copyright law and moving to the interpretation and application of the communication to the public right. Hence, it is

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<sup>873</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch).

<sup>874</sup> *ibid* [10]–[14].

<sup>875</sup> G Colangelo and M Maggiolino, ‘ISPs’ Copyright Liability in the EU Digital Single Market Strategy’ (2018) 26 *IJLIT* 142, 147.

<sup>876</sup> *Nintendo Co Ltd v Sky UK Ltd & Ors* [2019] EWHC 2376 (Ch).

<sup>877</sup> *ibid* [7].

appropriate for this chapter to mainly focus on the blocking injunctions that have been granted by national courts in the selected jurisdictions.

Secondly, it has been outlined in the introduction of this thesis that Germany, France, and the UK have been chosen as representative countries as the top three leaders of the video game market in Europe.<sup>878</sup> Although Greece is not a leader in the video game development, there is a strong presence of small independent developers as well as representation in worldwide competitions.<sup>879</sup> Moreover, among the selected jurisdictions, Germany, France, and the UK represented about 55% of the total Gross Domestic Product (GDP) generated by copyright industries at the EU level in 2014–2016 and about 48% of the total employment in the same sector in the EU.<sup>880</sup> In addition to these copyright-related considerations, Germany, France, and the UK also represented over 48% of the total EU population in 2018. As far as the consumer market is concerned, the UK was the sixth largest video game market worldwide in 2018, with approximately 37.3 million people playing games.<sup>881</sup>

Thirdly, national courts in the EU have not followed a harmonised rule in granting blocking injunctions against ISPs. Courts in some Member States order technology-specific blocking, while courts in other Member States grant blocking injunctions with non-specific technical orders or do not even order ISPs to block infringing content. Hence, it is of the utmost importance to examine how blocking injunctions have been developed in the selected jurisdictions. The chapter examines whether blocking injunctions are a suitable remedy to tackle copyright infringement that occurs via LP videos and live streaming videos of video games.

In order to address and analyse the issues raised above, a combination of doctrinal legal method and comparative analysis will be deployed. The chapter identifies and analyses the relevant legislation and case law. It also compares the selected jurisdictions and considers

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<sup>878</sup> Statista, ‘Western European Countries Ranked by Video Game Revenues in 2019’ (*Statista*, 11 October 2019) <<https://www.statista.com/statistics/788396/leading-gaming-markets-by-revenue-in-europe/>> last accessed on 25 March 2021 and Statista, ‘Leading Video Game Markets in Western Europe in 2020, by Revenue’ (*Statista*, 24 June 2021) <<https://www.statista.com/statistics/788396/leading-gaming-markets-by-revenue-in-europe/>> last accessed on 4 February 2022.

<sup>879</sup> FEFES, Festival Européen Du Film Fantastique de Strasbourg <<http://strasbourgfestival.com/igc-apocalypse-cow-en/>> last accessed on 4 February 2022.

<sup>880</sup> European Patent Office and the European Union Intellectual Property Office, ‘IPR – Intensive Industries and Economic Performance in the European Union’ (September 2019) <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/IPContributionStudy/IPR-intensive\\_industries\\_and\\_economicin\\_EU/WEB\\_IPR\\_intensive\\_Report\\_2019.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/IPR-intensive_industries_and_economicin_EU/WEB_IPR_intensive_Report_2019.pdf)> last accessed on 8 April 2023.

<sup>881</sup> UK Games Market 2018 (25 July 2018) <https://newzoo.com/insights/infographics/uk-games-market-2018/> last accessed on 4 February 2022.



whether there is a harmonious approach in granting blocking injunctions. In doing so, emphasis is given to the previous practice followed by national courts and the issue is raised of the effectiveness of this remedy to block access to infringing LP videos and live stream videos.

## 5.1 The Technical Side of Blocking and Limitations

There is a plethora of blocking techniques ISPs can adopt to block access to a target website or an online location. Arnold J referred to four blocking techniques available to ISPs: DNS blocking; IP blocking; DPI-based URL blocking; and the two-stage systems.<sup>882</sup> The four major blocking methods will be further discussed in the following paragraphs, with emphasis on their unique characteristics and their feasibility to block access to infringing LP videos and live stream videos of video games.

### 5.1.1 Domain Name System (DNS) Blocking

Devices connecting to the Internet bear a unique IP address.<sup>883</sup> Nevertheless, it is impossible for a human to memorise these addresses, hence IP addresses are translated into domain names. For instance, Brunel University's IP address number is '134.83.2.0/23'.<sup>884</sup> When a user requests 'brunel.ac.uk', that request has to be translated into the corresponding IP address for the devices to connect. DNS enables this process to be concluded. Lindsay explains that in DNS blocking, ISPs remove or modify their records, so that a request for a specific domain name fails to correspond to an IP address, and the ISPs system can either return no IP address or redirect customers to another site, informing them that access has been blocked.<sup>885</sup>

The advantage of using DNS blocking over other blocking methods is that it is privacy friendly and less expensive to implement, because there is not a complicated filter that intercepts all Internet traffic.<sup>886</sup> However, DNS blocking may result in blocking even legitimate content that happens to reside in the same server using the same domain name.<sup>887</sup> In fact, DNS blocking targets the uppermost level of the infringing domain.<sup>888</sup> In comparison with IP

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<sup>882</sup> *Cartier International AG & Ors v British Sky Broadcasting Ltd & Ors* [2016] EWCA Civ 658 [25].

<sup>883</sup> A Roy and A Marsoof, 'Blocking Injunctions and Collateral Damage' (2017) 39(7) EIPR 74.

<sup>884</sup> IPInfo Information for Brunel University London IP address <<https://ipinfo.io/AS786/134.83.0.0/16-134.83.2.0/23>> last accessed on 8 April 2023.

<sup>885</sup> D Lindsay, 'Website Blocking Injunctions to Prevent Copyright Infringement: Proportionality and Effectiveness' (2017) 40 U New S Wales LJ 1507, 1509.

<sup>886</sup> M Perel, 'Digital Remedies' (2020) 35 Berkeley Tech LJ 1, 27.

<sup>887</sup> *ibid*, 28.

<sup>888</sup> Ofcom, "'Site Blocking' to Reduce Online Copyright Infringement: A Review of Sections 17 and 18 of the Digital Economy Act' (May 2011) 34 <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/78095/Ofco](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78095/Ofco)

blocking, which will be considered in the following section, it is more accurate since it is easier to update the lists with domain names, but it is less effective because it is easy to bypass DNS blocking.<sup>889</sup>

Among the selected jurisdictions, British Telecommunications (BT) launched in 2012 a system called Nominum, which involved DNS address blocking, and Sky introduced in 2013 the Sky Shield service implementing DNS blocking.<sup>890</sup> Similarly, German ISPs, including Vodafone Deutschland, have blocked access to a popular piracy website after a complaint from GEMA, a collecting society.<sup>891</sup> DNS blocking was also granted more recently in the *Bundesgerichtshof (BGH) Dead Island* case.<sup>892</sup> In the French cases of *Association des Producteurs de Cinéma (APC) and others v Auchan Telecom and others*,<sup>893</sup> *Federation National des Distributeurs and others v SA Orange and others*,<sup>894</sup> and *SAS Elsevier and others v SA Orange and others*,<sup>895</sup> the Paris Tribunal issued a blocking injunction against a French ISP requiring a website containing infringing copyright material to be blocked using DNS blocking. DNS blocking has been widely used by the Greek Commission for the notification of online copyright and related rights infringement, which is the newly founded administrative authority, responsible for conducting out-of-court proceedings.<sup>896</sup>

In the context of targeting infringing LP videos hosted, for example, by YouTube or Twitch.tv, DNS blocking is not an effective blocking method because YouTube and Twitch.tv are not infringing piracy sites per se, nor does most of the content they host fall into this category. The fact that only several videos hosted by them are potentially infringing does not justify the deployment of DNS blocking.

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[m Site-Blocking- report with redactions vs2.pdf](#)> last accessed on 4 February 2022. In the domain hierarchy, the top-level domains are represented by extensions such as '.com', '.eu.edu'.

<sup>889</sup> *ibid.*

<sup>890</sup> *Cartier International AG & Ors v British Sky Broadcasting Ltd & Ors* [2014] EWHC 3354 (Ch) [41]–[43].

<sup>891</sup> *Sueddeutsche Zeitung*, 'Netzsperrern unterscheiden sich von Upload-Filtern', (5 April 2019) <<https://www.sueddeutsche.de/digital/gema-vodafone-files-sharing-sperre-telekom-tauschboerse-1.4396610-2>> last accessed on 4 February 2022.

<sup>892</sup> German Federal Court of Justice (BGH) I ZR 64/17, 26 July 2018.

<sup>893</sup> Paris Tribunal de Grande Instance, *Association des Producteurs de Cinéma (APC) and others v Auchan Telecom and others*, Case No 11/60013 (28 November 2013).

<sup>894</sup> Paris Tribunal de Grande Instance, *Federation National des Distributeurs et autres v SA Orange et autres*, Case No 18/03028 (25 May 2018).

<sup>895</sup> Paris Tribunal de Grande Instance, *SAS Elsevier et autres v SA Orange et autres*, Case No 18/14194 (7 March 2019).

<sup>896</sup> Greek Copyright Act 2121/1993, art 66E; Commission for the notification of online copyright and related rights infringement, Decision No 17/2020, 16/2020, 15/2020, 11/2019, 9/2019, 7/2019, 5/2019, 3/2018.

### 5.1.2 Internet Protocol (IP) Blocking

IP blocking aims to block all traffic to the IP address associated with the target website. Practically, this means that attempts to connect to a server with that IP address will be interrupted. Perel argues that, despite being a simple method, IP blocking lacks accuracy and efficiency.<sup>897</sup>

As far as accuracy is concerned, one should not disregard the ‘over-blocking’ of legitimate content.<sup>898</sup> Legitimate content and illegitimate content may share the same IP address. By employing IP blocking, this could result in blocking legitimate content, too. The balance between copyright protection and free speech would then weigh in favour of the former, leading to ‘over-enforcement’ of copyright.<sup>899</sup>

In terms of efficiency, the IP blocking method is doubtful. IP blocking is implemented by devices located between users and websites. Therefore, users who use the services of an Internet provider that has not implemented a blocking device can bypass the blocking. The same result will occur when users use technology such as a virtual private network (VPN), which ‘conceals’ the true destination of their traffic.<sup>900</sup> Apart from the users, website owners have tools to circumvent IP blocking by using content delivery networks (CDNs), which constantly change the IP address of infringing content.<sup>901</sup>

The technical method of IP address blocking was adopted by national courts in the selected jurisdictions. More specifically, the courts ordered IP address blocking in the UK cases of *Twentieth Century Fox Film Corp & Ors v British Telecommunications Plc*<sup>902</sup> and *Dramatico Entertainment Ltd v British Sky Broadcasting Ltd*,<sup>903</sup> in the Greek case of the Athens court of first instance no 4658/2012,<sup>904</sup> and in the German cases I ZR 3/14 and I ZR 174/14.<sup>905</sup>

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<sup>897</sup> M Perel, ‘Digital Remedies’ (2020) 35 Berkeley Tech LJ 1, 24.

<sup>898</sup> L Feiler, ‘Website Blocking Injunctions under EU and US Copyright Law—Slow Death of the Global Internet or Emergence of the Rule of National Copyright Law?’ (2012) Stanford–Vienna Transatlantic Technology Law Forum Working Papers No 13, 24 <[https://law.stanford.edu/wp-content/uploads/sites/default/files/publication/203758/doc/slpublic/feiler\\_wp13.pdf](https://law.stanford.edu/wp-content/uploads/sites/default/files/publication/203758/doc/slpublic/feiler_wp13.pdf)> last accessed on 8 April 2023.

<sup>899</sup> Perel (n 897) 24.

<sup>900</sup> *ibid* 25.

<sup>901</sup> *ibid*.

<sup>902</sup> *Twentieth Century Fox Film Corp & Ors v British Telecommunications Plc* [2011] EWHC 1981 (Ch) [12].

<sup>903</sup> *Dramatico Entertainment Ltd v British Sky Broadcasting Ltd (No 2)* [2012] EWHC 1152 (Ch) [13].

<sup>904</sup> Athens Court of First Instance, Case 4658/2012.

<sup>905</sup> OLG Hamburg, Case No I ZR 3/14, 5 U 68/10 and OLG Cologne, Case No I ZR 174/14, 6 U 192/11.

The UK case of *Cartier v Sky* considered the issue of shared IP addresses and the impact a blocking injunction could have on legitimate content.<sup>906</sup> To address this issue, Arnold J considered three scenarios: in the first scenario, the IP address is not shared among different websites, thus IP address blocking would not have an impact on lawful users; in the second scenario, the IP address is shared by websites that engage in unlawful activities and therefore IP address blocking would be an appropriate measure; the third and last scenario sees an IP address shared by lawful and unlawful websites, which means that the most suitable measure would be DNS blocking rather than IP address blocking.

Whereas the first scenario does not have any concerning aspects, the second and third scenarios are more challenging and thus require more assessment. In the second scenario the Court referred to ‘unlawful’ activities rather than ‘infringing activities’. The selection of the words was insightful, because the word ‘unlawful’ covers a wide range of activities, such as child pornography. According to Roy and Marsoof, the reach of the injunction would be broader than what was anticipated by the EU legislation, resulting in the blocking of unlawful websites in addition to intellectual property infringing websites.<sup>907</sup> Although in cases of child pornography the Court would not hesitate to order IP blocking, one should not disregard cases where it is challenging to draw a line between what is lawful and what is not. In this situation, it is the applicant who has the burden to determine and certify the unlawfulness and certify that a notice has been sent to the website notifying them about the order and providing them with an opportunity to defend themselves.<sup>908</sup> The third scenario comprises an IP address shared by lawful and unlawful websites. Although DNS blocking is a more suitable method of blocking, one should not disregard that this technique has an inherent limitation of being easily circumvented.<sup>909</sup>

Similar to DNS blocking, IP address blocking would not be an effective blocking method for LP videos. LP videos are hosted on lawful websites (e.g., YouTube and Twitch.tv), which mostly accommodate lawful videos. Courts are not aware if an IP address is shared and, if they are, whether it is shared between lawful and unlawful websites. Regarding the three possible scenarios discussed above and the challenges associated with IP address blocking and DNS blocking, the next step is to assess the third blocking technique: URL blocking.

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<sup>906</sup> *Cartier v Sky* [2014] EWHC 3354 (Ch); [2015] 1 All ER 949 [256].

<sup>907</sup> A Roy and A Marsoof, ‘Blocking Injunctions and Collateral Damage’ (2017) 39(7) EIPR 74.

<sup>908</sup> *ibid.*

<sup>909</sup> J Songe-Moller & OK Foss, ‘File Sharing, Streaming and The Pirate Bay: Nordic Perspectives on Website Blocking’ (2016) 22(2) CTLR 37, 41.

### 5.1.3 Uniform Resource Locator (URL) Site Blocking

The URL is a global address of specific documents and resources on the World Wide Web.<sup>910</sup> It includes a domain name and the location of the specific resource. When users request a URL, a comparison takes place between the requested URL with those in the blacklist held by the proxy server.<sup>911</sup> URL blocking can be implemented by proxies, firewalls, and routers that block the connection to the web server requested by the user or redirect the traffic to another website.<sup>912</sup>

URL blocking is more effective as a technique compared to IP and DNS blocking, because it targets a precise location.<sup>913</sup> The following scenario will provide more clarity. Assume that an infringing LP video is located on a distinct page of website C. If the ISPs adopted IP blocking, this would block access to all websites that share the same IP address (A, B, C). Alternatively, if ISPs adopted DNS blocking and targeted the main domain, websites sharing the same main domain would be blocked (B and C). However, by employing URL blocking, ISPs would block the specific part of the website (e.g., <http://sub-domain-C.main-domain.com/infringing.html>), leaving all other websites intact.<sup>914</sup>

However, URL blocking raises concerns. First, this method may suffer from ‘false positives and false negatives’, as it may block legitimate content that is located on the blocked web page, such as hyperlinks embedded on the blocked web page and links to legitimate content.<sup>915</sup> Second, URL blocking resides under the ‘shadow of circumvention’. While circumventing an IP address or a DNS would require website operators to move to a different host or change the domain name, which would incur additional costs, URL circumvention could be achieved by merely changing a file’s name.<sup>916</sup>

Given the convenience of a URL circumvention, national courts have not granted URL-based blocking injunctions alone. As will be revealed in the following paragraphs, URL

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<sup>910</sup> D Lindsay, ‘Website Blocking Injunctions to Prevent Copyright Infringement: Proportionality and Effectiveness’ (2017) 40 U New S Wales LJ 1507, 1507.

<sup>911</sup> *ibid.*

<sup>912</sup> M Perel, ‘Digital Remedies’ (2020) 35 Berkeley Tech LJ 1, 26.

<sup>913</sup> C Geiger and E Izyumenko, ‘The Role of Human Rights In Copyright Enforcement Online: Elaborating A Legal Framework For Website Blocking’ (2016) 32(1) Am U Int’l L Rev 43, 66. As they pointed out, this technique suffers from high costs and complexities in its implementation.

<sup>914</sup> A Roy and A Marsoof, ‘Blocking Injunctions and Collateral Damage’ (2017) 39(7) EIPR 74, 78.

<sup>915</sup> Perel (n 912) 26.

<sup>916</sup> *ibid.* See also Roy and Marsoof (n 914) 78.

blocking is more effective when it is combined with another blocking measure, for instance DNS or IP address blocking.

#### 5.1.4 Hybrid Systems

The hybrid system deploys a combination of the above-mentioned blocking systems and often implements a two-phase process. For example, in stage one ISPs could use IP address blocking and in stage two they could involve URL blocking.<sup>917</sup> The hybrid system has the potential to improve the effectiveness of the blocking because it will make circumvention more difficult to achieve.<sup>918</sup> BT has developed a hybrid method called ‘Cleanfeed’, which employs a two-step process: IP address blocking and URL blocking in order to filter specific Internet traffic.<sup>919</sup>

In order to consider whether blocking injunctions are effective for tackling online copyright infringement, first it is necessary to interpret the term ‘effectiveness’. In *UPC Telekabel*, Advocate General Cruz Villalón provided an insightful assessment of efficacy based on several factors, including the costs associated with the measure, the circumvention, and the complexities and duration of the measure.<sup>920</sup> In the same case, the CJEU also emphasised the importance for blocking injunctions to be ‘strictly targeted’ in the sense that the techniques deployed by the ISPs should terminate the copyright infringement but without thereby affecting Internet users who are using the services to lawfully access information.<sup>921</sup>

The blocking techniques discussed in this chapter have the potential to tackle copyright infringement but present some serious disadvantages. Among them is the possibility of circumvention, which leads to discussion of whether blocking injunctions are indeed effective. However, despite the possibility of circumvention, the relevant question should not be whether a block can be circumvented, but if it will be circumvented.<sup>922</sup> A study conducted by Saunders

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<sup>917</sup> D Lindsay, ‘Website Blocking Injunctions to Prevent Copyright Infringement: Proportionality and Effectiveness’ (2017) 40 U New S Wales LJ 1507, 1510.

<sup>918</sup> Ofcom, ‘“Site Blocking to Reduce Online Copyright Infringement: A Review of Sections 17 and 18 of the Digital Economy Act’ (May 2011) <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/78095/Ofcom\\_Site-Blocking-report\\_with\\_redactions\\_vs2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78095/Ofcom_Site-Blocking-report_with_redactions_vs2.pdf)> last accessed on 4 February 2022.

<sup>919</sup> *Twentieth Century Fox and others v British Telecommunications plc* [2011] EWHC 1981 (Ch), para 73.

<sup>920</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541, Opinion of AG Cruz Villalón.

<sup>921</sup> *ibid*, para 56. The issue of over-blocking was also discussed in Case C-484/14 *Tobias Mc Fadden v Sony Music Entertainment Germany GmbH* [2016] ECDR 26, [2017] Bus LR 430, para 93.

<sup>922</sup> L Feiler, ‘Website Blocking Injunctions under EU and US Copyright Law—Slow Death of the Global Internet or Emergence of the Rule of National Copyright Law?’ (2012) Stanford – Vienna Transatlantic Technology Law Forum Working Papers No 13, 10–11 <<https://law.stanford.edu/wp->

showed that over the course of 2013–2015 the usage of the sites that have been blocked has decreased in the UK with a total reduction of 74.8%, while global usage has decreased by 33.5%.<sup>923</sup>

Apart from the UK, the hybrid method has been widely used by national courts outside the selected jurisdictions. For instance, the Swedish courts have issued blocking injunctions that deploy DNS and URL blocking,<sup>924</sup> while in the Netherlands the courts have granted DNS and IP address blocking.<sup>925</sup>

## 5.2 Blocking Injunctions in the Selected Jurisdictions

### 5.2.1 Germany

Among the EU Member States, Germany has had to deal with controversial judgements over the years. For many years the German courts did not grant blocking injunctions against ISPs. The German Federal Court of Justice (*Bundesgerichtshof*) decided in two cases (I ZR 3/14 and I ZR 174/14) that, in order to grant blocking injunctions against ISPs, a variety of requirements should be fulfilled, including the prior best efforts of the rightholder to start the proceeding against the operator of the website, because a hosting provider is ‘closer’ to the infringement than an Internet access provider.<sup>926</sup> An additional requirement for the rightholders was to consult and hire a private investigator or involve the criminal prosecution authorities as a first step.<sup>927</sup>

It is worth mentioning that the first blocking injunction for copyright infringement was granted in 2018.<sup>928</sup> The court granted a blocking injunction against a German access provider

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[content/uploads/sites/default/files/publication/203758/doc/slspublic/feiler\\_wp13.pdf](content/uploads/sites/default/files/publication/203758/doc/slspublic/feiler_wp13.pdf)> last accessed on 8 April 2023.

<sup>923</sup> INCORPO, ‘Site Blocking Efficacy Study United Kingdom’ (2015), 4 <<https://www.incoproip.com/wp-content/uploads/2020/02/Site-blocking-efficacy-study-United-Kingdom.pdf>> last accessed on 8 April 2023.

<sup>924</sup> Svea Court of Appeal, *Universal Music Aktiebolag and others v B2 Bredband*, 13 February 2017 and Svea Court of Appeal, *Telia Sverige AB and others v Aktiebolaget Svensk Filmindustri and others* No PMO 9945-18, 1 February 2019. A summary of the judgements is provided in EUIPO, ‘IPR Enforcement Case-Law Collection’ (August 2019) 68, 70 <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2019\\_IPR\\_Enforcement\\_Case\\_Law\\_Collection/2019\\_IPR\\_Enforcement\\_Case\\_Law\\_Collection\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2019_IPR_Enforcement_Case_Law_Collection/2019_IPR_Enforcement_Case_Law_Collection_en.pdf)> last accessed on 8 April 2023.

<sup>925</sup> District Court of Midden, No C/16/448423/KG ZA 17-382, 12 January 2018. A summary of the judgements is provided in EUIPO (n 924) 59.

<sup>926</sup> OLG Hamburg, Case No I ZR 3/14, 5 U 68/10 and OLG Cologne, Case No I ZR 174/14, 6 U 192/11.

<sup>927</sup> Federal Court of Justice (Bundesgerichtshof) on the liability of access providers for copyright infringement by third parties, No 194/2015 <<http://juris.bundesgerichtshof.de/cgi-bin/rechtsprechung/document.py?Gericht=bgh&Art=pm&Datum=2015&Sort=3&nr=72928&pos=0&anz=195>> last accessed on 4 February 2022.

<sup>928</sup> Regional Court of Munich, Case 7 O 17752/17 BeckRS 2018, 2857.

in order to block access to the illegal streaming service ‘kinox.to’.<sup>929</sup> Although German courts have been hesitant to grant blocking injunctions in the past or have imposed additional requirements before granting an injunction, one could argue that the German courts are now aligned with the EU approach on blocking injunctions. One should not disregard that the first blocking injunction case came in 2018, a year after the UK case of *FAPL v BT*, which also dealt with a blocking injunction targeting at blocking access to streaming websites.<sup>930</sup>

### 5.2.2 France

Article 8(3) of the InfoSoc Directive was implemented into the French law in Article L. 336-2 of the French Intellectual Property Code, which allows rights holders to seek a Court order to have intermediaries implement measures to cease or prevent online copyright infringement. Blocking injunctions for online copyright infringement have been granted in numerous cases in France.<sup>931</sup> The French courts require hosting service providers and Internet access providers to contribute to the fight against online copyright infringement, since they are in the ‘best position to put an end to such infringement’.<sup>932</sup> While in the past courts required the cost of implementation of the blocking measure to be borne by the rightholder, recent case law of the French Supreme Court<sup>933</sup> orders Internet intermediaries to pay for blocking measures against illegal streaming websites.

### 5.2.3 Greece

The Greek Copyright Act 1993 has implemented Article 8(3) of the InfoSoc Directive in its Article 64A,<sup>934</sup> which provides that rightholders are able to seek injunctions against intermediaries, whose services are used by a third party to infringe copyright or related rights. Despite the importance of Article 64A, Greek courts have only produced limited case law.<sup>935</sup>

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<sup>929</sup> B Lotz and L Reulecke, ‘Advancing Content Protection in Germany: Munich Courts Pave Way for Website Blockings’ (2018) 40(11) EIPR 745.

<sup>930</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch).

<sup>931</sup> *Association des Producteurs de Cinéma (APC) and others v Auchan Telecom and others*, Case No 11/60013 (28 November 2013). In this case, the Paris Tribunal de Grande Instance issued a blocking injunction against a French ISP, requiring websites containing infringing copyright material to be blocked using DNS blocking.

<sup>932</sup> M Pavis, ‘France: Costs of Blocking Injunctions to be Borne by Internet Intermediaries’ (*The IPKat*, 01 August 2017) <<https://ipkitten.blogspot.com/2017/08/france-costs-of-blocking-injunctions-to.html>> last accessed on 4 February 2022.

<sup>933</sup> Cour Cass, Civ 1, 6 July 2017, *SFR and others v Association of Cinema Producers and others*, No 16-17.217, 16-18.298, 16-18.348, 16-18.595, ECLI:FR:CCASS:2017:C100909 and Tribunal De Grande Instance de Paris (Paris Tribunal), *Federation Nationale des Distributeurs de Films and other v SA Orange and others* No 18/03028, 25 May 2018.

<sup>934</sup> Greek Copyright Act 2121/1993, art 64A.

<sup>935</sup> Athens Court of First Instance, Case 4658/2012; Athens Court of First Instance, Case 13478/2014.



In addition to the judicial path to tackle online copyright infringement, Greece has implemented in its national law an out-of-court Notice and Takedown mechanism, through a national administrative authority (Commission) for the notification of online copyright and related rights infringement.<sup>936</sup> The new mechanism is independent from the judicial protections of rights, which means that the decision of the Commission does not prevent parties from initiating judicial proceedings. The Commission issued the first blocking order in 2018,<sup>937</sup> obliging all Internet access providers to block 38 infringing websites, including <piratebay.org>. However, according to the Greek Copyright Act, the Commission will not deal with cases of infringement committed by end users by means of downloading or streaming or peer-to-peer exchange of files, or by means of providing data storing services through cloud computing.<sup>938</sup> Thus, video game developers as rightholders would not be able to benefit from this procedure to target end users if the copyright infringement is committed via streaming.

#### 5.2.4 The UK

The UK courts grant blocking injunctions in cases of online copyright infringement. The legislative basis for requesting a blocking injunction is section 97A of the CDPA 1988, which states that ‘the High Court of England and Wales shall have the power to grant an injunction against a service provider, where that service provider has actual knowledge of another person using its service to infringe copyright’.<sup>939</sup>

There is a long list of cases where the UK courts have granted blocking injunctions to tackle copyright infringements. Among those cases, *Twentieth Century Fox v BT* presents particular significance, as it was the first case where a blocking injunction was granted under section 97A of the CDPA 1988.<sup>940</sup> In this case, Twentieth Century Fox filed an action against the ISP BT and sought an injunction obligating BT to block access to an infringing website. Subsequent cases illustrate the development of the judicial approach to website blocking. While *Twentieth Century Fox v BT* set basic principles and jurisdictional matters, the case *Dramatico Entertainment Ltd v British Sky Broadcasting Ltd (No2)*<sup>941</sup> signalled the extension to IP address blocking, given that the IP address was not shared.<sup>942</sup> Among the latest development in the

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<sup>936</sup> Greek Copyright Act 2121/1993, art 66E.

<sup>937</sup> Commission for the Notification of Online Copyright and Related Rights Infringement, Decision No 3/2018, <[https://www.opi.gr/images/epitropi/apofaseis/edppi\\_3\\_2018.pdf](https://www.opi.gr/images/epitropi/apofaseis/edppi_3_2018.pdf)> last accessed on 11 October 2020.

<sup>938</sup> Greek Copyright Act (n 936), art 66E.

<sup>939</sup> Copyright, Design and Patents Act 1988, s 97A.

<sup>940</sup> *Twentieth Century Fox and others v British Telecom Plc* [2011] EWHC 1981 (Ch).

<sup>941</sup> *Dramatico Entertainment Ltd v British Sky Broadcasting Ltd* [2012] EWHC 268 (Ch).

<sup>942</sup> R Arnold, ‘Website-Blocking Injunctions: The Question of Legislative Basis’ (2015) 37 EIPR 623.

court's approach is the case *FAPL v BT*,<sup>943</sup> where the court order aimed at an immediate and responsive blocking of live streaming transmissions of the Premier League's copyright content.

The UK courts have also dealt with the issue of the implementation of costs allocation. The *Cartier* case shed light on this matter.<sup>944</sup> In 2016 the Court of Appeal held that the costs of implementation of the injunction should be borne by the intermediary rather than the rightholder, because intermediaries made profits from the services that the operators of the target websites used to infringe the intellectual property rights of the rightholders, and the costs of implementing the order could therefore be regarded as a cost of carrying on their business.<sup>945</sup> Although the Court of Appeal perceived the liability for the costs of compliance as a *quid pro quo* for the immunities the ISPs enjoy, the Supreme Court disagreed.<sup>946</sup> According to the Court, there is no legal basis for requiring an 'innocent party' to remedy an injustice if he or she has no legal responsibility and is acting under the compulsion of an order of the court.<sup>947</sup>

Based on the analysis above, it is evident that the selected jurisdictions have granted blocking injunctions for online copyright infringement.<sup>948</sup> However, each country had its own starting point for the implementation of this method. Characteristic examples are the UK, Greece, and France where blocking injunctions have been granted since 2011, 2012, and 2013, respectively. On the contrary, Germany is among the countries that have recently started to issue blocking injunctions. Apart from the difference in time of implementation, another difference can be found in the alternative ways of copyright enforcement. In Greece, for instance, apart from the traditional judicial path, there is also the out-of-court notice and take down legal mechanism, through an administrative authority. This initiative will be helpful for the rightholders, bearing in mind the caseload and slow disposal of cases in the Greek courts.

### 5.2.5 Other EU Member States

Apart from the selected jurisdictions, emphasis should also be given to other European national courts that have ordered website-blocking injunctions. Belgium is one of the jurisdictions where national courts have granted blocking injunctions with a specific technical method. For example, in the case of *VZW Belgian AntiPiracy Federation v NV Telenet*, the

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<sup>943</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch) [24].

<sup>944</sup> *Cartier International AG & Ors v British Sky Broadcasting Ltd & Ors* [2016] EWCA Civ 658.

<sup>945</sup> *ibid* [214].

<sup>946</sup> *Cartier International AG & Ors v British Telecommunications Plc & Anor* [2018] UKSC 28 [29].

<sup>947</sup> *ibid* [32].

<sup>948</sup> There is no substantive case law concerning copyright infringement in the video game sector. The *Nintendo v Sky* case is one of the first cases to deal with the circumvention of technological protection measures.

Court of Appeal issued a DNS blocking order.<sup>949</sup> The method of DNS blocking was also ordered by the Danish courts requiring ISPs to block access to <www.allofmymp3.com><sup>950</sup> and <www.thepiratebay.org><sup>951</sup> and Spanish courts requiring ISPs to block access to the website <goear.com>.<sup>952</sup>

In Finland, the Helsinki Court of Appeals ordered the ISP Elisa Oyj to ‘discontinue’ making available to the public material that infringed copyright through DNS and IP address blocking.<sup>953</sup> Ordering IP blocking as an additional ‘layer of protection’ the Finnish court went a step further than the Belgian, Danish, and Spanish courts.

The national courts in Sweden ordered the first blocking injunction in 2017. In *Universal Music AB v B2 Bredband AB*, the court ordered B2 to block access to The Pirate Bay and Swefilmer by deploying URL and DNS blocking for a period of three years.<sup>954</sup> The hybrid method of DNS and IP address blocking was also ordered by the District Court of Midden – Nederland compelling the Dutch ISPs to block access to The Pirate Bay website.<sup>955</sup>

DNS blocking remains a controversial blocking method throughout the EU. For instance, in the case of *UPC Telekabel*, the Higher Regional Court in Vienna reversed the order of the court of first instance regarding the technical measure of DNS blocking and IP blocking and held that the ISP has to be free to decide the technical means to be used.<sup>956</sup> An analysis of the issue of who is in a better position to decide the specific technical means will be provided below in subsection 5.4. A collection of case law from the jurisdictions discussed above, outlining the technical method of blocking that had been deployed, is provided in Appendix 1.

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<sup>949</sup> *Anvers Court of Appeal, VZW Belgian AntiPiracy Federation v NV Telenet*, 26 September 2011 No 3399 Rep. 2011/8314.

<sup>950</sup> *IFPI Denmark v Tele 2 A/S*, Copenhagen City Court, 25 October 2006, No F1-15124/2006.

<sup>951</sup> *IFPI Denmark v DMT2 A/S*, Frederiksberg Court, 5 February 2008, No FS 14324/2007.

<sup>952</sup> Central Contentious-Administrative Court, No 1/2015 20 April 2016. A summary of the judgements is provided in EUIPO, ‘IPR Enforcement Case-Law Collection’ (August 2019) 65 <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2019\\_IPR\\_Enforcement\\_Case\\_Law\\_Collection/2019\\_IPR\\_Enforcement\\_Case\\_Law\\_Collection\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2019_IPR_Enforcement_Case_Law_Collection/2019_IPR_Enforcement_Case_Law_Collection_en.pdf)> last accessed on 8 April 2023.

<sup>953</sup> *IFPI Finland ry v Elisa Oyj*, 26 May 2011, case number 11/41552.

<sup>954</sup> Svea Court of Appeal, *Universal Music Aktiebolag and others v B2 Bredband*, 13 February 2017.

<sup>955</sup> District Court of Midden – Nederland, No C/16/448423/KG ZA 17-382, 12 January 2018.

<sup>956</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541, paras 12 and 14.

### 5.3 The Effectiveness of Blocking Injunctions to Tackle Infringing LP Videos and Livestreams of Video Games

After gaining a better understanding regarding the legal framework, case law, and techniques of blocking injunctions to tackle online copyright infringement, this section considers whether blocking injunctions against ISPs are effective in respect of online copyright infringement conducted via LP videos and live streaming videos of video games.

It must be noted that the majority of blocking injunction cases target entire websites that contain infringing content. The situation with LP videos would pose an additional burden to litigation of this nature. Websites, such as YouTube and Twitch.tv, that host video game review videos and LP videos (with and without commentary) do not contain infringing materials in their entirety. These websites accommodate content of all kinds. Video game content (via LP videos or live streaming) is only a part of YouTube and the largest part of Twitch's content.<sup>957</sup> For the blocking injunctions it would suffice that a substantial proportion of the website is infringing, despite containing parts of non-infringing content.<sup>958</sup>

In the UK, the High Court justified the blocking of the website *Newzbin2*, even though there was the potential of preventing non-infringing uses.<sup>959</sup> On the same wavelength, the German BGH held that it is 'necessary to look at the overall ratio of lawful and unlawful content and at whether the former constitutes a non-significant amount in comparison with the latter'.<sup>960</sup> Contrary to these decisions, the District Court of Athens held that the blocking was disproportionate with regard to users' freedom of information, as some of the content of the websites in question could be legal.<sup>961</sup> The Court of Athens' 13475/2014 decision was in contrast with its earlier decision in 2012<sup>962</sup> and was heavily criticised;<sup>963</sup> the Court decided that

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<sup>957</sup> *Cengiz and Others v Turkey* App Nos 48226/10 and 14027/11 (ECtHR, 1 December 2015). The Court found a violation of the right to information when a blocking injunction targeted YouTube, on the basis that only ten video files contained infringing materials.

<sup>958</sup> C Geiger and E Izyumenko, 'The Role of Human Rights In Copyright Enforcement Online: Elaborating A Legal Framework For Website Blocking' (2016) 32(1) *Am U Int'l L Rev* 43, 61.

<sup>959</sup> *Twentieth Century Fox Film Corp & Ors v British Telecommunications Plc* [2011] EWHC 1981 (Ch) [186].

<sup>960</sup> German Federal Court of Justice (BGH) I ZR 3/14, 26 November 2015 and German Federal Court of Justice I ZR 174/14, 26 November 2015.

<sup>961</sup> Athens Court of First Instance, Case No 13478/2014.

<sup>962</sup> Athens Court of First Instance, Case No 4658/2012

<sup>963</sup> Y Paramythiotis, 'Website Blocking in Greece: How Does It Work There?' (*The IPKat*, 28 January 2015) <<https://ipkitten.blogspot.com/2015/01/website-blocking-in-greece-how-does-it.html>> last accessed on 12 November 2022; T Synodinou, 'Draft Law Provision on the Administrative Removal and Blocking of Online Copyright Infringing Content. Will 2016 Bring More "Happiness" to Greek Copyright Law?' (*Kluwer Copyright Blog*, 8 January 2016) <<http://copyrightblog.kluweriplaw.com/2016/01/08/draft-law-provision-on-the-administrative-removal-and-blocking-of-online-copyright-infringing-content-will-2016-bring-more-happiness-to-greek-copyright-law/>> last accessed on 12 November 2022.

it was both ineffective and disproportionate to block access to a website illegally offering copyright-protected content, as it is easy for infringers to host the content through another IP address, and some of the webpages of the website could contain legal content. The judgement stated that this would be either because the works lack originality, or have fallen into the public domain, or because their communication to the public was authorised by rightholders. In the Court's view, IP or DNS blocking would deprive Internet users of their right to access online information, thus violating Article 5A of the Greek Constitution, which provides for the freedom to information. Paramythiotis highlights, first, that the above was the CJEU's reasoning in *Scarlet* – though the Athens Court's extension of the CJEU's decision was problematic, as the former seemed to equate the implications of content filtering to IP/DNS filtering – and, second, that no reference was made to *Svensson*, but to 'pre-*Svensson* outdated theory'.<sup>964</sup> Synodinou notes that the Court referred to the principle of neutrality of the Internet, which is not part of the Greek legal system.<sup>965</sup> With the exception of the 13478/2014 decision, which seemed to be controversial, one could argue that national courts engage in a balancing exercise to assess the ratio of lawful and unlawful content, taking into account the fundamental rights.

The CJEU and the ECtHR have provided some guidance on balancing the fundamental rights in cases of blocking injunctions through the cases of *UPC Telekabel*<sup>966</sup> and *Akdeniz v Turkey*,<sup>967</sup> respectively. In the first case, the Court aimed to reconcile the copyright and related rights,<sup>968</sup> the ISP's freedom to conduct business,<sup>969</sup> and the freedom of information of Internet users.<sup>970</sup> <sup>971</sup> The right to freedom of expression,<sup>972</sup> which encompasses the right to impart information and the right of the public to receive it, has evolved over the years to accommodate

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<sup>964</sup> Y Paramythiotis, 'Website Blocking in Greece: How Does It Work There?' (*The IPKat*, 28 January 2015) <<https://ipkitten.blogspot.com/2015/01/website-blocking-in-greece-how-does-it.html>> last accessed on 12 November 2022.

<sup>965</sup> T Synodinou, 'Draft Law Provision on the Administrative Removal and Blocking of Online Copyright Infringing Content. Will 2016 Bring More "Happiness" to Greek Copyright Law?' (*Kluwer Copyright Blog*, 8 January 2016) <<http://copyrightblog.kluweriplaw.com/2016/01/08/draft-law-provision-on-the-administrative-removal-and-blocking-of-online-copyright-infringing-content-will-2016-bring-more-happiness-to-greek-copyright-law/>> last accessed on 12 November 2022.

<sup>966</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541.

<sup>967</sup> *Akdeniz v Turkey* App No 25165/94 31 (ECtHR, 31 May 2005).

<sup>968</sup> Charter of Fundamental Rights of the European Union [2012] OJ C 326/391, art 17(2).

<sup>969</sup> *ibid*, Article 16.

<sup>970</sup> *ibid*, Article 11.

<sup>971</sup> Case C-314/12 *UPC Telekabel* (n 966), para 47.

<sup>972</sup> Protected by Article 11 of the Charter of Fundamental Rights of the European Union [2012] OJ C 326/391 and by Article 10 of the Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as amended) (ECHR), as amended by Protocols No 11 and No 14.

Internet access as part of freedom of speech, or the ‘right to Internet access’.<sup>973</sup> This expansion of the right is crucial, as each individual has the right to access the Internet as an integral part of the right of communication and expression.

In order to balance those conflicting rights, the Court held that, regarding the freedom of information, the blocking should be ‘strictly targeted’ at the infringing content and Internet users should be granted with the opportunity to defend their rights before the national court.<sup>974</sup> The ISPs’ right to conduct business is not violated either, insofar as they will decide upon which blocking technique to better adopt.<sup>975</sup> In the second case, the ECtHR dealt with the issue of the freedom of information of Internet users and held that the applicant and the other Internet users were only indirectly affected by the blocking.<sup>976</sup>

For the purposes of this research, emphasis is given primarily to the right of information, because review videos and playthrough videos with commentary serve as a public forum. Video games are the basis upon which viewers and streamers interact and participate in the expression of a streamer using a chat function. In addition, one should not disregard that streaming platforms and LP videos are highly appealing to young people, who perceive these platforms as political fora to discuss and debate. Young people rarely take part in traditional ways of democratic deliberation. Churchill and Xu argue that streaming platforms, Twitch in particular, have become ‘more than just an entertainment medium; it is the home of the largest gaming community history’.<sup>977</sup> Setting aside their entertainment mission, Taylor explains that streaming platforms provide viewers and gamers with a ‘civic space, political domain and site of critical work’.<sup>978</sup>

As discussed earlier in subsection 3.5.2, copyright should serve as an engine of free expression, instead of serving the purposes of blocking access to information to avoid unwelcome criticism.<sup>979</sup> It has been noted that video game streaming can be considered a form

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<sup>973</sup> N Lucchi, ‘Access to Network Services and Protection of Constitutional Rights: Recognising the Essential Role of Internet Access for the Freedom of Expression’ (2011) 19(3) *Cardozo J Int’l & Comp L* 645. See also *Ahmet Yildirim v Turkey* App No 3111/10 (ECtHR, 18 December 2012) para 31.

<sup>974</sup> *Ahmet Yildirim v Turkey* App No 3111/10 (ECtHR, 18 December 2012), paras 56–57.

<sup>975</sup> *ibid*, para 52.

<sup>976</sup> *Akdeniz v Turkey* App No 25165/94 31 (ECtHR, 31 May 2005), para 24

<sup>977</sup> B Churchill and W Xu, ‘The Modem Nation: A First Study on Twitch.TV Social Structure and Player/Game Relationships’ (IEEE International Conferences on Big Data and Cloud Computing (BDCloud), Social Computing and Networking (SocialCom), Sustainable Computing and Communications (SustainCom) 2016).

<sup>978</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 13.

<sup>979</sup> C Geiger and E Izyumenko, ‘Freedom of Expression as an External Limitation to Copyright Law in the EU: The Advocate General of the CJEU Shows the Way’ (2019) 41(3) *EIPR* 131; Austrian Supreme Court,

of protected speech, as it contributes to debates in the general interest (such as reporting sporting events).<sup>980</sup>

If a blocking injunction is granted, ISPs or the courts would have to decide upon the most effective blocking technique. The CJEU held in the case of *UPC Telekabel* that intermediaries would choose the suitable technical measure available to them.<sup>981</sup> Leaving the choice of the technical measure at the ISPs' discretion is – to a certain extent – justifiable because ISPs are placed in a better position to know and implement the most suitable measure. For instance, ISPs have knowledge of how many IP addresses are shared. However, assigning this task to ISPs would also create difficulties in striking a fair balance between conflicting rights: the copyright holder's right, the right to conduct business, and the right to freedom of information. Angelopoulos points out that the CJEU missed the opportunity to address the fact that 'without concrete instructions from the courts, an ISP has no real way of knowing what is and what is not "reasonable" in the eyes of the law'.<sup>982</sup>

Technical means that block access to an entire website should be less favourable because the potential infringing content would be only a part of the entire website. A more targeted technical measure, such as a URL blocking, would be more suitable. URL blocking is more effective as a technique compared to IP and DNS blocking, because it targets a precise location.<sup>983</sup> Taking Twitch.tv as an example, one could see that there are hundreds of on-demand videos, showing whole or parts of video game footage. For instance, the story-based video game *The Last of Us Part II* appears in more than 100 videos. If the rightholder, Naughty Dog, were to apply for blocking injunctions, the most suitable blocking would be URL blocking, where the ISPs would block access to the exact part of the website (for example twitch.tv/videos/123456789), leaving all other webpages intact.

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*Medienprofessor*, 12 June 2001, *GRUR Int* 341 (2002) (the use by the rightholders of their copyright 'with the sole objective of hindering any criticism towards their media campaign'); The Hague Court of Appeals, *Church of Scientology v XS4ALL*, 4 September 2003, 6 *AMI* 222 (2003) (unsuccessful attempts of the Church of Scientology to invoke copyright protection over its internal documents in order to prevent their publication on a website for the purposes of criticism).

<sup>980</sup> *Von Hannover v Germany (No 2)* App No 40660/08 (ECtHR, 7 February 2012), para 109; *Axel Springer AG v Germany* App No 39954/08 (ECtHR, 7 February 2012), para 90.

<sup>981</sup> Case C-314/12 *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH and Wega Filmproduktionsgesellschaft mbH* [2012] ECDR 12, [2014] Bus LR 541, paras 52 and 53.

<sup>982</sup> C Angelopoulos, 'Are Blocking Injunctions Against Isps Allowed in Europe? Copyright Enforcement in the Post-Telekabel EU Legal Landscape' (2014) *JIPLP* 9.

<sup>983</sup> C Geiger and E Izyumenko, 'The Role of Human Rights In Copyright Enforcement Online: Elaborating A Legal Framework For Website Blocking' (2016) 32(1) *Am U Int'l L Rev* 43, 66.

However, the effectiveness of URL blocking raises some concerns. First, it may block legitimate content that is located on the blocked web page, such as hyperlinks embedded on the blocked web page and links to legitimate content.<sup>984</sup> Second, URL blocking can be easily circumvented and, third, blocking injunctions are more pragmatic for the protection of trademarks, rather than copyright, because there are greater chances for user circumvention, aiming to access infringing material.<sup>985</sup> In the context of trademarks, users would not proceed to circumvention techniques in order to gain access to a blocked website offering counterfeit products.

Setting aside the limitation of blocking injunctions in terms of circumvention and balancing conflicting fundamental rights,<sup>986</sup> an additional challenge refers to the effectiveness of blocking injunctions against live streaming platforms. To date, ‘live’ blocking injunctions have only been granted in the UK (among the selected jurisdictions) targeting live stream content of sporting events.<sup>987</sup> In 2017, Arnold J made the first order on the application of the Football Association Premier League requiring ISPs to take measures to block or at least impede access by their customers to streaming servers that delivered infringing live stream footage of Premier League matches.<sup>988</sup> The ‘live’ blocking order had effect only at the time when live FAPL footage is being broadcast and for a short period of time (covering the Premier League season).<sup>989</sup> Later the same year, Arnold J made the first UEFA order for infringing live streams of UEFA football matches.<sup>990</sup> In both cases, rightholders were granted permission to apply for extending the operation of the order for the next season. In 2018, Matchroom Boxing obtained a blocking order against the six main ISPs in the UK, requiring them to block access to infringing live streams of professional boxing matches.<sup>991</sup> Although this decision is similar to

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<sup>984</sup> M Perel, ‘Digital Remedies’ (2020) 35 Berkeley Tech LJ 1, 26.

<sup>985</sup> A Marsoof, ‘The Blocking Injunction – A Critical Review of Its Implementation in the United Kingdom Within the Legal Framework of the European Union’ (2015) 46 IIC 632, 654.

<sup>986</sup> G Dore, ‘And They Lived Happily Ever After *UPC Telekabel*: A Copyright Fairy Tale or a Chance to Strike a Fair Balance’ (2015) 5 Queen Mary J Intell Prop 226.

<sup>987</sup> To date, the UK is a pioneer in live blocking injunctions. Their availability has not yet been tested in Germany or Greece. However, in France a discussion regarding live blocking has emerged in connection to the Draft Law on audio-visual communication in the digital age. See EUIPO, ‘Study on Dynamic Blocking Injunctions in the European Union’ (March 2021) 40 <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2021\\_Dynamic\\_Blocking\\_Injunctions/2021\\_Study\\_on\\_Dynamic\\_Blocking\\_Injunctions\\_in\\_the\\_European\\_Union\\_FullR\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Dynamic_Blocking_Injunctions/2021_Study_on_Dynamic_Blocking_Injunctions_in_the_European_Union_FullR_en.pdf)> last accessed on 8 April 2023.

<sup>988</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch).

<sup>989</sup> *ibid* [24] and [25].

<sup>990</sup> *Union Des Associations Européennes De Football v British Telecommunications Plc & Ors* [2017] EWHC 3414 (Ch).

<sup>991</sup> *Matchroom Boxing Ltd & Anor v British Telecommunications Plc & Ors* [2018] EWHC 2443 (Ch).



the earlier order granted by Arnold J, there are two main differences: the irregular timing of events necessitated an alternative form of monitoring and identifying infringing servers and the order was for two years with the events to be notified to the ISPs four weeks in advance.<sup>992</sup>

What is common in the three cases discussed above is that the professional association of the sporting events broadcasted the matches, which were subsequently ‘captured and retransmitted’ through live streaming platforms. In the context of video game streaming, though, the broadcast or communication is not originated from the rightholder, but from Internet users/gamers. In the case of FAPL, for example, the live blocking order was possible due to the following technological advances: FAPL used video monitoring technologies that permitted the identification of infringing streams and the ISPs’ blocking systems allowed them to block and unblock IP addresses during the course of the Premier League matches.<sup>993</sup> Therefore, it is hard to draw an analogy with this case, because video game live stream videos emanate from individual users. With the current technology, video game developers are not able to monitor if their video game footage is being streamed and thus apply for a live blocking order.

In addition, live video game streaming differs from any other sporting event streaming in terms of schedule. Official sporting events, such as the Premier League matches, are scheduled for a certain season, starting and ending at predetermined days and time. Live streaming of video game content starts and ends at the users’ discretion. Hence, ‘live’ blocking would not be an effective method for live streamed video game content.

#### 5.4 Determining the Appropriate Technical Measure: Current Approach and Recommendations

As shown above, among the selected jurisdictions, courts in Greece, France, and the UK have been issuing blocking injunctions with specific technical measures for over a decade, while German courts have recently considered granting blocking injunctions to order ISPs to block access to infringing websites. Based on the case law originating from the courts of the selected jurisdictions, it is clear that there is not a uniform approach in deciding the most appropriate technical method. In addition, the *UPC Telekabel* judgement entrusted the ISPs with the task of implementing the most suitable measure. This would also cause an

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<sup>992</sup> *Matchroom Boxing Ltd & Anor v British Telecommunications Plc & Ors* [2018] EWHC 2443 (Ch) [6] and [7].

<sup>993</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch) [24].

unharmonised implementation across the EU and the UK, because the determination of the appropriate measure would depend on the technical knowledge and resources available to ISPs in different jurisdictions.

Due to the lack of standard guidance at a Union level, Wang has suggested that it is of great importance for a framework of harmonised standards on website blocking to be established by the Commission in the EU.<sup>994</sup> In order to determine the role and the powers of the Commission to protect IP rights and Internet users, Wang draws an analogy to the General Data Protection Regulation.<sup>995</sup> Harmonisation at an EU level is of paramount importance in order to safeguard a standard approach in all Member States.

This moves the discussion to who should decide on the appropriate technical means: the courts or the ISPs. Courts will ensure the legality of the process and will take into account the proportionality when trying to strike a balance between the right of the copyright holders, the right to conduct a business, and the right of access to information. However, the judiciary lacks the technical knowledge to decide the proper blocking technique.

On the other end of the spectrum, ISPs are equipped with technical knowledge and resources to select and implement the most appropriate blocking measure. ISPs, however, cannot balance the legitimate interests of the involved parties. Hence, it would be beneficial if there were a combination of court protection and technical expertise.<sup>996</sup> Before the courts decide and order a specific blocking injunction, they should collaborate and consult with technical experts. A recent study on dynamic blocking injunctions conducted by the EU Intellectual Property Office (EUIPO) provided an analysis of the evidence required for blocking injunctions and concluded that there is no specific procedural rule that governs the admissibility of evidence.<sup>997</sup> Among the type of evidence that is required for the court to order a blocking injunction, the study listed documentary evidence, factual witness evidence, and/or expert evidence. The study reported

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<sup>994</sup> FF Wang, 'Site Blocking Orders in the EU: Justification and Feasibility' (14th Annual Intellectual Property Scholars Conference (IPSC), Boalt Hall School of Law, University of California, Berkeley, 2014) 12.

<sup>995</sup> *ibid.* See also Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation) (2016) OJ L 119/1, Recital 167.

<sup>996</sup> D Farmaki, 'The Effectiveness of Blocking Injunctions against ISPs in respect of Online Copyright Infringement in Europe: A Comparative Analysis from the UK, Greece and the Nordic Countries' (2021) 2 *Stockholm IP Law Review* 6, 16.

<sup>997</sup> EUIPO, 'Study on Dynamic Blocking Injunctions in the European Union' (March 2021) 47 <[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2021\\_Dynamic\\_Blocking\\_Injunction\\_s/2021\\_Study\\_on\\_Dynamic\\_Blocking\\_Injunctions\\_in\\_the\\_European\\_Union\\_FullR\\_en.pdf](https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Dynamic_Blocking_Injunction_s/2021_Study_on_Dynamic_Blocking_Injunctions_in_the_European_Union_FullR_en.pdf)> last accessed on 8 April 2023.

that Finland, among the studied Member States, accepted technical reports and expert testimony hearings as evidence in court proceedings.<sup>998</sup> On the other hand, French courts consider as evidence the number of monthly visits to the content, the type and number of works, and the number of protected works, as well as the methods available to access these sites; German courts require screenshots, testimonies, and affidavits; whereas Greek courts have considered evidence regarding the similarity of database, graphics, user interface, and indexing.<sup>999</sup> The UK courts consider expert evidence when they are asked to adjudicate on intellectual property law cases, such as the *Cartier* case,<sup>1000</sup> in which case the court examined Internet traffic data.

Cooperation between courts and ISPs can also be viewed in the ‘notice and block’ regime adopted in the UK to respond to potential circumvention techniques. According to this regime, in case of an IP or URL blocking circumvention, the ISPs are subsequently notified by rightholders about this amendment and update their system with the new IP or URL, so that the target website remains inaccessible.<sup>1001</sup>

EU Member States could benefit from the ‘notice and block’ regime. As a first step, rightholders should seek court protection in order to ensure that their interests have been taken into account and a fair balance has been achieved. Technical experts could support the court to decide and order the most suitable blocking method. In case of circumvention, rightholders should remain protected and not be required to initiate proceeding from the beginning. A subsequent notification to the ISP regarding the new ‘landscape’ would not only save time but would also be cost effective.

## 5.5 Jurisdictional Issues and Recommendations

The typical issue associated with online copyright infringement is the fact that in the digital era infringing websites may be located outside the jurisdiction of the court. Therefore, to determine whether a website is committing copyright infringement within a particular jurisdiction, courts have first to determine whether the said jurisdiction is being targeted by the

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<sup>998</sup> EUIPO, ‘Study on Dynamic Blocking Injunctions in the European Union’ (March 2021) 47 <[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2021\\_Dynamic\\_Blocking\\_Injunctions/2021\\_Study\\_on\\_Dynamic\\_Blocking\\_Injunctions\\_in\\_the\\_European\\_Union\\_FullR\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Dynamic_Blocking_Injunctions/2021_Study_on_Dynamic_Blocking_Injunctions_in_the_European_Union_FullR_en.pdf)> last accessed on 8 April 2023..

<sup>999</sup> *ibid*, 48.

<sup>1000</sup> *Cartier International AG & Ors v British Sky Broadcasting Ltd & Ors* [2014] EWHC 3354 (Ch) [10].

<sup>1001</sup> A Marsoof, ‘The Blocking Injunction – A Critical Review of Its Implementation in the United Kingdom Within the Legal Framework of the European Union’ (2015) 46 IIC 632.

infringing website.<sup>1002</sup> Arnold J considered the criteria that the CJEU has treated as relevant, when dealing with similar questions:

The following matters, the list of which is not exhaustive, are capable of constituting evidence from which it may be concluded that the trader's activity is directed to the Member State of the consumer's domicile, namely the international nature of the activity, mention of itineraries from other Member States for going to the place where the trader is established, use of a language or a currency other than the language or currency generally used in the Member State in which the trader is established with the possibility of making and confirming the reservation in that other language, mention of telephone numbers with an international code, outlay of expenditure on an internet referencing service in order to facilitate access to the trader's site or that of its intermediary by consumers domiciled in other Member States, use of a top-level domain name other than that of the Member State in which the trader is established, and mention of an international clientele composed of customers domiciled in various Member States. It is for the national courts to ascertain whether such evidence exists.<sup>1003</sup>

Given the territoriality of intellectual property rights, when infringement takes place in more than one jurisdiction, rightholders have to file action in every jurisdiction in which their rights have been infringed. Although Private International Law provides for the recognition and enforcement of foreign decisions, there is a list of certain conditions that have to be met, including that the parties involved in the litigation must be identical.<sup>1004</sup> In the context of blocking injunctions against ISPs for copyright infringement, although the claimant and the substance of the dispute is the same, the defendants (ISPs) are not. In any jurisdiction, there is an identifiable number of companies that provide Internet access and as such ISPs operate within the boundaries of a particular jurisdiction.<sup>1005</sup>

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<sup>1002</sup> *EMI Records Ltd & Ors v British Sky Broadcasting Ltd & Ors* [2013] EWHC 379 (Ch) [44]–[51].

<sup>1003</sup> Case C-144/09 *Pammer v Reederei Karl Schlüter GmbH & Co. KG and Hotel Alpenhof GesmbH v Heller* [2010] ECR I-12527, para 93.

<sup>1004</sup> A Bennett, 'Advisory Committee on Enforcement: The Intersection between Intellectual Property Law and Private International Law' WIPO/ACE/17/Rev. 1 September 2017, Geneva, 36 <[https://www.wipo.int/edocs/mdocs/enforcement/en/wipo\\_ace\\_12/wipo\\_ace\\_12\\_7\\_rev.pdf](https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_7_rev.pdf)> last accessed on 8 April 2023.

<sup>1005</sup> In the UK the largest ISPs are British Telecom (BT), Sky Broadband, Virgin Media, TalkTalk, and Vodafone UK; In Germany, the largest ISPs are Vodafone Kabel Deutschland, Vodafone DSL, Deutsche Telekom AG, and O2 Deutschland; In France, the largest ISPs are Free SAS, SFR, Bouygues Telecom, and Orange; In Greece, the largest ISPs are Cosmote Mobile Telecommunications SA, Forthnet SA, Wind Hellas, and Vodafone Greece.

Moving from the national point of view to the European context, it should be mentioned that blocking access to an infringing source in one jurisdiction does not mean that the source cannot be accessed from other jurisdictions. Savola has demonstrated a clear example of an ISP established in Finland, which operates and has customers in different Member States (Finland, Estonia, and Sweden), while the website, where access is being blocked, is located in Sweden.<sup>1006</sup> The author raises the following question: If an injunction against the ISP is sought in a Finnish court, does the court have jurisdiction to block access to the website by customers located in other Member States?<sup>1007</sup> In terms of jurisdiction, Article 4 of the Brussels I Regulation (Recast) confers principal jurisdiction on the state where the defendant (ISP) is domiciled.<sup>1008</sup> Over the Internet, it is hard to determine where a legal person/company is domiciled. Regulation 1215/2012 provides that a company is domiciled at the place where it has its statutory seat, central administration, or principal place of business.<sup>1009</sup> These factors can be checked by the claimant, having regard to the connecting factors of the registration of the defendant's business, licences, electronic payments, and places of delivery of goods and services.<sup>1010</sup> Setting aside the general, principal jurisdiction, the Regulation provides also for a special jurisdiction in Article 5(5), which states that if the dispute arises out of the operations of a branch, agency, or other establishment, the court where the branch is established has special jurisdiction.<sup>1011</sup> This provision leads to the following questions: What is a 'branch, agency, or other establishment'? Is a request to order an ISP to block access to an infringing website an issue 'arising out of the operations of a branch'?

An interpretation of the terms 'branch, agency, or other establishment' was given in the *Somafer SA v Saar-Ferngas AG* case, in which the Court required that a place of business should have an appearance of permanency, have management, and be materially equipped to negotiate business in the name of the parent company or as an extension of it.<sup>1012</sup> In the same case, the Court also interpreted the 'operations of a branch' to include inter alia claims concerning undertakings concluded in the name of the parent company to be performed in that

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<sup>1006</sup> P Savola, 'The Ultimate Copyright Shopping Opportunity – Jurisdiction and Choice of Law in Website Blocking Injunctions' (2014) 45 IIC 287, 306.

<sup>1007</sup> *ibid.*

<sup>1008</sup> Council Regulation (EU) No 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (Brussels I Regulation)[2012] OJ L 351/1, art 4.

<sup>1009</sup> *ibid.*, Article 63(1).

<sup>1010</sup> FF Wang, 'Obstacles and Solutions to Internet Jurisdiction: A Comparative Analysis of the EU and US Laws' (2008) 3(4) JICLT 233, 235.

<sup>1011</sup> Brussels I Regulation, art 7(5).

<sup>1012</sup> Case C-33/78 *Somafer SA v Saar-Ferngas AG* [1978] ECR 1978-02183.

state or similar non-contractual obligations.<sup>1013</sup> Such an undertaking could be the formation of a contract between the branch and the customers of that state to provide Internet connectivity. Therefore, in terms of jurisdiction, the state where the ISP is established has principal jurisdiction, while having a branch in another Member State confers special jurisdiction to order injunctions affecting that state.

In addition, another problematic issue is that blocking injunctions are tied to a particular jurisdiction.<sup>1014</sup> If a rightholder would like to seek protection through blocking injunctions at a global level, this means that they should obtain blocking injunctions in every single jurisdiction. Although the source of the infringement is the same, the ISPs operating in each country are different.

Does the judgement in *Eva Glawischnig-Piesczek v Facebook Ireland Ltd*<sup>1015</sup> allow for national courts to order intermediaries to block access to illegal content globally? At an EU level, the e-Commerce Directive does not preclude injunction measures from producing effects worldwide.<sup>1016</sup> However, its Recitals 58 and 60 provide that the EU rules in this area should be consistent with international rules.<sup>1017</sup> The CJEU concluded that it is up to the Member States to make sure that the measures they adopt and that produce effects at a global level take due account of those rules.<sup>1018</sup> In other words, the CJEU simply stated that the e-Commerce Directive does not prevent the global effect of injunctions issued by national courts within the framework of the international law.

It is apparent that there should be a mechanism by which a blocking order granted in one jurisdiction could be first recognised and then enforced in other jurisdictions as well. It is unfortunate that in the EU context none of the relevant Directives (neither the InfoSoc nor the Enforcement Directive) provides for a method of achieving cross-border enforcement of blocking orders. The problem is more acute because both Directives allow discretion to each Member State regarding the conditions and the modalities upon which blocking orders could be obtained.

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<sup>1013</sup> Case C-33/78 *Somafer SA v Saar-Ferngas AG* [1978] ECR 1978-02183, para 13.

<sup>1014</sup> A Marsoof, 'The Blocking Injunction – A Critical Review of Its Implementation in the United Kingdom Within the Legal Framework of the European Union' (2015) 46 IIC 632.

<sup>1015</sup> Case C-18/18 *Eva Glawischnig-Piesczek v Facebook Ireland Ltd* [2020] ECDR 19, [2020] 1 WLR 2030.

<sup>1016</sup> Council Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') [2000] OJ L 178/1, art 18.

<sup>1017</sup> *ibid*, Recitals 58 and 60.

<sup>1018</sup> Case C-18/18 *Eva Glawischnig-Piesczek* (n 1015), para 52.

Thus, for a blocking injunction to be developed into a more versatile remedy that allows for enforcement of IP rights at a global level, there should be a system of recognition and enforcement of judgements. Marsoof suggests a system similar to the Hague Convention on Foreign Judgements in Civil and Commercial Matters 1971 or that the Brussels Regulations (Recast) should be adopted in the IP context.<sup>1019</sup> The Hague Convention of 2019 cannot be applied to recognition and enforcement of judgements regarding copyright infringement, given that the Convention expressly excludes intellectual property rights from its scope.<sup>1020</sup> The adoption of an alternative legislative instrument dedicated to intellectual property rights or the expansion of the scope of the Hague Convention to accommodate intellectual property judgements would increase the efficacy of the blocking injunctions at an EU level, reducing the costs and risks of re-litigation. For example, if a blocking injunction has already been obtained in one Member State, it should be possible for that order to also be enforced in the other Member States against ISPs that operate in those countries, as the source of the infringement is the same.

## 5.6 Conclusion

Blocking injunctions are granted by courts against ISPs whose services are being used for online copyright infringement. A blocking order can stipulate the technical means of blocking (IP address, DNS, or URL-based blocking) and the timeframe for its implementation. It is undoubted that this procedure is rather costly and would require more time for the courts to decide upon a dispute before them.

Although there is a variety of blocking techniques, all of them have inherent limitations. Among the limitations, the possibility of circumvention and ‘over-blocking’ are of significant importance. The chapter also analysed the response of the selected jurisdictions to blocking orders. The UK, Germany, France, and Greece grant blocking injunctions in cases of online

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<sup>1019</sup> Hague Convention of 1 February 1971 on the Recognition and Enforcement of Foreign Judgments in Civil and Commercial Matters (1971) <<https://www.hcch.net/en/instruments/conventions/full-text/?cid=78>> last accessed on 8 April 2023. The Hague Convention of 1971 has evolved over the decades. The low number of signatory parties to the 1971 Convention led to a new Convention in 2005 and 2011. More recently, on 2 July 2019, the Hague Conference of Private International Law (HCCH) adopted the Convention on the Recognition and Enforcement of Foreign Judgments in Civil or Commercial Matters, aiming to ‘enhance predictability and justice in cross-border legal relations in civil and commercial matters, reducing the risks and costs associated with dispute resolution’. See S Boersen and M Vijverberg, ‘The Hague Judgments Convention: An Instrument for the Distant Future?’ (*Lexology*, 25 September 2019) <<https://www.lexology.com/library/detail.aspx?g=5d18bc9a-e60e-45df-ae8b-9d75172b386e>> last accessed on 4 February 2022.

<sup>1020</sup> Hague Convention of 2 July 2019 on the Recognition and Enforcement of Foreign Judgments in Civil or Commercial Matters (2019), art 2 <<https://www.hcch.net/en/instruments/conventions/specialised-sections/judgments>> last accessed on 8 April 2023.

copyright infringement. Out of the selected jurisdictions, emphasis should be given to the UK and Greece for the following reasons. The UK is among the jurisdictions who first granted blocking injunctions and the first to grant ‘live’ blocking orders. The Greek courts have also been granting blocking injunctions for a decade now. In parallel to the traditional judicial path, Greece is one of the Member States that has implemented in its national law an out-of-court mechanism.

To date, there is no substantive case law about blocking injunctions for video game copyright infringement. Similarly, the injunctions granted to block streamed content are minimal. Among the cases outlined in this chapter, *Football Association v BT*,<sup>1021</sup> *Nintendo v Sky*,<sup>1022</sup> and *Nintendo v BT*<sup>1023</sup> are of particular importance for the purposes of this research. The first case was one of the first to discuss a live blocking order, a particular type of website blocking limited to the ‘time window’ during which the infringing content had been streamed. Arnold J, who delivered the judgement, emphasised the ‘growing problem’ of live stream copyright-protected content. The second case concerned the circumvention of copyright protection measures, which paved the way for Nintendo to seek and obtain blocking injunction for copyright infringement of their protected works.

In the context of unauthorised video game streaming, there are four specific limitations that would impede the effectiveness of website-blocking injunctions. First and foremost, there is no harmonised case law on the amount of infringing content that should be available on a website. While national courts in Greece ruled that the blocking was disproportionate with regard to users’ freedom of information as some of the content on the website was legal, the UK and German courts emphasised the amount of the content that was infringing (instead of legal) and presented a rather balanced solution as to weighing the infringing and non-infringing content. Given that LP videos are only a part of the content stored online for YouTube and a substantive amount of content for Twitch.tv, it can be argued that there is no harmonisation in national jurisprudence and in the event of potential litigation of this nature, national courts would follow a different approach. Secondly, it is hard to determine which is the most suitable blocking method for LP videos. The chapter considered URL blocking as the most suitable method because the precise location of the infringing video would have been targeted, but this technique is easily circumvented and thus not the most effective. Thirdly, playthrough videos

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<sup>1021</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch).

<sup>1022</sup> *Nintendo Co Ltd v Sky UK Ltd & Ors* [2019] EWHC 2376 (Ch).

<sup>1023</sup> *Nintendo Co Ltd v British Telecommunications Plc & Ors* [2021] EWHC 3488 (IPEC).



with commentary serve as public fora, hence the balancing of rightholders' rights with freedom of expression is not an easy task. More specifically, if the determination of the blocking method were only assigned to ISPs, the balancing task would be more challenging. Finally, live streamed content poses an additional difficulty. The relevant case law on 'live' blocking orders would not be applicable to live streaming of video game content, due to lack of technological advancements and the unfixed times of broadcasting.

In addressing the question of who is the most suitable to determine the appropriate technical method, the chapter has recommended that cooperation between the courts, external experts, and ISPs would be of significant value. Courts do not have the technical knowledge (for example, a court could not be aware of how many websites share the same IP address) and ISPs cannot guarantee the balance of the conflicting fundamental rights. In addition, the chapter raised jurisdictional issues pertaining to blocking injunctions against ISPs. Given the territoriality of copyright and the fact that ISPs are operating within the boundaries of a particular jurisdiction, it has been suggested that an instrument similar to the Hague Convention could provide for recognition and enforcement of foreign judgements on copyright infringement cases, increasing the efficacy of website-blocking injunctions and reducing the cost of re-litigation.

For all the reasons discussed in this chapter, this thesis will put forward an alternative measure to strike a fair balance between the different rightholders' rights through the conclusion of a licence agreement. The deployment of blockchain technology for the facilitation of this agreement will also be considered.

## **Chapter 6: Striking a Fair Balance between Competing Rights: An Alternative Route through a Licence Agreement between Video Game Companies and Service Providers**

The previous chapters considered the legal status of video games from a copyright perspective, determined that unauthorised ‘Let’s Play’ (LP) videos and live stream videos of video game footage is an act of communication to the public, and explored whether hosting service providers (platforms) can effectively take down infringing content, as well as whether Internet Service Providers (ISPs) can effectively block access to infringing content.

The Notice and Takedown procedure starts with a notice of the alleged copyright infringement, which is sent to the intermediary service provider (e.g. platform) requiring the ‘expeditious’ removal of, or blocking of access to, infringing content.<sup>1024</sup> Chapter 4 considered that in the video game sector there are not many cases where rightholders would file a Notice and Takedown procedure against YouTube or Twitch.tv, because LP videos play a vital role in advertising the video game to the general public.<sup>1025</sup> Among the cases where video game developers have requested an LP video be taken down, one could observe that many of those notices have been used for ulterior motives, for instance when video game developers wish to divorce themselves from the LP gamer or silence negative criticism of their video game.<sup>1026</sup> The Notice and Takedown procedure has been criticised on the ground that intermediaries would determine the legality or illegality of content, influenced by their own potential liability.<sup>1027</sup> The removal of the content subjected to a takedown notice was the safest way for intermediaries to avoid liability. Intermediaries remove the content they believe is infringing, acting in their own best interest. Another issue exists with notice submitters, who may or may not undertake any quality control of what they notify as infringing content.<sup>1028</sup>

In light of the Digital Single Market (DSM) Directive, online content-sharing service providers (OCSSPs), upon receiving a notice, are obliged not only to disable access to the

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<sup>1024</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 14.

<sup>1025</sup> S Matsui, ‘Does it Have to be a Copyright Infringement: Live Game Streaming and Copyright’ (2016) 24 *Tex Intell Prop LJ* 215, 220; M Johnson and J Woodcock, ‘The Impact of Live Streaming and Twitch.tv on the Video Game Industry’ (2019) 41(5) *Media Cult Soc* 670.

<sup>1026</sup> J Alexander, ‘YouTube Accepts Campo Santo’s Copyright Strike against PewDiePie, Could Lead to Bigger Issues’ (*Polygon*, 14 September 2017) <https://www.polygon.com/2017/9/14/16309430/pewdiepie-campo-santo-strike> last accessed on 4 February 2022.

<sup>1027</sup> A Marsoof, ‘The Blocking Injunction – A Critical Review of Its Implementation in the United Kingdom Within the Legal Framework of the European Union’ (2015) 46 *IIC* 632.

<sup>1028</sup> M Husovec, ‘The Promises of Algorithmic Copyright Enforcement: Takedown or Stay Down? Which is Superior? and Why?’ (2018) 42 *Colum JL & Arts* 53, 59.

infringing content but also to prevent a future reappearance.<sup>1029</sup> However, automated filtering systems, such as YouTube’s Content ID or Twitch.tv’s Audible Magic,<sup>1030</sup> are not always able to recognise exception and limitation cases. This challenge has also been raised by providers of content recognition technologies, who agreed that ‘copyright exceptions require a high degree of intellectual judgement’.<sup>1031</sup>

Although algorithmic filters have the potential to detect LP videos and match them against a database of copyright-protected works, the cases of live streaming are posing particular challenges. An automated filtering system would have to be sophisticated enough to identify and block live streamed content. Back in 2012, early attempts to automatically ‘catch and shut down’ content resulted in the wrongful flagging of Michelle Obama’s Democratic National Convention speech live stream on YouTube as well as the Hugo Awards broadcast at Ustream.<sup>1032</sup> Deploying automated systems for the detection of infringing content during a live stream would be a rather challenging task because, during a live stream, there would be times where a copyrighted song would be played in the background, or even a ringtone from a phone not switched to silent mode.<sup>1033</sup> It is difficult for automated systems to handle live content effectively. In the case of LP videos, in particular, there are multiple layers of audio and video content, which should be individually examined. As Taylor pointed out, gameplay content occupies only a portion of any given broadcast.<sup>1034</sup>

Regarding website-blocking injunctions, Chapter 5 examined in detail whether blocking injunctions to tackle infringing LP videos and live streaming videos of video games is an effective remedy and unveiled the following limitations. First and foremost, the majority of blocking injunction cases target entire websites that contain infringing content. The situation with LP videos would place an additional burden on litigation of this nature. Websites, such as

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<sup>1029</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17(4).

<sup>1030</sup> J Kastrenakes, ‘Twitch Will Begin Scanning and Deleting Clips That Contain Copyrighted Music’ (*The Verge*, June 2020) <<https://www.theverge.com/2020/6/11/21288220/twitch-scan-clips-copyrighted-music-dmca-takedowns-audible-magic>> last accessed on 4 February 2022.

<sup>1031</sup> Fourth meeting of the Stakeholder Dialogue on Article 17 of the Directive on Copyright in the Digital Single Market (Audible Magic) <<https://webcast.ec.europa.eu/copyright-stakeholder-dialogues-16-12#>> last accessed on 4 February 2022.

<sup>1032</sup> TL Taylor, *Watch me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press 2018) 248.

<sup>1033</sup> G Dayal, ‘The Algorithmic Copyright Cops: Streaming Video’s Robotic Overlords’ (*Wired*, 09 June 2012) <<https://www.wired.com/2012/09/streaming-videos-robotic-overlords-algorithmic-copyright-cops/>> last accessed on 4 February 2022.

<sup>1034</sup> Taylor (n 1032) 249.

YouTube and Twitch.tv, that host video game review videos and LP videos (with and without commentary) do not contain infringing materials in their entirety. These websites accommodate content of all kinds. Video game content (via LP videos or live streaming) is only a part of YouTube and the largest part of Twitch content.<sup>1035</sup> For the blocking injunctions it would suffice that a substantial proportion of the website is infringing, despite containing parts of non-infringing content.<sup>1036</sup> There is no harmonised case law on the amount of infringing content that should be available on a website.<sup>1037</sup> LP videos are only a part of content stored online for YouTube and a substantive amount of content for Twitch.tv.

Secondly, it is hard to determine which is the most suitable blocking method for LP videos. Among DNS blocking, IP address blocking, and URL blocking, Chapter 5 considered URL blocking as the most suitable method, due to the fact that it can target locations precisely, but this technique is easily circumvented and thus not effective.<sup>1038</sup> As far as the live streaming of video games is concerned, a ‘live’ blocking injunction, similar to ones that were granted by the pioneering judgements from the UK courts,<sup>1039</sup> would not be applicable to the live streaming of video game content, due to the lack of technological advancements and the unfixed times of broadcasting. Thirdly, playthrough videos with commentary serve as public fora,<sup>1040</sup> hence the balancing of rightholders’ rights with the freedom of expression is not an easy task.

For LP videos and live streams to continue to exist, without the risk that they will be taken down after a request made by the rightholders, a licence agreement is an alternative and feasible

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<sup>1035</sup> *Cengiz and Others v Turkey* App Nos 48226/10 and 14027/11 (ECtHR 1 December 2015). The Court in *Cengiz* found a violation of the right of information when a blocking targeted YouTube on the basis that only ten video files contained infringing materials.

<sup>1036</sup> C Geiger and E Izyumenko, ‘The Role of Human Rights In Copyright Enforcement Online: Elaborating A Legal Framework For Website Blocking’ (2016) 32(1) *Am U Int’l L Rev* 43, 61.

<sup>1037</sup> For instance, in the UK the court justified the blocking of the website *Newzbin2*, even though there was the potential for preventing non-infringing uses (*Twentieth Century Fox Film Corp & Ors v British Telecommunications Plc* [2011] EWHC 1981 (Ch) at [186]), and the German Bundesgerichtshof held that it was ‘necessary to look at the overall ratio of lawful and unlawful content and at whether the former constitutes a non-significant amount in comparison with the latter’ (German Federal Court of Justice (BGH) I ZR 3/14, 26 November 2015 and German Federal Court of Justice (BGH) I ZR 174/14, 26 November 2015). Contrary to these decisions, the District Court of Athens held that the blocking was disproportionate with regard to users’ freedom of information, as *some* of the content of the websites in question could be legal (District Court of Athens, No 13478/2014).

<sup>1038</sup> Geiger and Izyumenko (n 1036) 66.

<sup>1039</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch), *Union Des Associations Européennes De Football v British Telecommunications Plc & Ors* [2017] EWHC 3414 (Ch), *Matchroom Boxing Ltd & Anor v British Telecommunications Plc & Ors* [2018] EWHC 2443 (Ch).

<sup>1040</sup> The ECtHR held that political discussion, sporting events, and performing artists contribute to a debate in the ‘general interest’, in *Von Hannover v Germany (No 2)* App No 40660/08 [2012] ECHR 228 7 February 2012, para 109; *Axel Springer AG v Germany* App No 39954/08 [2012] ECHR 227 7 February 2012, para 90; *Ceylan v Turkey* App No 23556/94 [1999] ECHR 1999-IV, [1999] ECHR 44, (2000) 30 EHRR 73, IHRL 2875 (ECHR 1999), 8th July 1999, para 34.

measure. In light of the DSM Directive, service providers are obligated to obtain an authorisation from rightholders, which can be achieved via a licence agreement.<sup>1041</sup>

The possibility of licensing has already been embraced by several video game companies. For instance, Sony implemented an option in their PlayStation 4 (PS4) console for gamers to share their videos and live stream video game footage from their PS4 console.<sup>1042</sup> Sony Online Entertainment, the division focusing on PC games, allows for the video creators to monetise their videos on hosting platforms under the condition that creators follow the policy constraints.<sup>1043</sup> PlayStation launched a new console at the end of 2020 and its new DualSense controller has been ‘upgraded’ from a mere ‘Share’ button to a ‘Create’ button, allowing players to create videos and share them with the world.<sup>1044</sup> Other video game companies have taken a different approach. For instance, Nintendo permits the usage of their video game footage and subsequent creation of LP videos or live streams under the condition that they include creative input and use the monetisation methods specified by Nintendo.<sup>1045</sup> The list of video game companies and their unique terms of use is long for the purposes of this research. What is remarkable, though, is that each of those companies has its own terms of use, allowing LP videos or not, monetising those videos or not.

The chapter will address the following questions: Could a fair balance be achieved via a licence agreement between rightholders and service providers? And subsequently, can a licence agreement be better achieved with the deployment of blockchain technology?

For that reason, this chapter explores the types of video games for which licence agreements can be concluded, the remuneration arrangements, and the potential of blockchain technology for the facilitation of the licence agreement. Blockchain technology bears some unique features,<sup>1046</sup> and although it is still in its infancy, it is hard to underestimate the potential of this

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<sup>1041</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17.

<sup>1042</sup> PlayStation 4 User’s Guide ‘Uploading a Video Clip’ <<https://manuals.playstation.net/document/en/ps4/share/videoclip.html>> last accessed on 4 February 2022.

<sup>1043</sup> Sony Online Entertainment Player Direct <<https://www.vgoemulator.net/archive/VGOOfficialForums/www.soe.com/player-direct.html>> last accessed on 4 February 2022.

<sup>1044</sup> PlayStation Blog, ‘Introducing DualSense, the New Wireless Game Controller for PlayStation 5’ (7 April 2020) <<https://blog.playstation.com/2020/04/07/introducing-dualsense-the-new-wireless-game-controller-for-playstation-5/>> last accessed on 4 February 2022.

<sup>1045</sup> Nintendo, ‘Nintendo Game Content Guidelines for Online Video & Image Sharing Platforms’ (November 2018) <[https://www.nintendo.co.jp/networkservice\\_guideline/en/index.html](https://www.nintendo.co.jp/networkservice_guideline/en/index.html)> last accessed on 4 February 2022.

<sup>1046</sup> F Mostert, ‘Digital Tools of Intellectual Property Enforcement: Their Intended and Unintended Norm Setting Consequences’ in T Aplin (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Limited 2020) 554.

technology. A blockchain is a database, a type of distributed ledger, in which all the transactions are grouped into blocks.<sup>1047</sup> Rightholders and OCSSPs can conclude a licence agreement benefiting from this type of technological development. Boshier opined that when it comes to actual licensing, this would be a type of smart contract, which is a computer protocol enabling the facilitation, verification, and enforcement of performance of a contract (for instance agree on the licence terms and make the payment).<sup>1048</sup> One of the advantages of employing blockchain technology is the possibility of recording and processing huge amounts of data and metadata associated with a copyright-protected work and the potential to register works into this ledger, which can solve issues around authorship. Once a work is registered into the blockchain, a digital certificate will be issued containing all the relevant information about a work, such as who the author(s) are, and any licence attached to it. In terms of monitoring, this technology enables the track and trace of uses of copyright material, giving control back to the rightholders (video game developers).

Currently, blockchain technology has been deployed in several creative industries, including the music industry. Examples of blockchain-based platforms are Ujo music, where artists upload, license, and manage the distribution of their works,<sup>1049</sup> and Mediachain, which was acquired by Spotify, to serve as a database with information on rights over music.<sup>1050</sup> Malaurie-Vignal cited the popularity of blockchain technology in the fashion industry, since it can facilitate evidence of authorship and prior rights, ensure the traceability of transactions, and manage copyrights with smart contracts.<sup>1051</sup> Apart from music and fashion, blockchain-based platforms have been adopted by digital artworks,<sup>1052</sup> digital images,<sup>1053</sup> and live concerts.<sup>1054</sup>

The alternative proposed solution of licence agreements between platforms and video game companies will be referred to as Safe Stream, since its main purpose is to monitor LP videos and live streams and protect the interests of rightholders, platforms, and Internet users.

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<sup>1047</sup> F Yang and others, 'The Survey of Intellectual Property Based on Blockchain Technology' (IEEE International Conference on Industrial Cyber Physical Systems, Taiwan, 2019) 743, 744 <doi:10.1109/ICPHYS.2019.8780125> last accessed on 4 February 2022.

<sup>1048</sup> H Boshier, *Copyright in the Music Industry* (Edward Elgar Publishing 2021) 227–28.

<sup>1049</sup> Ujo Music <<https://ujomusic.com/>> last accessed on 4 February 2022.

<sup>1050</sup> Mediachain <<http://www.mediachain.io/>> last accessed on 4 February 2022. See S Perez, 'Spotify Acquires Blockchain Start-up Mediachain to Solve Music's Attribution Problem' (*Techcrunch*, 26 April 2017) <<https://techcrunch.com/2017/04/26/spotify-acquires-blockchain-startup-mediachain-to-solve-musics-attribution-problem/?guccounter=1>> last accessed on 4 February 2022.

<sup>1051</sup> M Malaurie-Vignal, 'Blockchain, Intellectual Property and Fashion' (2020) 15(2) *JIPLP* 92.

<sup>1052</sup> KnownOrigin <<https://knownorigin.io/>> last accessed on 4 February 2022.

<sup>1053</sup> Kodakone <<https://www.ryde.one/>> last accessed on 4 February 2022.

<sup>1054</sup> Artbit <<https://artbit.com/>> last accessed on 4 February 2022.

## 6.1 Licence Agreement in Light of Article 17 of the Copyright in the Digital Single Market Directive

A licence agreement between video game developers (rightholders) and intermediary platforms would provide assurance for both parties and Internet users, who would continue to generate content from video games. It has been suggested that a licence agreement should be concluded between rightholders (video game developers) and individual users.<sup>1055</sup> However, this chapter discusses the potential of a licence agreement between rightholders and intermediaries, pursuant to the DSM Directive.<sup>1056</sup>

According to Article 17 of the DSM Directive, service providers are obligated to obtain authorisation from the rightholders.<sup>1057</sup> The authorisation may be granted by concluding a licence agreement.<sup>1058</sup> Platforms hosting user-generated content, such as YouTube, would be required to obtain licences for each piece of uploaded content on their website.<sup>1059</sup> Platforms and video game companies ought to conclude a licence agreement, which would permit platforms to host LP videos and, thus, permit users to stream video game content. Therefore, upon obtaining such a licence, platforms would be permitted to communicate the work to the public and make available to the public works or other subject matter.<sup>1060</sup>

Article 17(3) of the DSM Directive provides that the safe harbour for hosting services will not be applied where an OCSSP performs an act of communication to the public or an act of making available to the public.<sup>1061</sup> An OCSSP performs an act of communication to the public or an act of making available to the public for the purposes of the Directive when it gives public access to copyright-protected works or other protected subject matter uploaded by its users. The fact that online services provide access to copyright-protected content without the

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<sup>1055</sup> Y Qui, 'A Cure for Twitch: Compulsory Licence Promoting Video Live Streaming' (2017) 21 *Marquette Intellectual Property Law Review* 31, 44; A Tie, 'Copyright Law Issues in the Context of Video Game Let's Plays and livestreams' (2020) 3(2) *IELR* 121, 129. See also E Brusa, 'Professional Video Gaming: Piracy that Pays' (2015) 49 *J Marshall L Rev* 217; IO Taylor Jr, 'Video Games, Fair Use and the Internet: The Plight of the Let's Play' (2015) *U Ill JL Tech & Pol'y* 247; C Postel, 'Let's Play: YouTube and Twitch's Video Game Footage and a New Approach to Fair Use' (2017) 68 *Hastings LJ* 1169.

<sup>1056</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 17.

<sup>1057</sup> *ibid.*

<sup>1058</sup> European Commission, 'Communication from the Commission to the European Parliament and the Council, Guidance on Article 17 of the Directive 2019/790 on Copyright in the Digital Single Market' Brussels 4 June 2021, COM (2021) 288 final, 6.

<sup>1059</sup> L Shikhiashvili, 'The Same Problem, Different Outcome: Online Copyright Infringement and Intermediary Liability under US and EU Laws' (2019) 24 *Intell Prop & Tech LJ* 125, 137; IO Taylor Jr (n 1055).

<sup>1060</sup> DSM Directive (n 1056).

<sup>1061</sup> *ibid.*, art 17(3).

involvement of rightholders has affected the ability of rightholders to determine whether and under which circumstances their works are used and accordingly the possibility of getting appropriate remuneration, which has created a ‘value gap’.<sup>1062</sup> Therefore, service providers are obligated by the Directive to obtain an authorisation from the rightholders. From a practical standpoint, platforms hosting user-generated content, such as LP videos on YouTube, would be required to obtain licences for each piece of uploaded content on their website.<sup>1063</sup>

Failing to obtain a licence, pursuant to Article 17, would render service providers primarily liable. As Frosio explains, hosting providers would be directly/primarily liable – instead of secondarily liable – because they would perform an act of communication to the public.<sup>1064</sup> In this regard, the making available by a service provider of uploaded copyright content may fall under the scope of Article 3 of the Information Society (InfoSoc) Directive. Therefore, in the event that service providers do not obtain authorisation from the rightholders, they will be held primarily liable.

The passage from secondary or indirect liability and the safe harbour regime to the primary or direct liability of online platform operators, for making copyright-protected works available, is one of the developments in European copyright laws over the past few years. The CJEU has acknowledged the direct liability of platform operators in certain circumstances, including where the platform makes available to the public third-party uploaded protected subject matter and provides functions, such as indexing, categorisation, deletion, and filtering of content.<sup>1065</sup>

Before providing an analysis of the licence agreement per se, emphasis should first be given to the legal nature of Article 17 of the DSM Directive. Presenting the legal nature of the right is of the highest importance because the possible authorisation mechanism depends on it. There is a substantial divergence of opinion among legal scholars regarding the nature of Article 17; Husovec and Quintais argue that Article 17 sets out a new right of communication to the public,

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<sup>1062</sup> European Commission, Communication ‘Online Platforms and the Digital Single Market. Opportunities and Challenges for Europe’, COM(2016) 288 Final, 8. The ‘value gap’ refers to the market distortion created by safe harbour provisions for user-generated content platforms, leading these platforms to pay less than the market rate for copyright permissions. See M Lambrecht, ‘Free Speech by Design: Algorithmic Protection of Exceptions and Limitations in the Copyright DSM Directive’ (2020) 11 J Intell Prop Info Tech & Elec Com L 68, 70.

<sup>1063</sup> L Shikhiashvili, ‘The Same Problem, Different Outcome: Online Copyright Infringement and Intermediary Liability under US and EU Laws’ (2019) 24 Intell Prop & Tech LJ 125, 137.

<sup>1064</sup> G Frosio, ‘To Filter, or Not to Filter? That Is the Question in EU Copyright Reform’ (2018) 36 Cardozo Arts & Ent LJ 331, 343.

<sup>1065</sup> Case C-610/15 *Stichting Brein v Ziggo BV and XS4ALL Internet BV* [2017] ECDR 19, paras 36–38.



either as a special right to Article 3 of the InfoSoc Directive or as a new *sui generis* right.<sup>1066</sup> On the other end of the spectrum, Rosati, Nordemann, and Waiblinger opine that what is special about Article 17 is how OCSSPs will be treated under the new copyright level, not at the exploitation level but at the liability level.<sup>1067</sup> In June 2021, a few days before the deadline for the transposition of the DSM Directive, the Commission provided guidance on Article 17.<sup>1068</sup> In Part II of the guidance, it is explicitly stated that ‘Article 17 is a *lex specialis* to Article 3 of the Directive 2001/29/EC and Article 14 of Directive 2000/31/EC’.<sup>1069</sup>

Article 17 has not changed Article 3 of the InfoSoc Directive; it has introduced an authorisation requirement for OCSSP to avoid liability. Article 17 does not establish a new right; it determines who is liable for the acts described in it. Looking at the DSM Directive’s scope, it becomes apparent that the legislator intended to leave intact several existing Directives in this area, including the InfoSoc Directive.<sup>1070</sup> The understanding of Article 17 – in its entirety – as a special right or a *sui generis* right goes beyond the true intentions of the legislator and the wording that was used for the formation of the DMS Directive.

The determination of the legal nature of Article 17 will impact on the choice of the most suitable authorisation mechanism. The authorisation mechanisms include direct licensing, voluntary collective licensing, mandatory collective management, and statutory licensing.<sup>1071</sup> Licensing is a rather complex procedure, especially when there are many individuals who have taken part in the creation of the work at hand. In general terms, licensing can be achieved by two different ways: either directly from the copyright owner(s) or through collective management.<sup>1072</sup> For example, the authors, performers, and producers of a song cannot possibly contact each and every radio station to negotiate licences and remuneration for the use of their

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<sup>1066</sup> M Husovec and JP Quintais, ‘How to Licence Article 17? Exploring the Implementation Options for the New EU rules on Content-Sharing Platforms under the Copyright in the Digital Single Market Directive’ (2021) GRUR International 1, 2.

<sup>1067</sup> E Rosati, ‘The Legal Nature of Article 17 of the Copyright DSM Directive, the (lack of) Freedom of Member States and Why the German Implementation Proposal is not Compatible with EU Law’ (2020) 15(11) JIPLP 874, 876; J Bernd Nordemann and J Waiblinger, ‘Article 17 DSMCD a Class of Its Own? How to Implement Article 17 into the Existing National Copyright Acts – Also a Comment on the Recent German Discussion Draft’ (2020) <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=43649626](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=43649626)> last accessed 4 February 2022.

<sup>1068</sup> European Commission, ‘Communication from the Commission to the European Parliament and the Council, Guidance on Article 17 of the Directive 2019/790 on Copyright in the Digital Single Market’ Brussels 4 June 2021, COM (2021) 288 final.

<sup>1069</sup> *ibid.*

<sup>1070</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 1(2).

<sup>1071</sup> Husovec and Quintais (n 1066) 18–22.

<sup>1072</sup> Z Detrekoi, ‘EU Copyright Directive: Sounding the Death Knell for Domestic Video-Sharing Platforms’ (2020) 25(4) Comms L 231, 234.

work and, on the same wavelength, radio stations cannot contact and seek the permission of every author, performer, and producer for using their song.<sup>1073</sup> The negotiation and final licensing can be better achieved through a collective management organisation (CMO).

Voluntary collective licensing at an EU level requires CMOs to negotiate licences on a multi-territorial basis.<sup>1074</sup> This pan-European voluntary collective licensing, although feasible for the music industry, is hard to achieve for the video game industry, because this sector has not developed CMOs as of today. It is of the utmost importance for video game developers to create and join a CMO dedicated to video game licensing for several reasons, which will be presented as follows. The function of a CMO is to negotiate the licence agreements, monitor the licences, and collect and distribute the royalties.<sup>1075</sup> Given the popularity of LP videos and live streams of video games, which has been presented throughout this research, and the issue of the ‘value gap’, which the DSM Directive wishes to ‘bridge’, there is no reason why CMOs cannot be a valuable solution for video games. A CMO would be beneficial for rightholders and OCSSPs for the facilitation of a licence agreement, because a CMO as an organisation would standardise the terms and guarantee fair licence terms and fees for OCSSPs. Additionally, OCSSPs will gain confidence when hosting LP videos and live streams, because they would have secured a licence with rightholders, as envisaged in Article 17.

From the rightholders’ perspective, smaller developers, also known as indie (independent) video game developers,<sup>1076</sup> will have more bargaining power when negotiating licensing terms.<sup>1077</sup> Taking a step back and considering the genesis of CMOs, a group of 22 authors came together in France in 1777 to form the first CMO; at an individual level it was rather difficult to negotiate terms and tackle any copyright infringement, but at an organisational level this is more feasible.<sup>1078</sup> Last but not least, rightholders would benefit from CMOs for resolving the complexities of video game authorship. As video games are complex works of authorship,<sup>1079</sup>

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<sup>1073</sup> WIPO, ‘Copyright – Collective Management of Copyright’ <https://www.wipo.int/copyright/en/> last accessed on 4 February 2022.

<sup>1074</sup> M Husovec and JP Quintais, ‘How to Licence Article 17? Exploring the Implementation Options for the New EU rules on Content-Sharing Platforms under the Copyright in the Digital Single Market Directive’ (2021) GRUR International 1, 19.

<sup>1075</sup> WIPO, ‘Collective Management of Copyright and Related Rights’ <<https://www.wipo.int/copyright/en/management/>> last accessed on 28 January 2023.

<sup>1076</sup> S Fisher and A Harvey, ‘Intervention for Inclusivity: Gender Politics and Indie Game Development’ (2013) 7(11) Journal of Canadian Game Studies Association 25, 27.

<sup>1077</sup> T Allen, ‘What’s in a Game: Collective Management Organisations and Video Game Copyright’ (2018) 8 UNLV Gaming Law Journal 209, 228–29.

<sup>1078</sup> M Ficsor, ‘Collective Management of Copyright and Related Rights’ (WIPO, 2002) 18 <[https://www.wipo.int/edocs/pubdocs/en/copyright/855/wipo\\_pub\\_855.pdf](https://www.wipo.int/edocs/pubdocs/en/copyright/855/wipo_pub_855.pdf)> last accessed on 8 April 2023.

<sup>1079</sup> Case C-355/12 *Nintendo Co Ltd v PC Box Srl* [2014] 1 WLUK 506, ECDR 6, para 22.

there are many authors who have contributed to the development of the final work. From a practical standpoint, CMOs can serve as one unit that will negotiate, monitor, and guarantee the licensing agreements and royalties for all parties involved. Given that CMOs for video games have not developed at the time of writing, this chapter not only presents the significance of such development, but also suggests the development of a decentralised organisation registering, monitoring, and enabling the payment of royalties by employing blockchain technology.

Mandatory collective management is another solution to the authorisation as per Article 17. It is the strictest type of collective rights management, as it requires the transfer or assignment of the exercise of rights to a CMO, who will act on behalf of rightholders, thus preventing rightholders from directly exploiting their works.<sup>1080</sup> Husovec and Quintais highlight that some collective licensing options are unlikely if Article 17 is seen to fall under the umbrella of Article 3 of the InfoSoc Directive since they would not pass the three-step test of Article 5(5) of the InfoSoc Directive.<sup>1081</sup> For instance, in the case of mandatory collective management and statutory licensing, the mechanism may qualify as a copyright exception or limitation, which would instantly require the measure to pass the three-step test. This is mainly due to the CJEU's strict interpretation of exceptions and limitations, which has restricted Member States' margin of discretion when drafting legislation to implement this kind of mechanism. This is clear from the CJEU's ruling in *Soulier*, where the Court found that the rights outlined in Article 3 of the InfoSoc Directive correspond to those outlined in Article 5(2) of the Berne Convention, stating that authors cannot be subjected to any formalities in order to exercise their rights.<sup>1082</sup> The Court concluded that Article 3 of the InfoSoc Directive prohibits national legislation that would require authors to fulfil formal requirements in order to exercise the rights granted to them in that Article.

In this situation, mandatory collective management can be viewed as a limitation or exception to the right of communication to the public and thus be subject to the aforementioned three-step test. It may be unlikely that such a licensing mechanism would satisfy this test,<sup>1083</sup>

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<sup>1080</sup> M Husovec and JP Quintais, 'How to Licence Article 17? Exploring the Implementation Options for the New EU Rules on Content-Sharing Platforms under the Copyright in the Digital Single Market Directive' (2021) GRUR International 1, 44.

<sup>1081</sup> *ibid*, 45.

<sup>1082</sup> Case C-301/15 *Marc Soulier and Sara Doko v Premier Ministre, Ministre de la Culture et de la Communication* [2016] 11 WLUK 446, [2017] ECDR 23, para 50.

<sup>1083</sup> M Husovec and JP Quintais, 'How to Licence Article 17? Exploring the Implementation Options for the New EU Rules on Content-Sharing Platforms under the Copyright in the Digital Single Market Directive' (2021) GRUR International 1, 45.

or if it did, it would be limited in that it might not impose any formalities on the rights of authors, given the rigorous interpretation of the CJEU. Quintais proposes an alternative to Article 17's authorisation mechanism; collective licensing with extended effect.<sup>1084</sup> One of the safeguards that affects the legality of the mechanism is that the licensing mechanism must be managed by a CMO that is sufficiently representative, as stated in Article 12. However, this requirement emphasises how challenging it is to implement any form of collective management in the video game streaming market, as CMOs have not been developed in the video game industry.<sup>1085</sup> The video game industry, through the growth and promotion of online gaming, offers ways for game developers not only to control access to but also to verify the authenticity of the games. As an illustration, Blizzard Entertainment<sup>1086</sup> and Electronic Arts<sup>1087</sup> use a login and authentication user account system to stop unauthorised access and use of their games. As video game companies seem to favour the exercise of control over their content through technological protection measures, this might provide a justification for the lack of development of CMOs in the video game industry. Therefore, direct licensing rather than a collective management mechanism may be more appropriate for the video game industry.

For the purposes of this research, the proposed licence agreement will be examined from a direct licence perspective, since currently there are no CMOs for the video game industry. Video game rightholders and OCSSPs will come to an agreement on the terms of the licence. Before a licence agreement is concluded, OCSSPs will have to contact rightholders proactively and offer negotiations on licensing terms, which is a realistic endeavour as rightholders are known in the market.<sup>1088</sup> In the pre-contractual negotiation phase, CJEU guidelines of patent cases can serve as a reference point. Different from the scenario in *Huawei v ZTE*,<sup>1089</sup> an OCSSP's duty to negotiate does not depend on a dominant position and rightholders are not obliged to conclude a licence agreement. Although this is a patent case judgement, its principles

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<sup>1084</sup> JP Quintais, 'The New Copyright in the Digital Single Market Directive: A Critical Look' (2020) 42(1) EIPR 28, 35.

<sup>1085</sup> T Allen, 'What's in a Game: Collective Management Organisations and Video Game Copyright' (2018) 8 UNLV Gaming Law Journal 209, 224–25.

<sup>1086</sup> See [https://eu.battle.net/login/en-us/?ref=https://eu.battle.net/oauth/authorize?response\\_type%3Dcode%26client\\_id%3D057adb2af62a4d59904f74754838c4c8%26scope%3Daccount.full%2520commerce.virtualcurrency.full%2520commerce.virtualcurrency.basic%26state%3DEjCjSAg08OUKAUCIqXIbtvK0cKCV\\_orfnv0t61k8As%253D%26redirect\\_uri%3Dhttps://account.blizzard.com/login/oauth2/code/account-settings&app=oauth](https://eu.battle.net/login/en-us/?ref=https://eu.battle.net/oauth/authorize?response_type%3Dcode%26client_id%3D057adb2af62a4d59904f74754838c4c8%26scope%3Daccount.full%2520commerce.virtualcurrency.full%2520commerce.virtualcurrency.basic%26state%3DEjCjSAg08OUKAUCIqXIbtvK0cKCV_orfnv0t61k8As%253D%26redirect_uri%3Dhttps://account.blizzard.com/login/oauth2/code/account-settings&app=oauth) last accessed on 26 November 2022.

<sup>1087</sup> See Electronic Arts User Agreement <<https://tos.ea.com/legalapp/WEBTERMS/US/en/PC/>> last accessed on 26 November 2022.

<sup>1088</sup> The European Copyright Society, 'Comment of the European Copyright Society on Selected Aspects of Implementing Article 17 of the Directive on Copyright in the Digital Single Market into National Law' (2020) 11 J Intell Prop Info Tech & Elec Com L 115, 119.

<sup>1089</sup> Case C-170/13 *Huawei Technologies Co Ltd v ZTE Corp* [2015] Bus LR 1261, [2016] RPC 4.

may still acts as a guidance for negotiations under Article 17(4) of the DSM Directive. Quintais and Husovec explain that the purpose of Article 17 is to provide rightholders with a stronger negotiating position by granting them a right that reaches the OCSSPs in exchange for agreeing to certain licensing rules for third-party content uploads.<sup>1090</sup>

The European Commission provided guidance on Article 17 and clarified that when a service provider contacts a rightholder but the latter rejects reasonable offers made in good faith or declines to enter into negotiations to grant an authorisation for the service provider's content, the service provider should be deemed to have complied with the best efforts obligation under Article 17(4)(a).<sup>1091</sup> However, in order to be exempt from liability if the unauthorised content is accessible through its service, the service provider would have to prove best efforts in accordance with Article 17(4)(b) and (c). Thus, the notion of best efforts should also encompass the initiatives taken by OCSSPs, in cooperation with rightholders, to negotiate in good faith and conclude fair licensing terms. However, 'best efforts' should not necessitate extensive monitoring and search activities if the protected material and the rightholder are not publicly known, for instance, if the rights are held by small or medium-sized businesses or by individual authors without a collective representation.<sup>1092</sup>

The notion of good faith requires further analysis through the lens of comparative law. Traditionally, civil law systems have imposed a duty to negotiate and perform contracts in good faith in commercial law;<sup>1093</sup> however, common law has opposed such duties.<sup>1094</sup> In *Interfoto Picture Library Ltd v Stiletto Visual Programmes Ltd* Bingham LJ discussed the principle of good faith in the civil law and stated that 'in many civil law systems, the law of obligations recognises and enforces an overriding principle that in making and carrying out contracts

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<sup>1090</sup> M Husovec and JP Quintais, 'How to Licence Article 17? Exploring the Implementation Options for the New EU Rules on Content-Sharing Platforms under the Copyright in the Digital Single Market Directive' (2021) GRUR International 1, 33.

<sup>1091</sup> European Commission, 'Communication from the Commission to the European Parliament and the Council, Guidance on Article 17 of the Directive 2019/790 on Copyright in the Digital Single Market' Brussels 4 June 2021, COM (2021) 288 final, 9 and 10.

<sup>1092</sup> A Metzger and M Senftleben, 'Understanding Article 17 of the EU Directive on Copyright in the Digital Single Market – Central Features of the New Regulatory Approach to Online Content-Sharing Platforms' (2020) 67 J Copyright Soc'y USA 279, 289.

<sup>1093</sup> French Civil Code, the Code by Ordonnance No 2016-131 of 10 February 2016 reforming contract law, the general regime, and proof of obligations, art 1104 <<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000032004939/>> last accessed on 8 April 2023; German Civil Code, BGB, art 242 <[https://www.gesetze-im-internet.de/englisch\\_bgb/englisch\\_bgb.html#p0731](https://www.gesetze-im-internet.de/englisch_bgb/englisch_bgb.html#p0731)> last accessed on 8 April 2023; Greek Civil Code - Presidential Decree 456/1984, art 288 <<https://www.ministryofjustice.gr/wp-content/uploads/2019/10/%CE%91%CF%83%CF%84%CE%B9%CE%BA%CF%8C%CF%82-%CE%9A%CF%8E%CE%B4%CE%B9%CE%BA%CE%B1%CF%82.pdf>> last accessed on 8 April 2023.

<sup>1094</sup> *Times Travel (UK) Ltd v Pakistan International Airline Corp* [2021] UKSC 40.

parties should act in good faith'.<sup>1095</sup> The judge compared this civil law principle with the position in English common law and highlighted that 'English law has, characteristically, committed itself to no such overriding principle but has developed piecemeal solutions in response to demonstrated problems of unfairness'.<sup>1096</sup>

A number of factors has caused disparity between the two systems. The notion of good faith has been criticised as an abstract, amorphous concept, leading to legal uncertainty.<sup>1097</sup> Giliker opines that the imposition of a duty to negotiate in good faith is impractical and in opposition to the principle of freedom of contracts, as it would not recognise the nature of the negotiating process, and concluded that case law of the past decade indicates a shift towards 'acceptance of express and implied duties of good faith in relation to contractual performance'.<sup>1098</sup> In this context, courts are able to interpret and determine the content of good faith based on the details of the contract as well as the long term relationship between the contracting parties. There is still opposition to the extension of the duty of good faith to the negotiation stage.

## 6.2 Implementing Article 17 of Directive 2019/790 into National Law

The implementation deadline for the DSM Directive was 7 June 2021.<sup>1099</sup> Only six out of the 27 Member States implemented Article 17 into their national laws within the deadline: Germany, France, the Netherlands, Hungary, Denmark, and Malta.<sup>1100</sup> The following paragraphs consider the transposition process of the Directive into the German, French, and Greek national law. The special case of the UK will also be analysed, although the UK did not implement the Directive. The case of the UK is characterised as 'special', because the UK left the EU before the transposition deadline. Apart from the transposition process, this subsection also considers the divergence in national proposals.

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<sup>1095</sup> *Interfoto Picture Library Ltd v Stiletto Visual Programmes Ltd* [1989] QB 433, 439.

<sup>1096</sup> *ibid.*

<sup>1097</sup> M Bridge, 'Good Faith, the Common Law and the CISG' (2017) 22(1) *Uniform Law Review* 98, 100–01; E McKendrick, *Contract Law* (10th edn, OUP 2022) 484.

<sup>1098</sup> P Giliker, 'Contract Negotiations and the Common Law: A Move to Good Faith in Commercial Contracting?' (2022) 43 *Liverpool LR* 175, 177. See also *Yam Seng Pte Limited v International Trade Corporation Limited* [2013] EWHC 111 (QB); *Essex CC v UBB Waste (Essex) Ltd (No 2)* [2020] EWHC 1581.

<sup>1099</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 29.

<sup>1100</sup> National transposition measures communicated by the Member States concerning Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (Text with EEA relevance.) [2019] OJ L 130/92, PE/51/2019/REV/1.

### 6.2.1 Lessons from Germany

In Germany the transposition process of the DSM Directive started in September 2019 with the consultation on transposition of the DSM Directive,<sup>1101</sup> followed by discussions on a draft for a First Act to adopt copyright law concerning the transposition of Article 15 and a Second Act to adapt copyright law concerning transposition of the remaining provisions of the Directive, in January 2020 and June 2020 respectively.<sup>1102</sup> In October 2020, the draft bill for the law to adapt copyright law to the requirements of the DSM Directive brought together the two previous discussions and in February 2021 the federal government adopted the draft bill.<sup>1103</sup> Recent developments include the first reading of the draft bill, which took place in the Bundestag in March 2021,<sup>1104</sup> and the adoption by the Bundestag of the Bill to adapt copyright law to the requirements of the digital single market in May 2021.<sup>1105</sup>

The German proposal in June 2020 has been subject to a hail of criticism by esteemed copyright law academics. Sections 6 and 7 of the German proposal include a new type of remunerated exception to Article 17 with the following new exception:

(1) The communication to the public and the reproduction required for this purpose of copyright-protected works and parts of works for non-commercial purposes is permitted to the following extent: [1] up to 20 seconds of an individual film or motion picture, [2] up to 20 seconds of an individual audio track, [3] up to 1, 000 characters of an individual text and [4] an individual photograph or an individual graphic with a data volume of up to 250 kilo-bytes.

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<sup>1101</sup> Bundesministerium der Justiz und für Verbraucherschutz, ‘Public Consultation on the Implementation of the EU Directives on Copyright Law (DSM-RL (EU) 2019/790) and Online-SatCab – RL (EU) 2019/789’ (28 June 2019) <[https://www.bmju.de/SharedDocs/Gesetzgebungsverfahren/Dokumente/Konsultation\\_UrhR-Richtlinien.html](https://www.bmju.de/SharedDocs/Gesetzgebungsverfahren/Dokumente/Konsultation_UrhR-Richtlinien.html)> last accessed on 4 February 2022.

<sup>1102</sup> CREATE, ‘Copyright in the Digital Single Market Directive – Implementation’ <<https://www.create.ac.uk/cdsm-implementation-resource-page/>> last accessed on 4 February 2022.

<sup>1103</sup> Bundesministerium der Justiz und für Verbraucherschutz, ‘Law to Adapt Copyright Law to the Requirements of the Digital Single Market’ (3 February 2021) <[https://www.bmju.de/SharedDocs/Gesetzgebungsverfahren/DE/Gesetz\\_Anpassung-Urheberrecht-dig-Binnenmarkt.html](https://www.bmju.de/SharedDocs/Gesetzgebungsverfahren/DE/Gesetz_Anpassung-Urheberrecht-dig-Binnenmarkt.html)> last accessed on 4 February 2022.

<sup>1104</sup> Deutscher Bundestag, ‘1st Reading – Copyright Should be Made Fit for the Digital Single Market’ (26 March 2021) <<https://www.bundestag.de/dokumente/textarchiv/2021/kw12-de-digitales-urheberrecht-826552>> last accessed on 4 February 2022.

<sup>1105</sup> CREATE, ‘Copyright in the Digital Single Market Directive – Implementation’ <<https://www.create.ac.uk/cdsm-implementation-resource-page/>> last accessed on 4 February 2022.

(2) Paragraph 1 shall only apply if there is no contractual right authorizing uses according to paragraph 1 and it is not a use authorized by law according to § 5.<sup>1106</sup>

This exception is remunerated and will apply only if there is no other exception or licence available in the German Copyright Act.<sup>1107</sup> Hosovec and Quintais opine that the German implementation proposal is compatible with EU law since they perceive Article 17 as a special right or even a new sui generis right,<sup>1108</sup> while Nordemann/Waiblinger and Rosati argue that the German implementation proposal is not compatible with EU law.<sup>1109</sup> The German proposal introduces new exceptions and limitations, but these do not seem to be in accordance with Article 5 of the InfoSoc Directive, which does not allow Member States to establish new exceptions and limitations. The legislator of the InfoSoc Directive intended to achieve harmonisation within the EU Member States, but the German proposal is not in line with this endeavour.

Apart from the legislator's intention, arguments against the introduction of new exceptions and limitations from a Member State can be drawn from the case law of the CJEU. In *Svensson*<sup>1110</sup> the CJEU clearly stated that Member States cannot give wider protection to copyright holders, by including activities 'other than those referred to in Article 3(1) of Directive 2001/29', because this would lead to legislative differences and legal uncertainty. Similarly, in the case of *Funke Medien*,<sup>1111</sup> a request for a preliminary ruling was lodged by the

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<sup>1106</sup> Bundesministerium der Justiz und für Verbraucherschutz, 'Discussion Draft of the Federal Ministry of Justice and Consumer Protection', s 6, <[https://www.bmju.de/SharedDocs/Gesetzgebungsverfahren/Dokumente/DiskE\\_II\\_Anpassung%20Urheberrecht\\_digitaler\\_Binnenmarkt\\_englischeInfo.pdf;jsessionid=7731B0A6C1CF4D2C563457F09AA873B6.2\\_cid289?\\_blob=publicationFile&v=4](https://www.bmju.de/SharedDocs/Gesetzgebungsverfahren/Dokumente/DiskE_II_Anpassung%20Urheberrecht_digitaler_Binnenmarkt_englischeInfo.pdf;jsessionid=7731B0A6C1CF4D2C563457F09AA873B6.2_cid289?_blob=publicationFile&v=4)> last accessed on 4 February 2022.

<sup>1107</sup> *ibid*, s 7.

<sup>1108</sup> M Husovec and JP Quintais, 'Article 17 of the Copyright Directive: Why the German Implementation Proposal is Compatible with EU Law – Part 2' (*Kluwer Copyright Blog*, 28 August 2020) <<http://copyrightblog.kluweriplaw.com/2020/08/28/article-17-of-the-copyright-directive-why-the-german-implementation-proposal-is-compatible-with-eu-law-part-2/>> last accessed on 4 February 2022.

<sup>1109</sup> JB Nordemann and J Waiblinger, 'Article 17 DSMCD: A Class of Its Own? How to Implement Article 17 into the Existing National Copyright Acts, including a Comment on the Recent German Discussion Draft – Part 1' (*Kluwer Copyright Blog*, 16 July 2020) <[http://copyrightblog.kluweriplaw.com/2020/07/16/art-17-dsmcd-a-class-of-its-own-how-to-implement-art-17-into-the-existing-national-copyright-acts-including-a-comment-on-the-recent-german-discussion-draft-part-1/?doing\\_wp\\_cron=1597142146.3135290145874023437500](http://copyrightblog.kluweriplaw.com/2020/07/16/art-17-dsmcd-a-class-of-its-own-how-to-implement-art-17-into-the-existing-national-copyright-acts-including-a-comment-on-the-recent-german-discussion-draft-part-1/?doing_wp_cron=1597142146.3135290145874023437500)> last accessed 4 February 2022; E Rosati, 'The Legal Nature of Article 17 of the Copyright DSM Directive, the (Lack of) Freedom of Member States, and Why the German Implementation Proposal is not Compatible with EU Law' (*The IPKat*, 31 August 2020) <<https://ipkitten.blogspot.com/2020/08/the-legal-nature-of-article-17-of.html>> last accessed on 4 February 2022.

<sup>1110</sup> Case C-466/12 *Svensson Nils & Ors v Retriever Sverige AB* [2014] 3 CMLR 4, paras 34 and 41.

<sup>1111</sup> Case C-469/17 *Funke Medien NRW GmbH v Federal Republic of Germany* [2019] ECDR 25, [2020] 1 WLR 1573, para 46.



German Federal Court of Justice and the CJEU ruled in favour of harmonisation. More specifically, it was held that

the Member States' discretion in the implementation of the exceptions and limitations provided for in Article 5(2) and (3) of Directive 2001/29 must be exercised within the limits imposed by EU Law, which means that the Member States are not in every case free to determine, in an unharmonized manner, the parameters governing those exceptions or limitations.

In *Spiegel Online*, which is another request for a preliminary ruling from the German Federal Court of Justice, the CJEU ruled once again that the discretion of Member States should be exercised within the EU limits.<sup>1112</sup>

Article 17 and the DSM Directive at large did not intend to divide the EU; it is very clear from Article 1(2) of the Directive and from its Recitals that the Directive intends to leave intact and in no way affect the InfoSoc Directive.<sup>1113</sup>

However, the German approach of ex-ante safeguards against over-blocking seems to be in line with Advocate General Saugmangsgaard Øe's Opinion in the Poland case.<sup>1114</sup> In his Opinion, the AG mentioned that 'it is for the Member States and the Commission to determine the detailed rules for measures'<sup>1115</sup> and that 'the definition of [those] practical solutions... must not be defined by those private parties alone in a way which lacks transparency, rather the process should be transparent and under the supervision of public authorities'.<sup>1116</sup> Given that most Member States have transposed Article 17 almost verbatim, without providing for any rules for the practical implementation of the Article, the German approach has been characterised as an 'ambitious' one.<sup>1117</sup>

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<sup>1112</sup> Case C-516/17 *Spiegel Online GmbH v Volker Beck* [2019] ECDR 24, [2019] Bus LR, para 31.

<sup>1113</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 1(2) and Recital 64.

<sup>1114</sup> Case C-401/19 *Republic of Poland v European Parliament, Council of the European Union* [2021] 7 WLUK 290, [2021] ECDR 21, Opinion of AG Saugmangsgaard Øe.

<sup>1115</sup> *ibid*, para 210.

<sup>1116</sup> *ibid*, para 212.

<sup>1117</sup> J Reda and P Keller, 'What Member States Can Learn from the AG Opinion on Article 17' (*Kluwer Copyright Blog*, 26 July 2021) <<http://copyrightblog.kluweriplaw.com/2021/07/26/what-member-states-can-learn-from-the-ag-opinion-on-article-17>> last accessed on 4 February 2022.

### 6.2.2 Lessons from France

The French transposition process started in December 2019, and in January 2020 the CSPLA (Higher Council on Literary and Artistic Property), the HADOPI (Higher Authority for the Dissemination of Works and the Protection of Rights on the Internet), and the CNC (National Centre for Cinema and the Moving Image) prepared jointly a ‘Mission’ report to inform the implementation of Article 17.<sup>1118</sup> In July 2020 the Ddadue law was adopted by the Senate, which included sections adapting the French law to EU law, and later on in October the law was approved by the National Assembly.<sup>1119</sup> In January 2021, the authorities who had previously joined for the preparation of the initial report prepared a second report to inform the implementation of Article 17.

The second report emphasises the importance of automated content recognition technologies for managing copyright on online platforms and states that Article 17 provides for adequate fundamental rights protection via the complaint and redress mechanism. A closer examination of the DSM Directive (from the Commission’s Proposal in 2016 to the Council negotiations and European Parliament’s report in 2018)<sup>1120</sup> shows that the trialogue negotiations between the European institutions led to the adoption of an ex-ante safeguard of the users’ fundamental rights, as opposed to an ex-post complaint mechanism, which is envisaged in the French report.<sup>1121</sup> In other words, the French report favours an ex-post complaint and redress mechanism aiming at providing sufficient fundamental rights protection, but the evolution of the Directive has shown that an ex-ante safeguard is needed. It seems that France, through this report, has failed to meet the intentions of the EU legislator in terms of Article 17(7).

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<sup>1118</sup> Ministère De La Culture, ‘CSPLA Mission on Tools for Recognizing Content Protected by Online Sharing Platforms: State of the Art and Proposals’ (30 January 2020) <<https://www.culture.gouv.fr/Sites-thematiques/Propriete-litteraire-et-artistique/Conseil-superieur-de-la-propriete-litteraire-et-artistique/Travaux/Missions/Mission-du-CSPLA-sur-les-outils-de-reconnaissance-des-contenus-protoges-par-les-plateformes-de-partage-en-ligne-etat-de-l-art-et-propositions>> last accessed on 4 February 2022.

<sup>1119</sup> CREATE, ‘Copyright in the Digital Single Market Directive – Implementation’ <<https://www.create.ac.uk/cdsm-implementation-resource-page/>> last accessed on 4 February 2022.

<sup>1120</sup> P Keller, ‘Article 17: (Mis)understanding the Intent of the Legislator’ (*Kluwer Copyright Blog*, 28 January 2021) <<http://copyrightblog.kluweriplaw.com/2021/01/28/article-17-misunderstanding-the-intent-of-the-legislator/>> last accessed on 4 February 2022.

<sup>1121</sup> *ibid.*

### 6.2.3 Lessons from Greece

In September 2019 the Greek Minister of Culture and Sports established the Legislative Preparatory Committee, whose tasks included the implementation of the DSM Directive.<sup>1122</sup> From April 2020 to June 2020 the Hellenic Copyright Organisation held a public consultation on the implementation of the Directive.<sup>1123</sup> To date, there is no proposal for new legislation that would adapt the national law to EU law. It remains to be seen how the Greek legislator will transpose the DSM Directive.

### 6.2.4 The Special Case of the UK

Until recently, there was uncertainty over the transposition of the Directive into the UK legal order. Officials in the UK had expressed different views over the years. Back in April 2019, the UK Minister for Universities, Science, Research and Innovation explained that the implementation of the Directive would depend on the departure from the EU.<sup>1124</sup> In October 2019, the UK Digital, Culture, Media and Sport Committee mentioned that the UK was considering implementing the Directive, given that copyright was ‘the bedrock of the UK music industry, authors, our creative industries’,<sup>1125</sup> but a few months later the UK government clearly stated that ‘the United Kingdom will not be required to implement the Directive, and the Government has no plans to do so’.<sup>1126</sup>

The UK has a strong presence in many – if not all – creative industries. The creative industries will most likely lobby hard for the implementation of the Directive or the reform of

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<sup>1122</sup> Hellenic Republic, Ministry of Culture and Sports, ‘Establishment of the Legislative Preparatory Committee’ 19 September 2019 <[https://www.opi.gr/images/library/nomothesia/ethniki/ypoyrgikes\\_apofaseis/12521\\_2019.pdf](https://www.opi.gr/images/library/nomothesia/ethniki/ypoyrgikes_apofaseis/12521_2019.pdf)> last accessed on 4 February 2022.

<sup>1123</sup> Hellenic Copyright Organisation, ‘Public Consultation for the Implementation of the Directive 2019/790’ (OPI, 13 April 2020) <<https://www.opi.gr/epikairotitai/nea/9698-public-consultation>> last accessed on 4 February 2022; Hellenic Copyright Organisation, ‘Public Consultation for the Implementation of the Directive 2019/790’ (OPI, 22 May 2020) <<https://opi.gr/epikairotitai/nea/9717-paratasi-prothesmias-ypovolis-apopseon>> last accessed on 4 February 2022.

<sup>1124</sup> Department for Education, ‘12258116 Proposal for a Regulation Laying Down Rules on the Exercise of Copyright and Related Rights Applicable to Certain Online Transmissions of Broadcasting Organisations and Retransmission of Television and Radio Programmes’ (April 2019) <[http://europeanmemoranda.cabinetoffice.gov.uk/files/2019/04/Scan2019-04-25-2488\\_001.pdf](http://europeanmemoranda.cabinetoffice.gov.uk/files/2019/04/Scan2019-04-25-2488_001.pdf)> last accessed on 4 February 2022.

<sup>1125</sup> House of Commons, Digital, Culture, Media and Sport Committee, ‘Oral Evidence: The Work of the Department for Digital, Culture, Media and Sport’, HC 71 (16 October 2019) Q621, Q626, <<https://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/digital-culture-media-and-sport-committee/the-work-of-the-department-for-digital-culture-media-and-sport/oral/106461.html>> last accessed on 4 February 2022.

<sup>1126</sup> UK Parliament, ‘Copyright EU Action’ (16 January 2020) <<https://questions-statements.parliament.uk/written-questions/detail/2020-01-16/4371>> last accessed on 4 February 2022.

existing copyright law to accommodate provisions that will be implemented across Europe. Parallel UK legislation would be required to regulate matters, such as authorisation and remuneration between rightholders and service providers.

The UK legislature has moved a step further towards modernising the music streaming sector. The House of Commons Digital, Culture, Media and Sport Committee published a report on the ‘Economics of Music Streaming’<sup>1127</sup> in which it is stated that the government would ‘take a wait and see approach to the Directive’s implementation’ but there is no reference to the exact timeframe.<sup>1128</sup> The Committee suggests that ‘the Government should introduce robust and legally enforceable obligations to normalise licensing arrangements for UGC-hosting services, to address the market distortions and the music streaming “value gap”’.<sup>1129</sup>

This report is promising, not only for the music sector but also for other creative sectors, because it acknowledges the market distortion and the ‘value gap’, and it calls for licensing arrangements for user-generated content hosting services.

### 6.3 The Licence Agreement between Video Game Developers and OCSSPs

Licence agreements enable rightholders to commercialise their IP right. A licence agreement is a contract, a commercial agreement through which the rightholder (licensor) grants permission to another party (licensee) to use their work for a specific purpose.<sup>1130</sup> The courts may decide to imply a licence to use a copyright work, but it is preferable that the agreement is recorded.<sup>1131</sup>

Thomas argues that licences ‘grow in the context of digital technologies’ and ‘pervade the digital world’.<sup>1132</sup> The following paragraphs consider the elements of the licence agreement between video game developers as rightholders and OCSSPs, in line with Article 17 of the DSM Directive. First and foremost, this subsection examines which types of video games should be subject to licence agreements, based on their characteristics and their impact on the

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<sup>1127</sup> House of Commons Digital, Culture, Media and Sport Committee, ‘Economics of Music Streaming Report’, (15 July 2021) <[https://publications.parliament.uk/pa/cm5802/cmselect/cmcomeds/50/5004.htm#\\_idTextAnchor001](https://publications.parliament.uk/pa/cm5802/cmselect/cmcomeds/50/5004.htm#_idTextAnchor001)>.

<sup>1128</sup> *ibid* 174.

<sup>1129</sup> *ibid*, 178.

<sup>1130</sup> H Boshier, *Copyright in the Music Industry* (Edward Elgar Publishing 2021) 104.

<sup>1131</sup> UK IPO, ‘Licence, Sell or Market Your Copyright Material’ (6 May 2014) <<https://www.gov.uk/guidance/license-sell-or-market-your-copyright-material>> last accessed on 8 April 2023.

<sup>1132</sup> S Thomas, ‘Circular Economy, Title, and Harmonisation of Commercial Law’ in O Akseli and J Linarelli (eds), *The Future of Commercial Law: Ways Forward for Harmonisation* (Hart Publishing 2020) 195, 207.

market. Secondly, the ‘right of cancellation’ is discussed. Thirdly, the provision for remuneration is presented and a standard of remuneration is proposed.

### 6.3.1 Licence Agreement in Certain Cases

A licence agreement between video game developers and OCSSPs, such as YouTube and Twitch.tv, should be limited to specific video game categories. As discussed in Chapter 2, there are five main categories (or genres) of video games: First-Person Shooter (FPS) games, Real Time Strategy (RTS) games, Role-Playing Games (RPGs), Massively Multiplayer Online Role-Playing Games (MMORPGs), and Multiplayer Online Battle Arena (MOBA) games.<sup>1133</sup> Qiu is of the opinion that the determining factor in selecting the type of the game entitled to be subject to a licence agreement is if the video game has been published and uploaded to the Internet by the copyright owner independently and directly,<sup>1134</sup> resulting in the exclusion of games that are published only by CD or other hard carriers.<sup>1135</sup> However, the categorisation of video games as ‘published and uploaded to the Internet’ and ‘published only by CD’ is now irrelevant and rather outdated. Nowadays and moving forward, the majority of – if not all – video games are only available in digital edition. Of the new generation video game consoles, PlayStation 5, released in November 2020, has two different models: with a CD player, or digital (without CD player option). The digital model is less expensive than the ‘traditional’ one,<sup>1136</sup> giving incentives to potential buyers to opt for the digital edition.

An argument pertaining to the consequences upon the market would be of greater relevance. As analysed, the impact of streaming on the market is debatable. Showing the entire video game could serve as a great advertisement for the video game company, given the millions of viewers and potential buyers.<sup>1137</sup> However, there are two sides to every coin. Watching the video game being played could affect consumer behaviour in a negative way. Johnson, Woodcock, and Caguioa argue that viewers may feel satisfied by watching an LP video to the extent that they would not proceed with purchasing the video game.<sup>1138 1139</sup> Therefore, a

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<sup>1133</sup> Game Designing, ‘The Evolution of Video Game Genres’ (*Game Designing*, 26 January 2020) <<https://gamedesigning.org/gaming/video-game-genres/>> last accessed on 4 February 2022.

<sup>1134</sup> Y Qiu, ‘A Cure for Twitch: Compulsory License Promoting Video Game Live-Streaming’ (2017) 21 *Marquette Intellectual Property Law Review* 31, 46.

<sup>1135</sup> *ibid.*, 47.

<sup>1136</sup> PlayStation UK (*Twitter*, 16 September 2020) <<https://twitter.com/PlayStationUK/status/1306339117412880385/photo/1>> last accessed on 4 February 2022.

<sup>1137</sup> M Johnson and J Woodcock, ‘The Impact of Live Streaming and Twitch.tv on the Video Game Industry’ (2019) 41(5) *Media Cult Soc* 670.

<sup>1138</sup> *ibid.*

<sup>1139</sup> IAC Caguioa, ‘Recent Copyright Issues in Video Games, Esports and Streaming’ (2019) 63 *Ateneo LJ* 882, 911.

categorisation between ‘pure story-driven’ video games, on the one hand, and ‘competitive’ video games, on the other, would provide more clarity. For instance, video games that are purely story-driven and present a linear story<sup>1140</sup> could be excluded from the licensing agreement, whereas a licence to stream ‘competitive’ video games, such as MOBA games, would attract more viewers and potential buyers.

### 6.3.2 Provision for a ‘Right of Cancellation’

A ‘right of cancellation’ is also proposed by this research. Video game copyright holders, when faced with improper streaming, will be entitled to terminate the licence to protect themselves as well as other streamers’ rights. For example, in February 2015 a famous dispute emerged between the streaming platforms Azubu and Twitch.tv, when a Twitch channel ‘SpectateFaker’ streamed the gameplay of the professional player Lee Sang-hyeok (also known as Faker) on Twitch.tv through the *League of Legends* spectator mode. ‘Faker’ and Azubu had concluded a contract, according to which the former would stream his content exclusively through Azubu. ‘Faker’ did not want his gameplay to be streamed without his consent, because this would affect the value and stability of his streaming.<sup>1141</sup> Therefore, a ‘right of cancellation’ on behalf of the copyright owner is necessary to balance the interests of rightholders and licensees.<sup>1142</sup>

### 6.3.3 Provision for Remuneration

The DSM Directive has provided in Articles 18 and 20 that the ‘authors and performers are entitled to claim additional, appropriate and fair remuneration from the party with whom they entered into a contract’.<sup>1143</sup> The provision for fair remuneration is not new; under harmonised EU law, the CJEU recognised fair remuneration in the *Technische Universität Darmstadt*

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<sup>1140</sup> J Puddington, ‘Fair Play: Economic Justification for Applying Fair Use to the Online Streaming of Video Games’ (2015) 21 BU J Sci & Tech L 413, 431. Quantic Dream, the developer of the video games *Heavy Rain* and *Beyond: Two Souls*, is a characteristic example of a video game company that develops theatrical and ‘story telling’ video games. *Beyond: Two Souls*, in particular, utilised the voices and appearance of the famous actors Willem Dafoe and Ellen Page and a huge amount of resources was invested for the creation of a cinematic experience. Although there are a few possible endings, players experience the same events during the gameplay and they are restricted so as not to change the course of the game. On the same wavelength, *Heavy Rain* is a mystery game in which the player has to find a serial killer and save one of the victims. While the player has a plethora of decisions to make throughout the game, the major events and the overall plot remain the same.

<sup>1141</sup> Y Qiu, ‘A Cure for Twitch: Compulsory License Promoting Video Game Live-Streaming’ (2017) 21 Marquette Intellectual Property Law Review 31, 37.

<sup>1142</sup> *ibid.*, 49.

<sup>1143</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, arts 18 and 20.

case,<sup>1144</sup> permitting libraries to make digital copies of books and providing for equitable remuneration.

In the case of licensing agreements between video game publishers and platforms, the latter are obligated to fairly remunerate the copyright holders. Intermediaries, such as YouTube, are placed into the value chain between rightholders and their audience.<sup>1145</sup> Deng and Lee opine that streaming platform operators would pay remuneration for two main reasons: it would be cost effective to collect remuneration from platform operators rather than individual streamers; and second, platforms benefit the most from the streaming industry, through advertising revenue.<sup>1146</sup> A similar rationale was presented by Qiu, who argued that platforms should be responsible for remunerating rightholders.<sup>1147</sup>

In addition to game developers, streaming platforms enter into agreements with streamers regarding the revenue share. Platform operators take a larger share of the advertising revenue compared to streamers. In recent years, the advertising system on YouTube has gained significant attention as a potential revenue stream for video creators. As described by Postigo, the YouTube Partners Programme allows for video creators to receive a share of the money collected by YouTube from advertising placed on or near their videos.<sup>1148</sup> These advertisements can take various forms, including banner ads, pre-video commercials, and in-video box ads. The system utilises metrics such as unique video views, ad clicks, and other indicators of a video's popularity to translate viewership into a monetary figure that can be charged to advertisers and subsequently shared with partners. This highlights the importance of user-generated content as a revenue stream for video creators on YouTube.

Deng and Lee drew an analogy between film producers and streaming platforms as well as between actors/performers and streamers to emphasise how streaming platforms are placed in a better position to remunerate rightholders and streamers.<sup>1149</sup> As the standard of remuneration is hard to be determined,<sup>1150</sup> the matter should be considered based on the principle of

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<sup>1144</sup> Case C-117/13 *Technische Universität Darmstadt v Eugen Ulmer KG* [2014] ECDR 23, [2015] 1 WLR 2017, para 48.

<sup>1145</sup> A Savelyev, 'Copyright in the Blockchain Era: Promises and Challenges' (2018) 34 CLSR 550, 553.

<sup>1146</sup> Z Deng and J-A Lee, 'Legalisation of Live Game Streaming Through Statutory Licence in China' (2022) 46 CLSR 105714.

<sup>1147</sup> Y Qiu, 'A Cure for Twitch: Compulsory License Promoting Video Game Live-Streaming' (2017) 21 *Marquette Intellectual Property Law Review* 31, 50.

<sup>1148</sup> H Postigo, 'The Socio-Technical Architecture of Digital Labor: Converting Play into YouTube money' (2016) 18(2) *New Media and Society* 332, 339.

<sup>1149</sup> Deng and Lee (n 1146) 105716–17.

<sup>1150</sup> L Shikhiashvili, 'The Same Problem, Different Outcome: Online Copyright Infringement and Intermediary Liability under US and EU Laws' (2019) 24 *Intell Prop & Tech LJ* 125, 146.

contractual freedom and a fair balance of rights and interests.<sup>1151</sup> In this balancing exercise, game developers will be remunerated from the profitable streaming activity and be incentivised to develop new games, streaming platforms will continue to earn from the advertising revenue for hosting video game streaming content (as rightholders will not issue take down notices and streamers will continue creating content), and streamers will be remunerated for their contribution and content creation and earn a share from the advertising revenue.

At this stage, two proposals could be made regarding the determination of the remuneration. The first proposal refers to the length of the copyrighted work that is used on the new video. Remuneration would, then, be proportionate to the length or amount of the work taken. For instance, a review video would normally contain seconds or a few minutes of the whole work. In a 15-minute review video, a large part is dedicated to the critical comment of the reviewer, whereas a smaller part may demonstrate seconds or minutes of gameplay. The remuneration owed to the copyright holder would be proportionate to the length taken from the original video game.

The second proposed solution is associated with the popularity of the video. The remuneration would be calculated based on the ‘views’ of the new video, allowing a percentage of the advertising revenue to be transferred to the rightholder.<sup>1152</sup> However, one should not disregard the personal contribution of the content creator. Thus, a fair balance between the rightholder, the creator/streamer, and the platform would be required when determining the standard of remuneration. The first proposed solution seems to be fairer for the content creator, as the remuneration would depend on the amount of the video game used on the streaming video, while at the same time the streamer’s personal contribution and effort is being recognised. It remains to be seen how Member States will implement Article 20 of the Directive.

The following subsections consider the potential of blockchain technology for the facilitation of the licence agreement between video game companies and online content-sharing service providers.

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<sup>1151</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, art 18.

<sup>1152</sup> C Postel, ‘Let’s Play: YouTube and Twitch’s Video Game Footage and a New Approach to Fair Use’ (2017) 68 *Hastings LJ* 1169, 1191.



## 6.4 Demystifying Blockchain Technology

The first time someone discussed blockchain was back in 2008, when Satoshi Nakamoto considered the possibility of creating a new infrastructure for payments.<sup>1153</sup> A blockchain is a database, a type of distributed ledger, in which all the transactions are grouped into blocks.<sup>1154</sup> Data blocks are generated successively in chronological order and each block is chained back and forth to create a blockchain structure and together they are registered immutably, using cryptographic trust.<sup>1155</sup> Every time a new entry is added to a blockchain, it cannot be removed, which is referred to as immutability. Even changing records on the chain is next to impossible, because it requires consensus by the majority of the users.<sup>1156</sup> The consensus mechanism ensures the validity of data without third parties, by using mathematical principles and cryptography algorithms.<sup>1157</sup> Limiting unilateral change, or removal from the chain, reinforces trust among users.<sup>1158</sup>

Blockchain provides a time-stamping architecture, which means that, when a cryptographic hash of a digital file is written, it can be cryptographically proven that the particular file existed at a specific date and time of day.<sup>1159</sup> The hash function is a type of mathematical function, which turns original data into a fingerprint of that data.<sup>1160</sup> This database is decentralised, which means that there is not a single entry, organisation, or group governing or even manipulating it. In addition, it provides for ‘tokens’ that can be used to allow actions and is written to the database as an immutable entry. A token represents different forms of digital assets,<sup>1161</sup> for instance in the copyright field it could represent a protected work, song, photograph, video, or data file, and it could embed documents of different content, including certificates and contractual information, such as licence terms and remuneration terms.<sup>1162</sup>

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<sup>1153</sup> S Nakamoto, ‘Bitcoin: A Peer-to-Peer Electronic Cash System’ (Bitcoin.org, 2008) <<https://bitcoin.org/bitcoin.pdf>> last accessed on 8 April 2023.

<sup>1154</sup> F Yang and others, ‘The Survey of Intellectual Property Based on Blockchain Technology’ (IEEE International Conference on Industrial Cyber Physical Systems, Taiwan, 2019) <doi: 10.1109/ICPHYS.2019.8780125> last accessed on 4 February 2022.

<sup>1155</sup> *ibid.*

<sup>1156</sup> A Savelyev, ‘Copyright in the Blockchain Era: Promises and Challenges’ (2018) 34 CLSR 550, 551

<sup>1157</sup> Yang (n 1154).

<sup>1158</sup> S Templin, ‘Blocked-Chain: The Application of the Unauthorised Practice of Law to Smart Contracts’ (2019) 32 *Geo J Legal Ethics* 957, 960.

<sup>1159</sup> Savelyev (n 1156) 553.

<sup>1160</sup> *ibid.*, 554.

<sup>1161</sup> M Finck and V Moscon, ‘Copyright Law on Blockchains: Between New Forms of Rights Administration and Digital Rights Management 2.0’ (2019) 50 *IIC* 77, 91.

<sup>1162</sup> B Bodo, D Gervais, and JP Quintais, ‘Blockchain and Smart Contracts: The Missing Link in Copyright Licensing?’ (2018) 26 *IJLIT* 311, 312.

Blockchain is not one unique technology, but rather a class of technologies.<sup>1163</sup> In order to provide the necessary information, this chapter focuses on the main differences between public/permissionless and private/permissioned blockchains. Public blockchains are publicly accessible, allowing interested parties to read, create transactions on, and obtain a copy of the database for review.<sup>1164</sup> The most characteristic example of a public blockchain is Bitcoin; everyone is free to create a digital wallet, transact, and become a miner by using publicly available software.<sup>1165</sup> On the other hand, private blockchains restrict access and use of the blockchain to a predetermined list of persons, who should be approved by the blockchain operator.<sup>1166</sup> Such a blockchain contradicts – to a certain extent – the decentralised nature of blockchain technology itself.

As blockchain allows the decentralisation of processing, this leads to the emergence of smart contracts. The concept of smart contracts was theorised in the mid-1990s by Nick Szabo, who coined the term to denote ‘a computerised transaction protocol that executes the terms of a contract’.<sup>1167</sup> Smart contracts are smart, since they are automatically executed when certain conditions are met; however, they are not necessarily contracts in strict legal terms. Smart contracts can facilitate transactions or instant and transparent remuneration for rightholders and can play a key role in the standardisation of comprehensive terms in licence agreements, given that copyright-protected works, video games in particular, are used in different jurisdictions.<sup>1168</sup> Following the example of Creative Commons Licences,<sup>1169</sup> which are employed at a global

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<sup>1163</sup> M Finck and V Moscon, ‘Copyright Law on Blockchains: Between New Forms of Rights Administration and Digital Rights Management 2.0’ (2019) 50 IIC 77, 100 and T Schrepel, ‘Smart Contracts and the Digital Single Market through the Lens of a “Law and Technology” Approach’ (European Commission 2021) 11. Schrepel takes an evolutionary perspective when describing blockchain and compares it with the Darwinian process of natural selection. In essence, blockchain is a combination of pre-existing technologies. It leads to the emergence of different varieties, including public–private, permissionless–permissioned, which will compete with each other and the ones that survive will try to expand their territory.

<sup>1164</sup> T Sharma, ‘Public vs Private Blockchain: A Comprehensive Comparison’ (Blockchain Council) <<https://www.blockchain-council.org/blockchain/public-vs-private-blockchain-a-comprehensive-comparison/>> last accessed on 4 February 2022.

<sup>1165</sup> *ibid.*

<sup>1166</sup> A Savelyev, ‘Copyright in the Blockchain Era: Promises and Challenges’ (2018) 34 CLSR 550, 550.

<sup>1167</sup> N Szabo, ‘Smart Contracts: Building Blocks for Digital Market’ (*King’s College London*, 1996) <[http://www.alamut.com/subj/economics/nick\\_szabo/smartContracts.html](http://www.alamut.com/subj/economics/nick_szabo/smartContracts.html)> last accessed on 8 April 2023.

<sup>1168</sup> B Bodo, D Gervais, and JP Quintais, ‘Blockchain and Smart Contracts: the Missing Link in Copyright Licensing?’ (2018) 26 IJLIT 311, 316; C Tan, ‘Copyright, Interrupted: Building Trust in Blockchain-Based Content Platforms’ (2020) 42(11) EIPR 698, 672; S Fabian, ‘Blockchain and Intellectual Property Rights’ (2021) 25 Intell Prop &Tech LJ 147, 150, 157.

<sup>1169</sup> Creative Commons is a non-profit organisation that helps overcome legal obstacles to the sharing of knowledge and creativity, by providing Creative Commons Licences that give everyone in the world a simple and free way to grant copyright permissions. The spirit of the CC Licences is to give certain licences to licensees, while reserving certain other rights to. Creative Commons, ‘Frequently Asked Questions’ (28 August 2020) <<https://creativecommons.org/faq/#what-does-some-rights-reserved-mean>> last accessed on 4 February 2022.

level, blockchain-based smart contracts could contain the terms of the licence agreements, terms of payment, and rights and obligations of the contracting parties, thus reducing multi-jurisdictional barriers.<sup>1170</sup> Tresise, Goldenfein, and Hunter highlight that licensing on blockchain platforms would revolutionise the creative industries, not only because it provides control over the content, lowers the costs associated with transactions, and removes intermediaries in licensing transactions, but also because smart contracts would be able to facilitate complex transactions regarding works that are created via collaboration, including film and music.<sup>1171</sup>

In the majority of cases, smart contracts operate in ‘if/then’ rules.<sup>1172</sup> For instance, if a user pays a certain amount of money to the smart contract account, then the contract allows them access to a digital copy of a work. Similarly, if a work generates a certain amount of remuneration to its account, then the smart contract will be able to facilitate the distribution of the revenue among the copyright owners.<sup>1173</sup>

#### 6.4.1 Digital Certificates

Digital certificates that authenticate the status of a work can be issued and verified by blockchain technology. Digital certificates that provide information about a video game could be registered on the database and cryptographically signed by one of the trusted entities. Certificates written to a blockchain are tamperproof so they could contain information about the work as well as a digital signature validating the certificate, which would reassure rightholders and users.<sup>1174</sup> In the context of video game licensing agreements, Article 17 of the DSM Directive requires a licence agreement between rightholders and OCSSPs. A digital certificate could enhance the certainty and confidence of service providers hosting LP videos or live streaming videos, as this certificate would include the title of video games and the rights that have been granted to them (service providers) as licensees. Confidence will be given to players, too.

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<sup>1170</sup> A Savelyev, ‘Copyright in the Blockchain Era: Promises and Challenges’ (2018) 34 CLSR 550.

<sup>1171</sup> A Tresise, J Goldenfein, and D Hunter, ‘What Blockchain Can and Can’t Do For Copyright’ (2018) 28 AIPJ 144, 151, 152.

<sup>1172</sup> T Schrepel, ‘Smart Contracts and the Digital Single Market through the Lens of a “Law and Technology” Approach’ (European Commission, October 2021) 32.

<sup>1173</sup> B Bodo, D Gervais, and JP Quintais, ‘Blockchain and Smart Contracts: the Missing Link in Copyright Licensing?’ (2018) 26 IJLIT 311, 316.

<sup>1174</sup> P De Filippi, ‘How Blockchains Can Support, Complement or Supplement Intellectual Property’ (COALA, 2016) 9 <[https://www.intgovforum.org/en/filedepot\\_download/4307/529](https://www.intgovforum.org/en/filedepot_download/4307/529)> last accessed on 8 April 2023.

As explained in Chapter 2, LP videos and live stream videos of video games attract millions of users and subsequently generate billions in advertising revenue. This is a new and profitable industry, on which gamers rely primarily for their income. There are many cases where rightholders have notified intermediaries and have asked for the videos to be taken down. The issuance of a digital certificate would recognise and secure the existence of user-generated content online, ensuring players that the particular service provider has been granted with a licence for a particular type of video games or certain titles, which they can use as a basis to generate their LP or live stream video. In other words, legal certainty will be enhanced between OCSSPs and rightholders, as they will provide information to users on the content covered by authorisation.<sup>1175</sup>

For instance, service provider A can secure a licence from video game company B, allowing the provider to host LP videos and/or live stream videos for video game C. Service provider A can display and inform users over the particular licence agreement with company B. This information could be displayed in an easy and user-friendly way on their website homepage. The European Commission highlighted that Member States could encourage both OCSSPs and rightholders to inform users of the content covered by rightholder authorisations in order to increase legal certainty, leaving it to all concerned parties to decide how best to communicate the existence of an authorisation.<sup>1176</sup> For example, a section/tab could be added that would include all licences for LP and/or live stream games (for example, under the name Safe Stream Project). In this section/tab, users could also search on the search bar for a particular title of a video game, for instance *League of Legends*, and if that title is among the licensed video games for this service provider, it would appear. If the provider does not have a licence for this video game, the title would not appear in the section.

Setting aside the display of information on the platform's website, video game companies should inform their customers whether their games can be the basis for user-generated content. This could be achieved by informing users before the purchase of the video game. For instance, before a user purchases video game C, among the information about the video game (publisher, category, and age rating) one could also be aware of a licence to use it for LP videos or live streams. Any user wishing to create an LP video or to live stream their gameplay experience

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<sup>1175</sup> European Commission, 'Communication from the Commission to the European Parliament and the Council, Guidance on Article 17 of the Directive 2019/790 on Copyright in the Digital Single Market' Brussels 4 June 2021, COM (2021) 288 final, 7.

<sup>1176</sup> *ibid.*

while playing game C will be aware that the said provider has a licence and hence would be confident that their video will remain available online without the risk of being taken down.

Concerned with End-User Licence Agreements (EULAs) and end-user flexibilities, Mezei and Harkai collected and analysed data related to 17 service providers grouped in four main categories: streaming with a hosting service, streaming without a hosting service, online marketplaces, and social media.<sup>1177</sup> In their analysis, it is emphasised that end users ‘are not in the position to negotiate the contractual clauses – they can only consent to “as is” terms’.<sup>1178</sup> From the platforms listed under the streaming sites using a hosting service, YouTube and Twitch are relevant for the purposes of this thesis as they are the leading platforms of user-generated content. A closer examination of Twitch’s terms of service would reveal the following: first, the chosen platforms typically permit the upload of one or more kinds of user-generated content, but they uniformly demand that the said content respect the intellectual property rights of third parties;<sup>1179</sup> and second, the chosen platforms all agree that they are free to change their terms and conditions at any time, and require end users to expressly (by confirming) or implicitly (by continued use) accept any changes.<sup>1180</sup> Users’ privileges (and licences) may be terminated for illegal activity or if they delete or remove their content from the site themselves.

Before one investigates the relationship between streamers, OCSSPs, and copyright holders, which Article 17 of the DSM Directive seeks to regulate, it is imperative to discuss some of the objectives of video game copyright holders because it may also highlight some of the differences between the video game streaming industry and other industries, such as the music industry. Twitch.tv streams several of the most popular games, including *DOTA 2*, *World of Warcraft*, and *Minecraft*, with the consent of the copyright holder, as stated in the terms of service.<sup>1181</sup> These examples share similar restrictions in that they let users monetise audio-visual content through streams provided that they are made accessible to the public without a

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<sup>1177</sup> P Mezei and I Harkai, ‘End-user Flexibilities in Digital Copyright Law – An Empirical Analysis of End-User License Agreements’ (2022) 5(1) IELR 2.

<sup>1178</sup> *ibid.*, 5.

<sup>1179</sup> Twitch, ‘Terms of Service 8’ (*Twitch.tv*, 11 September 2022) <<https://www.twitch.tv/p/hu-hu/legal/terms-of-service/#7-license>> last accessed on 07 January 2023.

<sup>1180</sup> Twitch, ‘Terms of Service 6’ (*Twitch.tv*, 11 September 2022) <<https://www.twitch.tv/p/hu-hu/legal/terms-of-service/#7-license>> last accessed on 07 January 2023.

<sup>1181</sup> Valve Corporation, ‘Valve Video Policy’ <[https://store.steampowered.com/video\\_policy](https://store.steampowered.com/video_policy)> last accessed on 7 January 2023; Blizzard Entertainment, ‘Blizzard Video Policy’ <<https://www.blizzard.com/en-gb/legal/2068564f-f427-4c1c-8664-c107c90b34d5/blizzard-video-policy>> last accessed on 07 January 2023; MOJANG, ‘Minecraft Brand and Assets Guidelines’ <<https://account.mojang.com/terms>> last accessed on 07 January 2023.

fee. It has been suggested that copyright holders may want to do so for several reasons, such as the fact that they view streaming as a free form of advertising and/or that they do not view videos or streaming of their games as detrimental to their businesses.<sup>1182</sup> Regardless of the precise reason, the practise appears to indicate that copyright holders are more interested in game sales than in licensing the streaming of their games, allowing streamers and OCSSPs to profit from their intellectual property. The copyright holders' unilateral ability to amend their terms of service at any time, however, creates a sense of ambiguity in these situations and may prevent intermediaries and streamers from streaming video games. When one considers the primary motivations for video game streaming, for example the financial gain, such a situation is undoubtedly undesirable from the standpoint of streamers and intermediaries (such as Twitch.tv and YouTube Gaming).

Twitch.tv, for instance, provides its platform as a service to streamers and viewers and generates revenue through advertising and 'subscribers' (who pay a subscription to access premium features of the network). Streamers can share this revenue if they participate in the partnership programme and become Twitch Partners<sup>1183</sup> or YouTube Partners.<sup>1184</sup> Higher viewership of a particular streamer would lead to higher advertising revenue, which will be shared between the streamer and the intermediary. As was previously indicated, there is uncertainty over the possibility that copyright holders could modify their terms of service and withdraw their consent for their video games to be streamed. However, many streamers invest finances and time to create their content and high-quality streams and to cultivate a community of fans.<sup>1185</sup> Given that Article 17 of the DSM Directive seems to be primarily focused on licensing, this may be beneficial for all parties involved by giving legal and financial certainty to streamers and intermediaries and potentially providing a second source of income for the copyright holders themselves in addition to the sales of video games.

Further evidence that video game copyright holders do not view streaming as a commercial activity can be found in the video policies for the most popular games, provided that viewers can freely access the stream and regardless of the fact that streamers may make money from

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<sup>1182</sup> M Larkey, 'Cooperative Play: Anticipating the Problem of Copyright Infringement in the New Business of Live Video Game Webcasts' (2015) 13 Rutgers JL & Pub Pol'y 52.

<sup>1183</sup> Twitch, 'Twitch Partner Program' <<https://www.twitch.tv/p/en/partners/>> last accessed on 07 January 2023.

<sup>1184</sup> YouTube Help, 'YouTube Partner Program Overview and Eligibility' <<<https://support.google.com/youtube/answer/72851?hl=en>> last accessed on 07 January 2023.

<sup>1185</sup> Larkey (n 1182).

other sources than direct sales (e.g. paid subscriptions and advertising).<sup>1186</sup> As not all video games are streamed or have the ability to be streamed, an assessment of the most streamed games would provide more clarity. Therefore, it is more acceptable in this context to evaluate the video rules of the firms whose games are most frequently streamed by users of streaming services to focus on the impact to individual streamers.<sup>1187</sup>

The vast majority of these companies specify that users are permitted to stream the game for non-commercial purposes but that indirect monetisation through platform sharing of advertising revenue and voluntary subscriptions is excluded from such non-commercial purposes and is therefore permitted.<sup>1188</sup> While streaming is permitted for a number of companies, it is unclear whether indirect monetisation (such as voluntary subscriptions or sharing in the platform's advertising revenue) is allowed because it is not expressly mentioned, in contrast to the prohibition on commercial use. Individual streamers are in an ambiguous situation regarding whether such indirect monetisation is allowed as a result of such firms' silence on the subject. In these situations, it would be preferable to contact businesses directly to secure a more explicit authorisation or licence, as needed.

Even though not all businesses explicitly define non-commercial use and leave open the possibility that it also includes indirect monetisation, the fact that most of them do not see indirect monetisation as constituting commercial use may be a sign of an industry-wide standard and understanding of such use. This demonstrates that the video game companies are mainly concerned with 'commercial use' rather than 'significant revenue', which might be indirectly generated through a share of the advertising revenue between intermediary and the streamer.

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<sup>1186</sup> Valve Corporation, 'Valve Video Policy' <[https://store.steampowered.com/video\\_policy](https://store.steampowered.com/video_policy)> last accessed on 07 January 2023; Blizzard Entertainment, 'Blizzard Video Policy' <<https://www.blizzard.com/en-gb/legal/2068564f-f427-4c1c-8664-c107c90b34d5/blizzard-video-policy>> last accessed on 07 January 2023; MOJANG, 'Minecraft Brand and Assets Guidelines' <<https://account.mojang.com/terms>> last accessed on 07 January 2023.

<sup>1187</sup> Epic Games Incorporated, 'Terms of Service' <<https://www.epicgames.com/site/en-US/tos>> last accessed on 07 January 2023; Riot Games Incorporated, 'Terms of Service' <<https://www.riotgames.com/en/legal>> last accessed on 07 January 2023; Electronic Arts Incorporated, 'Video Policy' <[https://store.steampowered.com/video\\_policy](https://store.steampowered.com/video_policy)> last accessed on 07 January 2023; Valve Corporation (n 1186); Activision Publishings Incorporated, 'Terms of Use' <<https://www.activision.com/legal/terms-of-use>> last accessed on 07 January 2023; Blizzard Entertainment (n 1186); Ubisoft Entertainment, 'Video Policy' <<https://legal.ubi.com/VideoPolicy/en-INTL>> last accessed on 07 January 2023; MOJANG (n 1186); and Rockstar Games, 'Policy on Posting Copyrighted Rockstar Games material' <<https://support.rockstargames.com/articles/200153756/Policy-on-posting-copyrighted-Rockstar-Games-material>> last accessed on 07 January 2023.

<sup>1188</sup> For example Valve Corporation (n 1186).

#### 6.4.2 Control over the Internet: Tracking Usage and Automatic Payments

Undeniably, the DSM Directive is an effort by the EU institutions to increase protection for the legitimate interests of rightholders.<sup>1189</sup> Nevertheless, the DSM Directive has not provided for a mechanism to monitor and track the use of original works over the Internet. Rightholders cannot control the usage of their works on the Internet in an effective way.<sup>1190</sup> When video games are released, rightholders have no knowledge of who is using it to create LP videos or live stream their experience with the wider audience. Video game developers have no way to check if footage of their video game has been taken in whole or in part. The lack of awareness creates another problem since rightholders may lose opportunities to monetise their work. In this perspective, blockchain technology may play a vital role in tracking the usage of works online.

What is more concerning is the fact that – at least currently – all video game genres are treated the same and rightholders cannot protect their story-driven video games from being uploaded or broadcasted. As discussed earlier in section 3.5, LP videos of purely story-driven video games could have a negative impact on the purchasing behaviour of consumers, given that the whole story or plot would have been revealed.<sup>1191</sup>

Licence agreements for certain types of video games, along with the potential of tracking usage when employing blockchain technology, can protect rightholders. De Filippi argues that blockchains could restore visibility into usage of works, either a priori or a posteriori.<sup>1192</sup> An existing example of a priori visibility is that of the Interplanetary File System,<sup>1193</sup> which is a distributed file storage system, whereas a typical example of a posteriori visibility is a service called ‘whereonthe.net’, a system that allows users to search for a particular image online and then displays the number of web pages on which the image has appeared.<sup>1194</sup> For the purposes

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<sup>1189</sup> Council Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, Recital 48.

<sup>1190</sup> A Savelyev, ‘Copyright in the Blockchain Era: Promises and Challenges’ (2018) 34 CLSR 550, 551.

<sup>1191</sup> M Johnson and J Woodcock, ‘The Impact of Live Streaming and Twitch.tv on the Video Game Industry’ (2019) 41(5) Media Cult Soc 670.

<sup>1192</sup> P De Filippi, ‘How Blockchains Can Support, Complement or Supplement Intellectual Property’ (COALA, 2016) 12 <[https://www.intgovforum.org/en/filedepot\\_download/4307/529](https://www.intgovforum.org/en/filedepot_download/4307/529)> last accessed on 8 April 2023.

<sup>1193</sup> Interplanetary File System ‘IPFS’ <<https://ipfs.io/#why>> last accessed on 4 February 2022; currently this system is available for file storage only.

<sup>1194</sup> M McConaghy and others, ‘Visibility and Digital Art: Blockchain as an Ownership Layer on the Internet’ (2017) 26(5) Strategic Change 461, 479.



of searching and being notified about footage of a video game, neither system can be used, since video games are complex works of authorship.

Similarly, Content ID and Audible Magic that detect and notify for matches against a database over YouTube and Twitch.tv are only available for music. However, the blockchain technology introduces a higher level of trust than the technologies available for intermediaries for the following reason: the above-mentioned technologies serve as a liability exemption tool for online intermediaries, and as such are closely dependent on those intermediaries' policies. Blockchain's feature of decentralisation would lead to more trust and certainty on the part of rightholders.<sup>1195</sup> Therefore, a system that would be able to detect on the web in how many instances video game footage has been used, searching for video, images, text, and music, would be of great assistance.

In terms of payments, blockchain technology could facilitate automatic payments. At this point, it is important to mention that blockchain became famous for the 'birth' of cryptocurrencies, such as Bitcoin, which removed the barriers of complicated formalities associated with traditional banking and reached a global audience. Payments via blockchain technology could provide for fair remuneration for rightholders,<sup>1196</sup> who would no longer be dependent on intermediaries. The usage of smart contracts will allow automatic payments (even micropayments)<sup>1197</sup> to rightholders, by attaching smart contracts to every LP video or live stream that users upload, which will serve as a tool for rightholders to know how many LPs are hosted on a particular intermediary and how much of the original video game has been used for the creation of the LP video and will subsequently calculate the payment to be made to the rightholder.

## 6.5 How to Overcome the Challenges of Blockchain Technology and Smart Contracts

### 6.5.1 Storage Limitation

As with any novel technology, blockchain technology has its own limitations and challenges in relation to its implementation. Savelyev opines that one of the main challenges concerns the

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<sup>1195</sup> A Savelyev, 'Copyright in the blockchain era: promises and challenges' (2018) 34 CLSR 550, 554.

<sup>1196</sup> As envisaged in the Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, PE/51/2019/REV/1 (DSM Directive) [2019] OJ L 130/92, arts 18 and 20.

<sup>1197</sup> Micropayment is the payment of a small sum. Smart contracts facilitate micropayments and enable instantaneous and fair remuneration for artists. See M Finck and V Moscon, 'Copyright law on Blockchains: Between New Forms of Rights Administration and Digital Rights Management 2.0' (2019) 50 IIC 77, 85 and B Bodo, D Gervais, and JP Quintais, 'Blockchain and Smart Contracts: the Missing Link in Copyright Licensing?' (2018) 26 IJLIT 311, 329.

storage of metadata and digital content, or, in other words, ‘where copyright works themselves will be stored: on the chain or elsewhere?’<sup>1198</sup> Currently, this young technology has limitations in terms of its size. For instance, in the music industry, where blockchain has been implemented, only one free metadatum per transaction is allowed.<sup>1199</sup> A possible solution would be for copyright works to be stored ‘off-chain’, with only some of the data stored ‘on-chain’.

In fact, storing a smart contract off-chain, while storing the hash value on-chain could resolve the storage limitation. As such, the data of a smart contract stored off-chain would remain immutable, because an effort to change it would create a new hash value that would not correspond to the initial one deployed on-chain.<sup>1200</sup> This alternative, though, has been criticised as it can create risks in terms of the accessibility of such content and as such it challenges the effectiveness of the blockchain potential at large.<sup>1201</sup>

#### 6.5.2 Blockchains as Intermediaries

The storage of copyright works ‘on-chain’ or ‘off-chain’ raises some legal issues, too. The storage of works on-chain resembles an online hosting service provider, a status that would grant exceptions from potential liability according to Article 14 of the e-Commerce Directive.<sup>1202</sup> What is problematic in this situation, though, is that, even if the administrator of the blockchain obtained knowledge of illegal activity, the removal or blocking of access to the information would be impossible.<sup>1203</sup> Removing or disabling access to information would be antithetical to the immutable nature of blockchain technology. However, if the digital work is stored ‘off-chain’ and the blockchain provides a link to it, it would be possible for the digital content to be removed or access to it could be blocked, but metadata that would remain ‘on-chain’ would become outdated and would not correspond to a copyrighted work.<sup>1204</sup>

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<sup>1198</sup> A Savelyev, ‘Copyright in the Blockchain Era: Promises and Challenges’ (2018) 34 CLSR 550, 556.

<sup>1199</sup> Revelator, ‘Blockchain: The Operating System for the Music’ (White Paper) 4 <<https://www.the-blockchain.com/docs/Blockchain%20Solution%20for%20the%20Music%20Industry.pdf>> last accessed on 4 February 2022

<sup>1200</sup> T Schrepel, ‘Smart Contracts and the Digital Single Market through the Lens of a “Law and Technology” Approach’ (European Commission, October 2021) 25.

<sup>1201</sup> Savelyev (n 1198).

<sup>1202</sup> *ibid.* See also C Tan, ‘Copyright, Interrupted: Building Trust in Blockchain-Based Content Platforms’ (2020) 42(11) EIPR 698,670.

<sup>1203</sup> Council Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (‘Directive on electronic commerce’) [2000] OJ L 178/1, art 14.

<sup>1204</sup> Savelyev (n 1198) 556.

The problematic scenarios discussed above pave the way for the necessity of legal regulation on the blockchain storage of digital works and for the need to provide new exemptions for operators who store infringing content put onto the blockchain by users. As discussed in section 4.2.3, the e-Commerce Directive is not future proof. The legislator at the beginning of the 2000s could not predict the leaps in technology that have been made. The existing exceptions in Article 14 are not ideal to accommodate blockchain services, because the inherent nature of blockchain would not allow the removal of information. Therefore, new legislation should be introduced to regulate the storage of copyrighted works and potential copyright infringement in a blockchain.

Back in 2019, the European Economic and Social Committee published an Opinion,<sup>1205</sup> listing the opportunities for the single market and the EU – such as the empowerment of citizens, the boost in entrepreneurship and innovation, and the creation of digital identities for individuals and organisations – and urged the European Commission to launch a communication of blockchain development, aiming at Europe to become a blockchain-based world pilot continent. The European Blockchain Partnership is planning a pan-European sandbox, bringing together regulators, companies, and tech experts with the European Commission, which is expected to operate in 2021/2022.<sup>1206</sup>

### 6.5.3 Jurisdictional Issues

Challenges created by smart contracts can be resolved by the laws applicable to cross-border relationships. Which county's laws will govern issues emerging from smart contracts (as legal contracts) and issues of online copyright infringement? Contractual relationships are regulated by several international treaties, for example Rome I applies to cross-border contractual obligations.<sup>1207</sup> In its general sense, Article 3 of Rome I provides that parties may freely choose the applicable law for their contract.<sup>1208</sup> As such, a smart contract between two British citizens will be expected to be governed by English law.

For copyright licensing, if the dispute concerns intellectual property rights *stricto sensu*, then the Regulation of the European Parliament and of the Council on the law applicable to

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<sup>1205</sup> European Economic and Social Committee on Blockchain, 'Opinion of the European Economic and Social Committee on Blockchain and the EU Single Market: What Next?' [2020] EESC 2019/02261 OJ C 47/17.

<sup>1206</sup> European Commission, 'Shaping Europe's Digital Future: Policy on Legal and Regulatory Framework for Blockchain' <<https://ec.europa.eu/digital-single-market/en/legal-and-regulatory-framework-blockchain>> last accessed on 4 February 2022.

<sup>1207</sup> Council Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the Law Applicable to Contractual Obligations (Rome I) (2008) OJ L 177/6.

<sup>1208</sup> *ibid*, art 3.

non-contractual obligations (Rome II)<sup>1209</sup> would be appropriate as a choice-of-law regime. According to Article 8 of Rome II, the *lex loci protectionis* (law of the country in which protection is sought) is the law applicable to cases of intellectual property rights infringement.

#### 6.5.4 Design Choices, Vulnerabilities, and Network Effect

As illustrated previously, there are different configurations of blockchain; public/permissionless and private/permissioned. A permissionless blockchain would allow anyone to contribute data and hold identical copies of the ledger. As a result, a permissionless blockchain is hard to hack, as all copies have to be attacked at the same time.<sup>1210</sup> Namasudra and others provided a detailed technical analysis and explained that to hack any blockchain network, more than 51% of the nodes of that network need to be hacked, which is almost impossible for any hacker or malicious user.<sup>1211</sup> Malicious tampering and unauthorised modification could not easily occur, as it would not remain unnoticed by participants in the network.<sup>1212</sup> While Caldarelli and Ellul<sup>1213</sup> and Corbet and others<sup>1214</sup> reported an increase in the hack rates in the decentralised finance industry, Shatkovskaya and others concluded that blockchain is a ‘guarantor for intellectual property rights’ and its ‘high hacking resistance attract[s the] attention of the market participants’.<sup>1215</sup>

Forking is the most frequent attack. The trust level of a blockchain directly depends on its length due to its decentralised structure, making the longest chain on the network the most trusted chain (MTC).<sup>1216</sup> Wang and Kim explain that the block propagation time is responsible for the occurrence of blockchain forks, in cases where a conflicting block is found whilst another block is propagating.<sup>1217</sup> The forking attack seeks to replace the MTC by creating an alternate side-chain. Recent research is concerned with methods and recommendations to

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<sup>1209</sup> Council Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations (Rome II) [2007] OJ L 199/40.

<sup>1210</sup> M Finck, ‘Blockchains: Regulating the Unknown’ (2018) 19(4) *Ger Law J* 665, 670.

<sup>1211</sup> S Namasudra and others, ‘The Revolution of Blockchain: State-of-the-Art and Research Challenges’ (2021) 28 *Archives of Computational Methods in Engineering* 1497, 1498.

<sup>1212</sup> *ibid.*

<sup>1213</sup> G Galrarelli and J Ellul, ‘The Blockchain Oracle Problem in Decentralized Finance—A Multivocal Approach’ (2021) 11 *Applied Sciences* 7572.

<sup>1214</sup> S Corbet and others, ‘The Destabilising Effects of Cryptocurrency Cybercriminality’ (2020) 191 *Economics Letters* 108741.

<sup>1215</sup> T Shatkovskaya and others, ‘Impact of Technological Blockchain Paradigm on the Movement of Intellectual Property in the Digital Space’ (2018) 21(1) *Eur Res Stud* 397, 401.

<sup>1216</sup> K Wang, Y Wang, and Z Ji, ‘Defending Blockchain Forking Attack by Delaying MTC Confirmation’ (2020) 8 *IEEE Access* 113847.

<sup>1217</sup> K Wang and S Kim, ‘FastChain: Scaling Blockchain System with Informed Neighbor Selection’ (IEEE International Conference on Blockchain, Atlanta, GA, USA, 2019) <doi: 10.1109/Blockchain.2019.00058> last accessed on 19 January 2023.

defend blockchain forking attacks.<sup>1218</sup> Wang, Wang, and Ji suggest a novel MTC confirmation mechanism.<sup>1219</sup> An arbitration mechanism would be activated when a fork is detected in the blockchain. The focal point of this mechanism is the fork detection. Kiayias and others illustrate that, in the abstract structure, every block has a unique blockhead that can be used as the character string.<sup>1220</sup> In a non-forked blockchain, one block has only one trailing block, hence the fork could be detected when two or more blocks carry the same prefix. In addition, Wang and Kim propose FastChain, which reduces the block propagation time, requiring miners to refresh their connections and disconnect from bandwidth-limited neighbours.

At the other end of the spectrum, permissioned ledgers have one or more owners. Trusted actors would carry out a consensus process to ensure the ledger's integrity. Bodo, Gervais, and Quintais highlight that transparency is a good reason to make a blockchain readable for anyone; however, they observe that a closed model might be preferred for the cross-border accounting of royalties, transaction verification, token generation, and writing of data on a blockchain.<sup>1221</sup>

De Filippi points out that a key challenge blockchain technology faces is to ensure that the evidence stored on a blockchain is accurate and trustworthy, because 'if inaccurate information is stored on a Blockchain, there is little the technology can do to address the problem. In fact, Blockchain technology could exacerbate these issues by making it difficult to delete or rectify false information once it has been recorded.'<sup>1222</sup> As users of blockchain technology have no method to confirm the authenticity of the data that was initially added to the chain, the insertion of false data on a blockchain would render hashing and unique identification pointless.

The credibility of the third-party evidence-preservation platform, as well as the webpage capture and source-recognition technology, has received a lot of attention. Mostert and Jue stated that a neutral and authoritative third party would strengthen the credibility of a blockchain record in cases involving both 'on-chain' and 'off-chain' information, as it would

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<sup>1218</sup> S Wang, C Wang, and Q Hu, 'Corking by Forking: Vulnerability Analysis of Blockchain' (IEEE INFOCOM 2019 – IEEE Conference on Computer Communications, Paris, France, 2019) <doi: 10.1109/INFOCOM.2019.8737490> last accessed on 19 January 2023; K Wang and S Kim, 'FastChain: Scaling Blockchain System with Informed Neighbor Selection' (IEEE International Conference on Blockchain, Atlanta, GA, USA, 2019) <doi: 10.1109/Blockchain.2019.00058> last accessed on 19 January 2023; K Wang, Y Wang, and Z Ji, 'Defending Blockchain Forking Attack by Delaying MTC Confirmation' (2020) 8 IEEE Access 113847.

<sup>1219</sup> *ibid* Wang, Wang, and Ji.

<sup>1220</sup> A Kiayias and others, 'Ouroboros: A Provably Secure Proof-of-Stake Blockchain Protocol' (Annual International Cryptology Conference 2017) <doi.org/10.1007/978-3-319-63688-7\_12> last accessed on 19 January 2023.

<sup>1221</sup> B Bodo, D Gervais, and JP Quintais, 'Blockchain and Smart Contracts: The Missing Link in Copyright Licensing?' (2018) 26 IJLIT 311, 318.

<sup>1222</sup> P De Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (Harvard University Press 2018) 114.

aid in ensuring consistency between the two sources.<sup>1223</sup> Using blockchain for traceability and authentication is highly dubious if there is no means to verify that the information that was initially encrypted was accurate and trustworthy.

The network effect is a further limitation. In order to witness the full potential of blockchain technology for copyright purposes, it needs to be used by as many rightholders as possible and cover a significant amount of copyright-protected works. Finck and Moscon opine that the system will become more valuable as the number of users increases.<sup>1224</sup> In the past, artists in the music industry<sup>1225</sup> embraced the potential of blockchain technology to facilitate remuneration via micropayments. However, it is not clear how high the threshold of a sufficient number of users will be.<sup>1226</sup>

Blockchains are databases whose information cannot be changed, except for extraordinary circumstances. The immutable inherent nature of this technology creates problems in cases where information about a copyrighted work is not entered correctly. This severe limitation requires technical and governance processes to be in place for remedying this fact. To date, it is not clear how incorrect information will be altered or amended, which remains a general concern over blockchains.<sup>1227</sup>

## 6.6 Conclusion

For LP videos and live streams to continue to exist, without the risk that they will be taken down after a request made by the rightholders, a licence agreement is an alternative and feasible solution. In light of the DSM Directive, service providers are obligated to obtain an authorisation from the rightholders, which can be achieved with licence agreement.

Two aspects of licence agreement are of particular importance: first, which video game categories could be included in the licence agreement and which could be excluded; and second, the determination of a remuneration standard for the rightholder. Regarding the first issue, the assessment of the potential impact on the market could provide clarity in determining which video game categories could be included. For instance, a purely story-driven video

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<sup>1223</sup> F Mostert and W Jue, 'The Application and Challenges of Blockchain in Intellectual Property Driven Businesses in China' (2018) 11 *Tsinghua China L Rev* 13, 34.

<sup>1224</sup> M Finck and V Moscon, 'Copyright Law on Blockchains: Between New Forms of Rights Administration and Digital Rights Management 2.0' (2019) 50 *IIC* 77, 88.

<sup>1225</sup> I Heap, 'Blockchain Could Help Musicians Make Money Again' (*Harvard Business Review*, 5 June 2017) <<https://hbr.org/2017/06/blockchain-could-help-musicians-make-money-again>> last accessed on 4 February 2022.

<sup>1226</sup> Finck and Moscon (n 1224).

<sup>1227</sup> *ibid.*

game, such as *Heavy Rain*, could be excluded from the licence agreement because a playthrough video with or without commentary would affect consumer behaviour. On the contrary, a competitive video game, such as *League of Legends*, would be included in the licence agreement because LP videos, showing a competitive game, would attract more viewers and potential consumers.

As far as the remuneration is concerned, there are two proposed solutions to determine the standard of remuneration. The first one relates to the length of the video game used in the new LP video and the second proposes remuneration based on the popularity of and the views achieved by the new video. The first proposed solution is fairer for the streamer, as content creator.

Copyright holders' rights will be better protected under the DSM Directive. However, the Directive has not provided for a mechanism for monitoring and tracking usage of original works over the Internet, thus copyright holders can benefit from the developments of blockchain technology. Safe Stream is a proposed solution of licence agreements between platforms and video game companies, since its main purpose would be to monitor LP videos and live streams and protect the interests of rightholders, platforms, and Internet users.

Among the benefits of blockchain technology for the licence agreement is copyright registration. Given that copyright law is territorial, blockchain removes the borders. In addition, the issuance of digital certificates, tracking of usage over the Internet, and transborder payments to rightholders add to the advantages of using this new type of technology.

However, there are inherent challenges associated with blockchain technology. The chapter considered immutability, the verification process, storage limitations, and the legal issue of the relevance of the e-Commerce Directive, as well as vulnerabilities and network effect limitations. It was proposed that Article 14 of the e-Commerce Directive should be amended to accommodate emerging technologies and new legislation should be introduced to regulate blockchain technology and intellectual property.

LP videos and live streams are a massive trend. Video game companies, by granting licences to platforms for hosting LP videos or live streams, would limit requests and disputes over the nature of LP videos and the eligibility for exceptions under fair use/dealing, while they would continue benefiting from the publicity of their video games and would receive a fair remuneration. Platforms would be protected for hosting LP videos, given that a licence agreement would clearly permit these activities and monitor the revenue arrangements, and

Internet users will be well informed as to which video games are available for user-generated content.

Although the idea of revolutionising the video game industry of LP videos and live streams with licence agreements using blockchain technology is promising, one should not disregard its limitations. In terms of the licence agreements, it remains to be seen in the near future how Member States will transpose the DSM Directive and in particular Article 17 into national law. As far as the employment of blockchain is concerned, it will take time for the legislator to accept these new technological advancements and to study and test them before legislating on them.



## Chapter 7: Conclusion

The thesis interpreted the communication to the public right through the lens of video game streaming. Even though video game streaming is a rather profitable area for users and online platforms, little attention has been paid to the copyright implications in Europe. The thesis explored how to strike a fair balance between the rights of video game copyright holders, the right of intermediaries to conduct a business, and Internet users' freedom of expression.

### 7.1 Summary of General Contribution

Copyright holders have the exclusive right to communicate their works to the public. With the development of streaming technology, Internet users are able to communicate a copyright-protected work, such as a video game, either in the form of an LP video or as a live stream. Both types of streaming (on demand and live streaming) infringe Article 3 of the Information Society (InfoSoc) Directive, which includes the right to broadcast the work to the public and the right to make the work available from a place and at a time individually chosen by the public.

The InfoSoc Directive outlines in Article 5 the exceptions or limitations to the communication to the public right, including the quotations for purposes such as criticism or review. In order to determine whether 'Let's Play' (LP) videos and live streams fall under the 'quotations for the purposes of criticism or review', the thesis categorised the LP videos into three categories: review videos, playthrough videos with the players' commentary, and playthrough videos without commentary. A review video contains parts of a video game and the critical opinion of the reviewer. It does not conflict with the normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the rightholder. Hence, its use is in accordance with fair practice.

However, the remaining two types of playthrough videos require additional consideration. As demonstrated in the thesis, playthrough videos that include commentary are unlikely to qualify as 'criticism or review' because they fail to satisfy the second step of the three-step test, namely the 'conflict with the normal exploitation of the work'. It has been argued that viewers may be so content with watching an LP video that they will not purchase the game. Playthrough videos without commentary cannot benefit from the exception of quotations for purposes of 'criticism or review' because there is no accompanying commentary to critique or review the video game. As a result, these two types of LP videos are not regarded as fair practices.

Apart from the copyright holders and the Internet users/players there is a third part or value in the equation: intermediaries. The role and liability of intermediaries is covered by the safe harbour provisions of the e-Commerce Directive. Intermediaries, which carry out mere conduit or hosting activities, are not liable for the content they transmit or store, on the condition that the providers remain passive. LP videos entail a pre-recorded video of gameplay that will be stored on a platform as an archived video. The platform hosting the said video acts as a hosting service provider. Live streaming video games causes greater confusion in terms of the platform that transmits the live streaming. For instance, Twitch.tv does not initiate the transmission, it does not select the person receiving the information, and does not modify the transmitted content. Hence, Twitch.tv acts as a mere conduit for the live streaming and as a hosting provider for the archived videos that are available via on-demand streaming.

The thesis unveiled the deviation of opinions and understandings among legal academics and the European Commission around live streaming, which in turn necessitates a clarification or upgrade in legislation, to accommodate this type of service. A clarifying Recital should introduce a new typology regarding intermediary functions, including a non-exhaustive list of examples for each category. The Internet has changed in the years since the enactment of the e-Commerce Directive and further clarification should be given at a European level on what types of online businesses fall under the category of mere conduit, caching, and hosting. Taking as an example the live streaming services, it is apparent that the e-Commerce Directive of 2000 cannot mirror the emerging technologies and has proven not to be ‘future-proof’.

The modus operandi of intermediaries to remove or to disable access to information should also be improved. It was discussed that automated filtering systems, such as Content ID, have the potential to detect LP videos and match them against a database of copyright-protected works. However, filtering systems cannot detect exceptions and limitations cases. The case of live streaming poses additional challenges, since automated filtering systems would have to be sophisticated enough to identify and block live streamed content, because during a live stream, there would be times where a copyrighted song would be played in the background, or even a ringtone from a phone not switched to silent mode. In these scenarios, the algorithm would automatically remove or disable access to information regardless of the lawful nature of the video.

As automated filtering systems are unable to recognise exception and limitation cases, a four-tier solution has been proposed in this thesis: first, platforms should be responsible for

educating their users on copyright rules upon the creation of the account on the said platform; second, users before uploading the content should be able to select from a list the type of content they upload, such as review video, or playthrough video with commentary, or playthrough video without commentary; third, platforms should impose time limits to each video that will be uploaded; and fourth, platforms should employ algorithmic, voice-detector filters. Hence, review videos and playthrough videos with commentary will ‘pass’ the test and be successfully uploaded and stored online, while playthroughs without commentary will be automatically flagged, taken down, or unable to be posted in the first place.

In addition, courts can issue site blocking injunctions against Internet Service Providers (ISPs), targeting websites that contain infringing content. YouTube and Twitch.tv do not contain infringing materials in the entirety of their website. These websites accommodate content of all kinds. Video game content (via LP videos or live streaming) is only a part of YouTube and the largest part of Twitch content. According to case law from the selected national jurisdictions, for the blocking injunctions it would suffice that a substantial proportion of the website is infringing, despite containing parts of non-infringing content. There is no uniform case law on the amount of infringing content that should be available on a website, the suitable blocking method, or even who should determine the blocking technique. It is hard to determine which is the most suitable blocking method for LP videos. Out of DNS blocking, IP address blocking, and URL blocking, the latter is the most suitable method, since it targets precise locations, but this technique is easily circumvented by merely changing a file’s name. As far as the live streaming of video games is concerned, a ‘live’ blocking injunction, similar to the ones granted by the pioneering judgements from the UK courts, would not be applicable to the live streaming of video game content, due to the lack of technological advancements and the unfixed times of broadcasting. Given that playthrough videos with commentary serve as public fora, the balancing of rightholders’ rights with the freedom of expression presents a challenging task.

For LP videos and live streams to continue to exist, without the risk that they will be taken down, and to close the ‘value gap’ that has been created by platforms providing access to copyright-protected works without any prior authorisation from rightholders, the use of licence agreements between video game developers (rightholders) and intermediary service providers is an alternative and feasible measure. In light of the recent development in copyright law, the DSM Directive stipulates that safe harbour for hosting services will not be applied where an online content-sharing service provider performs an act of communication to the public or an

act of making available to the public. From a practical standpoint, platforms hosting user-generated content, such as LP videos on YouTube, would be required to obtain licences for each uploaded piece of content on their website.

Two aspects of the licence agreement were considered: first, which video game categories could be included in the licence agreement; and second, the determination of a remuneration standard for the rightholder. Regarding the first issue, competitive video games, such as *League of Legends*, would be included in the licence agreement because LP videos demonstrating a competitive game would attract more viewers and potential customers, while purely story-driven video games, such as *Heavy Rain*, could be excluded from the licence agreement because a playthrough video with or without commentary could negatively affect consumer behaviour.

As far as remuneration is concerned, its standard is hard to be determined. As there is no regulation accommodating the remuneration for video game streaming, this matter should be considered, based on the principle of contractual freedom and a fair balance of rights and interests. Two proposals were made regarding the determination of remuneration. The first proposal refers to the length of the copyrighted work that is used on the new video. Remuneration would, then, be proportionate to the length or amount of the work taken. For instance, a review video would normally contain seconds or a few minutes of the whole work. In a 15-minute review video, a large part is dedicated to the critical comment of the reviewer, whereas a smaller part may demonstrate seconds or minutes of the game. The remuneration owed to the copyright holder would be proportionate to the length taken from the original video game.

The second proposed solution is associated with the popularity of the video. The remuneration would be calculated based on the ‘views’ of the new video, allowing a percentage of the advertising revenue to be transferred to the rightholder. However, one should not disregard the personal contribution of the content creator. Thus, a fair balance between the rightholder, the creator/streamer, and the platform would be required when determining the standard of remuneration. The first proposed solution seems to be fairer for the content creator, as the remuneration would depend on the amount of the video game used on the streaming video. It remains to be seen how Member States will implement Article 20 of the Directive.

The DSM Directive aims at closing the ‘value gap’ created by platforms, but there are no provisions for a mechanism to monitor and track usage of original works over the Internet.

Consequently, the thesis recommends that copyright holders could leverage the advancements of blockchain technology. Specifically, the thesis emphasised the importance of issuing digital certificates, tracking usage over the Internet, and making transborder and instant payments to rightholders.

A digital certificate (containing information about a work) could enhance the certainty and confidence of service providers hosting LP videos or live streaming videos, as this certificate would include the title of video games and the rights that have been granted to them (providers), as licensees. Confidence will be given to the users/players, too. As blockchain enables the tracking of works on the Internet, a system to detect on the web in how many instances video game footage has been used, which would search for video, images, text, and music, is needed. Regarding payment, blockchain technology could facilitate automatic payments. Attaching smart contracts to every LP video or live stream that users upload will serve as a tool for video game copyright holders to know how many LPs are hosted by a particular intermediary, as well as how much of the original video game has been used for the creation of the LP video, and it will subsequently calculate the payment to be made to them.

Blockchain technology has already been employed in various industries, such as music, digital artworks, images, and even the fashion industry. Of course, technical challenges to the blockchain infrastructure, as well as legal implications (e.g. the perception of blockchain as a ‘hosting service provider’) around the use of blockchain for licensing purposes, necessitate the regulation of blockchain for the storage of digital works and a provision for new exceptions for storing infringing content put onto it by users. While recent research has been conducted on methods and recommendations to defend blockchain forking attacks, an additional key challenge that blockchain technology faces is to ensure that the evidence stored on a blockchain is accurate and trustworthy. The thesis highlighted that a neutral and authoritative third party would strengthen the credibility of a blockchain record in cases involving both ‘on-chain’ and ‘off-chain’ information, as it would aid in ensuring consistency between the two sources. Blockchains are databases whose information cannot be changed, except for extraordinary circumstances. The inherently immutable nature of this technology creates challenges in cases where information about a copyrighted work is not entered correctly. This severe limitation requires technical and governance processes to be in place for remedying this fact. To date, it is not clear how incorrect information will be altered or amended, thus remaining a general concern over blockchains.

## 7.2 Limitations and Directions for Future Research

The following paragraphs set out the limitations of this thesis. Firstly, the study focused on the application of the communication to the public right in video game streaming. If and to what extent the conclusions of this research can be generalised and applied to other industries still needs further examination. For example, Internet users/players interact with the video game and add their personal and creative input during a LP video or live stream, but this is not the case with the music or film industry. Likewise, the conclusions reached in Chapter 5 on the effectiveness of live blocking injunctions cannot be applied to video game live streaming but have been granted by the UK courts for sport live streaming.

Secondly, the thesis emphasised four jurisdictions: Germany, France, Greece, and the UK. From a practical point of view, it is not possible to analyse the legal framework and case law of all national systems in Europe. The thesis was written during the transition period after Brexit; therefore, it is not clear how the future relationship between the EU and the UK will be in terms of copyright law harmonisation.

Thirdly, recent developments on copyright law include the enactment of the DSM Directive. However, at the time of writing, the Directive has not been transposed by all EU Member States. From the selected jurisdictions, Greece has delayed transposing the Directive, while the UK will not implement it into the national system at all, since the deadline was after the end of the Brexit transition period. As such, it is not clear how Article 17 will be implemented in practice and how the authorisation requirement will be met.

Lastly, the thesis employed a doctrinal and comparative analysis. Future research could expand the methodological approach to include qualitative methodology with the use of interviews. A suggestion would be to interview representatives of rightholders, intermediaries, and users in the video game industry, in order to gain an in-depth understanding of their business model and strategy. Additionally, Chapter 6 proposed an alternative measure, that of licensing through blockchain technology; therefore, it would be interesting for future studies to examine the practical aspects of this proposal.

## Appendix

### Appendix 1: National case law on blocking injunctions

Jurisdiction and case	Blocking injunction with specific technical means	Blocking method
<u>Germany</u>		
BGH I ZR 64/17	Yes	DNS
OLG Hamburg I ZR 3/14 and OLG Cologne I ZR 174/14	Yes	IP
<u>France</u>		
Paris Tribunal de Grande Instance, Association des Producteurs de Cinéma (APC) and others v Auchan Telecom and others [2013]	Yes	DNS
Paris Tribunal de Grande Instance, Federation National des Distributors et autres v S.A. Orange et autres [2018]	Yes	DNS
Paris Tribunal de Grande Instance, S.A.S Elsevier et autres v S.A. Orange et autres [2019]	Yes	DNS
<u>Greece</u>		
National Court: Athens Court of First Instance No 4658/2012	Yes	IP

<p>Greek Commission: Decision No 17/2020, 16/2020, 15/2020, 11/2019, 9/2019, 7/2019, 5/2019, 3/2018</p>	<p>Yes</p>	<p>DNS</p>
<p><u>The UK</u></p> <p>Cartier International AG &amp; Ors v British Sky Broadcasting Ltd &amp; Ors [2014] EWHC 3354 (Ch)</p> <p>Twentieth Century Fox Film Corp &amp; Ors v British Telecommunications Plc [2011] EWHC 1981 (Ch)</p> <p>Dramatico Entertainment Ltd v British Sky Broadcasting Ltd [2012] EWHC 1152 (Ch)</p> <p>The Football Association Premier League Ltd v British Telecommunications Plc &amp; Ors [2017] EWHC 480 (Ch)</p> <p>Union Des Associations Européennes De Football v British Telecommunications Plc &amp; Ors [2017] EWHC 3414 (Ch)</p> <p>Matchroom Boxing Ltd &amp; Anor v British Telecommunications Plc &amp; Ors [2018] EWHC 2443 (Ch)</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>DNS</p> <p>Hybrid: IP &amp; URL</p> <p>Hybrid: IP &amp; URL</p> <p>Live blocking order</p> <p>Live blocking order</p> <p>Live blocking order</p>
<p><u>Belgium</u></p>		



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<u>Denmark</u>		
Copenhagen City Court, IFPI Danmark v Tele 2 A/S, Copenhagen City Court, 25 October 2006, No F1-15124/2006	Yes	DNS
Frederiksberg Court, IFPI Danmark v DMT2 A/S, Frederiksberg Court, 5 February 2008, No FS 14324/2007	Yes	DNS
<u>Spain</u>		
Central Contentious-Administrative Court, No 1/2015, 20 April 2016	Yes	DNS
<u>Finland</u>		
IFPI Finland ry v Elisa Oyj, 26 May 2011, case number 11/41552	Yes	Hybrid: DNS & IP
<u>Sweden</u>		
Svea Court of Appeal, Universal Music Aktiebolag and others v B2 Bredband, 13 February 2017	Yes	Hybrid: DNS & URL
Svea Court of Appeal, Telia Sverige AB and others v Aktiebolaget Svensk Filmindustry and others No PMO 9945-18, 1 February 2019	Yes	Hybrid: DNS & URL
<u>The Netherlands</u>		

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