

Written evidence submitted by SCRIPT

Submission to DCMS inquiry on Economics of music streaming, November 2020

This submission is made on behalf of [SCRIPT](#), a law and technology research centre based at Edinburgh Law School within the University of Edinburgh. SCRIPT, the Scottish Research Centre for Intellectual Property and Technology Law, explores the intersection between law, technology and society from a multidisciplinary and multi-jurisdiction perspective. The centre's research focuses on the synergetic relationship between law, social norms, ethics, technologies, commerce and society in the widest possible sense. This submission has been prepared by the following members of SCRIPT:

Dr Smita Kheria is a [Senior Lecturer in Intellectual Property Law](#) at the University of Edinburgh. She specialises in socio-legal research that evaluates the complexities of copyright in 'real world' contexts, with an emphasis on the relationship between copyright law and the everyday lives of creative practitioners. She has examined how copyright intersects with the everyday lives and practices of professional writers, cartoonists, visual artists, music composers, and performers through research funded by Research Councils UK. One of her primary objectives is to assess how copyright, as a regulatory framework, can remain relevant, and fit for purpose, for artists working in social, technological, and economic conditions that are both uncertain and changing at pace.

Des Agyekumhene is a music manager, and [PhD researcher](#) at the University of Edinburgh. His doctoral research, funded by the Scottish Graduate School for Arts and Humanities' Creative Economies Studentship scheme, examines the development, role, and place of online streaming services and related flow of streaming revenues. His primary research objective is to evaluate if the current legal framework for rights of musicians and music creators remains fit for purpose.

Giorgos D Vrakas is a [PhD researcher](#) at the University of Edinburgh. His doctoral research, funded by the Scottish Graduate School for Arts and Humanities, examines how musicians, who create and upload recreations of songs to YouTube, interact with, and perceive, the copyright framework and related enforcement regimes.

This submission is based on previous and ongoing research conducted by the above three authors, and in line with their expertise, the overall focus and emphasis in the submission is on the implications of music streaming for artists' livelihoods. The submission addresses Questions 1 to 4 of the inquiry, which are noted in turn below. For Questions 1 and 2, our primary focus is on platforms that offer music as a service however we recommend reviewing them in the context of the broader digital consumption landscape. For Question 3, we focus on setting out the key implications of music streaming on artists (used as an umbrella term to include both musicians e.g.

featured artists and session musicians, and music creators e.g. composers and songwriters). For Question 4, we recommend consideration of author-protective provisions equivalent to those in the Copyright Directive, alongside other technology-led options.

Q.1 What are the dominant business models of platforms that offer music streaming as a service?

1. The market size of the music streaming industry is predicted to be \$16B in 2020, with Spotify dominating the market share at 36%, followed by its closest competitor Apple Music at 18%.¹ Platforms that *offer* music streaming as a service rely on a mixture of business models, but advertising and subscription-based models dominate the field.
2. Ad-supported streaming enables advertisers to pay platforms for ad placements and users often receive a restricted, for “free”, service. Subscription based models rely on monthly rate subscription plans in exchange for unrestricted access to a wide range of music available on the platform. Revenue generated from advertising and subscriptions are collected in two separate pools (there may also be a pool for sponsorship revenue). Streaming services take a cut between 25%-35% of the total revenue generated from each pool. The remaining balance from the pools, between 65%-75%, is divided amongst rights holders according to the proportion of total streams achieved by song. This is known as a pro-rata market share pay-out. A user-centric pay-out model is also possible but is still premature (see para 26).
3. Spotify, the world’s most popular pro-rata music streaming service, uses a mixture of both advertising and subscription-based models; offering a free ad-supported service to essentially entice users to their platform. With nearly 299 million monthly active users, it made €1.89 billion in revenue in its latest quarter, of which approximately 90% was derived from premium subscriptions.² Spotify’s core focus has been user engagement, in line with its initial value proposition of presenting consumers with an alternative to music piracy.³ On average it makes €4.41 per premium user per month and must ensure that its churn rate⁴ remains in control in order to maximize the “lifetime value” of each paying user that it acquires.

¹ T4, [‘Worldwide Music Streaming Market Size \(\\$\), 2020-2024 2020’](#), 16 August 2020.

² Spotify, [‘Shareholder Letter Q2 2020’](#), 2020.

³ R Neate, [‘Daniel Ek profile: Spotify will be worth tens of billions’](#), *The Telegraph*, 17 February 2010.

⁴ This is the rate at which customers stop doing business with an entity.

4. A number of other competitor platforms that *offer* music streaming services, also pursue additional commercial objectives such as pushing products and services associated with their core revenue stream e.g. e-commerce for Amazon and hardware for Apple.⁵
5. YouTube is one of the most used platforms for the consumption of music,⁶ although it is not viewed as a platform that *offers* music streaming as a service. To properly assess how much money is available for distribution to artists from music streaming, it is important to compare platforms that offer music streaming as a service with those where music is often consumed, even if not offered as a service. Unlike the platforms noted above, YouTube is a de-centralised user-generated-content orientated website which allows for users to upload works directly with a variety of content ranging from gaming to comedy, but its most prominent content genre is, arguably, music.⁷ In offering an ad-based on-demand service, it does not require listeners to register, but has an additional paid tier.⁸
6. It is recommended that the committee take cognisance of both routes to music consumption as exemplified by Spotify and YouTube. Assessing the costs incurred by such platforms towards music licensing is crucial to understanding how much money is available for distribution to artists from music streaming. In addition, revenue generation via the business models noted above must be evaluated both in the context of how said revenue is distributed to artists and through consideration of a number of related challenges (see para 11 onwards).

Q.2 Have new features associated with streaming platforms, such as algorithmic curation of music or company playlists, influenced consumer habits, tastes, etc?

7. Streaming platforms have changed how artists are discovered, fan-bases are created, and what gets consumed. The influence of streaming on consumer habits changed in 2014 when streaming figures started to be included in UK music charts.⁹ This change was significant because prior to this, "no one ever asked pop fans how many times they played the singles they took home" and it

⁵ C Hu, '[The Four Types Of Music Subscription Models In 2019](#)', *MusicBusiness Worldwide*, 28 January 2019.

⁶ M Mulligan, '[Music Consumer Behaviour Q2 2019 Fragmentation and Disruption](#)', *Midia*, 26 September 2019; International Federation of Phonographic Industry, '[Music Listening 2019: A Look at How Recorded Music Is Enjoyed around the World](#)', 2019.

⁷ H McIntyre, '[Report: YouTube Is The Most Popular Site For On-Demand Music Streaming](#)', *Forbes*, 27 September 2017.

⁸ YouTube Music's Music Premium service allows listening to music ad-free and offline.

⁹ L Kreisler, '[UK's Official Singles Chart to include streaming data for first time](#)', *Official Charts*, 22 June 2014.

was the “first time plays would count towards something larger in cultural terms, rather than just being the most-played track on a single service.”¹⁰

8. Playlists on music streaming platforms play an increasingly influential role in shaping the consumption habits of subscribers and determining what is consumed.¹¹ Consequently, streaming platforms, by combining proprietary algorithms and human curators,¹² constitute the “new gatekeepers” in an industry previously dominated by human intermediaries such as radio programmers, journalists, and other experts.¹³
9. Music streaming platforms may not be directly successful in telling people what music to like, but can be very successful in telling its users what is worth listening to. Therefore, when a music curator and/or an algorithm places a song at the top of Spotify playlists like “New Music Friday”¹⁴ or “Rap Caviar”¹⁵ and assigns less visible positions to others, this creates not just a numerical but also a cultural hierarchy of importance for those songs. Streaming platforms are becoming the new radio, and wield a form of “algo-torial power” that has the ability to set the “listening agendas” of global music consumers.¹⁶ The influence of music streaming curation in determining consumer choice mirrors the effect of radio. However, exploitation of music through radio broadcast is paid differently than streaming platforms.
10. It is recommended that the committee take due consideration of the distinction between the ‘push’ effect of music streaming curation, and the simple ‘pull’ effect of music searched and consumed by consumers on streaming platforms. For artists, with music streaming replacing radio, the direct consequence of this is

¹⁰ Per F McAlpine as reported in SJ Griffiths, ‘[Official singles chart to include streaming services](#)’, *BBC*, 23 June 2014.

¹¹ M Hogan, ‘[How Playlists are Curating the Future](#)’, *Pitchfork*, 16 July 2015.

¹² E.g. Spotify offers personalised editorial playlists which are a hybrid between editor (music experts and genre specialists) playlists and purely algorithmic playlists. YouTube’s “autoplay” feature, when enabled, will automatically play another related video and will also recommend videos for users in a column on the side of the video being watched. YouTube also creates algorithmically curated playlists based on the users viewing history referred to as “my mix”.

¹³ T Bonini and A Gandini, ‘[First Week Is Editorial, Second Week Is Algorithmic: Platform Gatekeepers and the Platformization of Music Curation](#)’, 5(4) *Social Media + Society*, October 2019.

¹⁴ “New Music Friday” is a regularly updated playlist showcasing new music where the “big” popular artists are featured at the more visible and easily accessible top of the playlist, compared to the “smaller” less notable artists who are featured at the bottom of the playlist.

¹⁵ “Rap Caviar” is one of Spotify’s biggest playlists with over 13 million followers. The playlist adds new music that reflects the culture of hip hop and consequently helps to shape it.

¹⁶ T Bonini and A Gandini, ‘[First Week Is Editorial, Second Week Is Algorithmic: Platform Gatekeepers and the Platformization of Music Curation](#)’, 5(4) *Social Media + Society*, October 2019.

that remuneration from radio is being replaced by remuneration from streaming, and this factor must be duly considered.

Q.3 What has been the economic impact and long-term implications of streaming on the music industry, including for artists, record labels, record shops, etc?

11. Music streaming has a significant impact on the ability of artists to sustain their careers (and the Covid-19 pandemic has brought this issue into sharp relief). It is recommended that the committee consider the economic impact on artists, and related evidence, arising from the following three issues:
 - (a) Current practice in the distribution of streaming revenues to artists and, within this, the nature and role of underlying artist contracts and lack of transparency;
 - (b) The role of streaming platforms as tastemakers and gatekeepers and its relationship with how a stream is classified for revenue distribution to artists; and,
 - (c) The pool of money available for distribution to artists as a result of how music streaming is consumed and paid for.These issues are addressed in more detail below.
12. Music streaming is now the most popular method of music consumption and a firm part of the music industry's new business model. Relative to other creative sectors, distribution of revenues from music exploitation has always been more complex. Challenges stemming from an uneven balance of power in music industry artist contracts, as well as artists' perceptions about not receiving fair compensation, have pre-existed. However, said challenges are exacerbated in the streaming era.¹⁷
13. **Streaming revenue distribution** - A notable concern is the strong perception amongst artists – both musicians (featured artists and session musicians) and music creators (composers and songwriters) – that they are not receiving a fair share of the music streaming revenue pie. The topic has attracted wide media attention, and there is dissatisfaction amongst artists about not receiving fair compensation for digital exploitation of their music, especially as other sources of revenue have declined.¹⁸ The dissatisfaction relates to perceived unfairness

¹⁷ The dissatisfaction amongst creative practitioners with copyright contracts and underlying perception of unfairness in revenue distribution, is borne out by S Kheria's research project on '[Individual Creators](#)' which included over 120 formal in-depth interviews with a range of writers, illustrators, visual artists, and music composers and performers; consultations with organisations that play an important role in representing creative practitioners, such as the Association of Illustrators, the Musicians' Union, the Scottish Artists Union, and the Society of Authors in Scotland; alongside collection of ethnographic data comprising observations at festivals and events, and secondary data from online ethnography of social media sites such as Facebook and Twitter.

¹⁸ There is a lack of conclusive empirical evidence on the sources, and amount, of revenue received by musicians and music creators. The lack of evidence is compounded by challenges in gathering such

about how revenues are distributed, how much revenue is received by artists for exploitation through streaming, and also which type of artists are most likely to benefit from streaming (e.g. superstar artists over lesser-known or smaller artists).

14. Distribution of revenues from music streaming is quite complex but can be roughly divided into two stages. First, the streaming platform pays out a share of its revenues to rightholders (e.g. labels and publishers), and collecting societies, who have secured exclusive rights for music exploitation through contracts with artists. This share is based on the percentage of streams the stakeholder's catalogues have accounted for alongside the revenue share agreements set out in relevant licensing deals with such stakeholders. The rightholders and collecting societies then share the money they receive with the artists: the share received by an artist depends on their individual copyright contract with labels and publishers; similarly, collecting societies will deduct their commission as per their collective licensing agreement with artists and distribute revenue accordingly. Three key thematic problems within this process of revenue distribution are outlined in paras 15 to 17 below.

15. **Artists' contracts and weak bargaining position in contractual relationships** – As explained above, an artist's copyright contract with the rightholders determines the music streaming revenue received by them. There are relatively few controls on such copyright contracts in the UK.¹⁹ Contractual terms agreed by artists depend entirely on their bargaining position. Such contractual terms may not result in fair remuneration (e.g. artists will often receive a minority cut of income under such contractual arrangements – commonly 15-20%),²⁰ and may even result in no remuneration (e.g. revenue share depends on deduction of various costs borne by rightholders such as administrative costs, packaging, discounts and promotions).²¹ Artist contracts may also require artists to lose control of their exclusive rights for the entire duration of copyright.²²

evidence: the nature and value of different sources of revenue vary significantly according to the genre of music and type of artistic practice, and often detailed and reliable data on such sources is not readily available except through self-reporting by artists.

¹⁹ S Dusollier et al, '[Contractual Arrangements Applicable to Creators: Law and Practice of Selected Member States](#)', *European Parliament's Committee on Legal Affairs*, 2014, pgs. 157-160.

²⁰ C Cooke, '[Dissecting The Digital Dollar Part One: How streaming services are licensed and the challenges artists now face](#)', *Music Managers Forum*, 2015, pg.11

²¹ C Cooke, '[Dissecting The Digital Dollar Part Two: Executive Summary](#)', *Music Managers Forum*, 2016, pg. 10

²² C Cooke, '[Dissecting The Digital Dollar Part One: How streaming services are licensed and the challenges artists now face](#)', *Music Managers Forum*, 2015, pg.21

16. The issue remains that artist contracts traditionally favour labels and publishers due to their initial risk in investing in artists, however, the unbalanced nature of such contracts has a direct implication on the revenue received by artists. Contracts agreed before, and even during, the advent of the streaming era do not sufficiently reflect the consequences of streaming on revenue sources for artists. There is also the broader issue of uneven bargaining power in contractual relationships, applicable not just to artists in the music industry, but creative practitioners in general: artists have “a weaker bargaining position, due to their inexperience, lack of information or desire to be published or produced at any cost.”²³
17. **Lack of transparency in the distribution of streaming revenue** – A significant challenge for artists is that they are not directly involved in the licensing deals agreed between the streaming services and the rightholders and collecting societies. Due to a lack of transparency resulting from non-disclosure agreements, terms and crucial elements of these licensing deals are unknown to artists and their representatives. Consequently, artists are unable to appropriately audit the revenues they receive and ensure that they are being paid correctly, or alternatively, decide whom to sign contracts with. The lack of transparency also contributes to dissatisfaction about failure to receive fair compensation for digital exploitation. Overall, the lack of information on digital exploitation of music makes artists weaker and further tips the balance in favour of other stakeholders. Again, such lack of transparency is a broader issue, applicable not just to artists in the music industry, but creative practitioners in general, and the underlying information asymmetry needs to be addressed urgently.
18. **Classification of streaming for the purpose of revenue distribution** – The role of streaming platforms as tastemakers and gatekeepers, and how a stream is classified for revenue distribution to artists, needs examination. Under the legal framework,²⁴ on-demand access to content (pulled media) is dealt with differently than broadcast (pushed media). The former is governed by the ‘making available’ right²⁵ and the latter is covered as a ‘broadcasting’ of music.²⁶ This classification

²³ S Dusollier et al, ‘[Contractual Arrangements Applicable to Creators: Law and Practice of Selected Member States](#)’, *European Parliament’s Committee on Legal Affairs*, 2014, pg.16. See also, L Bently et al, ‘Strengthening the Position of Press Publishers and Authors and Performers in the Copyright Directive’, *European Parliament’s Committee on Legal Affairs*, 2017, Section 4. Creative practitioners’ perception of uneven balance of power in contractual relationships is also borne out of S Kheria’s research project on ‘Individual Creators’ (n17 above).

²⁴ Copyright, Designs and Patents Act (CDPA) 1988, section 20.

²⁵ CDPA 1988, section 20(2)(b) provides for “the making available to the public of the work by electronic transmission in such a way that members of the public may access it from a place and at a time

has a direct impact on the revenues that flow, the licensing deals that are in place, the rates that are set by the Copyright tribunal for online services, and whether musicians and music creators benefit and, if so, to what extent. Uses classified under the making available right result in artists being paid through the rightholders subject to artist contracts' deduction of costs (described in para 15 above). In contrast, uses classified as a broadcast, result in artists being paid through the equitable remuneration right,²⁷ separate from any revenue owed under artist contracts. The nature of music consumption and the user experience has changed significantly with streaming becoming the new radio. Consequently, a thorough assessment of how pushed and pulled music is classified for the purpose of streaming revenue distribution is necessary.

19. **The pool of money available for distribution to artists from how music streaming is consumed and paid for** - the full impact of music streaming on artists cannot be understood without assessing the implications of availability of music on platforms like YouTube. Although Spotify has managed to dominate the music streaming market by barely making a profit, this is due to the cost of licensing music.²⁸ In order for Spotify, and other platforms like it, to effectively compete, it is necessary to assess how platforms such as YouTube are regulated and whether or not they also bear similar music licensing costs.
20. Platforms like YouTube have been able to rely on “safe harbour provisions” for music uploaded by their users.²⁹ Such provisions require that a platform like YouTube adopts a “wholly passive role” in order to be exempt from liability. Consequently, such de-centralised user-generated-content orientated platforms do not necessarily have to seek out licenses for the music content that is made available by users of their platform. YouTube has established licensing deals with several rightholders and collecting societies and has developed a content recognition system to assist rightholders in monitoring user-uploaded music and monetising it. However, arguably, the safe harbour provisions give YouTube an advantage in negotiating licences, relative to platforms like Spotify.³⁰ It also, arguably, creates a “value gap” between the revenues generated by platforms

individually chosen by them”.

²⁶ CDPA 1988, section 20(2)(a) provides for “broadcasting of the work”.

²⁷ E.g. see CDPA 1988, section 182D which provides for the right to equitable remuneration for exploitation of sound recordings.

²⁸ B Peterson, '[Spotify has spent \\$10 billion on music royalties since its creation and it's a big part of why its bleeding money](#)', *Business Insider*, 28 February 2018.

²⁹ These comprise broad exemptions from liability for user-uploaded content and arise from the EU Directive on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce) [2000] OJ 2 178/01.

³⁰ C Cooke, '[Dissecting The Digital Dollar Part One: How streaming services are licensed and the challenges artists now face](#)', *Music Managers Forum*, 2015, pg.67

like YouTube from the wide variety of user-uploaded music, and the revenues which are available for distribution to artists whose music is consumed on the platform.³¹

Q.4 How can the Government protect the industry from knock-on effects, such as increased piracy of music? Does the UK need an equivalent of the Copyright Directive?

21. In order to address the economic impact of streaming on artists, the committee must consider strengthening the artists' position not only in terms of how revenue distribution takes place but also by ensuring that a level playing field exists for streaming services to increase the pool of money available for distribution to artists. In principle, voluntary industry-led solutions to address some of the issues highlighted above are possible e.g. artist contracts could contain strong transparency obligations. However, due to the prevalence of issues with copyright contracts across jurisdictions (reflected in the adoption of author-protective provisions in the Copyright Directive) and across creative sectors (contractual issues, while amplified in the music industry are also present in other sectors), it is strongly recommended that the committee consider regulatory solutions for such challenges. Specifically, it is recommended that the committee consider the advantages of provisions equivalent to the Copyright Directive alongside other legal options, which are noted below. Alignment with the EU on author-protective rules would be significant in ensuring a level playing field and safeguarding the financial interests of artists.

22. **Contract adjustment mechanism or best-seller provision** – The committee should consider the equivalent of a contract adjustment mechanism provided in the Copyright Directive³² through which artists can claim additional, appropriate and fair remuneration from labels and publishers for the exploitation of their works, when their initial remuneration agreed under the contract is disproportionately low compared to subsequent relevant revenues derived from the exploitation of the works. Such statutory provisions tie additional remuneration to market success, and provisions of this type already exist in Germany and the Netherlands and are often referred to as a “best-seller” provision. The UK isn't entirely unfamiliar with this mechanism with the Patents Act 1977 providing for compensation to employees for certain inventions belonging to the employer, when the invention has been of outstanding benefit to the employer.³³

³¹ International Federation of Phonographic Industry, 'Global Music Report 2018', 2018.

³² Directive 2019/790 on Copyright and related rights in the Digital Single Market 2019, article 20.

23. **Right of revocation** –The committee should consider the equivalent of a right of revocation provided in the Copyright Directive³⁴ through which an artist could revoke in whole or in part the licence or the transfer of their rights provided to the label or publisher, if there is a lack of exploitation of their works. Presence of rights reversion clauses in copyright contracts can result in significant financial benefit for creative practitioners³⁵ and can also address the imbalance in bargaining power. Legal provisions allowing artists to regain ownership of their works exist in both EU member states and the US.
24. **Transparency requirements** – The committee should consider the equivalent of transparency obligations provided in the Copyright Directive³⁶ to ensure that artists receive regular, up to date, and detailed, information about the digital exploitation of their works, including a clear breakdown of information on modes of exploitation, revenues generated, and revenue due to them. Legally mandated transparency requirements in copyright contracts can restore power to artists, and address both the underlying information asymmetry and uneven bargaining power in conclusion of contracts. Although business confidentiality is important, a balance must be struck with transparency of information on digital exploitation.³⁷
25. **Un-waivable equitable remuneration right for digital exploitation** – The committee should also consider other regulatory solutions that can result in guaranteeing artists a minimum share of revenue generated by streaming, which would not be subject to recoupment enforced through copyright contracts. A possible solution would be the introduction of a broader equitable remuneration right, which could be administered by collecting societies. This solution can address the ‘push’ effect of music curation on streaming platforms, and align it with how broadcast of music is classified and paid for. While limited equitable remuneration provisions exist in copyright frameworks³⁸, a much bolder use of this mechanism remains possible to ensure fair remuneration to artists.

³³ The Patents Act 1977, sections 40-41.

³⁴ Directive 2019/790 on Copyright and related rights in the Digital Single Market 2019, article 22.

³⁵ See for e.g. S Kheria, ‘Copyright in the everyday practice of writers’ in J Jefferies and S Kember (eds), *Whose Book Is It Anyway?: A View from Elsewhere on Publishing, Copyright and Creativity*, Open Book Publishers, 2019; J Gibson, P Johnson and G Dimita, ‘The Business of Being an Author: A Survey of Authors’ Earnings and Contracts’, *Queen Mary, University of London*, 2015.

³⁶ Directive 2019/790 on Copyright and related rights in the Digital Single Market 2019, article 19,

³⁷ S Dusollier et al, ‘[Contractual Arrangements Applicable to Creators: Law and Practice of Selected Member States](#)’, *European Parliament’s Committee on Legal Affairs*, 2014, pg.72.

³⁸ See for e.g. Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, article 12; WIPO Performances and Phonograms Treaty, article 15.

26. **‘User-centric’ mechanisms for splitting streaming revenues** – The committee should consider possible ‘user-centric’ mechanisms for splitting streaming revenue, which calculate and attribute streaming royalties from each listener’s monthly subscription to only the specific artists that user listens to and gives their custom to. Such a mechanism, if viable, might allow for a more equitable distribution of streaming revenues and benefit early career and small to mid-size artists as well as artists from less-popular genres.³⁹ However, to ensure accurate payment of royalties under such a system, robust digital fingerprinting technologies would be needed. The committee should consider a call for evidence on how such mechanisms could function in practice and whether industry-led adoption of such mechanisms can achieve a more equitable distribution of revenues generated by music streaming platforms.
27. **Increase the pool of money ultimately to be distributed to artists** – The committee should consider both industry-led and regulatory mechanisms that can ensure that platforms such as YouTube obtain licenses for music available on their platforms and fairly contribute to the pool of money available for distribution to artists. In this regard, the committee should consider the provisions equivalent to those in the Copyright Directive,⁴⁰ with the aim of encouraging such platforms to seek out licenses from UK rightholders and collecting societies. Although the provisions on content-recognition technologies in the Copyright Directive are seen as controversial and have been widely debated, the committee should consider whether use of mechanisms such as YouTube’s Content ID does allow rightholders to realise revenues that would have otherwise been lost.⁴¹ It is recommended that the committee consider a call for evidence on the benefits and pitfalls associated with the adoption of digital fingerprinting mechanisms in relation to collection and distribution of revenue to artists.

³⁹ The comments of Deezer’s CEO, H Albrecht, are notable in this regard: “We did a calculation, and this is better for mid-sized artists, smaller artists and upcoming artists as it gives them a good chance. If you go deeper into jazz freaks or classical freaks who never listen to Katy Perry, they are still paying for her. It’s not fair”. See ‘Music Ally, [Deezer CEO Hans-Holger Albrecht talks streaming in 2017 \(#midem\)](#), 8 June 2017.

⁴⁰ Directive 2019/790 on Copyright and related rights in the Digital Single Market 2019, article 17.

⁴¹ YouTube’s Content ID allows rightholders to identify and manage music available on YouTube that they own by checking user-uploaded content against a database of music works submitted to YouTube by rightholders. According to Google, by 2018 more than \$3 billion had been paid out to rightholders who monetised their works through Content ID. See Google, ‘How Google Fights Piracy’, November 2018.