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### **TECHNICAL, LEGAL AND JUDICIAL ASPECTS OF THE ILLEGAL RETRANSMISSION OF LIVE BROADCASTS THROUGH INTERNET STREAMING\***

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## **ABSTRACT**

This study examines the technical and legal aspects and judicial treatment of live broadcasts illegally transmitted through Internet streaming. First, it scrutinizes the nature of illegally retransmitted live broadcasts and investigates the challenges this presents to broadcasters, event organizers, and the entertainment industry. Second, it investigates whether there is copyright or related rights protection for live content and/or broadcast separate from the underlying content by explaining the types of copyright and related rights protection found in national systems. Third, it examines the different licenses required for a broadcaster to comply with copyright laws and secure the necessary rights from content owners. Fourth, the study examines the diverse models employed by unauthorized streamers when retransmitting live broadcasts. It highlights how these illegal methods capture and retransmit live content without authorization. It then reviews the legislative and regulatory measures implemented globally to combat illegal live streaming, including current remedies, and assesses the effectiveness of these strategies in deterring copyright infringement. Finally, the study identifies the potential limitations of the current remedies, including unresolved legal, technical, and operational challenges. This study stresses the urgent importance of implementing effective enforcement measures and establishing a widely agreed-upon set of rules to combat the illegal retransmission of live events through Internet streaming.

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## I. INTRODUCTION

1. The Internet has revolutionized content consumption, shifting from traditional broadcasts to streaming over the Internet. Consumers now rely on streaming service providers such as Netflix, YouTube, HBO Max, IQIY, Iroko TV and ivi TV<sup>1</sup>, which are usually subscription-based, for on-demand or live content<sup>2</sup>. With greater advantages vis-à-vis choice, convenience, and control over consumer entertainment experiences, coupled with the growth of broadband infrastructure, the ever-increasing Internet streaming industry is highly robust<sup>3</sup>. The global live-streaming market grew from \$1.24 billion in 2022 to \$1.49 billion in 2023<sup>4</sup> and it is expected to grow to \$3.21 billion in 2027<sup>5</sup>.

2. Illegal retransmission of live broadcasts through the Internet has also increased in recent years, mainly due to lack of effective enforcement mechanisms. This has led to revenue loss for pay TV broadcasters and organizations<sup>6</sup>. In 2019, the European Union (EU) estimated at EUR 522 million in lost revenue from online piracy, including the unauthorized retransmission of live sports events<sup>7</sup>. This figure considered only illegal business models relying on users' subscription fees<sup>8</sup>.

3. Illegal streaming of live broadcasts has two main implications. First, it leads to substantial financial losses for content creators, event organizers, and broadcasters<sup>9</sup>. Second, it undermines the integrity of creative works, challenging creators' exclusive rights to distribute and profit from their work<sup>10</sup>.

4. With this background, this study examines the technical and legal aspects as well as the judicial treatment of the illegal retransmission of live broadcasts through Internet streaming. It undertakes a thorough analysis of the existing legal frameworks at both national and international levels, focusing on copyright and broadcasting regulations, and identifying gaps. This study's overarching objective is to examine the legal approaches and enforcement

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<sup>1</sup> Anna Font, '5 European Netflix alternatives to watch' (2020) at <<https://www.eu-startups.com/2020/04/5-european-netflix-alternatives-to-watch/>>; ChinaPlanning (2022) at <<https://www.chinaplanning.org/10-websites-to-watch-chinese-movies-tv-series-online-free/>>; FlixPatrol (2020) at <<https://flixpatrol.com/streaming-service/kinopoisk/>>; Africa (2019) at <<https://www.bizcommunity.africa/Article/410/810/186456.html>>.

<sup>2</sup> In addition, major players in the live streaming market are AfreecaTV Co. Ltd., Amazon, Boxcast, Dacast, Empire Video Productions LLC, Facebook Inc., Flux Broadcast, Google LLC, Huya Inc., IBM Corporation, Instagram Inc., Microsoft Corporation, Periscope, Pluto Inc., and Twitch Interactive Inc, see Live Streaming Global Market Report 2023 at <<https://www.researchandmarkets.com/reports/5766965>>.

<sup>3</sup> Precedence Research, Video Streaming Market Size, Trends, Growth, Report 2023 (2022) at <<https://www.precedenceresearch.com/video-streaming-market>>.

<sup>4</sup> Live Streaming Global Market Report (2023) at <<https://www.researchandmarkets.com/reports/5766965>>.

<sup>5</sup> Live Streaming Global Market Report (2023) at <<https://www.researchandmarkets.com/reports/5766965>>.

<sup>6</sup> Brett Hutchins, 'Sport on the Move: The Unfolding Impact of Mobile Communications on the Media Sport Content Economy' (2014) 38(6) *Journal of Sport and Social Issues* 509, 510–511, see also Kanchana Kariyawasam & Matthew Tsai, 'Copyright and Live Streaming of Sports Broadcasting' (2017) 31 (3) *International Review of Law, Computers & Technology* 265–288.

<sup>7</sup> EU, Commission Recommendation (EU) 2023/1018 of 4 May 2023 on combating online piracy of sports and other live events, PARA 4, Page 1 and 2 at <<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32023H1018>>.

<sup>8</sup> EU, Commission Recommendation (EU) 2023/1018 of 4 May 2023 on combating online piracy of sports and other live events, PARA 4, Page 1 and 2 at <<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32023H1018>>.

<sup>9</sup> European Parliament, 'Challenges of Sports Events Organisers in the Digital Environment' (2021) at <[https://www.europarl.europa.eu/doceo/document/TA-9-2021-0236\\_EN.html](https://www.europarl.europa.eu/doceo/document/TA-9-2021-0236_EN.html)>.

<sup>10</sup> See Statement of Maria A. Pallante, Register of Copyrights before the Subcommittee on Intellectual Property, Competition, and the Internet Committee on the Judiciary, United States House of Representatives 112th Congress, 1st Session June 1, 2011 Promoting Investment and Protecting Commerce Online: The ART Act, the NET Act and Illegal Streaming available at <<https://www.copyright.gov/docs/regstat060111.html>>.

mechanisms that WIPO Member States have adopted, which enforce the rights of broadcasting organizations against the illegal retransmission of live broadcasts. It also reviews how legislators and courts have addressed infringements, and the current challenges to ensuring the proper enforcement of broadcasters' rights.

## A. BROADCASTING

5. Rights in the area of broadcasting are a bundle. Broadcasting organizations may have a special or related right to the program-carrying signal, or a copyright in the signal. Secondly, a broadcasting organization may be in possession of a copyright or related right in the content carried by the signal. Such rights may be acquired by the broadcasting organization in the production process of its own programs, or rights may be acquired from independent producers or other broadcasting organizations. Finally, a broadcasting organization may have copyright in its flow of programs, a program day or program week, based on the so-called catalog protection in Article 2(5) of the Berne Convention.

6. The rights in the content consist firstly of copyright of the authors' works included in the works included in the programs. Secondly, the rights may be related rights or copyrights of performers or producers of phonograms. Finally, a right in the broadcast content may be the intellectual property right granted in some countries to sports events.

7. This study is mainly focused on the rights in content. References to the broadcasters' own rights in its broadcasts or signals are referred to as necessary.

8. In the existing international regime, the main instrument that deals with broadcasters' own rights is the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations 1961 (Rome Convention). The Rome Convention defines "broadcasting" as the transmission by wireless means for public reception of sounds or of images and sounds<sup>11</sup>. The definition of broadcasting was extended to expressly include satellite broadcasting in the 1996 WIPO Performances and Phonograms Treaty (WPPT)<sup>12</sup>. From a combined reading of the Rome Convention and WPPT, the definition of broadcasting can be understood as having a primary focus on transmission; therefore, the term "broadcast" would cover only the transmitted signals and not the content. A "signal" is defined under the Brussels Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite 1974 (Brussels Convention) as an electronically generated carrier capable of transmitting programs<sup>13</sup>.

## B. INTERNET STREAMING

9. Streaming refers to the transmission of real (near instantaneously or with minimum delays) or stored media between client and server computers via the Internet without downloading<sup>14</sup>. Put simply, streaming lets users view or listen to music or video content over

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<sup>11</sup> Article 3 (f) of the Rome Convention.

<sup>12</sup> Article 2 (f) of the WPPT. It says that "broadcasting" means the transmission by wireless means for public reception of sounds or of images and sounds or of the representations thereof; such transmission by satellite is also "broadcasting"; transmission of encrypted signals is "broadcasting" where the means for decrypting are provided to the public by the broadcasting organization or with its consent.'

<sup>13</sup> WIPO, 'Summary of the Brussels Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite (1974)' at <<https://www.wipo.int/treaties/en/ip/brussels/>>.

<sup>14</sup> Franc Kozamernik, 'Media Streaming over the Internet: An overview of Delivery Technology' (2022) *EBU Technical Review* 1-15, see also Dave Johnson, 'The Beginner's Guide to Streaming, Including How It Works, the Pros and Cons, and More' (2021) *Business Insider* at <[www.businessinsider.com/what-is-streaming](http://www.businessinsider.com/what-is-streaming)>; see also

the Internet without needing to download a file to their computer<sup>15</sup>. It restricts users from retaining copies of the content and if the end-user wants to access it again, the work may not readily be available to the end-user<sup>16</sup>. With music content, a song is performed during the file transfer, and upon the song's completion, no copy of the file remains on the user's hard drive<sup>17</sup>. This is mainly due to the buffering process in streaming because a buffer comprises information kept in RAM for a short amount of time when an end-user accesses an audio or video file via Internet streaming, one-fifth of this file is loaded first into the buffer before it begins to play<sup>18</sup>.

10. There are two types of streaming: (i) on-demand/interactive and (ii) live-streaming/non-interactive<sup>19</sup>. What separates on-demand from live streaming is user control<sup>20</sup>. In an on-demand stream transmission, the data is initially stored in a central server and then transmitted to end-users upon their request. Users have the flexibility to watch content at their convenience<sup>21</sup>.

11. Conversely, live streaming is recognized as the digital distribution of audio or video material in real time, or as close to real time as technological constraints allow<sup>22</sup>. In real time streaming, there is no "steady storage"; the content is delivered to the user's media player in real time without any storage<sup>23</sup>. For instance, without any intermediate storage between its origin/source and the player, the data is processed as it arrives at the player and then discarded<sup>24</sup>. It is therefore a continuous process.<sup>25</sup>

12. The benefit of live-streaming is its ability to allow Internet users to view real time content, such as live sports games, music concerts, and conferences<sup>26</sup>. The methods of accessing live streaming include (a) peer-to-peer (P2P) networks, in which all computers are interconnected and can communicate with each other directly without needing a third-party server; (b) unicast streaming, in which content is stored on a server then provided to users through a website; and

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Irene Calboli, 'Legal Perspectives on the Streaming Industry: The United States' (2022) 70 (1) *The American Journal of Comparative Law* i220–i222.

<sup>15</sup> Dave Johnson, 'The Beginner's Guide to Streaming, Including How It Works, the Pros and Cons, and More' (2021) *Business Insider* at <[www.businessinsider.com/what-is-streaming](http://www.businessinsider.com/what-is-streaming)>; see also Irene Calboli, 'Legal Perspectives on the Streaming Industry: The United States' (2022) 70 (1) *The American Journal of Comparative Law* i220–i222.

<sup>16</sup> Lasantha Ariyaratna, *Streaming and Copyright Law: An End-user Perspective* (2023, Routledge, UK).

<sup>17</sup> Matt Jackson, 'From Broadcast to Webcast: Copyright Law and Streaming Media' (2003) 11(3) *Texas Intellectual Property Law Journal* 447-482.

<sup>18</sup> Steven Foley, 'Buffering and the Reproduction Right: When Is a Copy a Copy?' (2010) 1(1) *Cybaris Intellectual Property Law Review* Art 100-122, see also Lasantha Ariyaratna, *Streaming and Copyright Law: An End-user Perspective* (2023, Routledge, UK).

<sup>19</sup> Mengna Liang, 'Copyright Issues Related to Reproduction Rights Arising from Streaming' (2020) 23 (5-6) *Journal of World Intellectual Property* 798-801.

<sup>20</sup> Taylor McGraw, 'Music Streaming: Where Interactive & Non-Interactive Services Fit under the Homestyle Exemption' (2018) 10 (1) *William and Mary Business Law Review* 269-283.

<sup>21</sup> *Ibid.*

<sup>22</sup> Daniel Chandler & Rod Munday, *Dictionary of Media and Communication* (Oxford University Press, 2011) 364.

<sup>23</sup> David Austerberry, *The Technology of Video and Audio Streaming* (Elsevier, 2<sup>nd</sup> ed., 2004) at 133.

<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.* at 7.

<sup>26</sup> Maurizio Borghi, 'Chasing Copyright Infringement in the Streaming Landscape' (2011) 42 (3) *IIC International Review of Intellectual Property and Competition Law* 316-343.

(c) streaming through a non-web based Internet application such as Periscope<sup>27</sup>. Live streaming can also occur through Internet Protocol Television (IPTV)<sup>28</sup>.

13. IPTV uses streaming technology, which is generally understood as technology in which the transmission of files takes place without transferring the files to the end users. The file is transferred only for enjoying content, not for permanent storage or future use<sup>29</sup>. In contrast, P2P sharing involves sharing files that can be downloaded by the user<sup>30</sup> and stored for future use. P2P networks are typically used to distribute stored media (i.e., previously recorded, and encoded content), unlike real-time streaming, which generally involves signal streams from the camera to the player<sup>31</sup>. Because there is a fundamental difference in how P2P networks and live streaming operate, P2P streaming cannot always involve real time live streaming.

14. In addition, Internet streaming service providers can be categorized into digital service providers (DSPs) and user-generated content services (UGCs)<sup>32</sup>. A DSP is a platform that “directly chooses and controls the content it makes available on its service at any given time,”<sup>33</sup> such as Netflix, Kayo, StanSport, Bein, Disney+, and Spotify. In general, DSPs are required to obtain explicit consent for the works they intend to stream by entering into licensing agreements directly with the relevant rights holders.<sup>34</sup> UGCs are open social video platforms such as YouTube, Facebook, and TikTok that allow users to upload content<sup>35</sup>. Because users of the platforms upload content independently<sup>36</sup>, UGCs<sup>37</sup> generally depend on the users themselves, including both professional and amateur artists, to obtain the necessary consent<sup>38</sup>.

<sup>27</sup> CISCO, ‘Technology White Paper: IP Multi Cast’ (White Paper, October 2001) accessed 12 August 2017; Michael J Mellis, ‘Internet Piracy of Live Sports Telecasts’ (2008) 18(2) *Marquette Sports Law Review*, 259–284; Lasantha Ariyaratna, *Streaming and Copyright Law: An End-user Perspective* (2023, Routledge, UK); Kanchana Kariyawasam & Matthew Tsai, ‘Copyright and Live Streaming of Sports Broadcasting’ (2017) 31 (3) *International Review of Law, Computers & Technology* 265-288; Note: “Periscope is a live video-streaming smartphone application (app) that allows users to broadcast live video simultaneously to multiple smartphone users worldwide”, see Maren Y Fuller et al, ‘Using the Periscope Live Video-Streaming Application for Global Pathology Education: A Brief Introduction’ (2016) 140 (11) *Arch Pathol Lab Med* 1273-1280.

<sup>28</sup> Sabu M. Thampi, ‘A Review on P2P Video Streaming’ at <<https://arxiv.org/pdf/1304.1235.pdf>>.

<sup>29</sup> M. Sakhivel, *Broadcasters’ Rights in the Digital Era: Copyright Concerns on Live Streaming* (Brill Nijhoff, 2020) 23.

<sup>30</sup> Ramon Casadesus-Masanell & Hervás-Drane, ‘Competing against online sharing. Management Decision’ (2010) 48(8) *Management Decision* 1247-1260.

<sup>31</sup> Kyung Wook Hwang, ‘Stored Media Streaming in BitTorrent-like P2P Networks’ at <<https://academiccommons.columbia.edu/doi/10.7916/D8F47WZD/download>>, see also David Austerberry, *The Technology of Video and Audio Streaming* (2<sup>nd</sup> Ed, Routledge, 2004)138.

<sup>32</sup> Irene Calboli, ‘Legal Perspectives on the Streaming Industry: The United States’ (2022) 70 *The American Journal of Comparative Law*, i220–i245, see also Michael J. Mellis, ‘Internet Piracy of Live Sports Telecasts’ (2008) 18 (2) *The Marquette Sports Law Review* 259, 269.

<sup>33</sup> Annemarie Bridy, ‘The Price of Closing the “Value Gap”: How the Music Industry Hacked EU Copyright Reform’ (2020) 22 (2) *Vanderbilt Journal of Entertainment and Technology Law* 323, 327.

<sup>34</sup> Irene Calboli, ‘Legal Perspectives on the Streaming Industry: The United States’ (2022) 70 *The American Journal of Comparative Law*, i220–i245.

<sup>35</sup> Annemarie Bridy, ‘The Price of Closing the “Value Gap”: How the Music Industry Hacked EU Copyright Reform’ (2020) 22 (2) *Vanderbilt Journal of Entertainment and Technology Law* 323, 327.

<sup>36</sup> Generally, users are required to obtain the necessary permission when the content involves third-party intellectual property. However, some copyright owners perceive that the fair use doctrine must be accommodated *vis a vis* User Generated Content (UGC). Some other copyright owners are concerned that UGC includes verbatim unauthorized copies of their work.

<sup>37</sup> Whether users uploading content are required to obtain the necessary authorizations from right holders, depends on the fine balance between accommodating fair use without diluting the protection afforded to the copyright holders; see also Fair Use Principles for User Generated Video Content at <<https://www.eff.org/pages/fair-use-principles-user-generated-video-content>>.

<sup>38</sup> Irene Calboli, ‘Legal Perspectives on the Streaming Industry: The United States’ (2022) 70 *The American Journal of Comparative Law*, i220–i245, The USA is one of the largest markets for Internet streaming; major streaming platforms such as Netflix, Hulu, Amazon Prime Video and Disney+ have a strong presence in the US market. Approximately 78 per cent of US households have subscribed to one or more streaming services. Video



### C. ILLEGAL STREAMING

15. Technological advances, as well as high-speed Internet connections and mobile services, mean that digital signals and content can be distributed simply and rapidly<sup>39</sup>. Once it is said that:

Online piracy of live sport events is a major challenge faced by sport events' organisers. It is important to enable an immediate and workable tool for the enforcement of rights for live sport events, including the possibility of realtime blocking of access to or removal of unauthorized online live sport content<sup>40</sup>.

16. It is pertinent to note that illegal live streaming services exist to profit their operators<sup>41</sup>. These websites change their domain names frequently, in order to avoid being indexed by search engines, and the scrutiny of researchers and law enforcement<sup>42</sup>. Moreover, they only host paths to live streams for the duration of the specific live event<sup>43</sup>. In 2016, Facebook was used to illegally live stream the 2016 Barcelona v. Real Madrid match gaining 700,000 views<sup>44</sup>.

17. This image shows an overview of the ecosystem of illegal live streaming<sup>45</sup>.

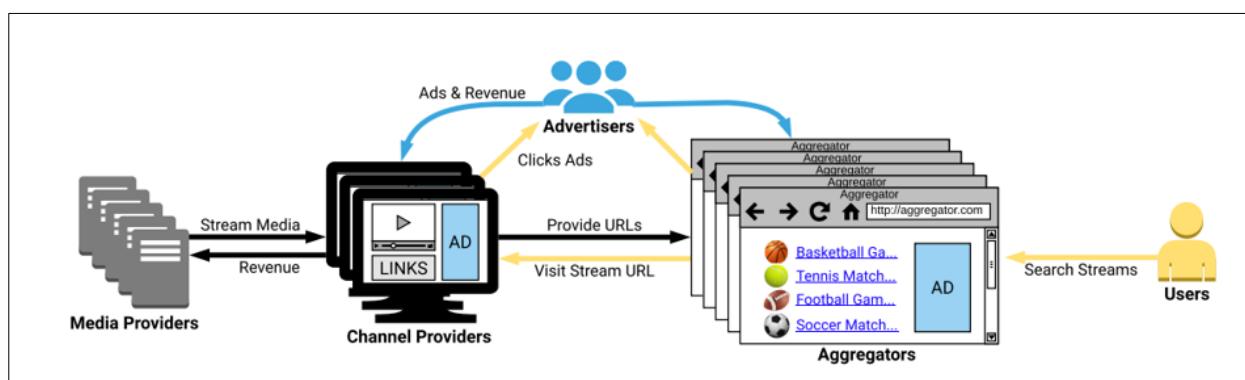


Figure 1: An overview of the ecosystem of illegal live streaming services. In some cases, media providers, channel providers, and/or aggregators may be controlled by a single entity.

and music streaming services are the most popular among consumers; see Ana Durrani, 'The Average American Spends Over 13 Hours A Day Using Digital Media—Here's What They're Streaming' (2023) at <<https://www.forbes.com/home-improvement/internet/streaming-stats/>>.

<sup>39</sup> Report ITU, 'The problem of unauthorized redistribution of broadcast content' at <[https://www.itu.int/dms\\_pub/itu-r/opb/rep/R-REP-BT.2036-2003-PDF-E.pdf](https://www.itu.int/dms_pub/itu-r/opb/rep/R-REP-BT.2036-2003-PDF-E.pdf)>.

<sup>40</sup> Press Release, 'Tackling digital piracy of live sport events and protecting organizers' (2021) at <<https://www.europarl.europa.eu/news/en/press-room/20210407IPR01528/tackling-digital-piracy-of-live-sport-events-and-protecting-organizers>>.

<sup>41</sup> Luke Hsiao & Hudson Ayers, 'The Price of Free Illegal Live Streaming Services' (2019) at <<https://arxiv.org/pdf/1901.00579.pdf>> at 1.

<sup>42</sup> Luke Hsiao & Hudson Ayers, 'The Price of Free Illegal Live Streaming Services' (2019) at <<https://arxiv.org/pdf/1901.00579.pdf>> at 2; see also Kiran Kumar Jakkur Patalappa et al, 'Exploring Ecosystem of Free Illegal Live Streaming Services and Its Price on Legitimate Services' 2021 IEEE International Conference on Mobile Networks and Wireless Communications (ICMNCW).

<sup>43</sup> Luke Hsiao & Hudson Ayers, 'The Price of Free Illegal Live Streaming Services' (2019) at <<https://arxiv.org/pdf/1901.00579.pdf>> at 1.

<sup>44</sup> MUSO, 'Inside the complex world of illegal sports streaming' at <<https://www.muso.com/magazine/inside-the-complex-world-of-illegal-sports-streaming>>.

<sup>45</sup> Luke Hsiao & Hudson Ayers, 'The Price of Free Illegal Live Streaming Services' (2019) at <<https://arxiv.org/pdf/1901.00579.pdf>> at 1, see also M. Zubair Rafique et al, 'It's free for a reason: Exploring the ecosystem of free live streaming services' at <<https://www.ndss-symposium.org/wp-content/uploads/2017/09/free-reason-exploring-ecosystem-free-live-streaming-services.pdf>>. In *Proceedings of the 23rd Network and Distributed System Security Symposium (NDSS 2016)* (2016), *Internet Society* at 1–15.

18. Illegal live streaming involves five main parties<sup>46</sup>:

- Media Providers: An individual with a subscription to a paid service who rebroadcasts for free in real time.
- Channel Providers: provide the infrastructure for live streaming.
- Aggregators: Publish the list of available streams and may act as channel providers, to ensure the user stays on the aggregator’s domain when connecting to a live event link.
- Advertisers: Individuals or Ad networks (often malicious or deceptive) fetched by Javascript code run by aggregators or channel providers.
- Users: Those watching illegal live streams on potentially malicious websites.<sup>47</sup>

D. UNAUTHORIZED RETRANSMISSION OF BROADCAST OF LIVE EVENTS

19. Under the Rome Convention<sup>48</sup> broadcasting organizations are granted an exclusive right to control rebroadcasting of their broadcasts<sup>49</sup>; unauthorized retransmission can include both civil and criminal liability, potentially leading to financial penalties and other legal remedies, making unauthorized transmission illegal. The definition of “rebroadcasting” under Article 3(g) is limited to the “simultaneous broadcasting by one broadcasting organization” of the broadcasts of another. The Rome Convention also provides for national treatment under Article 6, which covers the protection against *illegal transmission* if provided under domestic laws. Article 15 (2) states that Member States may provide for the same kinds of limitations regarding the protection of broadcasting organizations as the domestic law provides “in connection with the protection of copyright in literary and artistic works”<sup>50</sup>.

20. Additionally, although the Convention on Cybercrime (Budapest 2001) does not explicitly mention unauthorized retransmission of live events, it still states that such acts constitute an infringement of copyright and related rights which is deemed an offense. State parties are required to adopt the necessary legislative measures to establish criminal offences under its domestic law, pursuant to their obligations under the Bern Convention, Rome Convention, TRIPS Agreement, WCT and WPPT<sup>51</sup>.

21. European Commission Recommendation 2023/1018 of 4 May 2023 was adopted to combat online piracy of sports and other live events including concerts and theatre performances. It states that:

This Recommendation encourages Member States, national authorities, holders of rights and providers of intermediary services to take effective, appropriate, and proportionate measures to combat unauthorised retransmissions of live sports events and other live events in accordance with the principles set out therein, and in full

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<sup>46</sup> Luke Hsiao & Hudson Ayers, ‘The Price of Free Illegal Live Streaming Services’ (2019) at <<https://arxiv.org/pdf/1901.00579.pdf>> at 3.

<sup>47</sup> Luke Hsiao & Hudson Ayers, ‘The Price of Free Illegal Live Streaming Services’ (2019) at <<https://arxiv.org/pdf/1901.00579.pdf>> at 3.

<sup>48</sup> Rome Convention on the Protection of Performers, Producers of Phonograms and Broadcasting Organizations 1961.

<sup>49</sup> Article 13(a), Rome Convention, 1961.

<sup>50</sup> See also Australian Law Reform Commission at <<https://www.alrc.gov.au/publication/copyright-and-the-digital-economy-dp-79/16-broadcasting/broadcast-exceptions-and-the-rome-convention/>>.

<sup>51</sup> Article 10 Offences related to infringements of copyright and related rights at <https://www.aclu.org/legal-document/text-council-europes-convention-cybercrime-treaty>.

compliance with Union law, including the Charter of Fundamental Rights of the European Union<sup>52</sup>.

22. The EC Recommendation focuses on three primary areas of action: (a) rapid and effective handling of notifications concerning illegal live content broadcasts, (b) implementing appropriate blocking injunctions adapted to this type of content, and (c) raising consumer awareness regarding online piracy<sup>53</sup>.

23. Article 11 of the Beijing Treaty on Audiovisual Performances (adopted in 2012 and entered into force in 2020) introduces an exclusive right for broadcasting and communication to the public as the rule, allowing contracting parties to introduce an equitable remuneration<sup>54</sup>. The treaty aims to establish a framework for recognizing and safeguarding the rights of performers in the digital age, providing them with better protection and opportunities for fair compensation. It prohibits unauthorized fixations e.g. recording, reproducing, or distributing audiovisual performances without the performer's consent which are considered a violation of their rights<sup>55</sup>. It mandates that each of the ratifying states must, in alignment with their legal framework, implement the required measures to enforce the treaty's provisions, particularly addressing "infringements of rights"<sup>56</sup>. An unauthorized live transmission of audiovisual performances without the performers' or broadcasters' consent can also "infringe" upon the rights protected by the treaty<sup>57</sup>. Article 20 states that Contracting Parties must establish legal measures within their jurisdiction to enable effective responses to any "infringement" of the rights protected by this Treaty. These measures should include swift remedies to prevent infringements and remedies that constitute a deterrent to further infringements<sup>58</sup>.

24. While rebroadcasting by digital means is within the scope of the treaties addressing rebroadcasting, there is an increasing demand for the development of an effective international treaty aimed at safeguarding the interests of broadcasters and supporting effective action against piracy.

## E. ILLEGAL RETRANSMISSION OF LIVE BROADCASTS: CHALLENGES FOR BROADCASTERS AND THE ENTERTAINMENT SECTOR

25. The primary impact of illegal retransmission is that it can result in substantial revenue losses for broadcasting organizations and the entertainment industry, including sports. Potentially, more than half the revenue of sports organizations comes from "exclusive television deals, pay-per-view sales and licensed Internet distribution"<sup>59</sup>. Illegal retransmission diverts potential paying customers away from broadcasting companies leading to revenue loss. For example, the global sports industry is losing up to \$28 billion in potential revenue annually due

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<sup>52</sup> Commission Recommendation (EU) 2023/1018 of 4 May 2023 on combating online piracy of sports and other live events at <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023H1018>>.

<sup>53</sup> Online piracy of live events (2023) at <[https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS\\_ATA\(2023\)749807\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS_ATA(2023)749807_EN.pdf)>.

<sup>54</sup> Article 11 of the Beijing Treaty on Audiovisual Performances.

<sup>55</sup> WIPO, 'Beijing Treaty on Audiovisual Performances' at <[https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_beijing\\_flyer.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_beijing_flyer.pdf)>.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

<sup>58</sup> Article 20 of the of the Beijing Treaty on Audiovisual Performances.

<sup>59</sup> Piracy of Live Sports Broadcasting over the Internet: Hearing Before the H. Comm on the Judiciary, 11<sup>th</sup> Congress (2009), see Antwayne Robertson, 'Internet Piracy of Sports Broadcasts: Finding the Solution in the United Kingdom and United States' (2015) 25 (2) *Marquette Sports Law Review* 469, 471.

to illegal live streaming<sup>60</sup>. The French football industry loses nearly \$610 million each year due to illegal streaming of live sports events<sup>61</sup>.

26. The data below illustrates the extent of direct revenue loss caused by illegal live streams in Germany.

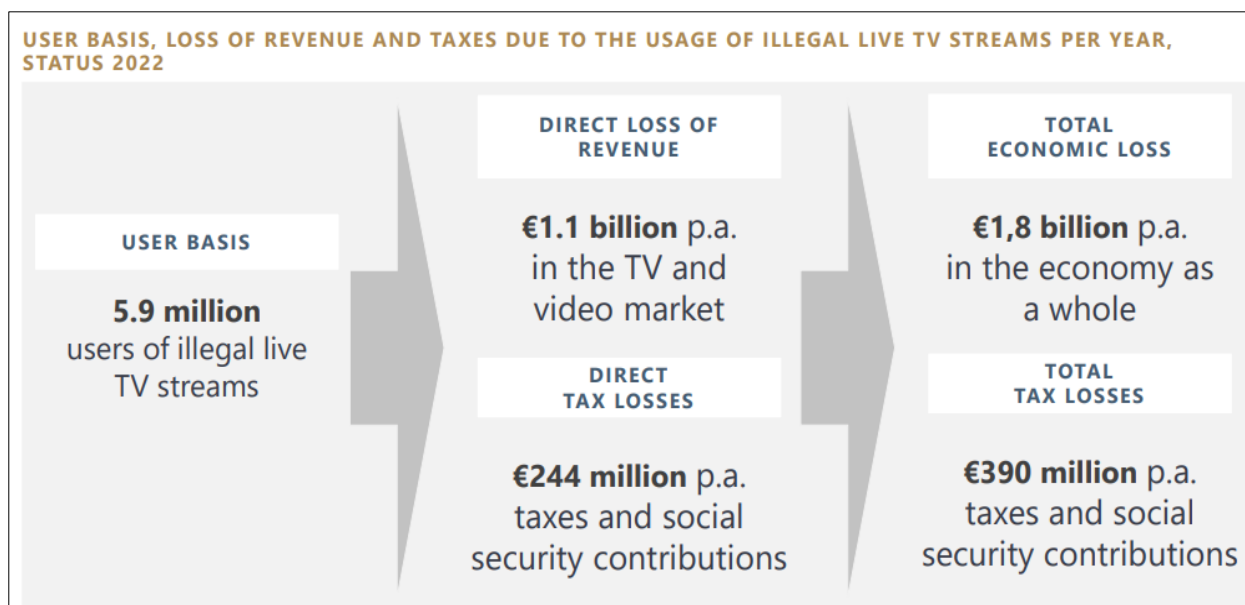


Figure 2: Data on Germany<sup>62</sup>.

27. Illegal transmission of broadcasts can undermine broadcasters' rights. It was once said that:

... The unauthorized streaming of a broadcast program, such as a live broadcast of a sports event, at the same time as the authorized broadcast would cause great harm to the legitimate market for the works being broadcast. This would be especially likely in cases where authorized performances are transmitted to the public by cable networks or by means of pay-per-view and similar services. A person who offers unauthorized streaming of such programs for no cost or a lower cost at the same time as the authorized transmission – or even within a few hours of the authorized transmission – could cause significant harm to the legitimate market<sup>63</sup>.

28. The illegal retransmission of live events may directly infringe both statutory and contractual rights of broadcasters, and many rights in the underlying content. A broadcaster often benefits from having a contractual arrangement with a sports promoter, in which it primarily seeks access to the sporting body's expertise, disclosure of information not generally available concerning routes and scheduling, and use of the promoter's sponsors as

<sup>60</sup> 'Sports organizations believe the US Patent and Trademark Office works too slowly when taking down illegal live streams and want to rewrite the law to make the process faster', see, BSO Entertainment (2023) at <<https://blackspportsonline.com/2023/08/how-the-nba-nfl-sports-industry-loses-a-potential-28-billion-in-revenue-per-year-due-to-illegal/>>.

<sup>61</sup> The Prevalence of Online Piracy in Live Sports Events (2022) at <<https://www.mediastalker.ai/blog/online-piracy/>>.

<sup>62</sup> A Study by Vaunet, 'Television Piracy Study 2022/2023' <<https://vau.net/wp-content/uploads/2023/01/VAUNET-study-on-TV-piracy-2022-2023-25.01.2023.pdf>> at 8.

<sup>63</sup> Statement of Maria A. Pallante, Register of Copyrights before the Subcommittee on Intellectual Property, Competition, and the Internet Committee on the Judiciary, United States House of Representatives 112th Congress, 1st Session June 1, 2011, Promoting Investment and Protecting Commerce Online: The ART Act, the NET Act and Illegal Streaming available at <<https://www.copyright.gov/docs/regstat060111.html>>.

television advertisers<sup>64</sup>. When this exclusive right and arrangement is encroached upon, the contractual and reputational rights of the broadcasting agency are both at stake.

## F. COPYRIGHT PROTECTION FOR LIVE CONTENT

29. The question of whether the “live content” of broadcasts is protected by copyright remains a subject of extensive academic and judicial debates; as yet there is no universal census that definitively settles this issue.

30. In *Commissioner of Taxation v Seven Network Limited*<sup>65</sup>, the Full Federal Court of Australia confirmed there is no copyright in digitally created streams representing the sounds and images of live broadcasts<sup>66</sup>. In this case, the Court considered whether there was copyright in the ITVR signal used to create Seven’s live broadcast of the Olympic Games. The Court stated that in a live broadcast of a major sporting event, the sounds and images are streamed digitally, thus no visual images or sounds are stored within the live stream signal at any time<sup>67</sup>. The Full Federal Court rejected the Commissioner of Taxation’s appeal concerning whether Seven Network’s payments to the International Olympic Committee (IOC) should be categorized as royalties under the *Income Tax Assessment Act 1936 (Cth)*. Bennett J stated, “The subject matter of the payment is not a cinematograph film, and is not a copyright or other like property or right”<sup>68</sup>. This demonstrates that the “material form” or “fixed form” requirement (used interchangeably) is an inherent part of the Australian Copyright Law<sup>69</sup>.

31. Also, in order to meet originality under copyright law, a work must be independently created and possess at least ‘some degree of creativity’<sup>70</sup>, which has also been challenging in determining what constitutes original content in the context of live streamed content. In the *Baltimore Orioles v. Major League Baseball* case<sup>71</sup> the primary issue to be decided was ‘whether major league baseball clubs own exclusive rights to the televised performances of major league baseball players during their games’<sup>72</sup>. The televised performances can also refer to the live performance implied from the fact that the baseball players argued that the lower court was wrong in holding that the baseball players’ live performance was copyrightable as embodied in a copyrighted telecast of the game<sup>73</sup>. In this context, the Appellate Court remarked that the telecasts were original works (independent creations) rather than mere reproductions of the earlier works<sup>74</sup>. In this case, it was held that the “many decisions that must be made during the broadcast of a baseball game concerning camera angles, types of shots, the use of instant

<sup>64</sup> Jean Pierre Blais, ‘The Protection of Exclusive Television Rights to Sporting Events Held in Public Venues: An Overview of The Law in Australia and Canada’ (2018) 18 *Melbourne University Law Review* 503, 504.

<sup>65</sup> 2016] FCAFC 70.

<sup>66</sup> 2016] FCAFC 70, see also *Mary Still et al*, ‘No copyright in digital data signals, says Full Federal Court’ (2016) at <<https://www.claytonutz.com/knowledge/2016/july/no-copyright-in-digital-data-signals-says-full-federal-court>>.

<sup>67</sup> 2016] FCAFC 70.

<sup>68</sup> [2014] FCA 1411, 127 & 139.

<sup>69</sup> See section 10 of the Copyright Act 1968 (Cth).

<sup>70</sup> Kanchana, Kariyawasam & Matthew Tsai, ‘Copyright and Live Streaming of Sports Broadcasting’ (2017) (31) (3) *International Review of Law, Computers and Technology* 265-288.

<sup>71</sup> *Baltimore Orioles v. Major League Baseball*, 805 F.2d 663 (7th Cir. 1986), Note that in the article titled “The Burden of Protecting Live Sports Telecasts: The Real Time Problem of Live Streaming and App-Based Technology by Adam Ainslie, it has been argued that the live sports telecasts merit copyright protection as they are independent creations (not copied from other works). The basis for the argument comes from the *Baltimore Orioles v. Major League Baseball* case.

<sup>72</sup> *Baltimore Orioles v. Major League Baseball*, 805 F.2d 663 (7th Cir. 1986).

<sup>73</sup> *Baltimore Orioles v. Major League Baseball*, 805 F.2d 663 (7th Cir. 1986).

<sup>74</sup> *Baltimore Orioles v. Major League Baseball*, 805 F.2d 663 (7th Cir. 1986).

replays and split screens, and shot selection, similarly supply the creativity required for the copyrightability of the telecasts”<sup>75</sup>.

32. Similarly, in the EU, the *C More Entertainment AB v Linus Sandberg* case<sup>76</sup>, the Court of Justice of the European Union (CJEU) held that *C More Entertainment AB* did not hold copyright as “no part of the commentators’, cameramen’s or picture producers’ work on the broadcasts of the ice hockey matches, taken on its own merits or some or all of those parts taken together reached the level of originality required for copyright protection”<sup>77</sup>. The case revolved around C More Entertainment offering live broadcasts of Swedish Ice Hockey League matches on its website and requiring viewers to pay an access fee. Mr. Sandberg published links on his own website that allowed users to bypass C More’s paywall to access the ice hockey matches. In the first instance, Mr. Sandberg was guilty of copyright infringement. However, in the appeal, the Court held that C More Entertainment did not hold a copyright but rather related rights<sup>78</sup>, which were still infringed upon. In this case, CJEU said that:

The Court of Justice of the European Union (“CJEU”) has provided a ruling confirming that individual Member States can give broadcasters wider protection than is set out in EU Directive 2001/2009 (the “InfoSoc Directive”) in respect of their rights in live-stream broadcasts of sporting fixtures. The extent to which broadcasters’ rights are protected has not been harmonised, with the result that different levels of protection may apply in different Member States<sup>79</sup>.

## G. RELATED RIGHTS FOR BROADCASTING ORGANIZATIONS

33. In traditional copyright laws, the rights of broadcasters were non-existent, thus a distinct scheme of “related rights” was created at the international level under the Rome Convention<sup>80</sup>. The Rome Convention aimed to ensure the broadcasters’ efforts and investments, and take action against unauthorized uses, and establish the right of broadcasters to control the transmission and retransmission of broadcasts. Following this adoption, many common law countries modified their copyright laws to include broadcasts within the category of protected works, thereby extending broadcasters’ rights to be analogous to those of content owners.<sup>81</sup> Broadcasts are categorized as “neighboring” or “related rights”, being less extensive than the protection granted to original works in terms of scope and duration of protection. These rights enable broadcasters to protect their investment in producing and transmitting broadcasts, plus the right to control retransmissions and other uses of their broadcasts.

34. In Article 8(3) of the Rental and Lending Directive of the EU (92/100/EC, codified version 2006/115/EC) broadcasting organizations enjoy an exclusive right to authorize or prohibit the rebroadcasting of their broadcasts by wireless means. This right, which belongs to the category of related rights, is what the Rome Convention requires.

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<sup>75</sup> *Baltimore Orioles v. Major League Baseball*, 805 F.2d 663 (7th Cir. 1986).

<sup>76</sup> C-279/13 (2015).

<sup>77</sup> Para 17 ECLI:EU:C: 2015:199 available at <<https://curia.europa.eu/juris/liste.jsf?num=C-279/13>>.

<sup>78</sup> Para 17 of the judgment.

<sup>79</sup> Feildfisher, ‘Member states freed up to protect broadcasters’ (2015) at

<<https://www.fieldfisher.com/en/insights/member-states-freed-up-to-protect-broadcasters>>.

<sup>80</sup> *International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations*, 26 October 1962, ATS 29 (entered into force on 18 May 1964).

<sup>81</sup> Hezekiel Oira & Lonias Ndlovu ‘*The Dichotomy Between Signal and Content as Basis of Broadcast Copyright: A Kenyan and South African perspective*’ (2008) *Obita* 399, 401.

35. Japan does not recognize copyright for its broadcasts but grants related/neighborhood rights to broadcasting and cable organizations<sup>82</sup>. A number of judicial decisions in Japan, as in many other countries, play a crucial role in interpreting and applying related rights for broadcasting organizations. For example, in *Maneki TV: NHK v Nagano Syoten Inc.*<sup>83</sup>, the plaintiffs argued that the defendant infringed their neighboring right to make the programs transmittable (art.2(9)(5) and art.99(2)) and their copyright over public transmission under Article 23 (1) of the Copyright Act<sup>84</sup>. In this case, NHK (Japan Broadcasting Corp) and five other TV broadcasting companies filed an injunction against *Nagano Syoten Inc.*, which provided a service known as “Maneki TV” for overseas users to stream live broadcasts through the Internet, claiming infringement of the neighboring TV broadcasting stations’ copyright. The Supreme Court ruled services that record and forward Japanese television programs and those that provide real time streaming of such via the Internet infringed the originating television station’s rights<sup>85</sup>. The Court held that “Nagano Syōten was the principal committing an infringement of both the “right of making a work transmittable” and the “right of public transmission”<sup>86</sup>.

36. Indian copyright law has also recognized related/neighborhood rights for broadcasters who disseminate the said work through TV, Radio, or the Internet. In *Espn Star Sports v. Global Broadcast News Ltd., & Ors*<sup>87</sup>, the plaintiff, ESPN Star Sports, had exclusive rights to make live and/or delayed and/or pay broadcasts of feeds of the cricket matches via terrestrial television, cable television and/or satellite television in India and other specified countries for December 26, 2007, to March 8, 2008 India vs Australia Test Matches<sup>88</sup>. The respondents were unauthorizedly telecasting the cricket matches, so the appellant filed a suit for a permanent injunction. The Court recognized that distributing live sports events was an infringement of the official broadcaster’s rights under section 37(3) of the Act. The Delhi High Court clarified that the broadcast reproduction right is a separate and distinct right from the copyright<sup>89</sup>.

37. Additionally, in India, in the *Multi Screen Media Pvt Ltd v. Sunit Singh & Ors.*, case, the Delhi High Court awarded an injunction, which prohibited more than 250 websites from illegally broadcasting the live and recorded footage of the 2014 FIFA World Cup (the exclusive broadcast rights were held by Sony Pictures, previously known as Multi Screen Media Pvt Ltd)<sup>90</sup>. In this case, the plaintiff argued that the unauthorized streaming of its broadcast infringed reproduction rights as stipulated in section 37 of the Act, resulting in significant and irreversible financial loss. While the Court has acknowledged that the distribution of live sports events constitutes a breach of the Copyright, the *Copyright Act 1957* has no specific provision regarding copyright in live sports.

<sup>82</sup> Article 1 of the Act states that the purpose of this Act is to provide for, and to secure protection of, the rights of authors, etc. and the rights neighboring thereto with respect [copyrightable] works as well as performances, phonograms, *broadcasts and wire-broadcasts*, while giving due regard to the fair exploitation of these cultural products, and by doing so, to contribute to the development of culture.

<sup>83</sup> *NHK v Nagano Syouten Inc* (Maneki TV), Tokyo District Court, June 20, 2008, H19 (wa) No.5765; aff’d, Intellectual Property High Court 2008, H20 (ne) No.10059.

<sup>84</sup> Miya Sudo & Simon Newman, ‘Japanese Copyright Law Reform: Introduction of the Mysterious Anglo-American Fair Use Doctrine or an EU style divine intervention via Competition Law?’ (2014) 18 *Intellectual Property Quarterly* 40-70.

<sup>85</sup> Takashi B Yamamoto, ‘Legal Liability for Indirect Infringement of Copyright in Japan’ (2013) 35 *Comparative Law Yearbook of International Business* at <https://www.itlaw.jp/yearbook35.pdf>; see also Naoya Isoda, ‘Copyright Infringement Liability of Placeshifting Services in the United States and Japan’ (2011) 7 (2) *Washington Journal of Law, Technology & Arts* 149, 184.

<sup>86</sup> *Ibid.*

<sup>87</sup> *ESPN STAR Sports v Global Broadcast News Ltd* 2008, 2008 (38) PTC 477 (Del).

<sup>88</sup> Approbation to the rights in live sports events: myth or reality at <https://www.lexology.com/library/detail.aspx?g=781d6b6e-5469-4e39-8c11-957947b64a31>.

<sup>89</sup> Para 33 of the judgment available at <https://indiankanoon.org/doc/184944149/>.

<sup>90</sup> Seemantani Sharma, ‘Online Piracy of Live Sports Telecasts in India’ (2018) 28 (2) *The Marquette Sports Law Review* 433, 440.

38. In 2020, China adopted its third Amendment to its Copyright Law<sup>91</sup> to include the streaming of sports, real-time broadcasting and other online programs. Under the amended law, live sports broadcasts and their corresponding original game pictures could be categorized as “audio-visual works” and copyright protected, but the properties of works containing player-operated pictures may be rejected<sup>92</sup>. These 2020 amendments enhance protections for broadcasting rights, and would be seen as a positive development for broadcasters. However, it should be noted that:

The level of protection for audiovisual works is higher than that of audiovisual recordings. However, the circularity and ambiguity which lie at the heart of intellectual property law subject matter like originality endow it with the flexibility to accommodate unexpected forms of subject matter. Thus, in the disputes of live broadcast sporting events, the issue is that continuous pictures of live sporting events constitute works created by a process analogous to either cinematography in copyright law or video recordings in neighboring rights law, the identification boundary of which is blurred<sup>93</sup>.

#### H. THE BROADCAST AS A “SUBJECT MATTER OTHER THAN WORKS”

39. Some countries provide protection for broadcasts as a “subject matter other than works”. For example, the *Australian Copyright Act (1968) (Cth)* has recognized broadcasters’ rights as “specific categories of rights” related to copyright, thus the rights of producers of sound recordings and broadcasters of radio and television transmissions are protected by copyright. With the objective of safeguarding entrepreneurial investment, the *Copyright Act* has introduced new categories under “subject matter other than works” in Part IV of the Act. Under section 87 of the Act, it is a copyright infringement for a person other than the rights holder to make a copy of the broadcast and to ‘communicate it to the public’. In *Network Ten Pty Ltd v TCN Channel Nine Pty Ltd*.<sup>94</sup>, (Panel case) Hely J in the Federal Court, expressly found that “the requirement of originality which is imposed by section 32 of the Act in the case of works does not apply to a television broadcast”<sup>95</sup>. The Panel case states that:

(i) in the case of Part IV copyright, ‘originality’ is not a touchstone for the assessment of substantiality as originality forms no part of the identification of the interest protected by the copyright. For that reason, the notion that the reproduction of non-original matter will not ordinarily involve a reproduction of a substantial part of a copyright work can have no application in the case of Part IV copyright. Nonetheless, the High Court’s observation that the element of ‘quality’ bears on the substantiality question, and may involve consideration of the ‘potency of particular images or sounds, or both’, invites an assessment of the relative significance in terms of story, impact and theme conveyed by the taken sounds and images relative to the source broadcast as a whole<sup>96</sup>.

<sup>91</sup> Copyright Law of the People’s Republic of China [2020 Copyright Law] (promulgated by the Standing Comm. Nat’l People’s Cong., Sept. 7, 1990, amended Nov. 11, 2020, effective June 1, 2021) at <<https://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=2610&context=plr>> at 684, see also <<http://www.npc.gov.cn/englishnpc/c23934/202109/ae0f0804894b4f71949016957eec45a3.shtml>>.

<sup>92</sup> Tao Gong et al, “Copyright protection of live esports broadcast under China’s new Copyright Law” at <<https://www.sciencedirect.com/science/article/abs/pii/S0160791X22002640>>.

<sup>93</sup> Shujie Feng & Fang Fang, ‘Live broadcasting of sporting events: a trigger to the revolutionary reform of Chinese copyright law by transforming the condition of originality’ (2022) 12 (3) *Queen Mary Journal of Intellectual Property* 400–424.

<sup>94</sup> (2004) 78 ALJR 585.

<sup>95</sup> (2001) 108 FCR 235 at 34, see also Kanchana Kariyawasam & Tiwari AD, ‘Copyright Protection of Broadcasts in Australia: The intersections between creativity, economic investment and social-oriented perspectives’ (2023) 14 *Journal of Intellectual Property, Information Technology and Electronic Commerce Law* 41-53.

<sup>96</sup> *TCN Channel Nine v Network Ten* [2005] FCAFC 53, [55].



## I. ABSENCE OF EXPLICIT COPYRIGHT PROVISIONS, YET INCLUSIVE PROTECTION FOR BROADCASTERS

40. In the United States, there is no specific or "explicit" copyright protection granted to broadcasters as a separate class of rights. However, it encompasses inclusive protection for broadcasters. For example, 17 U.S. Code § 101 protects content for which a broadcaster is the rights holder by providing that "a transmitted work consisting of sounds, images, or both, is 'fixed' for the purposes of this title if a fixation of the work is being made simultaneously with its transmission"<sup>97</sup>.

41. In the case of *American Broadcasting Cos., Inc., et. al. v. Aereo, Inc., Fka- Bamboom Labs, Inc.*<sup>98</sup> decided by the Supreme Court of the United States<sup>99</sup>, the issue that had to be decided was whether the respondent Aereo Inc., had infringed the exclusive right of American Broadcasting Companies to perform the work in public as it concurrently streamed the television programs to its subscribers over the Internet without having any authorization from the copyright owners i.e., American Broadcasting Companies and others who were television producers, marketers, distributors and broadcasters<sup>100</sup>. The Court held that Aereo's "performance" to the "public" constituted an infringement of the exclusive right granted to the copyright holders (who were also broadcasters for the purposes of this case) under 17 U.S. Code § 106 (4).

42. In 2023, in *United States v. Joshua Streit*<sup>101</sup>, the defendant (Joshua Streit) operated a website that was responsible for "illegally live streaming" copyrighted content from major professional sports leagues including the Major League Baseball ("MLB"), the National Basketball Association ("NBA"), the National Football League ("NFL"), and the National Hockey League ("NHL")<sup>102</sup>. Out of the several charges that were levelled against him, one pertaining to the illicit digital transmission was deemed an offense under Title Code 18, sections 2319C (b) and 2319C (c) (2). It is pertinent to note that section 2319C (b) deems it illegal "when a person, wilfully, and for purposes of commercial advantage or private financial gain, offers or provides to the public a digital transmission service" protected under Title 17. Title 17, section 106 specifically mentions the copyright owner's exclusive right to reproduce the work and communicate such to the public and others. Joshua Streit was sentenced to three years of supervised release and ordered to pay USD 2,995,272.64 in restitution and USD 500,000 in

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<sup>97</sup> 17 U.S. Code § 101.

<sup>98</sup> *American Broadcasting Cos., Inc., et. al. v. Aereo, Inc., FkaBamboom Labs, Inc.* 573 US 2014.H. R. Rep.

<sup>99</sup> *American Broadcasting Cos., Inc., et. al. v. Aereo, Inc., FkaBamboom Labs, Inc.* 573 US 2014.H. R. Rep.

<sup>100</sup> *American Broadcasting Cos., Inc., et. al. v. Aereo, Inc., FkaBamboom Labs, Inc.* 573 US 2014.H. R. Rep, page 2 & 3 of the verdict at <<https://supreme.justia.com/cases/federal/us/573/13-461/case.pdf>>.

<sup>101</sup> 22 Cr. 350 (ALC) (S.D.N.Y. Mar. 17, 2023).

<sup>102</sup> The U.S. Attorney's Office, 'Minnesota Man Charged With Computer Intrusion And Illegally Streaming Content From Four Major Professional Sports Leagues' (2021) at <<https://www.justice.gov/usao-sdny/pr/minnesota-man-charged-computer-intrusion-and-illegally-streaming-content-four-major>>; see also Department of Justice Responses to Questions for the Record From The United States Senate Committee on the Judiciary at <<https://www.judiciary.senate.gov/imo/media/doc/QFR%20Responses%20-%20DOJ%20-%202021-10-27.pdf>> at 98.

forfeiture<sup>103</sup>. The USA took serious note of it as it infringed the exclusive rights of the copyright owner among others<sup>104</sup>.

## J. COPYRIGHT OR RELATED RIGHTS PROTECTED FOR SIGNAL RIGHTS

43. Signal rights provide broadcasters with exclusive rights over the signal or transmission of their broadcasts<sup>105</sup>. They usually include the exclusive right to authorize or prohibit the rebroadcasting of their broadcasts. In essence, broadcasters have control over how their signals are used by third parties. An unauthorized usage of broadcast signals by a third party, known as “signal piracy,” may result in economic loss to the broadcaster<sup>106</sup>. Hence, these rights are given to broadcasting organizations to protect their investment and entrepreneurial efforts<sup>107</sup>.

44. The Rome Convention is the most relevant law pertaining to the signal rights of broadcasters because it safeguards the broadcasters’ rights and obliges each Contracting State to grant the minimum level of protection to broadcasters<sup>108</sup>. The Rome Convention aims to protect “broadcasting,” which is understood as “transmission over the air of signals intended for reception by the general public”<sup>109</sup>. Under Article 13 of the Rome Convention, the broadcasting organizations are provided the following rights,

- (a) The re-broadcasting of their broadcasts;
- (b) The fixation of their broadcasts;
- (c) The reproduction of unauthorized fixations; and
- (d) The communication of their television broadcasts to the public if such communication is made where the public must pay an entrance fee.<sup>110</sup>

45. The term broadcast is understood to be the “program output” as assembled and broadcast by or on behalf of the “broadcasting organization”, which in turn may be defined as the organization which engages in this activity<sup>111</sup>. Here, it should be noted that what is protected is the broadcast signal of the broadcasting organization, not the underlying images and sounds<sup>112</sup>.

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<sup>103</sup> The U.S. Attorney’s Office, ‘Minnesota Man Charged With Computer Intrusion And Illegally Streaming Content From Four Major Professional Sports Leagues’ (2021) at <<https://www.justice.gov/usao-sdny/pr/minnesota-man-sentenced-three-years-prison-scheme-commit-computer-intrusion-and>>; also see <<https://www.justice.gov/usao-sdny/pr/minnesota-man-charged-computer-intrusion-and-illegally-streaming-content-four-major>>.

<sup>104</sup> The case mentioned in this paragraph, while not strictly addressing broadcasting rights, is included as a noteworthy example which effectively sanctioned the unauthorized streaming of copyrighted content owned by sports associations.

<sup>105</sup> EBU, ‘Legal and Policy Focus: broadcasters’ Rights: Towards A New WIPO Treaty’ (2021) at <<https://www.ebu.ch/files/live/sites/ebu/files/Publications/strategic/open/legal--policy-focus-broadcasters-right-wipo-treaty.pdf>>.

<sup>106</sup> WIPO, Broadcasting & Media Rights in Sport at <<https://www.wipo.int/sports/en/broadcasting.html>>.

<sup>107</sup> World Intellectual Property Organization (WIPO) Standing Committee on Copyright and Related Rights, *Protection of Broadcasting Organizations: Terms and Concepts* (Report, 2002) 12 at <[https://www.wipo.int/edocs/mdocs/copyright/en/sccr\\_8/sccr\\_8\\_inf\\_1.pdf](https://www.wipo.int/edocs/mdocs/copyright/en/sccr_8/sccr_8_inf_1.pdf)>.

<sup>108</sup> Rome Convention on the Protection of Performers, Producers of Phonograms and Broadcasting Organizations 1961, Article 13.

<sup>109</sup> European Broadcasting Union (EBU), ‘Legal and Policy Focus Broadcasters’ Rights: Towards a New WIPO Treaty, 2021 at <<https://www.ebu.ch/files/live/sites/ebu/files/Publications/strategic/open/legal--policy-focus-broadcasters-right-wipo-treaty.pdf>>.

<sup>110</sup> Article 13 of the Convention.

<sup>111</sup> The Legal Protection of Broadcast Signals at <<https://rm.coe.int/16807833ab>> at 3.

<sup>112</sup> The Legal Protection of Broadcast Signals at <<https://rm.coe.int/16807833ab>> at 2. Note: Similarly, “hardware-based unauthorized access of broadcast signals has been historically one of the most common forms of illicit signal access in the developed European markets – mainly revolving around the use of pirated cards and

46. Additionally, Article 2(e) of Directive 98/84 EC (Conditional Access Directive) states: “*Illicit device’ shall mean any equipment or software designed or adapted to give access to a protected service in an intelligible form without the authorization of the service provider.*” Article 4 of the Conditional Access Directive required member states to prohibit the manufacture, marketing, use, possession and communication of any equipment or software designed or adapted to give access to a protected service (e.g. television and radio broadcasting) without the authorization of the service provider in their territories.

47. The Brussels Satellite Convention 1974 also obliges the Contracting States to prevent the unauthorized distribution of program-carrying signals transmitted via satellite before their intended broadcast<sup>113</sup>. Specifically, it safeguards “pre-broadcast signals” transmitted by satellite between a (mobile) studio and a broadcaster, from one broadcaster to another, or to cable distributors or other intermediary recipients. The Brussels Convention does not require exclusive rights for protected signals, sufficing with the provision of adequate measures<sup>114</sup> including, *inter alia*, private rights such as national copyright or neighboring rights<sup>115</sup>. The flexibility of the Brussels Convention has resulted in signal piracy being dealt with according to different laws based on State practices: unfair competition law may be invoked for the misappropriation of broadcast signals, or criminal law or special laws on telecommunication secrecy or cybercrime may be invoked for the theft of pre-broadcast signals<sup>116</sup>. One limitation of this Convention is that each contracting State is left to undertake adequate measures preventing any distributor, for whom the satellite-transmitted signal is not intended, from distributing that signal on or from its territory<sup>117</sup>.

48. Signal rights are important for broadcasting organizations because they acknowledge the organizational, technical, and economic effort invested in a program and its broadcast. Broadcasting organizations invest substantial resources in producing and acquiring content, such as TV shows, sports events, news programs, and more. Signal rights allow them to monetize their content by selling or licensing access to their broadcasts to various distribution platforms, including cable and satellite providers, streaming services, and local affiliates. This revenue is a primary source of income for broadcasters so their signal rights need to be secured to protect their investments, control the distribution of their content and generate revenue<sup>118</sup>.

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modified STB’s.” It states, however, that “now the unauthorized access has shifted from STB hacking to card sharing – a newer form of illegal access, more difficult to detect, wherein control from a legitimate smart card is shared over the Internet to multiple STBs with Ethernet connectivity, making the box’s CAS believe that it is being supplied with a code by a legitimate smartcard”; see Study on the Socioeconomic Dimension of the Unauthorized Use of Signals – Part II: Unauthorized Access To Broadcast Content – Cause And Effects: A Global Overview, SCCR at <[https://www.wipo.int/edocs/mdocs/copyright/en/sccr\\_20/sccr\\_20\\_2\\_rev.pdf](https://www.wipo.int/edocs/mdocs/copyright/en/sccr_20/sccr_20_2_rev.pdf)> at 45 &46.

<sup>113</sup> WIPO, Summary of the Brussels Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite (1974) at <[https://www.wipo.int/treaties/en/ip/brussels/summary\\_brussels.html](https://www.wipo.int/treaties/en/ip/brussels/summary_brussels.html)>.

<sup>114</sup> Brussels Satellite Convention, Article 2.

<sup>115</sup> WIPO, Protection of Broadcasting Organizations – Background Brief at <<https://www.wipo.int/pressroom/en/briefs/broadcasting.html>>.

<sup>116</sup> *Ibid.*

<sup>117</sup> See Sylvia Ospina, ‘Piracy of Satellite-Transmitted. Copyright Material in the Americas: Bane or Boon?’ at <<https://business.columbia.edu/sites/default/files-efs/imce-uploads/CITI/Articles/Piracy%20of%20Satellite-Transmitted%20Material.pdf>>.

<sup>118</sup> The Legal Protection of Broadcast Signals, IRIS plus Legal Observations of The European Audio Visual Observation at <<https://www.ivir.nl/publicaties/download/768.pdf>> at 2, see also Protection of the Rights of the Broadcasting Organization, UNESCO para 6 at <<https://unesdoc.unesco.org/ark:/48223/pf0000139057>>; see also The Legal Protection of Broadcast Signals, IRIS plus Legal Observations of The European Audio Visual Observation at <<https://www.ivir.nl/publicaties/download/768.pdf>>; see also Protection of the Rights of the Broadcasting Organization, UNESCO para 6 at <<https://unesdoc.unesco.org/ark:/48223/pf0000139057>>.

## K. LICENSES NEEDED TO TRANSMIT LIVE BROADCASTS BY STREAMING OVER THE INTERNET

49. Retransmitting a live broadcast by streaming over the Internet, especially for the public to receive in multiple territories, requires the broadcaster to obtain various licenses to ensure compliance with copyright laws and secure the necessary rights from the content owners. The specific licenses needed can vary, depending on factors such as the type of content being broadcast, territories involved, and legal frameworks of the respective countries. Some common licenses are described in this section.

### a) Broadcast License

50. Live sports streaming is becoming a billion-dollar industry with streaming providers such as Bein, Kayo, and OptusSports providing online streaming services for sporting events such as Barclay's Premier League, NBA, IPL, and UFC<sup>119</sup>. The original broadcaster typically holds the broadcast license for that content, and retransmitting it may require permission from the broadcaster or the relevant broadcasting authority.

51. In *Live Nation Motion Sports, Inc v. Davis*<sup>120</sup>, a district court determined liability for streaming sporting events. In this case, Davis streamed live broadcasts of motorcycle races, produced by SFX Motor Sports, on his own website. SFX Motor Sports sued Davis for copyright infringement<sup>121</sup>. This case confirmed that an unauthorized individual who uploads and streams telecasts of live sports for anyone to access infringes the exclusive right of public performance<sup>122</sup>. Davis was found liable for streaming unauthorized broadcasts on his website, infringing SFX Motor Sports' copyright<sup>123</sup>. This case confirms that leagues or associations hold exclusive broadcasting rights; hence, streaming providers must obtain licenses from leagues or associations to stream their live events online<sup>124</sup>.

52. A broadcasting license could include a content license that covers the contents in the broadcast, as well as licenses required to operate broadcasting equipment within that jurisdiction<sup>125</sup>. In jurisdictions where the broadcast is defined in a narrow sense, the broadcaster must obtain permission for digital distribution via the Internet either through the same contract or via a separate digital distribution license<sup>126</sup>. A broadcaster has the right to

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<sup>119</sup> David Jarvis et al, *Live Sports: the next arena for the streaming wars*, November 2022 at <<https://www2.deloitte.com/us/en/insights/industry/technology/technology-media-and-telecom-predictions/2023/live-sports-streaming-wars.html>>; Nick Small, *Rights to Broadcast Live Sports: Advice and Tips* (2018) at <<https://www.dacast.com/blog/rights-to-broadcast-live-sports-advice-tips/>>.

<sup>120</sup> *Live Nation Motion Sports, Inc v. Davis*, No. 3:06-CV-276-L, 2007 WL 79311, at \*3–4 (N.D. Tex. Jan. 9, 2007).

<sup>121</sup> Stephanie N. Horner, 'DMCA: Professional Sports Leagues' Answer to Protecting Their Broadcasting Rights Against Illegal Streaming' (2014) 24 (2) *Marq. Sports L. Rev* 447-448.

<sup>122</sup> Adam Ainslie, 'The Burden of Protecting Live Sports Telecasts: The Real-Time Problem of Live Streaming and App-Based Technology' (2015) at <<http://dx.doi.org/10.2139/ssrn.2729641>> at 14.

<sup>123</sup> *Live Nation Motion Sports, Inc v. Davis*, No. 3:06-CV-276-L, 2007 WL 79311, at \*3–4 (N.D. Tex. Jan. 9, 2007).

<sup>124</sup> Brian A. McKenzie, 'Home Field Advantage: Establishing Personal Jurisdiction Over Illegal Online Sports Streaming Websites in Copyright Infringement Litigation' (2022) *Washburn Law Journal* 622; *Pittsburgh Athletic Co. v. KQV Broadcasting Co.* Also see the Sports Broadcasting Act of 1961 15 U.S.C. § 1291.

<sup>125</sup> Australian Communications Media and Authority, *Broadcasting content license* at <<https://www.acma.gov.au/broadcasting-content-licences>>.

<sup>126</sup> Crystal Everson, *Understanding Digital Distribution Rights*, Legal Zoom (2023) at <<https://www.legalzoom.com/articles/understanding-digital-distribution-rights>>; European Broadcasting Union, *Copyright Guide Practical Information for Broadcasters* (2021) at <<https://www.ebu.ch/files/live/sites/ebu/files/Publications/EBU-Legal-Copyright-Guide.pdf?fbclid=IwAR2LHoRYRQG05ZI4wsMviCk7GXAfWsWNiuUFsu106M4NI0yXYHzk9hSQR4I>>.

rebroadcast the transmission<sup>127</sup>; however, this does not include retransmission via the Internet<sup>128</sup>. As such, the broadcaster may need to obtain consent for retransmission via the Internet should they desire to retransmit the broadcast. Given this context, any Internet Streaming Service Provider (ISSP) that retransmits live broadcasts needs authorization to ensure their compliance with copyright laws and secure the retransmission right from the content owners. Some organizations may use a disclaimer notice, clearly prohibiting retransmission at the inception<sup>129</sup>. Other platforms such as YouTube use algorithms to scan for third-party content whenever new content is uploaded<sup>130</sup>.

53. Many countries have national laws to tackle unauthorized retransmission, including provisions for shutting down illegal retransmission.<sup>131</sup> In *Union des Associations Européennes the Football (UEFA) v. Briscomb*<sup>132</sup>, an English High Court held that there was copyright infringement when the defendant, a website operator, provided live streaming of UEFA Champions League games to subscribers. The Court concluded that reproducing broadcasts and ancillary works without a license was infringing the copyright of UEFA's broadcasting right<sup>133</sup>.

54. The Italian Supreme Court also held that live streaming via hyperlink was infringing copyright<sup>134</sup>. Thus, ISSPs need to acquire a license, including retransmission consent, to retransmit live broadcasts via streaming over the Internet. An ISSP can transmit live broadcasts in two ways. First, it can obtain a broadcasting license along with underlying copyright licenses from the organizations concerned. Referring to the previous examples of live sporting events, this involves obtaining licenses from the football league organizers. Second, the ISSP can obtain authorization for retransmission from the original broadcaster.

55. A broadcasting license may not include a license to permit Internet retransmission<sup>135</sup>. In *Hollywood Universal Studios v. Zattoo*<sup>136</sup>, a German District Court held that statutory rights to retransmit broadcasts do not include rights to retransmit via the Internet<sup>137</sup>. In this situation, the broadcaster would not be able to enter agreements with ISSPs to permit Internet retransmission. The broadcaster would need to acquire the relevant rights from all the underlying rights holders to permit retransmission via the Internet<sup>138</sup>.

56. The types of licenses required for retransmission via the Internet have not been fully covered by regulations. Many jurisdictions lack uniformity in how they treat retransmission via the Internet. Three main modalities exist<sup>139</sup>; first, the notion of retransmission is extended to Internet retransmission; second, extended collective licensing is required to permit

<sup>127</sup> Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (1961), Art 13 (a).

<sup>128</sup> Maurizio Borghi, 'Chasing Copyright Infringement in the Streaming Landscape' (2011) 42 (3) *International Review of Intellectual Property and Competition Law* 316-343.

<sup>129</sup> Brian A. McKenzie, 'Home Field Advantage: Establishing Personal Jurisdiction Over Illegal Online Sports Streaming Websites in Copyright Infringement Litigation' (2022) *Washburn Law Journal* 611, 639.

<sup>130</sup> Copyright issues with live streams at <<https://support.google.com/youtube/answer/3367684?hl=en>>.

<sup>131</sup> WIPO, Broadcasting & Media Rights in Sport at <<https://www.wipo.int/sports/en/broadcasting.html>>.

<sup>132</sup> *Union des Associations Europeennes the Football (UEFA) v Briscomb*, [2006] EWHC 1268 (Cth).

<sup>133</sup> Brian A. McKenzie, 'Home Field Advantage: Establishing Personal Jurisdiction Over Illegal Online Sports Streaming Websites in Copyright Infringement Litigation' (2022) *Washburn Law Journal* 611, 639.

<sup>134</sup> Italian Supreme Court, 4 July 2006-10 October 2006, No.33945.

<sup>135</sup> *Hollywood Studios Universal v. Zattoo*, (Hamburg District Court) 308 O 660/07, 8 April 2009 (unreported); Commented in F. Niemann, 'Copyright infringement', 9(5) E.C.L. & P. 16±17 (2009); Maurizio Borghi, 'Chasing Copyright Infringement in the Streaming Landscape' (2011) 42 (3) *International Review of Intellectual Property and Competition Law* 316-343.

<sup>136</sup> *Hollywood Studios Universal v. Zattoo*, (Hamburg District Court) 308 O 660/07, 8 April 2009 (unreported).

<sup>137</sup> *Hollywood Studios Universal v. Zattoo*, (Hamburg District Court) 308 O 660/07, 8 April 2009 (unreported).

<sup>138</sup> Australian Law Reform Commission, Copyright and the Digital Economy: *Internet Retransmission*, 2013.

<sup>139</sup> European Broadcasting Union at 35 - 36.

retransmission; and third, retransmission via the Internet is subject to clearance and consent mechanisms, which require complex negotiations<sup>140</sup>.

b) Performance Rights License

57. Live broadcasts often include performances, such as music concerts or theatrical events, which are protected by performance rights. A performance rights license from the relevant performing rights organization (PRO) in each territory needs to be obtained to stream the performances.

58. Performers' rights protect them against unconsented actions, such as broadcasting and communication to the public of a live performance, fixation of the live performance, and reproduction of the original fixation<sup>141</sup>. As such, broadcasters need to obtain consent from the performers to transmit their performance.

59. In some cases, event organizers manage the required licensing. For example, if a broadcaster desires to transmit live performances by music artists performing at the Super Bowl, they must obtain consent from the performers as well as approval from the organizers. One license commonly used in Super Bowl events is the full creative license<sup>142</sup>.

60. The performers' consent can be obtained in the form of a public performance license<sup>143</sup>, which is a legal authorization granted to establishments to display or broadcast copyrighted content for an audience outside the private sphere. This license is necessary when businesses or organizations — such as bars, restaurants, hotels, or public venues—want to show live events, sports matches, or other copyrighted content to their customers or visitors. It could also include consent to perform an artistic or literary work via online streaming with a live streaming license<sup>144</sup>.

61. As was held in the case of *Hollywood Studios Universal v. Zattoo*<sup>145</sup>, the right to retransmit broadcasts does not cover retransmission via the Internet<sup>146</sup>. Consent to broadcast does not automatically imply consent to retransmit via the Internet. As such, ISSPs need to obtain licenses from the performers concerned should they desire to retransmit live broadcasts.

c) Copyright License

62. Copyright licenses are necessary to stream copyrighted content, including any audio, video, or other creative works included in the live broadcast. A streaming provider must obtain a copyright license from the relevant copyright holder.

63. As discussed in previous sections, an ISSP that desires to retransmit a live broadcast online may also have to obtain copyright licenses from various other underlying rights holders<sup>147</sup>. The live broadcasts could also incorporate other copyright-protected content.

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<sup>140</sup> Ibid.

<sup>141</sup> Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (1961), Art 7.

<sup>142</sup> Chanel Vargas, 'Here's why Rihanna Wasn't Paid For Her Stunning Bowl Appearance' (2023), at <<https://www.popsugar.com/entertainment/do-super-bowl-performers-get-paid-49087789>>.

<sup>143</sup> SoundCharts, 'What are Mechanical Royalties? Who Pays Mechanical Royalties & Who Collects Them?' (2020) at <<https://soundcharts.com/blog/mechanical-royalties>>.

<sup>144</sup> The Alliance of Performing Arts Conferences (APAC), 'The Legal Landscape of Live Streaming' (2020) at <[https://folk.org/wp-content/uploads/2020/05/Legal-Landscape-of-Live-Streaming\\_NA\\_April272020.pdf](https://folk.org/wp-content/uploads/2020/05/Legal-Landscape-of-Live-Streaming_NA_April272020.pdf)>.

<sup>145</sup> *Hollywood Studios Universal v. Zattoo*, (Hamburg District Court) 308 O 660/07, 8 April 2009 (unreported).

<sup>146</sup> *Hollywood Studios Universal v. Zattoo*, (Hamburg District Court) 308 O 660/07, 8 April 2009 (unreported).

<sup>147</sup> ALRC, Copyright and the Digital Economy: Retransmission of free-to-air broadcasts at <[https://www.alrc.gov.au/wp-content/uploads/2019/08/15.\\_retransmission\\_of\\_free-to-air\\_broadcasts.pdf](https://www.alrc.gov.au/wp-content/uploads/2019/08/15._retransmission_of_free-to-air_broadcasts.pdf)> at 301.

Whereas a performers' rights license incorporates rights related to the performers or artists, an unauthorized retransmission also affects other forms of underlying copyright. For example, a broadcaster may also play an artist's recorded music over the live online broadcast as a soundtrack. In such a case, a synchronization license may be required to synchronize the pre-recorded music with the online transmission<sup>148</sup>.

64. A broadcaster also needs to obtain permission for other copyrighted materials. In addition to musical compositions, the broadcast content could include works such as visual arrangement, storylines, and gameplays (video games) that command copyright protection. Some content on free-to-air broadcasts can be retransmitted upon obtaining a statutory license<sup>149</sup>. Although this mainly relates to on-demand content, such statutory licensing could also apply to live free-to-air broadcasts. In cases of audiovisual works, this may include numerous individuals involved in the production such as scriptwriters, directors, and technicians. Albeit that the copyright is vested in the producer and approval from the producer may suffice, this agreement must be in the form of a comprehensive contractual arrangement<sup>150</sup>.

#### d) Territory-specific Licenses

65. Despite the proliferation of global digital content providers, access to audiovisual digital content is not equal across jurisdictions<sup>151</sup>. Content availability may be limited to certain jurisdictions only. Moreover, the content availability may differ according to jurisdiction even on the same digital platform<sup>152</sup>. Whereas content may be available on one platform in one country, the same content may not be available on the same platform in another country. For example, the number of shows available on Netflix in Australia is limited compared to that of Netflix in the USA<sup>153</sup>. One reason for the access restriction to such contents could be the economic interests of the licensee. Enabling access to content across all countries usually means increased royalty costs for the service provider. In another scenario, some territorial licenses may be exclusive in nature, which would prevent copyright holders from granting licenses to another entity. This is common in the context of audiovisual content where distribution rights are sold to national distributors, along with exclusive rights to exploit that work in their particular territory<sup>154</sup>. One of the most popular examples of this relates to the show *Rick and Morty*. This animated comedy is a popular show on Netflix in many countries. Despite its popularity, however, Netflix does not stream it in the USA. This is because a broadcast channel called Adult Swim has an exclusive license over its broadcasting in the USA and can exclude other platforms from airing the show. As a consequence, *Rick and Morty* is only available to stream on Hulu and HBO Max in the USA<sup>155</sup>.

<sup>148</sup> Songtrust, 'How Do Songwriters Get Paid for Super Bowl Halftime Performers?' (2020) at <https://blog.songtrust.com/how-do-songwriters-get-paid-for-super-bowl-halftime-performances>.

<sup>149</sup> Herbert Smith Freehills LLP, 'Copyright and the Digital Economy: Transmission and Broadcasts' (2014), at <https://www.lexology.com/library/detail.aspx?g=608059a3-bdbb-499d-9425-4211cce9d832>.

<sup>150</sup> European Broadcasting Union at 14.

<sup>151</sup> Miriam Ettl & Paul W. J. de Bijl, 'A next step for territorial copyright licenses for on-demand audio-visual services in the light of the EU Digital Single Market' (2019) 24 (11) *Information, Communication & Society* 1551-1567.

<sup>152</sup> Rebecca Partington, 'Australia: Territory-based licensing and distribution agreements – lessons from Netflix', Mondaq (2016) at <https://www.mondaq.com/australia/broadcasting-film-tv--radio/462400/territory-based-licensing-and-distribution-agreements--lessons-from-netflix>.

<sup>153</sup> Alasdair Belling, 'Why Australian Netflix customers get a raw deal compared to US clients', "News.com.au", (2022) at <https://www.news.com.au/entertainment/tv/streaming/why-australian-netflix-customers-get-a-raw-deal-compared-to-us-clients/news-story/959b4b55789c91e712a76816a671991c>.

<sup>154</sup> European Parliament – briefing, 'EU Copyright Reform: Revisiting the Principle of Territoriality' (2015) at [https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/568348/EPRS\\_BRI%282015%29568348\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/568348/EPRS_BRI%282015%29568348_EN.pdf).

<sup>155</sup> Kasey Moore, 'When will "Rick and Morty" Season 6 be on Netflix?', Netflix News (2023) at <https://www.whats-on-netflix.com/news/when-will-rick-and-morty-season-6-be-on-netflix-05->

66. Under copyright law, the concept of territoriality lets the copyright holder exercise their rights by allowing or restricting the use of their copyrighted material according to the jurisdiction<sup>156</sup>. The Berne Convention lays the foundations for copyright holders to license their work on a territorial basis. Specifically, Article 11bis provides the authors of literary and artistic works with exclusive rights in relation to broadcasting. Likewise, performers have the right to exclusive territory-specific licensing under the WPPT, footballing associations have widely used territory-specific licensing to broadcast European football on a country-by-country basis<sup>157</sup>.

67. When relying on territory-specific licenses, the licensee needs to obtain licenses for all the jurisdictions where it intends to broadcast and distribute content. Territory-specific licenses enable copyright holders to permit the use of their copyrighted content on a country-by-country basis. This means that ISSPs can only broadcast or distribute content in the countries covered by the license<sup>158</sup>. In the Rick and Morty example, Netflix is licensed to stream the popular show in many countries, including Australia. It does not have a license to stream it in the USA, however, because of a geographical restriction for the USA. Thus, if Netflix were to stream the show in the USA, it would be held liable for infringement<sup>159</sup>. An ISSP would thus need to obtain a territorial license for each individual jurisdiction where it intends to stream the content<sup>160</sup>.

68. Another important aspect of this license relates to its exclusivity for a particular territory. National broadcasters usually seek exclusive distribution rights to exploit audiovisual content in a particular territory<sup>161</sup>. Consequently, such territory-specific licensing includes exclusive broadcasting rights for the licensee (e.g, Adult Swim's exclusive territorial license for Rick and Morty)<sup>162</sup>. It defines the scope of the licensee's rights to prevent the audiovisual content from being offered to other competing broadcast organizations<sup>163</sup>.

69. Many territory-specific licenses may also include a provision requiring licensees to implement geo-blocking measures to block access to the content in territories not covered by the license<sup>164</sup>. Because of the limited scope of territory-specific licenses, content suppliers see

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2023/#:~:text=As%20per%20all%20previous%20seasons,on%20Hulu%20and%20HBO%20Max>; Aikansh Chaudhary, 'Why Is Rick And Morty Not On Netflix U.S.? Where Else Can I Watch It?', Fossbytes' (2021) at <<https://fossbytes.com/why-is-rick-and-morty-not-on-netlix-us/>>.

<sup>156</sup> Miriam Ettel & Paul W. J. de Bijl, 'A next step for territorial copyright licenses for on-demand audio-visual services in the light of the EU Digital Single Market' (2021) 24 (11) *Information, Communication & Society* 1551-1567.

<sup>157</sup> Miranda Ward, 'Stan Lands Streaming Blow with Champions League rights', *Financial Review* (2021) at <<https://www.afr.com/companies/media-and-marketing/stan-lands-streaming-blow-with-champions-league-rights-20210627-p584m4>>.

<sup>158</sup> Petr Szczepanik et al, *Digital Peripheries: The Online Circulation of Audiovisual Content from the Small Market Perspective* (Cham, Springer, 2020).

<sup>159</sup> Miriam Ettel & Paul W. J. de Bijl, 'A Next Step for Territorial Copyright Licenses for On-Demand Audio-Visual Services in the Light of the EU Digital Single Market' (2019) 24(11) *Information, Communication & Society*, 1551-1567; Mengna Liang, 'Copyright Issues Related to Reproduction Rights Arising from Streaming', (2020) 23 *The Journal of World Intellectual Property* 798-800.

<sup>160</sup> Miriam Ettel & Paul W. J. de Bijl, 'A Next Step for Territorial Copyright Licenses for On-Demand Audio-Visual Services in the Light of the EU Digital Single Market' (2019) 24(11) *Information, Communication & Society*, 1551-1567.

<sup>161</sup> European Parliament – briefing, 'EU Copyright Reform: Revisiting the Principle of Territoriality', (2015) at <[https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/568348/EPRS\\_BRI%282015%29568348\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/568348/EPRS_BRI%282015%29568348_EN.pdf)> at 3.

<sup>162</sup> Kasey Moore, When will 'Rick and Morty' Season 6 be on Netflix?, Netflix News (2023) at <[https://fossbytes.com/why-is-rick-and-morty-not-on-netlix-us/](https://www.whats-on-netflix.com/news/when-will-rick-and-morty-season-6-be-on-netflix-05-2023/#:~:text=As%20per%20all%20previous%20seasons,on%20Hulu%20and%20HBO%20Max>; Aikansh Chaudhary, 'Why Is Rick And Morty Not On Netflix U.S.? Where Else Can I Watch It?', Fossbytes (2021) at <<a href=)>.

<sup>163</sup> European Broadcasting Union, Copyright Guide Practical Information for Broadcasters, December 2021 at <<https://www.ebu.ch/files/live/sites/ebu/files/Publications/EBU-Legal-Copyright-Guide.pdf?fbclid=IwAR2LHoRYRQG05ZI4wsMviCk7GXAfWsWNiuUFsu106M4NI0yXYHzk9hSQR4I>>.

<sup>164</sup> Tatiana Eleni Synodinou, 'Geoblocking in EU Copyright Law: Challenges and Perspectives' (2020) 69 (2) *GRUR International: Journal of European and International IP Law* 136-150.



geo-blocking technology as an important mechanism to protect their audiovisual content online<sup>165</sup>. Geo-blocking effectively prevents the content from being accessible in certain jurisdictions. As such, this technology is considered to be an effective instrument for implementing territory-specific licenses.

70. Another current challenge with territory-specific licensing is the cross-border movement of account holders<sup>166</sup>. Although streaming services such as Netflix and Amazon Prime provide services specific to territories, the individual accounts in these streaming services link to particular individuals. When an individual moves from England to Germany, for instance, the account also moves with the individual. In this situation, the individual is unlikely to create a new Netflix account. Instead, they would log in through their existing account, which is linked to the previous jurisdiction. This could raise concerns for the online consumer experience, as users may find that some content, they used to have access to in one country is no longer available or that their viewing options are limited compared to what they had in another territory.

e) Digital Performance Rights Licenses

71. Digital performance rights licenses are necessary for copyright holders to authorize or prohibit the public performance of their work. Any person wanting to play or stream copyrighted content publicly must obtain authorization from the copyright holder in the form of a public performance license<sup>167</sup>. This license, known as a digital performance license<sup>168</sup>, was introduced to address rising copyright concerns with the advent of Internet streaming. In the USA, Congress specifically introduced the Digital Performance Right in Sound Recordings Act (“DPRA”)<sup>169</sup> in 1995 to address industry-wide concerns that the existing Copyright Act was not sufficiently equipped to deal with digitalization<sup>170</sup>.

72. The digital performance license governs the relationship between a copyright holder and any person sharing their copyrighted work over the Internet. The license regulates the use of copyrighted material over the Internet by streamers or webcasters.

73. The license permits a licensee to transmit the work in a digital format. This includes the transmission of musical or audiovisual works via a digital platform, such as YouTube to the general public<sup>171</sup>.

74. The requirements for a digital performance license can vary according to the type of content. In the context of the DPRA, for instance, the mode of acquisition of a digital performance license for sound recordings varied according to whether the mode of transmission

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<sup>165</sup> Mengna Liang, ‘Copyright Issues Related to Reproduction Rights Arising from Streaming’ (2020) 23 *The Journal of World Intellectual Property* 798-800.

<sup>166</sup> Miriam Ettl & Paul W. J. de Bijl, ‘A Next Step for Territorial Copyright Licenses for On-Demand Audio-Visual Services in the Light of the EU Digital Single Market’ (2019) 24(11) *Information, Communication & Society*, 1551-1567.

<sup>167</sup> Brian Day, ‘The Super Brawl: The History and Future of the Sound Recording Performance Right’ (2009) 16 (1) *Michigan Telecommunications and Technology Law Review* 179, 182.

<sup>168</sup> Larry Wacholtz, *Monitizing Entertainment An Insider’s Handbook for Careers in the Entertainment and Music Industry* (Routledge, New York, 2016).

<sup>169</sup> Digital Performance Right in Sound Recordings Act of 1995, PUBLIC LAW 104–39—NOV. 1, 1995, at <<https://www.govinfo.gov/content/pkg/PLAW-104publ39/pdf/PLAW-104publ39.pdf>>.

<sup>170</sup> Lynne B. Lubash, ‘How the Digital Performance Rights in Sound Recordings Act of 1995 Protect Copyright Owners on the Internet’ (1998) 14 (2) *Santa Clara High Technology Law Journal* 497; see also, Eric Priest, ‘The Future of Music Copyright Collectives in the Digital Streaming Age’ (2021) 45 (1) *The Columbia Journal of Law & The Arts* 1-46.

<sup>171</sup> Brian Day, ‘The Super Brawl: The History and Future of the Sound Recording Performance Right’ (2009) 16 (1) *Michigan Telecommunications and Technology Law Review* 179, 181.

was interactive or non-interactive<sup>172</sup>. The retransmitting entities needed to obtain consent from the copyright holders directly if the mode of transmission was considered to be an interactive medium<sup>173</sup>. The term “interactive medium” describes instances where the user can select the music they want to listen to. In non-interactive services, conversely, such a license could be subject to a compulsory license regime unless exceptions apply<sup>174</sup>. The digital performance license required for audiovisual content could also be different from that required for a purely audio transmission.

75. Furthermore, depending on the type of content, a digital performance license may be voluntary or mandatory. Given the exponential growth in streaming services and the transmission of audiovisual digital content, this license is becoming increasingly important.

## II. COMMON MODELS FOR THE ILLEGAL RETRANSMISSION OF LIVE BROADCASTS THROUGH STREAMING

76. Several models are used to conduct illegal retransmission of live broadcasts through streaming. This section outlines the most common models.

### A. UNICAST STREAMING

77. Unicast is used to illegally distribute live broadcasts of sporting events, concerts, and other real time content through direct streaming from the unicast service provider's servers<sup>175</sup>. Individuals set up these unauthorized streams to capture the live broadcast using devices or websites that retransmit the content<sup>176</sup>. Because unicast streaming channels can be set up with relative ease on a standard home computer, television tuner card, and broadband connection, many digital content aggregators use unicast streaming for their transmissions<sup>177</sup>.

78. As the name “unicast” suggests, a single or direct request made from one host to another enables interaction between those two hosts<sup>178</sup>. When a hyperlink is clicked on a web browser, for instance, the host defined in the link makes a request to the hypertext transfer protocol (HTTP) data, which then delivers the data to the browser<sup>179</sup>. Unicast is used when a direct connection is established between the server and client via the contacted websites<sup>180</sup>. Therefore, unlike multicasts (discussed below), unicasts are not ideal for delivering live streams

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<sup>172</sup> Joseph E. Margri, ‘New Media, New Rules: The Digital Performance Right and Streaming Media over the Internet’ (2003) 6 *Vanderbilt Journal of Entertainment and Technology Law* 58.

<sup>173</sup> Amanda S. Reid, ‘Play It Again, Sam: Webcasters’ Sound Recording Complement as an Unconstitutional Restraint on Free Speech’ (2004) 26 (2) *Hastings Comm. & Ent. L.J.* 317, 325- 326.

<sup>174</sup> *Ibid.*

<sup>175</sup> Michael J. Mellis, ‘Internet Piracy of Live Sports Telecasts’ (2008) 18 (2) *The Marquette Sports Law Review* 259, 266.

<sup>176</sup> “Unauthorized unicast sites often collect paid subscriptions or are supported by advertising because the technology requires significant computer processing and bandwidth”, see Organization for Economic Co-operation and Development (OECD), ‘*Piracy of Digital Content, Case Study: The Sports Owners Sector*’ (2009) (“*Piracy of Digital Content*”) at 90-91; see also Statement of Maria A. Pallante Register of Copyrights before the Subcommittee on Intellectual Property, Competition, and the Internet Committee on the Judiciary, United States House of Representatives 112th Congress, 1st Session June 1 2011 at <<https://www.copyright.gov/docs/regstat060111.html>>.

<sup>177</sup> Seagull Haiyan Song, ‘How Should China Respond to the Online Piracy of Live Sports Telecasts? A Comparative Study of Chinese Copyright Legislation to US and European Legislation’ (2011) 9 *University of Denver Sports and Entertainment Law Journal* 3, 21.

<sup>178</sup> David Bull & Fan Zhang, ‘Communicating Pictures: Delivery Across Networks’ (2021) DOI: 10.1016/B978-0-12-820353-8.00020-7.

<sup>179</sup> *Ibid.*

<sup>180</sup> Digital Guide, (2023) at <<https://www.ionos.com/digitalguide/server/know-how/unicast/>>.

of audio or video to larger audiences<sup>181</sup>. A unicast table is organized with a destination subnet set up to forward the packet to the intended destination<sup>182</sup>. In simple terms, unicast means point-to-point targeted communication<sup>183</sup>. It is used for video-on-demand (VoD) streaming, in which content is streamed to the individual user by popular VoD services such as YouTube, Netflix, and Amazon Prime Video<sup>184</sup>, or Over-The-Top streaming in which files are already stored in a video-streaming repository<sup>185</sup>. Because unicast streaming requires a substantial number of servers and network infrastructure to handle the concurrent connections, the end user normally needs to pay a subscription fee due to the high costs involved with the bandwidth requirement and processing power<sup>186</sup>. Owners of broadcasting rights have successfully brought legal actions against illegal unicast live streaming providers on a direct liability basis<sup>187</sup>. For example, Premier League Ltd filed actions against two illegal unicast live streaming service providers in the United Kingdom in 2007: *Football Association Premier League Ltd v. Ayiotis*<sup>188</sup> and *Football Association Premier League Ltd v. Sayward*<sup>189</sup>. They successfully obtained restraining orders from the courts to prevent such illegal unicast live streaming service providers from retransmitting live broadcasts of Premier League football matches.

## B. MULTICAST STREAMING

79. If unicast is one-to-one, or point-to-point, communication, multicast is one-to-many communication<sup>190</sup>. Multicast streaming is one of the most popular methods of online copyright piracy, including live broadcasts<sup>191</sup>. As was explained in *Amino Communications Ltd v. Revenue & Customs*<sup>192</sup>, a multicast is where the signal/streaming is sent to a network, whether cable or internet and only the users who are connected to that network can access the streaming<sup>193</sup>. Figure 3 illustrates how multicast streaming operates.

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<sup>181</sup> Ibid.

<sup>182</sup> Walter Goralski, *The Illustrated Network* (Elsevier, Morgan Kaufmann Publishers, 2<sup>nd</sup> edition, 2017) at 468.

<sup>183</sup> John Buford, Heather Yu, & Eng Keong Lua, *P2P networking and applications* (Elsevier Morgan Kaufmann, 2009) at 365, see also Jiménez-Soria et al, 'Coordinated Multicast/Uncast Transmission on 5G: A Novel Approach for Linear Broadcasting' (2021) 121 *Wireless Pers Commun* 1273–1287; Foundjem Armstrong et al, 'Broadcast vs. Uncast Review Technology: Does It Matter?' *10th IEEE International Conference on Software Testing, Verification and Validation (ICST)* (2017) Tokyo, Japan, 2017 (219-229).

<sup>184</sup> Ibid.

<sup>185</sup> Vinod Joseph & Brett Chapman, *Deploying QoS for Cisco IP and Next Generation Networks: The Definitive Guide* (Morgan Kaufmann, 1<sup>st</sup> edition, 2009) at 95; Xiangbo Li et al, 'Cloud-Based Video Streaming Services: A Survey' (2021) 123 in *Advances in Computers*, edited by Ali Hurson, Elsevier, Amsterdam, The Netherlands at 193-244, June 2020.

<sup>186</sup> Seagull Song, 'How Should China Respond to Online Piracy of Live Sports Telecasts? A Comparative Study of Chinese Copyright Legislation to U.S. and European Legislation' (2010) IX *University of Denver Sports and Entertainment Law Journal* at <<https://ssrn.com/abstract=2118959>>.

<sup>187</sup> Ibid.

<sup>188</sup> [2007] EWHC (Ch) 01572.

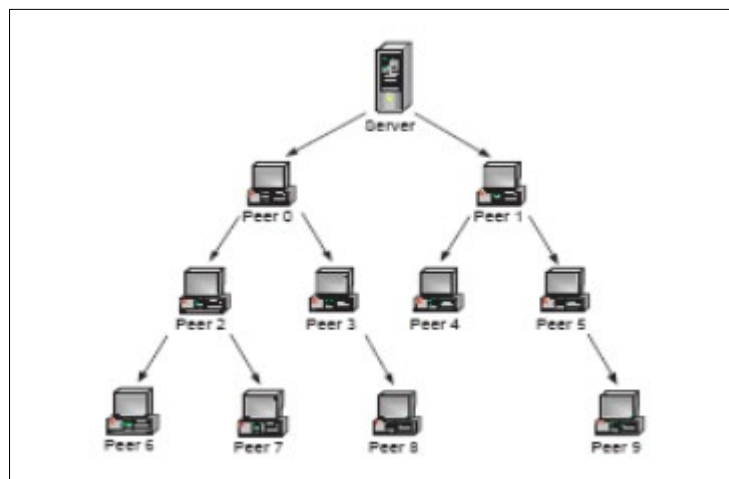
<sup>189</sup> [2007] EWHC (Ch) 01574.

<sup>190</sup> Vinod Joseph & Brett Chapman, *Deploying QoS for Cisco IP and Next Generation Networks: The Definitive Guide* (Morgan Kaufmann, 1<sup>st</sup> edition, 2009) at 91.

<sup>191</sup> Mellis MJ, 'Internet Piracy of Live Sports Telecasts' (2008) 18 *Marquette Sports Law Review* 259.

<sup>192</sup> 2015] UKFTT 35 (TC).

<sup>193</sup> 2015] UKFTT 35 (TC).

Figure 3<sup>194</sup>

80. In multicast streaming, a website aggregator uses a multicast to distribute digital content such as “free streaming”. Most websites that provide such a streaming facility use deceptive techniques by hiding the hosting location<sup>195</sup>. Multicast streaming is less susceptible to unauthorized redistribution than unicast because multicast operates in a private Internet Protocol (IP) network, rather than the public Internet, making it more secure than OTT platforms. Another feature of multicast is that messages can be encrypted with a single key, allowing only the group member to decrypt them<sup>196</sup>. Multicasting services employ a Class D destination IP address format, which are specifically designed for multicast distribution, as opposed to a Class A, B, or C format, which are addresses used in unicast communication<sup>197</sup>. The design ensures that the data is only received by those who are part of the multicast group, reducing the risk of unauthorized access and redistribution. Because the cost of subscription is relatively low, however, some providers use illegal IPTV services (such as Gears TV) to transmit live content<sup>198</sup>. Many IPTV service providers use multicast streaming to deliver live broadcasts. However, it should also be noted that IPTV does not exclusively rely on multicast. The director of Synnex Trading was jailed for 12 weeks and fined \$160,880 plus a further fine of \$5400 by a Singaporean court for selling illegal Android TV boxes that facilitate multicasting through IPTV<sup>199</sup>. Multicasting service providers can thus be held secondarily liable for copyright or broadcasting rights infringement.

<sup>194</sup> Hareesh Kumbhinarasaiah & Manjaiah DH, ‘Peer-to-Peer Live Streaming and Video On Demand Design Issues and its Challenges’ (2011) 2 (4) *International Journal of Peer to Peer Networks* 1, 3.

<sup>195</sup> M. Zubair Rafique et al, ‘It’s Free for a Reason: Exploring the Ecosystem of Free Live Streaming Services’, *Proceedings of the 23rd Network and Distributed System Security Symposium* (February 2016) 1–15 at <<https://www.ndss-symposium.org/wp-content/uploads/2017/09/free-reason-exploring-ecosystem-free-live-streaming-services.pdf>>.

<sup>196</sup> Ran Canetti et al, “Multicast Security: a Taxonomy and Some Efficient Constructions,” IEEE INFOCOM '99. Conference on Computer Communications. Proceedings. Eighteenth Annual Joint Conference of the IEEE Computer and Communications Societies. The Future is Now (Cat. No.99CH36320), New York, NY, USA, doi: 10.1109/INFOCOM.1999.751457.

<sup>197</sup> Aireza Abdollahpouri et al, ‘Unicast versus Multicast for Live TV Delivery in Networks with Tree Topology’ at <[https://link.springer.com/chapter/10.1007/978-3-642-13315-2\\_1](https://link.springer.com/chapter/10.1007/978-3-642-13315-2_1)>.

<sup>198</sup> Complete list of illegal IPTV or pirate IPTV streaming services (2021) at <<https://iptvadviser.com/illegal-iptv-services/>>.

<sup>199</sup> Kenny Chee, ‘Selling Set-top Boxes Offering Pirated Streamed Shows to Be Made Illegal in Singapore’ (2021) at <<https://www.straitstimes.com/singapore/politics/selling-set-top-boxes-offering-pirated-streamed-shows-to-be-made-illegal-in->>.

### C. USER-GENERATED STREAMING

81. Illegal user-generated live streaming is where an audience who has access to the live action or live streaming of a certain event recording transmits the live stream using a camera or computer (smart device) to an audience who does not have legal rights to access that live stream<sup>200</sup>. In this method, users directly broadcast and upstream the signal/live stream to a website in real time through their devices, making the live streaming illegal<sup>201</sup>. Live streaming happens in two ways: in the first, spectators of live events such as sports matches record the matches at the location where the event is taking place and illegally broadcast it to online viewers in real time; in the second, people watching legal live broadcasts retransmit it illegally to viewers via illegal live streaming<sup>202</sup>.

82. It is said that “user-generated streaming is recognized as an imminent challenge to distributing copyright works, where it is extremely difficult to detect the unauthorized distribution of copyright works because every person equipped with a smartphone or similar device can become a spontaneous distributor”<sup>203</sup>. User-generated video platforms such as Twitch, Twitter, and YouTube have made it convenient for users to live stream videos to the millions of users who have access to these platforms<sup>204</sup>. Individuals can share live video content directly with their followers or the general public. Social media live streaming enables individuals, organizations, and influencers to connect with their audiences, and is a widely used feature<sup>205</sup>. During the COVID-19 pandemic, people used social live-streaming services, such as YouTube Live and Facebook Live, to provide real-time events online<sup>206</sup>.

### D. VPNS AND ILLEGAL LIVE STREAMING

83. Individuals may use virtual private networks (VPNs) to access geo-restricted live broadcasts or evade detection when streaming copyrighted content. VPNs can hide a user’s location, making it harder to enforce copyright restrictions. With VPNs, for example, users can fake where their computers are located and thus stream unauthorized content via websites that are blocked in their own country<sup>207</sup>. Certain websites instruct users how to watch the French Open 2023 and Rugby World Cup Online live by changing their IP address to another country<sup>208</sup>. This clearly circumvents geo-blocking technology<sup>209</sup>. Transmitting through a VPN creates a secured tunnel to protect the streaming through to the intended destination; by

<sup>200</sup> Haris Džananović & Narcis Behililović, ‘IPTV Content Abuse and Measures for Improving Delivery of IPTV Content’ (2014) 2014 X International Symposium on Telecommunications (BIHTEL).

<sup>201</sup> Maurizio Borghi, ‘Chasing Copyright Infringement in the Streaming Landscape’ (2011) 42(3) *International Review of Intellectual Property and Competition Law* 316-343.

<sup>202</sup> Samanta C. Franchim, ‘It’s a Deal: Forging Media Rights Deals in Response to Spectator Live Streaming’ (2017) 21 (2) *Journal of Technology Law & Policy* 223-242.

<sup>203</sup> Ramon Lobato & James Meese, ‘Geoblocking and Global Video Culture’ (Institute of Network Cultures, Amsterdam, 2016) 64–72; see also Lasantha Ariyaratna, *Streaming and Copyright Law: An End-user Perspective* (2023, Routledge, UK).

<sup>204</sup> Kun He, Patrick Maillé, Gwendal Simon, ‘Delivery of Live Watermarked Video in CDN’: Fast and Scalable Algorithms [2017] Proceedings of the 27th Workshop on Network and Operating Systems Support for Digital Audio and Video at <<https://doi.org/10.1145/3083165.3083174>>.

<sup>205</sup> Kathy Ann Fletcher & Ayantunji Gbadamosi, ‘Examining Social Media Live Stream’s Influence on the Consumer Decision-Making: A Thematic Analysis’ (2022) *Electron Commer Research* 1-31.

<sup>206</sup> Haoyu Liu, Kim Hua Tan & Xianfeng Wu, ‘Who’s watching? Classifying Sports Viewers on Social Live Streaming Services’ (2023) *Annals Operations Research* 325, 743–765.

<sup>207</sup> Sabrina Earle, ‘The Battle Against Geo-Blocking: The Consumer Strikes Back’ (2016) 15 (1) *Richmond Journal of Global Law and Business* 1-20; See Mengna Liang, ‘Copyright Issues Related to Reproduction Rights Arising from Streaming’ (2020) 23 *The Journal of World Intellectual Property* at 809.

<sup>208</sup> How to Watch the French Open 2023 (Free TV Channels) at <<https://www.01net.com/en/vpn/french-open-live-stream/>>.

<sup>209</sup> Mengna Liang, ‘Copyright Issues Related to Reproduction Rights Arising from Streaming’ (2020) 23 *The Journal of World Intellectual Property* at 808.

providing extra protection through encryption and hiding the user's IP address, the stream can bypass the active restrictions on the networks<sup>210</sup>. The answer to the question of whether using VPN services to bypass geo-blocking technology is legal lies in discovering whether the production and communication to the public rights (of the legitimate copyright owners) have been used without authorization<sup>211</sup>. If so, the streaming is a copyright infringement<sup>212</sup>. While VPNs are not illegal, a user's activities can be.

## E. RIGHTS INFRINGED

84. Broadcasting rights provide broadcasters with (i) protection for the investments they made in televising live events, (ii) recognition and reward for the broadcasting organization's entrepreneurial efforts, and (iii) recognition and reward for the dissemination of information and culture<sup>213</sup>. Article 7 of the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations provides basic rights for broadcasters to prevent unauthorized third parties from (i) rebroadcasting their broadcasts, (ii) making fixations of their broadcasts, (iii) reproducing such fixations, and (iv) communicating their television broadcasts to the public if such communication is made in places accessible to the public against payment of an entrance fee<sup>214</sup>. This provides broadcasters with the sole discretion of whether or not to broadcast, reproduce, fixate, and communicate to the public.

85. Illegal live streaming constantly violates broadcast owners' rights in valuable content<sup>215</sup>. As discussed previously, sports broadcasters invest millions of dollars to obtain the right to broadcast live sports events from sports clubs and/or leagues<sup>216</sup>. When legitimate access holders retransmit such live broadcasting illegally, however, this provides access to millions of viewers who do not have legitimate access to original streaming, resulting in a loss of the broadcast rights owners' investment<sup>217</sup>. Arguably, this deprives the owners of broadcasting rights from gaining financial rewards for their investment, thus infringing their "economic rights" toward the content.

86. Section 17(6) of the UK's *Copyright, Designs and Patents Act 1988* provides that a "transient" copy of the work amounts to copyright infringement<sup>218</sup>. Although no permanent reproduced copy is stored in the device's RAM in the illegal transmission of live streaming, a transient reproduction occurs; hence, the illegal transmission of live streaming infringes the

<sup>210</sup> Mark Smirniotis, 'What Is a VPN and What Can (and Can't) It Do?' *New York Times Wirecutter* (2021) at <<https://www.nytimes.com/wirecutter/guides/what-is-a-vpn/>>; Reethika Ramesh, Anjali Vyas, Roya Ensafi, 'All of them claim to be the best: Multi-perspective study of VPN users and VPN providers, Cornwell University', (2023) at <<https://arxiv.org/abs/2208.03505>>.

<sup>211</sup> Mengna Liang, 'Copyright Issues Related to Reproduction Rights Arising from Streaming' (2020) 23 *The Journal of World Intellectual Property* at 809.

<sup>212</sup> Mengna Liang, 'Copyright Issues Related to Reproduction Rights Arising from Streaming' (2020) 23 *The Journal of World Intellectual Property* at 809.

<sup>213</sup> 'Broadcasting and Media Rights in Sport' (WIPO) at <<https://www.wipo.int/sports/en/broadcasting.html>>.

<sup>214</sup> Article 7 of the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations at <<https://www.unesco.org/en/legal-affairs/international-convention-protection-performers-producers-phonograms-and-broadcasting-organizations>>.

<sup>215</sup> Yan Wang, Yujiao Tan, and Ruiyun Kong, 'Modeling of Legal Protection of Network Broadcasting Right of Sports Events Based on Data Technology' (2022) *Wireless Communications and Mobile Computing* 1.

<sup>216</sup> Oliver Budzinski, Sophia Gaenssle & Philipp Kunz-Kaltenhäuser, 'How Does Online Streaming Affect Antitrust Remedies to Centralized Marketing?' (2019) 25 *Ilmenau Economics Discussion Papers* at <http://dx.doi.org/10.2139/ssrn.3417423>.

<sup>217</sup> Jason Haynes, 'The Protection of Sports Broadcast Rights in the Commonwealth Caribbean after TVJ V CVM' (2021) 19 (2) *Entertainment and Sports Law Journal* 1-19.

<sup>218</sup> See section 17(6) of the UK's *Copyright, Designs and Patents Act 1988*. "Copying in relation to any description of work includes the making of copies which are transient or are incidental to some other use of the work."

owner's broadcasting rights. For example, both unicast and multicast streaming make unauthorized copies of copyrighted content, which infringes on the owner's reproduction rights.

87. The illegal retransmission of live events infringes the owner's right to communicate their broadcasts to the public if such communication is made to the public subject to a payment<sup>219</sup> because the owners intend to generate revenue by providing viewers with access for a cost, while viewers of an illegal live-streaming retransmission do not pay this cost. In countries such as France, Poland, Sweden, and the UK, the uploaders who make copyrighted content accessible to illegitimate viewers infringe the owners' right to reproduction and public communication; yet in Germany, the Netherlands and Spain, such uploaders only infringe the owners' right to communication to the public<sup>220</sup>.

88. Similarly, user-generated streaming creates a significant challenge for broadcasters of sports events, TV shows, movies, and music because it involves the unauthorized distribution of copyrighted content. This poses a significant threat to broadcasters being able to monetize their content through licensing and distribution agreements. User-generated live streams could also potentially contain defamatory or harmful content that would infringe individuals' reputations and rights.

### III. LEGISLATIVE APPROACHES TAKEN FOR COMBATING THE ILLEGAL RETRANSMISSION OF LIVE BROADCASTS THROUGH INTERNET STREAMING

#### A. FRANCE

89. The Regulatory Authority for Audio-visual and Digital Communication (ARCOM) was established in France in 2021. This major change, which was brought into law (No. 2021-1382) on October 25, 2021, and relates to "the regulation and protection of access to cultural works in the digital age," came into effect from January 1, 2022<sup>221</sup>. This new authority was established via a merger of the High Authority for the Dissemination of Works, the Protection of Rights on the Internet (HADOPI), and Superior Audio-visual Council (CSA)<sup>222</sup>. According to Article L.331-12 of the Intellectual Property Code, ARCOM's missions are as follows:

a) A mission to protect works and objects to which are attached copyright, a neighboring right or audio-visual exploitation right mentioned in Article L.333-10 of the Sports Code, regarding infringements of these rights committed on the electronic communication networks used to provide services to the public online.

b) A mission to encourage the development of the legal offer and to observe the legal and illegal use of works and objects protected by copyright, related rights or audio-visual exploitation rights mentioned in Article L.333-10 on the electronic communication networks used to supply services to the public online.

c) A mission to regulate and monitor the field of technical measures for the protection and identification of protected works and objects<sup>223</sup>.

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<sup>219</sup> Ibid.

<sup>220</sup> João Pedro Quintais Quintais, 'Global Online Piracy Study Legal Background Report' (2018) at <<https://www.ivir.nl/publicaties/download/Global-Online-Piracy-Study-Legal-Background-Report.pdf>>.

<sup>221</sup> LAW n° 2021-1382 of October 25, 2021, relating to the regulation and protection of access to cultural works in the digital age (1) at <<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000044245615>>.

<sup>222</sup> What is ARCOM at <[https://www.arcom.fr/sites/default/files/2023-06/Livret%20interactif%20ARCOM-13-06-2023-%20livret\\_EN.pdf](https://www.arcom.fr/sites/default/files/2023-06/Livret%20interactif%20ARCOM-13-06-2023-%20livret_EN.pdf)>; see <<https://www.hadopi.fr/en>>, see also <<https://www.arcom.fr/larcom>>.

<sup>223</sup> Intellectual Property Code: Sub-section 1: Jurisdiction and organization for the protection of copyright and Related Rights at <[https://www.legifrance.gouv.fr/codes/article\\_lc/LEGIARTI000044259258](https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000044259258)>.

90. Article L.331-12 of the Intellectual Property Code mentions Article L.333-10 under section 3, titled “fight against the illicit retransmission of events and competitions” of the Sports Code. Under Article L.333-10 of the Sports Code (as amended by Law 2022 – 296 of March 2, 2022, coming into force from March 4, 2022), if there is any infringement of exclusive rights of audio-visual communication companies guaranteed under Article L.216-1 of the Intellectual Property Code (as amended by Law 2021-1382 on October 25, 2021, art. 2)<sup>224</sup>, which leads to broadcasting sports competitions or events without authorization, the rights holder can “seize the president of the court of law... for the purpose of obtaining all proportionate measures to prevent or put an end to this attack, against any person likely to contribute to remedying it”<sup>225</sup>. Once the president of the court orders any measure, the rights holder is called to communicate the same to ARCOM, which may order the access to be terminated if the service does not provide justification<sup>226</sup>.

91. The case *FFT v. SA Orange et al.*<sup>227</sup> illustrates how this provision operates<sup>228</sup>. The French Tennis Federation (FFT)<sup>229</sup>, the official organizer of the Roland-Garros French Open Tennis Championship held in Paris between May 16 and June 5, 2022, filed for an urgent proceeding against the “main internet access providers in order to prevent the 19 sites that were broadcasting, free of charge the ‘live streams of matches’ whose exclusive rights vested with FFT”<sup>230</sup>. The judge granted the required measures to FFT after finding *prima facie* that the sites were involved in “serious and repeated breaches” and “their main objective was to broadcast without authorization” as given under Article L.333-10 I of the Sports Code<sup>231</sup>.

92. On January 20, 2022, French broadcaster beIN Sports received the first injunction under the new regulations to block almost 20 domains related to pirating “live events”<sup>232</sup>. *La Fédération Nationale Des Éditeurs De Film et al. c/ SA Bouygues Telecom et al.*<sup>233</sup> is another important case in relation to Article L.336.2 of the Intellectual Property Code. In 2020, the National Federation of Film Publishers (FNEF), Syndicate of Digital Video Editing (SEVN), Union of Film Producers (UPC), and National Cinema Center (CNC) filed a suit requesting the Court to block pirate sites<sup>234</sup>. Agreeing with the petitioners, the Court passed an order on

<sup>224</sup> Article L 216. 1: The reproduction of its programs, as well as their making available to the public by sale, rental or exchange, their radio or television broadcasting, their making available to the public online, and their communication to the public in a place accessible to the public against payment of an entrance fee. Are called audio-visual communication companies the organizations that exploit an audio-visual communication service within the meaning of the law n° 86-1067 of September 30, 1986, relating to the freedom of communication, whatever the mode applicable to this service., see Intellectual Property Code: Part One: Literary and Artistic Property (Articles L111-1 to L343-7) at <[https://www.legifrance.gouv.fr/codes/section\\_lc/LEGITEXT000006069414/LEGISCTA000006114031/#LEGISCTA000006114031](https://www.legifrance.gouv.fr/codes/section_lc/LEGITEXT000006069414/LEGISCTA000006114031/#LEGISCTA000006114031)>.

<sup>225</sup> Article L 331-10, I.

<sup>226</sup> Article L 331-10, II and III.

<sup>227</sup> Tribunal judiciaire, Paris, (ord. réf.), 25 mai 2022, *FFT c/ SA Orange et a.*

<sup>228</sup> Tribunal judiciaire, Paris, (ord. réf.), 25 mai 2022, *FFT c/ SA Orange et a.*

<sup>229</sup> The French Tennis Federation (FTF) is called as Fédération française de tennis, (FFT) in French.

<sup>230</sup> Tribunal judiciaire, Paris, (ord. réf.), 25 mai 2022, *FFT c/ SA Orange et a.* Paris court of justice (urgent procedure), 25 May 2022, *FFT v SA Orange et al.*, [FR] Blocking of Streaming Sites Illegally Retransmitting Roland-Garros Tennis Matches at <<https://merlin.obs.coe.int/download/9539/pdf>>.

<sup>231</sup> Ibid.

<sup>232</sup> Nigel Cory and Jaci McDole, ‘Comments to the Attorney General of Australia Regarding Australia’s Copyright Enforcement Review’ (2023) at <<https://itif.org/publications/2023/03/06/australia-copyright-enforcement-review/>>.

<sup>233</sup> Tribunal Judiciaire de Paris, 3ème chambre, 1ère section, Jugement du 16 janvier 2020, N° Portalis 352J-W-B7D-CRHKS.

<sup>234</sup> Tribunal judiciaire de Paris, 16 janvier 2020, *La Fédération Nationale Des Éditeurs De Film et al c/SA Bouygues Telecom et al.* Paris Court of Justice, 16 January 2020, *The National Federation of Film Publishers v. SA Bouygues Telecom* at <<https://torrentfreak.com/images/France-Blocking-Order-200119.pdf>>; see also, Andy Maxwell, ‘French ISPs Block Dozens of Pirate Sites Following Movie Industry Action’ (2020) at <<https://torrentfreak.com/french-isps-block-dozens-of-pirate-sites-following-movie-industry-action-200305/>>.



January 16, 2020, blocking all 36 pirated sites from illegally streaming copyright-protected content<sup>235</sup>.

## B. ITALY

93. The Authority for Communications Guarantees/*Autorità per le Garanzie nelle Comunicazioni* (AGCOM) was established in 1997 as an independent administrative body<sup>236</sup>. Among the various functions of the AGCOM, it deals with online copyright enforcement<sup>237</sup>. The AGCOM's "rule book" concerning online copyright is its resolution No. 680/13/CONS, titled "Regulation on the Protection of Copyright on Electronic Communication Networks and Implementing Procedures Pursuant to Legislative Decree 9 April 2003, N. 70"<sup>238</sup>.

94. Since its inception, AGCOM has dealt with online infringement seriously. To highlight its active contribution, Italy ranked first among European States (as of December 2021) in blocking websites, as evidenced by Figure 4:

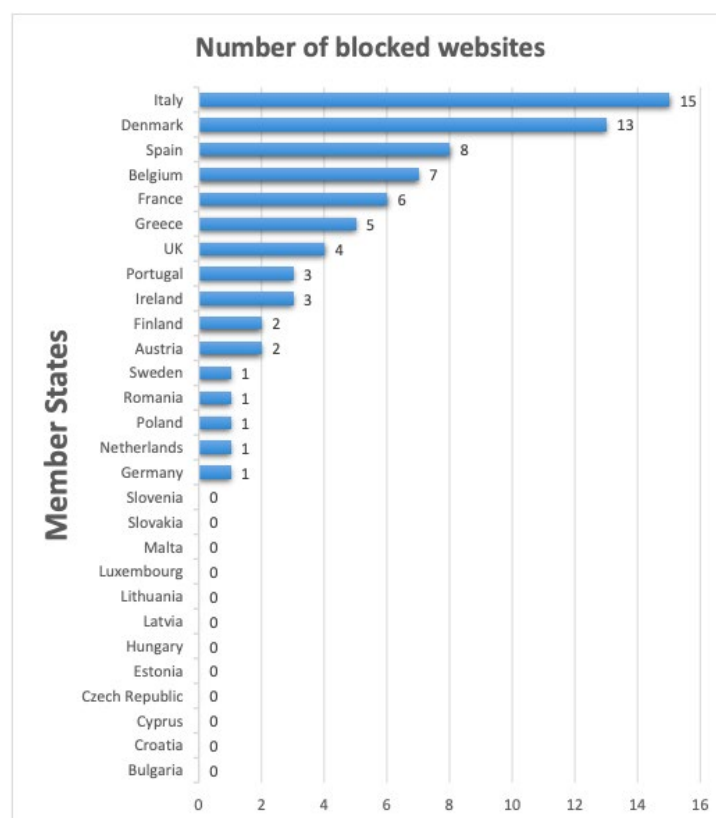


Figure 4: Member States of copyright enforcement actions against studied infringing websites operating across the EU<sup>239</sup>

<sup>235</sup> Ibid.

<sup>236</sup> Law No. 249/1997 of 31 July 1997 [Italy].

<sup>237</sup> Cross Border Enforcement of Intellectual Property Rights in EU, Policy Department for Citizens' Rights and Constitutional Affairs Directorate-General for Internal Policies, PE 703.387, December 2021 at <[https://www.europarl.europa.eu/RegData/etudes/STUD/2021/703387/IPOL\\_STU\(2021\)703387\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/703387/IPOL_STU(2021)703387_EN.pdf)> at 50.

<sup>238</sup> Alfonso Maruccia, 'Italy's new anti-piracy law could bring swift justice to IPTV streamers and users' (2023) at <<https://www.techspot.com/news/99602-italy-new-anti-piracy-law-could-bring-swift.html>>.

<sup>239</sup> Cross Border Enforcement of Intellectual Property Rights in EU, Policy Department for Citizens' Rights and Constitutional Affairs Directorate-General for Internal Policies, PE 703.387, December 2021 at <[https://www.europarl.europa.eu/RegData/etudes/STUD/2021/703387/IPOL\\_STU\(2021\)703387\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/703387/IPOL_STU(2021)703387_EN.pdf)> at 62.

95. Out of 14 blocked websites (the 15<sup>th</sup> was when Italy blocked Pirate Bay by virtue of a civil injunction proceeding in 2008), at least 9 were blocked by the administrative orders of AGCOM<sup>240</sup>. In addition, in 2018 the Court of Milan provided for an interim injunction (though not related to sports content) and ordered certain Italian access providers to block access to specific domain names<sup>241</sup>. The Court also provided for a dynamic injunction not restricted to a single domain name<sup>242</sup>. A case before the Court of first instance in Milan in 2020 was related to the illegal broadcast of Serie A league matches on unauthorized websites. The Court issued an injunction to block a service provider because it was contributing to infringement by permitting the temporary storage of data<sup>243</sup>.

96. To further strengthen its efficiency in combating online piracy, in a press note dated July 27, 2023, AGCOM highlighted how it unanimously approved resolution No. 189/23/CONS in its meeting on July 26, which amends resolution No. 680/13/CONS, concerning the fight against the illegal broadcasting of live sports content<sup>244</sup>. The 2023 resolution provides the AGCOM with the power to issue “dynamic injunctions” and that now “it will be possible to disable the access to pirated content in the first 30 minutes of the broadcast by blocking the Domain Name System (DNS) Resolution of domain names and blocking the routing of network traffic to IP addresses uniquely intended for illegal activities”<sup>245</sup>. In short, AGCOM is empowered to intervene in stopping the pirated live broadcasting of all events, including sports<sup>246</sup>. This measure is in line with Law 93 of July 14, 2023: “Provisions for the prevention and suppression of the unlawful dissemination of content protected by copyright via electronic communications networks,” which came into force on August 8, 2023<sup>247</sup>.

97. The 2023 law provides for a fine of up to €15,000 and a criminal conviction ranging from 6 months to 3 years for those who illegally broadcast films, TV series, sports, and football matches<sup>248</sup>. A fine of up to €5000 also extends for those who “consume” a “substantial quantity of protected work or material”<sup>249</sup>. However, the full effectiveness of this new law is yet to be seen.

98. It is pertinent to note that resolution No.189/23/CONS notes the Recommendation of the European Commission on the fight against online piracy of sporting events and other live events (C (2023) 2853 final) of May 4, 2023<sup>250</sup>. In this Recommendation, Member States are encouraged “to take effective measures against unauthorized retransmission of live sports events, while guaranteeing the necessary safeguards to protect fundamental rights”<sup>251</sup>. When describing how Italy is fulfilling the European Commission’s recommendation, Massimiliano Capitano, Commissioner of the AGCOM, remarked, “With this amendment, in perfect

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<sup>240</sup> Ibid at 60, 62 and 69.

<sup>241</sup> Mapping report on National Remedies against online piracy of sports content European Audio-visual Observatory, Strasbourg 2021 <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 52.

<sup>242</sup> Ibid.

<sup>243</sup> Court of first instance of Milan, order No. 42163 of 5 October 2020 as seen from Mapping report on national remedies against online piracy of sports content European Audio-visual Observatory, Strasbourg 2021, at 433 at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>>.

<sup>244</sup> Official Press note at <<https://www.agcom.it/documents/10179/31023367/Comunicato+stampa+27-07-2023/df5419f4-ff5f-4a08-abfa-1cf3f374527a?version=1.0>>.

<sup>245</sup> Ibid.

<sup>246</sup> Ibid.

<sup>247</sup> Ibid.

<sup>248</sup> Andy Maxwell, ‘Italian Pirate IPTV Customers Risk a 5,000 Euro Fine Starting August 8, 2023’ at <<https://torrentfreak.com/italian-pirate-iptv-customers-risk-a-5000-euro-fine-starting-august-8-2023-230728/>>

<sup>249</sup> Ibid.

<sup>250</sup> Resolution No 189/23/CONS at 3 (translated document attached as Annexure 1).

<sup>251</sup> Recommendations, Commission Recommendation (EU) 2023/1018 of 4 May 2023 on combating online piracy of sports and other live events <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023H1018>> at 3.

synchrony with the changes introduced by Parliament, AGCOM is once again at the forefront of the European scene in combating online piracy activity”<sup>252</sup>.

### C. CANADA

99. Canada has implemented legislation to address the unauthorized streaming of live broadcasts through the Online Streaming Act 2023,<sup>253</sup> the first major reform of its *Broadcasting Act* since 1991. Under the new law, online streaming services need to register with the Canadian Radio-television and Telecommunications Commission (CRTC), which aims to regulate online broadcasting<sup>254</sup>. The Act strives to empower the CRTC to regulate these media more effectively<sup>255</sup> by establishing a fair and competitive environment for streaming platforms while promoting accessibility and fostering the creation and inclusion of Canadian content on broadcast and streaming platforms. In its interpretation of the word “Broadcasting” in section 2(1) of the Broadcasting Act 1991 (as amended by the Act), it states that “broadcasting means any transmission of programs — regardless of whether the transmission is scheduled or on-demand or whether the programs are encrypted or not — by radio waves or other means of telecommunication for reception by the public by means of broadcasting receiving apparatus, but does not include any such transmission of programs that is made solely for performance or display in a public place”<sup>256</sup>.

### D. USA

100. In the USA, legislation that combats illegal streaming is the *Protecting Lawful Streaming Act* (PLSA) introduced by Senator Tillis, which amends Title 18 of the United States Code by prohibiting illicit digital transmission services. The legislation was signed into law on December 27, 2020, through the *Consolidated Appropriations Act 2021* and was enforced from January 2021<sup>257</sup>. Prior to the enactment of the PLSA 2020, a “streaming loophole” meant that violations of reproduction and distribution rights of copyright owners were charged as felonies, and the unauthorized live streaming of copyrighted content could only be charged as a misdemeanor<sup>258</sup>. After the PLSA classified copyright infringement through streaming as a felony, criminal penalties now include heavy fines, imprisonment of up to five years (10 years for second offenders), or both<sup>259</sup>. Prior to the enactment of PLSA, the two main legislations pertaining to illegal streaming activities were the *Cable Communications Policy Act of 1984* (CCPA) and the *Digital Millennium Copyright Act* (DMCA)<sup>260</sup>.

<sup>252</sup> Official Press at <<https://www.agcom.it/documents/10179/31023367/Comunicato+stampa+27-07-2023/df5419f4-ff5f-4a08-abfa-1cf3f374527a?version=1.0>>.

<sup>253</sup> Commonly known as Bill C-11.

<sup>254</sup> Mariane Bourcheix-Laporte, ‘How the Online Streaming Act will support Canadian content’ (2023) at <<https://theconversation.com/how-the-online-streaming-act-will-support-canadian-content-201862>>.

<sup>255</sup> Jena Wallace, ‘Canada’s Online Streaming Act: Everything We Know About Bill C-11 So Far’ at <<https://www.3playmedia.com/blog/canadas-online-streaming-act-everything-we-know-about-bill-c-11-so-far/>>.

<sup>256</sup> Section 2(1) of the Broadcasting Act 1991.

<sup>257</sup> Consolidated Appropriations Act 2021 at <<https://www.congress.gov/116/plaws/publ260/PLAW-116publ260.pdf>>, see also US IP Law Update (2021) at <<http://ielawgroup.net/u-s-ip-law-update/>> and Irene Calboli, ‘Legal Perspectives on the Streaming Industry: The United States’ (2022) 70 (1) *The American Journal of Comparative Law* i220–i245i231.

<sup>258</sup> Press Release, ‘Tillis Releases Text of Bipartisan Legislation to Fight Illegal Streaming by Criminal Organizations’ (2020) at <<https://www.tillis.senate.gov/2020/12/tillis-releases-text-of-bipartisan-legislation-to-fight-illegal-streaming-by-criminal-organizations>>.

<sup>259</sup> Miriam Marcowitz Bitton et al., ‘The Future of Criminal Enforcement of Copyright: The Promise of Civil Enforcement’ (2023) 30 (2) *George Mason Law Review* 463, 494.

<sup>260</sup> See Cable Communications Policy Act of 1984, 47 U.S.C § 553(b) and Digital Millennium Copyright Act 17 U.S.C. § 1201 (a)(1)(A), see also Joseph Cairo, ‘The Shortcomings of Past Anti-Streaming Laws and Hope for the

## E. CHINA

101. The third revision to the *Chinese Copyright Act* in 2020, which changed the wording from “cinematographic works and works created by a process analogous to cinematography” to “audio-visual works” is revolutionary because it has broadened the scope of copyright to all types of audio-visual performances<sup>261</sup>. Accordingly, “the continuous pictures of originality are protected as audio-visual works (cinematographic works and works created by a process analogous to cinematography) of copyright<sup>262</sup>, and continuous pictures without originality are protected as video recordings of neighboring rights<sup>263</sup>. The latest revision “categorize[s] the continuous pictures of ‘live sports’ as works created by a process analogous to cinematography”<sup>264</sup>. The 2020 amendment brings more stringent penalties for copyright infringement. It introduces the concept of punitive damages, and in cases of deliberate copyright infringement or severe violations of copyright-related rights, the compensation awarded will reach up to five times the determined damages<sup>265</sup>.

## F. MALAYSIA

102. Malaysia’s *Copyright Amendment Act 2022* brought in section 43AA, titled “offences relating to streaming technology”<sup>266</sup>. Section 43AA prohibits, among other acts, the offering to the public or the provision of service of streaming technology. In this provision, streaming technology includes any “computer program, device or component which is used in part or in whole that results in an infringement of the copyright in a work”<sup>267</sup>. This definition covers both the software and hardware used in part or whole that facilitates access to copyright-infringing works<sup>268</sup>. The 2022 Amendment includes the following clause (k) in section 41, dealing with offenses: “section 41 (1) Any person who during the subsistence of copyright in a work or performers’ right “(k) provides or shares access to an online location of any works<sup>269</sup> or copies

PLSA’ (2021) at <<https://sports-entertainment.brooklaw.edu/film-tv/the-shortcomings-of-past-anti-streaming-laws-and-hope-for-the-plsa/>>.

<sup>261</sup> Shujie Feng & Fang Fang, ‘Live Broadcasting of Sporting Events: a Trigger to the Revolutionary Reform of Chinese Copyright Law by Transforming the Condition of Originality’ (2022) 12(3) *Queen Mary Journal of Intellectual Property* at 404.

<sup>262</sup> Article 3 of the Copyright Law of the People’s Republic of China (20100226) and Article 4(11) of the Regulation for the Implementation of the Copyright Law of the People’s Republic of China (2013 Revision)

<sup>263</sup> Article 5(3) of the Regulation for the Implementation of the Copyright Law of the People’s Republic of China (2013 Revision).

<sup>264</sup> The selection, editing, arrangement, and out-of-picture commentary of the shooting pictures all reflect the individual choices and arrangements of creators such as photographers and directors, which are original (cannot be determined as a mechanical recording) and already meet the originality requirements of works created by a process analogous to cinematography; see, Beijing Higher People’s Court (2018) Jingmin Zhong No. 562, Civil Judgment as seen in Shujie Feng & Fang Fang, ‘Live Broadcasting of Sporting Events: a Trigger to the Revolutionary Reform of Chinese Copyright Law by Transforming the Condition of Originality’ (2022) 12(3) *Queen Mary Journal of Intellectual Property* at 412.

<sup>265</sup> Linda Zhao, ‘China Passes Harsher Amended Copyright Law’ (2020) at <<https://www.managingip.com/article/2a5cy419r9rqg588zo1ds/china-passes-harsher-amended-copyright-law>>.

<sup>266</sup> Section 43 AA (1) No person shall commit or facilitate infringement:

(a) manufacturing a streaming technology for sale or hire.

(b) importing a streaming technology.

(c) selling or letting for hire, offering, exposing or advertising for sale or hire, possessing or distributing a streaming technology in the course of a business.

(d) distributing a streaming technology for purposes other than in the course of a business to such an extent as to affect prejudicially the owner of the copyright, or

(e) offering to the public or providing any service of streaming technology.

<sup>267</sup> Section 43 AA (4), The Copyright Act, 1987 (Malaysia) as amended in 2022.

<sup>268</sup> Baker McKenzie, at <<https://insightplus.bakermckenzie.com/bm/intellectual-property/malaysia-copyright-amendment-bill-2021-key-amendments-to-the-copyright-act-1987>>, see also Gooi Yang Shuh & Messrs Skrine, ‘The Malaysian Copyright (Amendment) Act 2022: A Win for Copyright Owners and Accessibility Efforts’ (2022) at <<https://aippi.org/content/uploads/2022/02/Gooi-Yang-Shuh.pdf>>.

<sup>269</sup> Broadcasts are works eligible for Copyright under Section 7(1) of The Copyright Act, 1987.

of works to any other person without authority shall unless he is able to prove that he acted in good faith and had no reasonable grounds for supposing that copyright or performers' right would or might thereby be infringed, be guilty of an offence...". The question of whether the provision links to illegal live streaming covered under section 41 (k) has not been clarified, however. Neither has the question of including illegal live streaming under the ambit of section 43AA.

#### IV. REMEDIES FOR COMBATING THE ILLEGAL RETRANSMISSION OF LIVE BROADCASTS THROUGH INTERNET STREAMING

##### A. LEGAL REMEDIES

103. Pursuant to Article 8(3) of the Copyright Directive 2001/29/EC of the European Parliament, and Articles 9 and 11 of Enforcement Directive 2004/48/EC of the European Parliament (IPRED), rightsholders can obtain **injunctions** ordering online intermediaries to block access to or remove unauthorized content<sup>270</sup>. Regulation (EU) 2022/2065 provides a general framework for ensuring a safe, predictable, and trusted online environment, addressing the dissemination of illegal content online. This removes or blocks access to illegal broadcasting upon the receipt of a notice<sup>271</sup>. In these circumstances, rightsholders can rely on the remedies provided in Directive 2001/29/EC, Directive 2004/48/EC, and Regulation (EU) 2022/2065<sup>272</sup>. Member States and stakeholders can apply the existing remedies against copyright infringements in a manner that considers the specificity of live transmissions.

104. In 2023, the EU Commission adopted a recommendation on how to combat commercial-scale online piracy of live broadcasts, specifically sports events<sup>273</sup>. Together with the European Union Intellectual Property Office (EUIPO) Observatory, the Commission will closely monitor the effects of this recommendation on unauthorized retransmissions of live sports and other live events<sup>274</sup>. In this recommendation, Member States are encouraged "to take effective measures against unauthorized retransmission of live sports events, while guaranteeing the necessary safeguards to protect fundamental rights"<sup>275</sup>.

105. The recommendation focuses on three main areas:

- 1) The importance of ensuring the prompt removal of content that has been identified as an unauthorized retransmission of a live event:
  - a) When processing the notices related to unauthorized retransmission of live events, providers of hosting services should consider the specific nature of live transmissions of the event.

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<sup>270</sup> Commission Recommendation on Combating Online Piracy of Sports and Other Live Events (2023) at <[https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=PI\\_COM:C\(2023\)2853](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=PI_COM:C(2023)2853)>.

<sup>271</sup> Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act) at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R2065>; see also Commission Recommendation of 4.5.2023 on combating online piracy of sports and other live events at <[https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=PI\\_COM%3AC%282023%292853](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=PI_COM%3AC%282023%292853)>.

<sup>272</sup> Ibid.

<sup>273</sup> European Commission at <<https://digital-strategy.ec.europa.eu/en/news/commission-recommends-actions-combat-online-piracy-sports-and-other-live-events>>.

<sup>274</sup> Press Release, 'Commission Recommends Actions to Combat Online Piracy of Sports and Other Live Events' (2023) <[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_23\\_2508](https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2508)>.

<sup>275</sup> European Commission Recommendation on Combating Online Piracy of Sports and Other Live Events, at 4.

- b) The main purpose is to minimize the harm caused during the unauthorized retransmission of such an event.
- 2) How the legal remedies provided for in the Enforcement Directive can be used to
    - a) address the unauthorized retransmission of live events:
    - b) Member States should be allowed to issue **injunctions** that are of a “dynamic nature” to address unauthorized retransmission of live events. This means adopting a case-by-case approach for updating the list of internet locations covered by the injunction<sup>276</sup>.
  - 3) Member States’ experience with live “**blocking injunctions**,” paying particular attention to the need to respect fundamental rights<sup>277</sup>.

106. In a statement, the Commission said that “the Recommendation encourages the use of blocking injunctions tailored to live events and, in the case of live sports events, encourages Member States to grant legal standing to sports event organizers to seek an injunction where it is currently not possible”<sup>278</sup>.

107. Blocking injunctions find their legal basis in Article 18(1) of the e-commerce Directive, Article 8(3) of the InfoSoc Directive and Article 11 of the IPRED<sup>279</sup>. They are a widely favored remedy for intellectual property rightsholders seeking to enforce their rights in the digital environment. Injunctions target a domain name or IP address and prevent consumers from accessing websites where a live event is broadcast illegally<sup>280</sup>. For example, in December 2014, Singapore amended its Copyright Act to enable rights holders to obtain website blocking orders<sup>281</sup>, and in 2015 Australia introduced website blocking provisions to its *Copyright Act 1968 (Cth)*<sup>282</sup>.

108. The AGCOM by virtue of its press note dated July 27, 2023, indicated how it unanimously approved resolution No.189/23/CONS in its meeting on 26 July concerning the fight against the illegal broadcasting of live sports content, which amended the resolution<sup>283</sup>. The 2023 resolution provides the AGCOM with the power to issue “**dynamic injunctions**,” and now “it will be possible to disable the access to pirated content in the first 30 minutes of the broadcast by blocking the DNS Resolution of domain names and blocking the routing of network traffic to IP

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<sup>276</sup> Recommendations, Commission Recommendation (EU) 2023/1018 of 4 May 2023 on combating online piracy of sports and other live events <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023H1018>>.

<sup>277</sup> Recommendations, Commission Recommendation (EU) 2023/1018 of 4 May 2023 on combating online piracy of sports and other live events <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023H1018>>.

<sup>278</sup> Foo Yun Chee, ‘Sports events organizers encouraged to secure injunctions against online piracy’ at <<https://www.reuters.com/sports/sports-events-organisers-encouraged-secure-injunctions-against-online-piracy-2023-05-04/>>.

<sup>279</sup> EUIPO report: Case law on pirate site blocking injunctions in the EU.

<sup>280</sup> EU Commission Combats Illegal Streaming of Sports Events, The European Commission Recommendation 2023/1018, of May 4th, seeks to combat online piracy of sports and other live events (2023) at <<https://www.caiadoguerreiro.com/en/eu-commission-combats-illegal-streaming-of-sports-events/>>.

<sup>281</sup> See Copyright (Amendment) Act 2014, An Act to Amend the Copyright Act (Chapter 63 of the 2006 Revised Edition); see also Study on Dynamic Blocking Injunctions in the European Union (2021)

<[https://euiipo.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://euiipo.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)> at 15.

<sup>282</sup> See Copyright Amendment (Online Infringement) Act 2015 (Cth); see also Study on Dynamic Blocking Injunctions in the European Union (2021) <[https://euiipo.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://euiipo.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)> at 15.

<sup>283</sup> Official Press note (2023) at <<https://www.agcom.it/documents/10179/31023367/Comunicato+stampa+27-07-2023/df5419f4-ff5f-4a08-abfa-1cf3f374527a?version=1.0>>.

addresses uniquely intended for illegal activities”<sup>284</sup>. The Authority is empowered to intervene in stopping the pirated live broadcasting of all events, including sports<sup>285</sup>. In April 2019, Denmark’s inaugural “dynamic blocking injunction” was granted by the Frederiksberg Court, which permitted LaLiga, the Spanish football league, to compel local internet service providers (ISPs) to restrict access to 10 websites that were infringing its copyright by broadcasting live matches<sup>286</sup>. Ireland’s High Court issued a “dynamic blocking injunction” on September 29, 2020, in support of the European Football Associations’ (UEFA) EURO 2020 (rescheduled to 2021 due to the COVID-19 pandemic) and various other matches scheduled for the 2020/2021 football season<sup>287</sup>. Dynamic injunctions, which are broad in scope and can target a range of online locations and methods used for copyright infringement, allow court orders to rapidly cover new internet locations that become available immediately after the blocking injunction but are broadcasting the same live event, avoiding so-called “mirror websites” (the same website under a different domain name or IP address)<sup>288</sup>. The dynamic aspect of this legal mechanism prevents recurring and potential violations of the same protected content by extending the scope of a particular injunction to cover similar websites, which may involve different domain names, internet protocol (IP) addresses, or URLs. Importantly, this can be achieved without needing to initiate fresh legal actions to obtain a new injunction<sup>289</sup>. Many countries use dynamic injunctions, including Austria, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Romania, Spain, Sweden, and the UK<sup>290</sup>.

109. On June 2023, the High Court of Kenya issued a **permanent injunction** compelling local ISPs to block 44 unauthorized sports streaming sites. This landmark case arose from a lawsuit filed by MultiChoice, the primary holder of broadcast rights for major sporting events. Originating in October 2019 with MultiChoice Kenya’s issuance of takedown notices to ISPs, the court’s ruling is the first instance of site-blocking in Kenya<sup>291</sup>. The decision aligns with a 2019 amendment to Kenya’s Copyright Act which enables right holders to request, by way of a takedown notice, that ISPs remove the infringing content<sup>292</sup>. “A permanent injunction perpetually restrains the commission of an act by the defendant in order for the rights of the plaintiff to be protected”<sup>293</sup>. A permanent injunction differs from a temporary or an interim injunction which is only meant to be in force for a specified time or until the issuance of further orders from the court. In this case, the High Court issued a permanent injunction after hearing the suit and fully determining the rights of the parties.

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<sup>284</sup> Official Press note (2023) at <<https://www.agcom.it/documents/10179/31023367/Comunicato+stampa+27-07-2023/df5419f4-ff5f-4a08-abfa-1cf3f374527a?version=1.0>>.

<sup>285</sup> Official Press note (2023) at <<https://www.agcom.it/documents/10179/31023367/Comunicato+stampa+27-07-2023/df5419f4-ff5f-4a08-abfa-1cf3f374527a?version=1.0>>.

<sup>286</sup> Adaptive Antipiracy Tools: An Update on Dynamic and Live Blocking Injunctions (2020) at <<https://itif.org/publications/2020/10/22/adaptive-antipiracy-tools-update-dynamic-and-live-blocking-injunctions/>>.

<sup>287</sup> Comments to the Attorney General of Australia Regarding Australia’s Copyright Enforcement Review at <<https://itif.org/publications/2023/03/06/australia-copyright-enforcement-review/>>.

<sup>288</sup> EU Commission combats illegal (2023) at <<https://www.caiadoguerreiro.com/en/eu-commission-combats-illegal-streaming-of-sports-events/>>.

<sup>289</sup> Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 74.

<sup>290</sup> Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 74.

<sup>291</sup> Ernesto Van der Sar, ‘Pirate Site Blocking Expands to Kenya with Landmark Court Order’ (2022) at <<https://torrentfreak.com/pirate-site-blocking-expands-to-kenya-with-landmark-court-order-220628/>>.

<sup>292</sup> *MultiChoice Kenya Limited v Safaricom PLC & another; Kenya Copyright Board & another (Interested Party) (Miscellaneous Civil Application E567 of 2019)* [2022] KEHC 3256 (KLR) (Commercial and Tax) (23 June 2022) (Ruling) at <<http://kenyalaw.org/caselaw/caselawreport/?id=234456>>.

<sup>293</sup> *Kenya Power & Lighting Co. Limited v Sheriff Molana Habib* [2018] eKLR at <<http://kenyalaw.org/caselaw/cases/view/157329>>.

110. **Live blocking injunctions** were first granted in 2017 in a case brought by the Premier League<sup>294</sup>. Courts issue them to prevent or block the unauthorized “live broadcasting or streaming” of copyrighted content, typically in real time or with minimal delay<sup>295</sup>. If granted, the order works by requiring ISPs to block internet users’ access to servers hosting infringing streams of live sporting events. “Live blocking injunctions” have been applied mainly in Ireland, the Netherlands, Spain, Sweden, and the UK. They are considered to be extremely efficient because they can be executed in a timely manner by hindering illegal live streams<sup>296</sup>. In 2017, in the case *Football Association Premier League Limited v. British Telecommunications PLC and Others*<sup>297</sup>, the Court issued an order effectively blocking illegal live streaming of broadcasts that were distributing copyrighted content owned by the Premier League without authorization<sup>298</sup>. In 2020, the High Court of Ireland granted the Union of UEFA a live blocking injunction, which required ISPs to block access to streaming servers that transmit unauthorized live coverage of UEFA or Premier League matches for the 2020/2021 football season<sup>299</sup>. In the *Football Association Premier League v. Ecatel*,<sup>300</sup> the Dutch High Court mandated that the ISP must execute the live blocking order within a half-hour of receiving the notification from the rights owners. Live blocking injunctions are extremely effective because they are not unduly complicated or costly and no other is equally effective but less expensive<sup>301</sup>. Many countries are yet to use live blocking injunctions.

111. **Blanket injunctions** to combat illegal live streaming are legal orders that proactively prevent the unauthorized live broadcasting of copyrighted content. They block repeated infringements that can even occur in the future, thus increasing the effectiveness of the injunction<sup>302</sup>. The UK broadcaster Sky recently obtained a blanket injunction against ISPs to block the illegal live streaming of its football games and television shows in real time<sup>303</sup>. Regarding the Sky case, an injunction was sought to block streaming sites from streaming “best-selling” football games such as the English Premier League matches, for which injunctions

<sup>294</sup> Nigel Cory, ‘Adaptive Antipiracy Tools: An Update on Dynamic and Live Blocking Injunctions’ (2020) at <<https://itif.org/publications/2020/10/22/adaptive-antipiracy-tools-update-dynamic-and-live-blocking-injunctions/>>; Rebecca Pakenham-Walsh, ‘First injunctions ever granted in the UK to block access to cyberlocker and stream-ripping sites’ at <<https://www.fieldfisher.com/en/services/intellectual-property/intellectual-property-blog/first-injunctions-ever-granted-in-the-uk-to-block>>, For the *Premier League case in discussion (Football Association Premier League Ltd (FAPL) and Others v. QC Leisure and Others (C-403/08))*, See The Guardian, at <<https://www.theguardian.com/uk-news/2023/may/30/streaming-gang-jailed-for-selling-cut-price-premier-league-subscriptions>>; <<https://theathletic.com/4792811/2023/08/21/premier-league-illegal-streaming-piracy/>>.

<sup>295</sup> Giancarlo Frosio & Oleksandr Bulayenko, ‘Website Blocking Injunctions in Flux: Static, Dynamic and Live’ (2021) 16 (10) *Journal of Intellectual Property Law & Practice* 1127–1143.

<sup>296</sup> Mapping Report on National Remedies Against Online Piracy of Sports Content (2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 4; see also <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 57.

<sup>297</sup> *The Football Association Premier League Ltd v British Telecommunications Plc & Ors* [2017] EWHC 480 (Ch); [2017] E.C.C. 17.

<sup>298</sup> Despoina 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) at <[https://stockholmiplawreview.com/wp-content/uploads/2022/01/The-effectiveness-of-blocking-injunctions-against-ISPs\\_IP\\_nr-2\\_2021\\_A4.pdf](https://stockholmiplawreview.com/wp-content/uploads/2022/01/The-effectiveness-of-blocking-injunctions-against-ISPs_IP_nr-2_2021_A4.pdf)>.

<sup>299</sup> *Union Des Associations Européennes De Football v. Eircom Limited T/A Eir & Ors* [2020] IEHC 488 at <<https://level.law/news/uefa-granted-blocking-injunction-in-ireland>>.

<sup>300</sup> High Court, 24 January 2018, *Football Association Premier League v. Ecatel* (C/09/485400 / HA ZA 15-367).

<sup>301</sup> Mapping Report on ‘National Remedies Against Online Piracy of Sports Content’ (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 57.

<sup>302</sup> Giancarlo Frosio & Oleksandr Bulayenko, ‘Study on Dynamic Blocking Injunctions in the European Union Study’ prepared by the European Union Intellectual Property Office (EUIPO) in collaboration with the Center for International Intellectual Property Studies (CEIPI) (2021) at <[https://euiipo.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://euiipo.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)>.

<sup>303</sup> Thomas D, ‘Sky Wins Court Order to Block Illegal Streaming of Hit Shows and Football’ (Financial Times, 30 July 2023) at <<https://www.ft.com/content/ed022ce0-521a-465f-86b8-b7ea2c403407>>.



are renewed each season at the High Court<sup>304</sup>. The Premier League also obtained another blocking injunction to block pirate IPTV services during the 2023/2024 and 2024/2025 seasons<sup>305</sup>. This is a successful instance of a blanket injunction being applied to prevent illegal live streaming.

112. **De-indexing injunctions** are used to combat the illegal live streaming of copyrighted content online. They prevent search engines from indexing and displaying links to websites or platforms that engage in the unauthorized live streaming of copyrighted material, such as sports events or movies<sup>306</sup>. De-indexing injunctions are theoretically different from blocking orders, because while access to the infringing content is deindexed, users may still access this content by bypassing search engine services through direct URLs or other means<sup>307</sup>. Another problem with de-indexing injunctions is that they commonly apply only to the specific jurisdictions where they are issued. The content may still be accessible from other regions or countries where the injunction does not apply. There is no case law on these injunctions; they are very rare<sup>308</sup>.

113. **Graduated response schemes**, also known as "three-strikes" systems, are strategies that governments and copyright enforcement agencies employ to combat illegal live streaming and other forms of online copyright infringement<sup>309</sup>. The technical aspects of graduated response schemes involve a systematic process of monitoring, detection, and notification. When an infringement is detected, the infringing IP addresses are pinpointed for identification. Infringement reports are then generated and forwarded to the respective ISPs<sup>310</sup>. If the subscriber persists in carrying out the same infringing act, additional warnings are issued. Following a pre-determined number of warnings, the subscriber's associated IP address received a sanction, which aims to deter or prevent further infringement<sup>311</sup>. France implemented one of the best-known graduated response schemes, known as "HADOPI," which was designed to address various forms of online copyright infringement, including illegal live streaming<sup>312</sup>. New Zealand introduced a "three-strikes" copyright law, which allowed copyright owners to notify ISPs of alleged copyright infringement by their users. After users received three notices, the copyright owner could seek damages through the courts<sup>313</sup>.

114. **Takedown notices** can be used to combat illegal live streaming over the internet; however, they are ineffective for live-streaming events that last for a matter of hours<sup>314</sup>. The USA's *Digital Millennium Copyright Act of 1998* (DMCA) introduced provisions for takedown notices, enabling the copyright owner to request website hosts, who do not have any

<sup>304</sup> Andy Maxwell, 'Sky Obtains Novel Injunction to Prevent Piracy of Live Sports & 'House of the Dragon' (2023) at <<https://torrentfreak.com/sky-obtains-novel-injunction-to-prevent-piracy-of-live-sports-house-dragon-230731/>>.

<sup>305</sup> Andy Maxwell, 'Premier League Wins 2-Year Pirate IPTV Blocking Order as Sky Targets Identified' at <<https://torrentfreak.com/premier-league-wins-2-year-pirate-iptv-blocking-order-as-sky-targets-identified-230807/>>.

<sup>306</sup> Mapping report on national remedies against online piracy of sports content (2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 61.

<sup>307</sup> Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 61.

<sup>308</sup> Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 61.

<sup>309</sup> *Nicolas Suzor & Brian Fitzgerald, 'The Legitimacy of Graduated Response Schemes in Copyright Law' (2011) 34 (1) University of New South Wales Law Journal 1.*

<sup>310</sup> Lasantha Ariyaratna, *Streaming and Copyright Law: An End-user Perspective* (2023, Routledge, UK).

<sup>311</sup> Lasantha Ariyaratna, *Streaming and Copyright Law: An End-user Perspective* (2023, Routledge, UK).

<sup>312</sup> Primavera de Filippi & Danièle Bourcier, 'Three-Strikes Response to Copyright Infringement: The Case of HADOPI' (2019) at <<https://hal.science/hal-01382009/document>>.

<sup>313</sup> Davies Collison Cave, 'Three strikes policy for copyright infringement lands in New Zealand. Is Australia next?' (2011) at <https://www.lexology.com/library/detail.aspx?g=3aa7b2e9-667b-4fe6-bced-5ed6bee240c8>.

<sup>314</sup> Donna Wong, 'The EPL Drama – Paving the Way for More Illegal Streaming? Digital Piracy of Live Sports Broadcasts in Singapore' (2015) 35 (5) *Leisure Studies* 534-548.

responsibility or knowledge of third-party material streamed on the internet through their websites, to remove any illegal/infringing materials from their websites<sup>315</sup>.

115. A law titled “Provisions for the prevention and suppression of the unlawful dissemination of content protected by copyright via electronic communications networks” came into force on August 8, 2023<sup>316</sup>, which has provided for a “**fine**” that can extend to up to €15,000 as well as a “**criminal conviction**” ranging from 6 months to 3 years for those who illegally broadcast films, TV series, sports, and football matches<sup>317</sup>. A fine of up to €5000 also extends for those who “consume” a “substantial quantity of protected work or material”<sup>318</sup>. While the full effectiveness of the new law is yet to be seen, the copyright owner of a work or other subject matter is entitled to damages as compensation for infringement.

116. “**Recurring penalties**” are also available in most Studied Member States (SMS) countries under the umbrella of the IPRED, which states that, where provided for by national law, non-compliance with an injunction shall, where appropriate, be subject to a recurring penalty payment with a view to ensuring compliance<sup>319</sup>.

117. **Codes of Conduct and/or Memoranda of Understanding (MoU)** are adopted by many countries<sup>320</sup> against illegal live streaming to encourage compliance with regulations among different stakeholders, such as content providers, streaming platforms, law enforcement, and regulatory authorities. The Danish Code of Conduct dated September 24, 2014, titled “Telecommunications Industry Association in Denmark: Code of Conduct for handling decisions by the courts of law or authorities concerning the blocking of websites due to rights infringements” is a good example of a code of conduct that promotes and simplifies the implementation of DNS blocking decisions<sup>321</sup>. The revised edition of the aforementioned code of conduct, completed by the Telecommunications Industry Association (TI) and Danish Rights Alliance on May 18, 2020, clarifies that the Code’s purpose is to ensure decisions to block websites are implemented by TI members within 7 working days<sup>322</sup>.

118. In Portugal, a Memorandum of Understanding (MoU) was signed on July 30, 2015, among various stakeholders, including copyright and related rights holders associations, the General Inspection of Cultural Activities (IGAC), the Portuguese Consumer Directorate-General, the Portuguese Association of Telecom Operators, DNS.PT (organization responsible for .pt domain registrations), MAPINET (a cross-sector anti-piracy organization), advertising associations, and consumer associations<sup>323</sup>. The MoU lays down how MAPINET will collect evidence relating to

<sup>315</sup> Jeffrey Cobia, 'The Digital Millennium Copyright Act Takedown Notice Procedure: Misuses, Abuses, and Shortcomings of the Process' [2009] 10(01) *Minnesota Journal of Law* 387-411.

<sup>316</sup> Official Press note (2023) at <<https://www.agcom.it/documents/10179/31023367/Comunicato+stampa+27-07-2023/df5419f4-ff5f-4a08-abfa-1cf3f374527a?version=1.0>>.

<sup>317</sup> What Do You Risk with the Piece? (2023) at <<https://news.italy24.press/trends/759850.html>>.

<sup>318</sup> What Do You Risk with the Piece? (2023) at <<https://news.italy24.press/trends/759850.html>>.

<sup>319</sup> IPRED, Article 11; see also EUIPO, 'Study on dynamic blocking injunctions in the European Union' (2021) at <[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)> at 54.

<sup>320</sup> Codes of conduct are adopted by Denmark, France, Netherlands, and Spain and MoUs are in the Czech Republic, Latvia, Poland, Portugal, Slovakia, UK, see Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 6.

<sup>321</sup> Code of Conduct for handling decisions on blocking access to services infringing intellectual property rights (2020) at <[https://rettighedsalliancen.com/wp-content/uploads/2020/11/CoC\\_ENG.eksl\\_Anneks.pdf](https://rettighedsalliancen.com/wp-content/uploads/2020/11/CoC_ENG.eksl_Anneks.pdf)>.

<sup>322</sup> Code of Conduct for handling decisions on blocking access to services infringing intellectual property rights (2020) at <[https://rettighedsalliancen.com/wp-content/uploads/2020/11/CoC\\_ENG.eksl\\_Anneks.pdf](https://rettighedsalliancen.com/wp-content/uploads/2020/11/CoC_ENG.eksl_Anneks.pdf)>.

<sup>323</sup> EDRI, 'Portugal: "Voluntary" agreement against copyright infringements' (2015) at <<https://edri.org/our-work/portugal-voluntary-agreement-against-copyright-infringements/>>.

copyright infringement, which it will forward to IGAC. In turn, IGAC will contact ISPs to prevent access to websites through “Domain Name System (DNS) blocking” within 15 working days<sup>324</sup>.

## B. TECHNOLOGIES AND TOOLS TO PREVENT OR IDENTIFY INFRINGEMENT

119. **Geo-blocking** is a technology used to restrict access to online content based on the user’s geographical location<sup>325</sup>. Geo-blocking technologies are essential for protecting exclusive territorial licenses in the context of media distribution and content licensing agreements, and they can be effective in combating illegal live streaming<sup>326</sup>.

120. **Geolocation** is a valuable tool in the effort to combat illegal live streaming. Content providers and platforms can utilize geolocation technology to pinpoint the physical location of users attempting to access their content<sup>327</sup>. Geolocation technology can be used to enforce regional or licensing restrictions, ensuring that the content is only available to viewers in authorized locations.

121. **Encryption** allows content owners (or, in the context of live broadcasts, content owners and broadcasters) to encode or obscure data to limit access to the intended audience only; typically, this includes subscribers to the service or those who have purchased access to a specific live event<sup>328</sup>.

122. **Watermarking** serves as a powerful tool in the fight against illegal live streaming. The technology adds “an invisible digital signature” to the content<sup>329</sup>. This process typically employs encryption protocols such as Transport Layer Security or Advanced Encryption Standard to protect content from being intercepted or accessed by unauthorized parties.

## V. SHORTCOMINGS IN CURRENT LEGAL AND REMEDIAL FRAMEWORKS

### A. ACTUAL OR POTENTIAL SHORTCOMINGS OF THE LEGISLATION AND REMEDIES CURRENTLY USED TO ADDRESS THE ILLEGAL RETRANSMISSION OF LIVE BROADCASTS THROUGH STREAMING

123. Although blocking orders are deemed effective, their number has been limited as is their application<sup>330</sup>. In many countries, for example, live blocking injunctions are not available or, at least, their availability has not been tested in court<sup>331</sup>. Similarly, the number of dynamic blocking

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<sup>324</sup> Ibid.

<sup>325</sup> Peter K. Yu, ‘A Hater’s Guide to Geoblocking’ (2019) 25 *B.U. J. Sci. & Tech* 504.

<sup>326</sup> Audiovisual Anti-Piracy Alliance, ‘AAPA’s position on the European Parliament own-initiative report on the implementation the geo-blocking Regulation’ at <<https://www.aapa.eu/aapas-position-on-the-european-parliament-own-initiative-report-on-the-implementation-the-geo-blocking-regulation>>

<sup>327</sup> Agus Sulaiman & Marza Ihsan Marzuki, ‘Development of Streaming Media Security using Geolocation’ (2022) 2 (1) *Journal of Integrated and Advanced Engineering* 11-18.

<sup>328</sup> Max Wilbert, dacast, ‘7 Secure Video Streaming Methods and Platforms for Professionals’, 16 April 2021; Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at 115.

<sup>329</sup> Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 115.

<sup>330</sup> ‘Online Piracy of Live Sports,’ European Parliamentary Research Service, June 2023 at <[https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS\\_ATA\(2023\)749807\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS_ATA(2023)749807_EN.pdf)>.

<sup>331</sup> Giancarlo Frosio & Oleksandr Bulayenko, ‘Study on dynamic blocking injunctions in the European Union’, European Union Intellectual Property Office (2021) at <<https://data.europa.eu/doi/10.2814/301088>> at 8.

injunctions<sup>332</sup> issued has been limited and their availability has not been tested by courts, for example, in Germany and Greece<sup>333</sup>. In most SMSs in Europe, there is no explicit statutory notion of dynamic blocking injunctions; the courts have been granting them based on expanding the existing norms<sup>334</sup>.

124. The 2023 Commission Recommendation encourages a wider availability of dynamic injunctions to prevent the unauthorized retransmission of live events<sup>335</sup>. Critics have stated, however, that despite the newly published “non-binding” recommendations, broadcasters and live event organizers continue to face challenges in blocking the illegal retransmission of live sporting events in real time and enforcing their rights against infringers. Because the recommendations are non-binding, it is unlikely that this will create the necessary legal incentive for online intermediaries to respond efficiently when notified of illegal live content<sup>336</sup>. The recommendations do not provide sector-specific regulations that require online platforms to remove illegal live streams immediately. What is necessary is a clear, binding, and tight timeframe for illegal live streams to be taken down, which is absent in the recommendations.

125. The possibility for judicial authorities to issue injunctions against infringers by virtue of the IPRED does not specifically apply to “live broadcasts” of sports events, clearly implying lacunae<sup>337</sup>. A report released in June 2023 by the European Parliamentary Research Service, titled *Online Piracy of Live Sports*, observed that most blocking orders are addressed to the ISPs and not directly to infringers<sup>338</sup>.

126. Australia is a country where the Court has mandated that rightsholders pay ISPs to implement the blocking order, which “cost effectively limits the number of ISPs against which a rightsholder will seek blocking orders in Australia, working against the purpose of the statute

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<sup>332</sup> Commission’s Guidance on the IPRED defines Dynamic Blocking Injunctions as ‘injunctions which can be issued, for example, in cases in which materially the same website becomes available immediately after issuing the injunction with a different IP address or URL, and which are drafted in a way that makes it possible to also cover the new IP address or URL, without the need for a new judicial procedure to obtain a new injunction’ Giancarlo Frosio & Oleksandr Bulayenko, ‘Study on dynamic blocking injunctions in the European Union’, European Union Intellectual Property Office, 2021 at <<https://data.europa.eu/doi/10.2814/301088>> at 16 See also Article 20, 2021 Resolution at <[https://www.europarl.europa.eu/doceo/document/TA-9-2021-0236\\_EN.html](https://www.europarl.europa.eu/doceo/document/TA-9-2021-0236_EN.html)>.

<sup>333</sup> European Union Intellectual Property Office, Giancarlo Frosio & Oleksandr Bulayenko, ‘Study on dynamic blocking injunctions in the European Union’, European Union Intellectual Property Office (2021) at <<https://data.europa.eu/doi/10.2814/301088>> at 39; see also Giancarlo Frosio & Oleksandr Bulayenko, ‘Website blocking injunctions in flux: static, dynamic and live’ (2021) 16 (10) *Journal of Intellectual Property Law & Practice* 1127, 1134.

<sup>334</sup> European Union Intellectual Property Office, Giancarlo Frosio & Oleksandr Bulayenko, ‘Study on dynamic blocking injunctions in the European Union’, European Union Intellectual Property Office, 2021 at <<https://data.europa.eu/doi/10.2814/301088>> at 8.

<sup>335</sup> Recommendation 28, Commission Recommendation (EU) 2023/1018 of 4 May 2023 on combating online piracy of sports and other live events available at <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023H1018>>.

<sup>336</sup> Aida Sanchez Alonso, ‘Brussels gives fresh recommendations on how to end piracy for live events’ (2023) at <<https://www.euronews.com/my-europe/2023/05/04/brussels-gives-fresh-recommendations-on-how-to-end-piracy-for-live-events>>; EU Commission combats illegal streaming of sports events (2023) at <<https://www.caiadoguerreiro.com/en/eu-commission-combats-illegal-streaming-of-sports-events/>>; EU Commission combats illegal streaming of sports events (2023) at <<https://www.caiadoguerreiro.com/en/eu-commission-combats-illegal-streaming-of-sports-events/>>; Molly Killeen, ‘EU Commission releases recommendation to combat piracy of live events’ (2023) at <<https://www.euractiv.com/section/copyright/news/molly-lucaeu-commission-releases-recommendation-to-combat-piracy-of-live-events/>>.

<sup>337</sup> ‘Online Piracy of Live Sports,’ European Parliamentary Research Service, June 2023 at <[https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS\\_ATA\(2023\)749807\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS_ATA(2023)749807_EN.pdf)>.

<sup>338</sup> ‘Online Piracy of Live Sports,’ European Parliamentary Research Service, June 2023 at <[https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS\\_ATA\(2023\)749807\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS_ATA(2023)749807_EN.pdf)>.

(section 115A of the *Copyright Act 1968*)<sup>339</sup> to effectively reduce piracy”<sup>340</sup>. The Department of Communications and the Arts (referring to section 115A of the *Copyright Act*) argued that “it is unlikely that a copyright owner would seek an injunction, particularly given the potential delays and costs associated with doing so”<sup>341</sup>. The first case under section 115A was *Roadshow Films Pty Ltd v Telstra Corporation Limited*<sup>342</sup>, in which it was ordered that “the applicants pay Telstra’s, Optus’, M2’s and TPG’s compliance costs calculated at the rate of \$50 per Domain Name the subject of DNS Blocking undertaken for the purposes of complying with Order 2 hereof (which was to disable access to target online locations)”<sup>343</sup>. On February 22, 2022, in the Roadshow case, the Federal Court of Australia again ruled that “the Applicants pay Telstra’s, Optus’, Vocus’, TPG’s and Vodafone’s compliance costs calculated at the rate of \$50 per Domain Name the subject of DNS Blocking undertaken for the purposes of complying with Order 1 (which was to disable access to target online locations)”<sup>344</sup>.

127. In *Rogers Media Inc. et al. v. Doe 1 et al.*<sup>345</sup> held in the Canadian Federal Court, the plaintiffs were the copyright holders for “live broadcasts” of National Hockey League games in Canada, who claimed that certain unknown defendants were unlawfully distributing these broadcasts to individuals in Canada, infringing their copyright<sup>346</sup>. The Court ordered a first-of-its-kind dynamic site blocking order against a third respondent who controls the vast majority of internet access in Canada<sup>347</sup>. A question also arose concerning the cost of implementing the order<sup>348</sup>. The blocking orders provided to ISPs involve significant costs (both to the rightsholder and the ISP), which poses a huge challenge<sup>349</sup>. This clearly shows that pursuing dynamic blocking injunctions can place a substantial burden on copyright holders.

128. Static injunctions, conversely, which are issued after a live event, have limited practicability because they will not prevent the initial unauthorized broadcasts or streams that occurred during the live event, which is when the infringement is most detrimental. A loophole

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<sup>339</sup> Amended section 115A; Section 115A now provides that: “(1) The owner of a copyright may apply to the Federal Court of Australia to grant an injunction that requires a carriage service provider to take such steps as the Court considers reasonable to disable access to an online location outside Australia that: (a) infringes, or facilitates an infringement, of the copyright; and (b) has the primary purpose or the primary effect of infringing, or facilitating an infringement, of copyright (whether or not in Australia);(2) The application under subsection (1) may also request that the injunction require an online search engine provider (other than a provider that is covered by a declaration under subsection (8B)) to take such steps as the Court considers reasonable so as not to provide a search result that refers users to the online location.”

<sup>340</sup> Submission in Response to the Review of the Copyright Online Infringement Amendment, Joint Submission from the Australian Film & TV Bodies March 23, 2018 at <[https://www.infrastructure.gov.au/sites/default/files/submissions/australian\\_film\\_tv\\_bodies.pdf](https://www.infrastructure.gov.au/sites/default/files/submissions/australian_film_tv_bodies.pdf)> at 4.

<sup>341</sup> Environment and Communications Legislation Committee, Copyright Amendment (Online Infringement) Bill 2018 at

<[https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Environment\\_and\\_Communications/OnlineInfringementBill/~/\\_media/Committees/ec\\_ctte/OnlineInfringementBill/report.pdf](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/OnlineInfringementBill/~/_media/Committees/ec_ctte/OnlineInfringementBill/report.pdf)> at 14.

<sup>342</sup> While this case did not pertain to live streaming, it does highlight the expenses involved in obtaining injunctions.

<sup>343</sup> *Roadshow Films Pty Ltd v Telstra Corporation Ltd* [2016] FCA 1503, para 19 at

<<https://jade.io/article/509017>>; see Patrick Tyson, Evaluating Australia’s New Anti-Piracy Website Blocking Laws at <<http://classic.austlii.edu.au/au/journals/UniSASStuLawRw/2018/8.pdf>> at 106.

<sup>344</sup> *Roadshow Films Pty Ltd v. Telstra Corporation Limited* [2022] FCA 134, para 20 at

<<https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/single/2022/2022fca0134>>.

<sup>345</sup> *Rogers Media Inc. et al. v. Doe 1 et al.*, 20220 FC 775 at

<[https://www.iipa.org/files/uploads/2023/01/2023SPECIAL301FILING\\_WEBSITE-1.pdf](https://www.iipa.org/files/uploads/2023/01/2023SPECIAL301FILING_WEBSITE-1.pdf)>.

<sup>346</sup> *Ibid.*

<sup>347</sup> Para 226, para 3, para 333 of the verdict at

<[https://www.iipa.org/files/uploads/2023/01/2023SPECIAL301FILING\\_WEBSITE-1.pdf](https://www.iipa.org/files/uploads/2023/01/2023SPECIAL301FILING_WEBSITE-1.pdf)>.

<sup>348</sup> Para 305 of the verdict at

<[https://www.iipa.org/files/uploads/2023/01/2023SPECIAL301FILING\\_WEBSITE-1.pdf](https://www.iipa.org/files/uploads/2023/01/2023SPECIAL301FILING_WEBSITE-1.pdf)>.

<sup>349</sup> In the Canadian case, it was stated that at the hearing, the Plaintiffs undertook to indemnify the Third Party Respondents for their costs of implementation up to a maximum of \$50,000 each, and a term to this effect will be included in the Order; see Para 310 of the verdict, see also Giancarlo Frosio & Oleksandr Bulayenko, ‘Website Blocking Injunctions in Flux: Static, Dynamic and Live’ (2021) 16 (10) *Journal of Intellectual Property Law & Practice* 1127–1143.

of static injunctions issued post-event only provides remedies such as seeking damages or taking down archived copies of the infringing content, but they do not prevent or mitigate the harm caused during the live event. Because the illegal streams have already reached their audience, they will not recover the lost revenue<sup>350</sup>.

129. Blocking injunctions are not being used in practice by countries to combat illegal live streaming for several other reasons. For example, some countries do not have specific provisions or well-established legal mechanisms for issuing blocking injunctions. In these cases, the legal process for obtaining these injunctions makes it more challenging for rightsholders to obtain them. Jurisdictional issues also complicate the enforcement of blocking injunctions: “blocking orders were limited in their length and their scope was set to specifically pre-determined identifiers so that the continuation of the measures must be subject to regular court proceedings to assess whether the grounds for the injunction still exist”<sup>351</sup>.

130. With reference to takedown notices, which are often seen as a remedy for tackling illegal piracy, they are highly inefficient and redundant in the context of live P2P sharing, especially in sports because they take a few hours if not days, by which it is too late to curtail/restrain the streaming of live events<sup>352</sup>. The European Parliament Resolution also affirmed the need to have “concrete measures specific to live sports event broadcasts” because injunctions and takedown notice mechanisms do not always provide the effective and timely enforcement of rights<sup>353</sup>. A letter from the Ultimate Fighting Championship (UFC), National Basketball Association (NBA), and National Football League (NFL) dated August 23, 2023, to the United States Patent and Trademark Office<sup>354</sup>, observes how US laws and regulations do not adequately address the unique time-sensitivity of live content, with online service providers frequently taking hours or even days to remove content in response to takedown notices<sup>355</sup>. The letter stresses this issue: “It should be no surprise that the notice-and-takedown regime established by the *USA Digital Millennium Copyright Act 1998* (DMCA), which was enacted before widespread internet-based live streaming became available, is not well-suited to address the present-day particular piracy issues surrounding the infringement of live content<sup>356</sup>. It is important to note that the lack of time-sensitive remedies is not only peculiar to the EU and USA, but also in other States<sup>357</sup>.

131. Geo-blocking, conversely, is used to secure the live stream in a specific geographical region but can also be easily circumvented when users use VPNs or proxies to bypass geo-blocking and access blocked content. This has become one of the loopholes. VPNs are the preferred method for bypassing geo-blocks due to their widespread availability and user-

<sup>350</sup> Nigel Cory, ‘A Decade After SOPA/PIPA, It’s Time to Revisit Website’ Blocking’ (2022) at <<https://itif.org/publications/2022/01/26/decade-after-sopa-pipa-time-to-revisit-website-blocking/>>.

<sup>351</sup> Study on ‘Dynamic Blocking Injunctions in the European Union’ (2021) at <[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2021\\_Dynamic\\_Blocking\\_Injunctions/2021\\_1\\_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_Injunctions/2021_1_Study_on_Dynamic_Blocking_Injunctions_in_the_European_Union_FullR_en.pdf)>.

<sup>352</sup> Seagull Haiyan Song, ‘How Should China Respond to Online Piracy of Live Sports Telecasts? A Comparative Study of Chinese Copyright Legislation to US And European Legislation’ (2010) 9 *University of Denver Sports and Entertainment Law Journal* at 20.

<sup>353</sup> Resolution 11, European Parliament Resolution of 19 May 2021 with Recommendations to the Commission on Challenges of Sports Events Organisers in the Digital Environment (2020/2073(INL) at <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021IP0236&from=EN>>.

<sup>354</sup> UFC (2023) at <[https://torrentfreak.com/images/UFC-PTO-C-2023-0006-0041\\_attachment\\_1.pdf](https://torrentfreak.com/images/UFC-PTO-C-2023-0006-0041_attachment_1.pdf)>.

<sup>355</sup> UFC (2023) at <[https://torrentfreak.com/images/UFC-PTO-C-2023-0006-0041\\_attachment\\_1.pdf](https://torrentfreak.com/images/UFC-PTO-C-2023-0006-0041_attachment_1.pdf)>.

<sup>356</sup> UFC (2023) at <[https://torrentfreak.com/images/UFC-PTO-C-2023-0006-0041\\_attachment\\_1.pdf](https://torrentfreak.com/images/UFC-PTO-C-2023-0006-0041_attachment_1.pdf)>.

<sup>356</sup> *Illegal Streaming Costs Sports Billions, Leagues Want Swift Government Action* (2023) at <<https://frontofficesports.com/illegal-streaming-costs-sports-billions-leagues-want-swift-government-action/>>.

<sup>357</sup> *Copyright Piracy and Cybercrime: Enforcement Challenges in India* (2022) at <[https://www.wipo.int/wipo\\_magazine/en/2022/04/article\\_0008.html](https://www.wipo.int/wipo_magazine/en/2022/04/article_0008.html)>.

friendliness – they are accessible even to individuals with limited internet expertise<sup>358</sup>. Much like a VPN, a proxy will help a user bypass geo-blocks by masking their real IP address<sup>359</sup>.

132. Another unresolved issue of the existing remedies is the inability to charge illegal streaming as a felony. By taking advantage of this loophole, illegal streaming services can stream live sports with very little oversight or punishment<sup>360</sup>. In the USA, the PLSA 2020 was enacted to increase criminal penalties for illegal streaming; unauthorized streaming can now be charged as a felony on par with other types of unlawful reproduction and distribution of unlawful copyright content<sup>361</sup>. Effective criminal sanctions may serve as a deterrent for future infringement.

133. The European Parliamentary Research Service reported that “the rapid advancement of technology and techniques that piracy services operators use ranging from mirror websites to fallback IT infrastructure offering the service at a different IP address, to offshore hosting and Piracy as a Service (PaaS) – makes monitoring very challenging and costly for rights holders, as they need to apply appropriate technology in real time to be efficient and limit the economic damage”<sup>362</sup>. Certainly, there are “universal challenges ranging from the technological sophistication of cybercriminals to problems of international jurisdiction and the local challenges, chiefly encompassing systemic problems with law enforcement agencies and the criminal justice system”<sup>363</sup>. Unless legislation provides innovative remedies tackling the menace of illegal live streaming will remain a challenge.

## B. UNRESOLVED LEGAL, TECHNICAL, OR OPERATIONAL ISSUES AND OPPORTUNITIES

134. The European Commission Recommendation 2023, on combating online piracy of sports and other live events, highlights how illegally retransmitted live events are made available online through various services, such as illegal IPTV, websites, or apps<sup>364</sup>. Operators who engage in illegal retransmissions have developed “resilience strategies to circumvent enforcement measures”<sup>365</sup>. Despite the legal and technical remedies used in the European Union, illegal retransmission of live streaming has just been on the rise. Christian Archambeau, the Executive Director of the EUIPO, stated:

The new study (the September 2023 report) shows that there is still much work to do to tackle piracy...Stopping this phenomenon is complex as piracy is continuously evolving with technology. This is why understanding the underlying mechanisms of

<sup>358</sup> Jay Kearns, ‘Why Geo-Blocking Fails and What Service Providers Can Do About It’ (2020) at <<https://www.cartesian.com/why-geo-blocking-fails-and-what-service-providers-can-do-about-it/>>.

<sup>359</sup> Jay Kearns, ‘Why Geo-Blocking Fails and What Service Providers Can Do About It’ (2020) at <<https://www.cartesian.com/why-geo-blocking-fails-and-what-service-providers-can-do-about-it/>>.

<sup>360</sup> Madison Hewitt, ‘Closing the Streaming Loophole: How the Protecting Lawful Streaming Act Allows Dana White to Punish Illegal UFC Streamers’ at <[https://www1.villanova.edu/villanova/law/academics/sportslaw/commentary/mslj\\_blog/2021/ClosingtheStreamingLoophole.html](https://www1.villanova.edu/villanova/law/academics/sportslaw/commentary/mslj_blog/2021/ClosingtheStreamingLoophole.html)>.

<sup>361</sup> Protecting Lawful Streaming Act of 2020 at <<https://www.uspto.gov/ip-policy/enforcement-policy/protecting-lawful-streaming-act-2020>>.

<sup>362</sup> ‘Online Piracy of Live Sports,’ European Parliamentary Research Service, June 2023 at <[https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS\\_ATA\(2023\)749807\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/749807/EPRS_ATA(2023)749807_EN.pdf)>.

<sup>363</sup> Copyright Piracy and Cybercrime: Enforcement Challenges in India (2022) at <[https://www.wipo.int/wipo\\_magazine/en/2022/04/article\\_0008.html](https://www.wipo.int/wipo_magazine/en/2022/04/article_0008.html)>.

<sup>364</sup> Recital 4, ‘Recommendation on Combating Online Piracy of Sports and Other Live Events’ (2023) at <<https://digital-strategy.ec.europa.eu/en/library/recommendation-combating-online-piracy-sports-and-other-live-events>>.

<sup>365</sup> Recital 4, ‘Recommendation on Combating Online Piracy of Sports and Other Live Events’ (2023) at <<https://digital-strategy.ec.europa.eu/en/library/recommendation-combating-online-piracy-sports-and-other-live-events>>.

piracy is essential to adopt effective policies and measures that contribute to reducing it<sup>366</sup>.

135. The lack of a uniform legal framework in line with the technology is an unresolved challenge. To effectively combat the illegal transmission of live events through the internet, it is vital to develop a binding international agreement or treaty that provides a clear framework for addressing illegal retransmissions.

136. Illegal live streaming often transcends international boundaries, but there is a lack of a cross-border enforcement mechanism. For example, operators responsible for illegally streaming live events use “offshore hosting” providers, which are registered in countries where regulations are lenient; nevertheless, they use “onshore” technical infrastructure to deliver the content<sup>367</sup>. Offshore hosting providers typically ignore or only answer to very limited takedown notices and support users’ anonymity, making enforcement even more challenging<sup>368</sup>. The need for an effective cross-border enforcement mechanism is crucial to combat illegal live streaming of live content.

137. The lack of adequate severe penalties is also an unresolved hurdle. In many countries, copyright infringement through live streaming is generally treated as a civil offense rather than a felony. Large-scale illegal streaming operations often involve organized groups; hence, treating illegal streaming as a felony can enable law enforcement agencies to prevent organized illegal live streaming more efficiently and this requires censuses around the globe. In the USA, the recent PLSA classified copyright infringement through streaming as a felony, with criminal penalties including heavy fines and longer imprisonment. These measures may lead to more effective enforcement and reduced illegal streaming.

138. On the technical side, the illegal retransmission of live events originates in the unlawful interception and capture of broadcast or pre-broadcast signals, which pass through various intermediaries so they can be delivered to end users via various interfaces (such as apps, websites, and IPTV)<sup>369</sup>. The unresolved challenge lies in eradicating the root of the problem; that is, the illegal interception and capture of signals. For every illegal stream shut down, newer (hydra-headed) ones emerge, which makes the problem even more complex<sup>370</sup>. To substantiate this point, it is worth considering the 2019–2020 Premier League season, in which 300,000 live streams were blocked or disrupted in the UK alone<sup>371</sup>. Before celebrating this success, however, 4.5 million people in the UK illegally watched the same Premier League season<sup>372</sup>. This demonstrates that illegitimate viewers (pirates) clothe themselves as legitimate viewers, making detection difficult. The techniques employed to pirate live streams, for example, are varied and some techniques employ perfectly legitimate services meant to protect or optimize content distribution, such as the Content Delivery Network (CDN) or Distributed

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<sup>366</sup> Rory O’Neill & Rani Mehta, ‘This week on MIP: UPC issues first injunction, Newman ban’ (2023) at <<https://www.managingip.com/article/2c7ymktwhm7wl4j67sw1/this-week-on-mip-upc-injunction>>.

<sup>367</sup> Ibid at 7.

<sup>368</sup> EUIPO, ‘Live Event Piracy’, discussion paper on challenges and good practices from online intermediaries to prevent the use of their services for live event piracy (March 2023) at <[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2023\\_Live\\_Event\\_Piracy/2023\\_Live\\_Event\\_Piracy\\_Discussion\\_Paper\\_FullR\\_en.pdf](https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_Live_Event_Piracy/2023_Live_Event_Piracy_Discussion_Paper_FullR_en.pdf)> at 40.

<sup>369</sup> Recital 5, ‘Recommendation on combating online piracy of sports and other live events’ (2023) at <<https://digital-strategy.ec.europa.eu/en/library/recommendation-combating-online-piracy-sports-and-other-live-events>>.

<sup>370</sup> Aaron Raj, ‘Can broadcast technology help reduce illegal streaming?’ (2021) at <<https://techwireasia.com/2021/08/can-broadcast-technology-help-reduce-illegal-streaming/>>.

<sup>371</sup> The Premier League is back and it’s an illegal livestream disaster (2020) at <<https://www.wired.co.uk/article/live-football-streams-premier-league-free>>.

<sup>372</sup> Global Business, ‘Owning the audience: could the Premier League launch its own subscription service?’ (2023) at <<https://www.raconteur.net/global-business/premier-league-subscription-service>>.



Denial of Service protection service<sup>373</sup>. CDNs can be used to hide the origin of servers, distribute illegal or harmful content, and make attacks more resilient. This misuse can pose significant challenges for content moderation and law enforcement, because it involves monitoring and controlling live streams to prevent the dissemination of harmful content, or identify and address any illegal activities.

139. The resilience strategies used by pirates who stream live content are also of great concern because the pirates recover immediately or withstand the enforcement measures targeting their services. Ideal strategies include setting up “mirror websites” (services under a different domain name) or “fallback infrastructure” (services under different IP addresses)<sup>374</sup>. Therefore, eradicating their hydra-headed presence is a challenge in itself.

140. Another unsolved issue is that “the majority of the blocking orders are addressed to the ISPs and not directly to the infringers or end user as mentioned. In particular, removal orders addressed directly to infringers are less frequent when compared to blocking orders addressed to ISPs”<sup>375</sup>. ISPs are not themselves infringing, and they cannot reasonably monitor or police the vast amount of live content transmitted through their networks. So, a suggestion has been that rightsholders should enforce their rights in court directly against individual infringers, rather than intermediaries<sup>376</sup>. Another argument is that “Court action against individuals is not the solution to online copyright infringement. The scale of infringements means that court action against each individual infringer is impractical, and the number of cases would overwhelm the court system”<sup>377</sup>. Getting the people behind the infringements is difficult because they often remain anonymous by using VPNs and circumventing geo-blocking restrictions. There are still no legal or technological solutions to address this issue.

141. From the rights holders’ perspective, they need significant technical resources and advanced systems to secure their rights during a live stream, because they need to monitor the various sources of illegal streams (by analyzing pirate linking sites; scanning for links across social media platforms, review apps, and various layer plug-ins; and accessing subscription-based services using various accounts and different payment methods to avoid being detected by pirates)<sup>378</sup>, as well as quickly review, identify, and verify whether there is an actual infringement besides identifying their sources. They need to do this all in real time as the event is streamed<sup>379</sup>. This figure below demonstrates the piracy enforcement cycle.

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<sup>373</sup> EUIPO, ‘Live Event Piracy’, discussion paper on ‘Challenges and Good Practices from Online Intermediaries to Prevent the Use of their Services for Live Event Piracy (March 2023) at <[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2023\\_Live\\_Event\\_Piracy/2023\\_Live\\_Event\\_Piracy\\_Discussion\\_Paper\\_FullR\\_en.pdf](https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_Live_Event_Piracy/2023_Live_Event_Piracy_Discussion_Paper_FullR_en.pdf)> at 6-7.

<sup>374</sup> Ibid at 7.

<sup>375</sup> Mapping Report on National Remedies Against Online Piracy of Sports Content (European Audiovisual Observatory, Strasbourg 2021) at <<https://rm.coe.int/mapping-report-on-national-remedies-against-online-piracy-of-sports-co/1680a4e54c>> at 4.

<sup>376</sup> Music Rights Australia, ‘Music Rights Australia’s Response to Productivity Commission Report’ (2016) at <[https://www.pc.gov.au/\\_\\_data/assets/pdf\\_file/0009/201060/subdr407-intellectual-property-attachment1.pdf](https://www.pc.gov.au/__data/assets/pdf_file/0009/201060/subdr407-intellectual-property-attachment1.pdf)> at 8.

<sup>377</sup> Ibid.

<sup>378</sup> EUIPO, ‘Live Event Piracy’, discussion paper on challenges and good practices from online intermediaries to prevent the use of their services for live event piracy (March 2023) at <[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2023\\_Live\\_Event\\_Piracy/2023\\_Live\\_Event\\_Piracy\\_Discussion\\_Paper\\_FullR\\_en.pdf](https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_Live_Event_Piracy/2023_Live_Event_Piracy_Discussion_Paper_FullR_en.pdf)> at 43.

<sup>379</sup> EUIPO, ‘Live Event Piracy’, discussion paper on challenges and good practices from online intermediaries to prevent the use of their services for live event piracy (March 2023) at <[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2023\\_Live\\_Event\\_Piracy/2023\\_Live\\_Event\\_Piracy\\_Discussion\\_Paper\\_FullR\\_en.pdf](https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_Live_Event_Piracy/2023_Live_Event_Piracy_Discussion_Paper_FullR_en.pdf)> at 43.

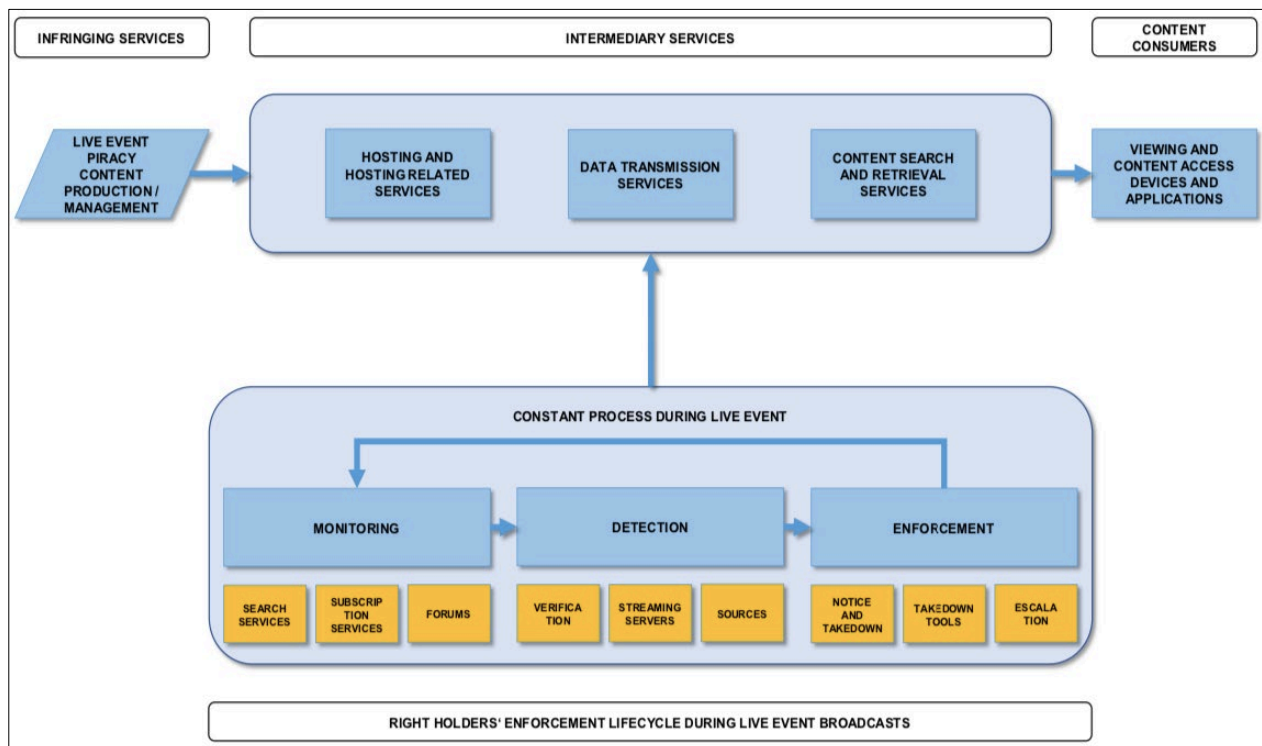


Figure 5: Live event piracy enforcement cycle<sup>380</sup>

142. The question, therefore, is of how to identify and remove illegal live streams effectively in “real time” is still unanswered. The lack of effective stream monitoring software to track illegal streams in real time is a significant technical challenge in combating illegal live streaming. While rightsholders can combat domain names and IP addresses that are live streaming content using sophisticated technology, one single pirate with a live-streaming app being present at an event can also pose a substantial threat<sup>381</sup>. Given the presence of 7 billion mobile phones on the internet and multiple live-streaming apps, combating mobile-based app piracy is a huge task<sup>382</sup>.

143. Takedown notices are not as effective in countering illegal streaming of live broadcasts for several reasons. One is that right holders must identify and specify each individual infringing link prior to sending the takedown notice, and ISPs are not provided with a blanket notice to take down all the infringing streaming links<sup>383</sup>. In this context, takedown notices further burden owners of copyright or broadcasting rights because they have limited timelines to identify infringing links<sup>384</sup>. Even if the links are detected before or during the live streamed event, by the time the takedown notice is actioned, the streaming might have ended. In 2015, for example, the famous boxing match between Floyd Mayweather Jr. and Manny Pacquiao was illegally streamed on the live-streaming site Periscope. Some people live streamed the game through television and others from the ringside via Periscope. The broadcasting rights owner sent 66

<sup>380</sup> EUIPO, ‘Live Event Piracy’, discussion paper on challenges and good practices from online intermediaries to prevent the use of their services for live event piracy (March 2023) at <[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2023\\_Live\\_Event\\_Piracy/2023\\_Live\\_Event\\_Piracy\\_Discussion\\_Paper\\_FullR\\_en.pdf](https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_Live_Event_Piracy/2023_Live_Event_Piracy_Discussion_Paper_FullR_en.pdf)> at 42.

<sup>381</sup> Cori Faklaris et al, ‘Legal and Ethical Implications of Mobile Live-streaming Video Apps’ (2016) Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct at <<https://dl.acm.org/doi/10.1145/2957265.2961845>>.

<sup>382</sup> AAPA, ‘The Problem, Challenges, and Effects of App Piracy’ 19 June 2023 at <<https://www.aapa.eu/the-problem-challenges-and-effects-of-app-piracy>>.

<sup>383</sup> Ainslie Adam, ‘The Burden of Protecting Live Sports Telecasts: The Real Time Problem of Live Streaming and App-Based Technology’ (2015) at <<http://dx.doi.org/10.2139/ssrn.2729641>>.

<sup>384</sup> Ibid.

takedown notices to Periscope, but only 30 links were able to be taken down because streams ended before Periscope actioned them<sup>385</sup>. Takedown notices require the owners of copyright or broadcasting rights to spend a lot of time and effort because detecting infringing links is resource-intensive<sup>386</sup>. Furthermore, because there is no “stay-down system” enforced on the ISP, obliging them to monitor infringing streaming through their websites subsequent to being served with a takedown notice on an infringing link, the takedown notice system is ineffective<sup>387</sup>.

144. Operationally, to combat the illegal retransmission of live streaming over the Internet, cooperation is needed among sports event organizers, intermediaries such as ISPs, search engines, and social media platforms, rights holders, law enforcement agencies and public authorities<sup>388</sup>. To date, effective and timely collaboration among these various stakeholders has been unseen. In the European Union, for instance, there is an absence of specific rights and remedies at the Union level (in the context of sports events), making it difficult for sports event organizers to act in a timely manner against the illegal retransmission of live streaming<sup>389</sup>. The menace of illicit live streaming is not limited to a particular country; rather, it is a global problem. Global commitments and enforcement regimes are thus required to combat this issue<sup>390</sup>.

## VI. CONCLUSION

145. The rise of illegal live streaming poses an unprecedented global challenge, resulting in broadcasters facing substantial financial losses. Technological advancements, ease of access, the rise of illegal streaming platforms, and the lack of enforcement mechanisms have combined to make illegal live streaming easier. While several existing remedies can combat illegal streaming, the problem remains on a large scale due to numerous technical, legal, and operational loopholes in the current legal framework. Developing strict enforcement mechanisms and penalties; finding technological/digital solutions, such as using AI and algorithms; establishing a widely agreed-upon set of rules; and working with intermediaries are imperative to mitigate the challenges that illegal live streaming poses.

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<sup>385</sup> Samanta C. Franchim, 'It's a Deal: Forging Media Rights Deals in Response to Spectator Live Streaming' (2017) 21(2) *Journal of Technology Law & Policy* 223-242.

<sup>386</sup> Irene Calboli, 'Legal Perspectives on the Streaming Industry: The United States' (2022) 70(0) *The American Journal of Comparative Law* 220-245.

<sup>387</sup> *Ibid.*

<sup>388</sup> Recital 15, 'Recommendation on combating online piracy of sports and other live events' (2023) at <<https://digital-strategy.ec.europa.eu/en/library/recommendation-combating-online-piracy-sports-and-other-live-events>>.

<sup>389</sup> Recital 11, 'Recommendation on combating online piracy of sports and other live events' (2023) at <<https://digital-strategy.ec.europa.eu/en/library/recommendation-combating-online-piracy-sports-and-other-live-events>>.

<sup>390</sup> Nigel Cory & Jaci McDole, 'Comments to the Attorney General of Australia Regarding Australia's Copyright Enforcement Review' (2023) at <<https://itif.org/publications/2023/03/06/australia-copyright-enforcement-review/>>.