Licensing, Mandatory Collective Management, and AI Machine Learning

Daniel J. Gervais*

Executive Summary

This report assesses the legal and economic framework for licensing copyrighted content used in AI training, with particular focus on the EU. It proceeds from the observation that while some AI training may fall within existing exceptions, including the EU's text and data mining provisions, uses that fall outside those exceptions may require a licence. Whether and to what extent AI training engages exclusive rights is the subject of ongoing scholarly debate and unresolved litigation; the report's analysis applies whichever way that question is answered.

The report explains why compulsory or mandatory collective licensing would be legally risky and economically unsound as a response to those uses that do require authorisation. Such regimes are difficult to reconcile with the Berne Convention, which only allows certain specific compulsory licences explicitly, and the three-step test, which requires that any limitation on exclusive copyright rights be confined to certain special cases, avoid conflict with normal exploitation, and not unreasonably prejudice the legitimate interests of rights holders. Mandatory collective management almost invariably fails the second condition in any market where voluntary or direct licensing is reasonably feasible and predictable.

Drawing on decades of empirical evidence, including EU cable retransmission and the US mechanical rights administration, the report documents the persistent shortcomings of compulsory schemes: below-market remuneration, negation of price discovery, high administrative costs, lack of transparency, reduced innovation incentives, and cross-border fragmentation. It also notes that excessive legal uncertainty about the scope of copyright in AI training can itself chill AI development. The policy objective should be to establish a framework that is legally certain, internationally consistent, and appropriately balanced.

The report recommends supporting voluntary licensing in various forms. It acknowledges that voluntary market-based pricing is partly aspirational given the nascent state of AI licensing markets and that the practical effectiveness of voluntary licensing at scale depends on resolving a structural infrastructure deficit, in particular the need for reliable rights-metadata systems that allow content to be matched to owners at scale.

* See the 'About the author' section at the end of the document for details. This report was prepared for Wilmer Cutler Pickering Hale and Dorr LLP but it is not meant to represent the views of that firm or of any of its clients. The views expressed are the author's own.

CONTENTS

1. Introduction: The Intersection of Copyright and AI

1. The rapid development of generative artificial intelligence (AI) poses significant challenges for copyright law. The extent to which the training of AI models is covered by the exceptions contained in arts 3 and 4 of the CDSM and other limitations and exceptions is a matter of ongoing litigation and scholarly debate on which this report does not opine.
2. What is certain is that generative AI systems often require substantial copyrighted datasets for training purposes. It is similarly clear that most existing licensing frameworks were not designed for large-scale AI training activities. This is partly because the application scope of exclusive rights and existing exceptions is uncertain, but it is also because the current infrastructure is under strain.
3. Negotiating individually with millions of rights holders is both economically and practically unfeasible for AI developers. This friction creates challenges for both creator compensation and technological innovation, prompting some policymakers to contemplate the implementation of mandatory (or compulsory) collective licensing as a potential compromise solution. This would be meant to address the concerns of rights holders demanding compensation and enterprises developing LLMs that utilise copyrighted materials for machine learning purposes. In French, this concept is referred to as a 'false good idea'. As detailed in the following pages, it may seem good at first glance, but, in reality, it would be an unfavourable outcome for both rights holders and users.
4. It is important to note that efficient voluntary collective management should remain a viable option. Under this system, rights holders can *choose* to entrust their rights to a collective management organisation (CMO), while users can *decide* whether to purchase a licence. CMOs have successfully overcome challenges relating to music performance, educational copying and digital distribution. Some CMOs – and possibly certain Independent Management Entities (IMEs) as defined in the 2014 Directive – could provide a framework for AI licensing. Indeed, some already do. The challenges they face are described below.
5. It is imperative to understand, first and foremost, the fundamental differences between voluntary and mandatory licensing models, keeping in mind that the specific legal model selected for collective management is subject to a comprehensive framework of international treaty obligations. This includes the Berne Convention for the Protection of Literary and Artistic Works [Paris Act, 1971. Hereinafter 'Berne Convention'], as well as the Agreement on Trade-Related Aspects of Intellectual Property Rights [hereinafter 'TRIPS Agreement'].

2. Foundational Principle: The Author's Exclusive Right

Property Rules vs. Liability Rules

6. In order to understand why certain collective management models are incompatible with international law, it is first necessary to establish the legal baseline. The international copyright system is based on the principle that authors have exclusive rights. The Berne Convention and the TRIPS Agreement, the latter of which incorporates most of the former's substantive provisions, do not merely grant authors the right to be paid for the use of their work. They contain a 'property rule', rather than a 'liability rule'. The core of this property rule is the author's exclusive right 'to authorise or prohibit' specific acts.
7. This fundamental principle is articulated in the key minimum rights guaranteed by the convention. According to Article 9(1) of Berne, 'Authors shall have the *exclusive right* to authorize the reproduction of their works in any manner or form'. Language to this effect is also present in Article 11(1) with regard to public performance and Article 11*bis*(1) with

regard to broadcasting and communication to the public. This includes the right to refuse a licence, to grant an exclusive licence to a single entity (for example, for a film option or a specific database) or to grant a non-exclusive licence to multiple entities. It also encompasses the prerogative to participate in a collective licensing system. The ability to restrict usage and establish licensing terms is fundamental to the 'normal exploitation' of a protected work within applicable exceptions and limitations.

The Contested Scope of Rights and the Role of Exceptions

8. A balanced account of the international copyright system must acknowledge that exclusive rights coexist with a structured framework of exceptions, limitations, and remuneration rights. The Berne Convention and the TRIPS Agreement do not establish absolute rights; they allow—indeed, they require—member states to calibrate their domestic systems within the boundaries set by those treaties, including the three-step test. The application of this framework to AI training is the subject of genuine scholarly debate.

9. Professor Martin Senftleben has argued that text and data mining (TDM) exceptions permitting AI training can satisfy all three conditions of the three-step test, provided that rights holders retain a meaningful opt-out opportunity. On this view, the opt-out mechanism as codified in Article 4(3) of the CDSM Directive prevents any conflict with normal exploitation and avoids unreasonable prejudice by preserving individual authorial choice.

10. Professor Robert Brauneis and other scholars have offered a more sceptical view of broad TDM exceptions, questioning whether large-scale commercial AI training can be cleanly characterised as a non-substitutive use that avoids harm to rights holders' primary markets. The debate remains unresolved in the courts. As noted in Section 5, both the Hamburg and Munich courts have addressed aspects of this question, reaching divergent results that are currently on appeal. The report's primary argument, namely that voluntary licensing is preferable to mandatory, does not depend on resolving that debate. Whether AI training is or is not covered (or to what extent) by an applicable exception, the framework for any licensing should be voluntary in nature and compatible with international treaty obligations.

The Prohibition of Formalities

11. The international framework is designed to make it as easy as possible to protect exclusive rights. According to Article 5(2) of the Berne Convention, automatic protection is a fundamental principle: 'The enjoyment and exercise of these rights will not be subject to any formality'. An author's rights are secured automatically upon creation of the work and, where applicable (such as in US law), upon fixation in a tangible medium of expression. There is no legal requirement to register the work, deposit copies or perform any other procedural act in order to secure copyright.

12. This prohibition on formalities has significant implications for collective management systems that are not purely voluntary. A fully mandatory system, which provides no opt-out option, does not merely impose a formality; it functionally expropriates the exclusive right.

13. The prohibition on formalities also creates a structural challenge that bears directly on the economic analysis. Because copyright arises automatically, without mandatory registration, deposit, or any identifying act, there is often a significant gap between content identification (the technical task of matching a given text or image to a source file) and rights identification (the legal and administrative task of determining who owns what rights in that material, in which territories, and subject to which conditions). Even where content can be technically matched to a source, the ownership chain may be opaque, fragmented across assignees, heirs, and joint authors, or complicated by contractual arrangements

invisible to third parties. AI developers training on large corpora therefore face high search costs, negotiation costs, and substantial residual uncertainty even when acting in good faith.

14. This structural challenge does not justify mandatory collective management, but it does mean that any realistic policy framework, including the voluntary model recommended in this report, must honestly account for the costs that the absence of formalities places on potential licensees and intermediaries.

3. The Role of Collective Management in AI Licensing

Defining the Scope of 'AI Licensing'

15. Before analysing the economics and legal structure of collective management, it is necessary to define with precision what 'AI licensing' encompasses. The term is used in this report to refer to the licensing of copyright-protected works for use in connection with AI systems. The report does not focus on the licensing of outputs.

16. Large-scale training of foundation models involves ingesting vast datasets of text, images, or other protected material to train the model's weights. This is the activity generally considered most directly implicated by TDM exceptions and the opt-out mechanism under Article 4 of the CDSM Directive. Where a rights holder has validly reserved their rights and no other exception (such as Article 3 CDSM) applies, a licence is required.

17. Retrieval-augmented generation (RAG) involves connecting a deployed AI system to an external database or document store that is queried at inference time. Unlike pre-training, RAG does not involve reproduction of works into model weights (though there often are reproductions in the external database required for RAG); instead, documents are retrieved and processed dynamically. The copyright characterisation of RAG is distinct from training and may implicate different rights (e.g., communication to the public or database rights). Post-training content partnerships are commercial agreements in which rights holders license their catalogues or content streams to AI developers for ongoing use, for example, to supply current news for a retrieval system or to provide high-quality text for continued fine-tuning. These arrangements are often characterised as content licensing rather than copyright licensing in the strict sense: they are commercial supply agreements rather than mere grants of rights.

18. This distinction between copyright licensing (the trading of exclusive rights in existing protected works) and content licensing (commercial supply agreements for the provision of content, which often involves a licence but does not have to) is important throughout the analysis that follows. Several of the transactions cited as evidence of a functioning voluntary market in the EU, including many of the deals between publishers and AI companies, are more accurately characterised as content partnerships than as simple licences of exclusive reproduction rights. These 'deals' are not exclusively about training. Indeed, they take a variety of forms depending on the parties. The existence of such deals is evidence of commercial viability and good-faith negotiation, but it does not straightforwardly establish that a market in exclusive copyright licences for training data is currently functioning *at scale*. Both types of agreement are mentioned where relevant; the distinction is maintained for analytical clarity.

Economic Justification for Collective Management

19. The traditional economic rationale for *voluntary* collective management is the reduction of transaction costs in the administration of copyrights through economies of scale, which occurs when a single source holds the necessary information to administer and license rights. Essentially, when both rights holders and users wish to use this system, the costs

associated with several rounds of licence negotiation can be reduced. For users, transaction costs typically arise from locating copyright owners and obtaining the necessary information to negotiate a price, as well as the negotiation itself with each rights holder.

20. These transaction cost savings could be significant in the context of AI training in cases where a licence is required (that is, for uses that go beyond what exceptions and limitations already allow). AI developers may require access to a vast collection of works from numerous rights holders spanning various jurisdictions. Negotiating licences individually with each rights holder could be prohibitively expensive, resulting in deadweight loss where both parties would benefit from licensing. As outlined by Ronald Coase in his seminal 'Theorem', transaction costs have been shown to have a significant impact on the formation of agreements, effectively altering the allocation of rights.

The Monopoly Problem and Welfare Analysis

21. When CMOs act as monopolies (not all of them do), they can create inefficiencies, for example through pricing incentives. It is often argued that there is an overall gain in terms of welfare if the total savings in transaction costs are offset by higher prices due to the monopoly power of collecting societies. Therefore, assuming users require a licence to operate legally, the fundamental economic question is whether the benefits of capturing secondary demand outweigh the market distortions caused by monopoly pricing. This is much less likely to occur where a CMO operates on a nonexclusive basis, meaning that the rights holders it represents can still enter into direct 'deals'.

22. Competition in the primary market of traditional, authorised uses may still be beneficial and enhance welfare due to the lower transaction costs of individual enforcement. The key to efficiency often lies in leveraging a collective to capitalise on secondary demand, particularly in contexts where individual enforcement is hindered by transaction costs. Factors that can mitigate monopolistic inefficiencies include regulation, a bilateral monopoly (where users form a negotiating entity) and price discrimination when extracting surplus from each willing licensee.

Evidence of Functioning Voluntary Markets

23. It is important to note that voluntary licensing for AI training has already occurred in instances where there was a need for training and users did not rely on exceptions. While most of these deals are individual transactions between rights holders and AI companies, voluntary collective systems have also reportedly emerged.[1]

24. For example, a number of major music labels have announced 'deals' with AI providers.[2] Many owners of text-based content have reportedly signed deals with OpenAI. These developments confirm the existence of *voluntary* licensing mechanisms for AI training for those who want them.

25. This is particularly relevant in this context because, beyond the compatibility issues with the Berne Convention and TRIPS Agreement discussed below, imposing a mandatory model in the EU would *presuppose the current existence of both a market at scale and a market failure*, neither

---

[1] Martin Kretschmer, Bartolomeo Meletti, Lionel Bently, Gabriele Cifrodelli, Magali Eben, Kristofer Erickson, Aline Iramina, Zihao Li, Luke McDonagh, Emma Perot, Luis Porangaba and Amy Thomas, 'Copyright and AI in the UK: Opting-In or Opting-Out?' (2025) 74 *GRUR International* 1055–1070 https://doi.org/10.1093/grurint/ikaf093 accessed 28 January 2026.

[2] Udio and Suno reportedly agreed to stop using unlicensed content for their current models. In exchange, they signed commercial licensing deals to build a new platform slated for launch in 2026.

of which has been empirically demonstrated. This topic will be discussed in more detail in the following section.

26. The May 2025 pre-publication report of the United States Copyright Office on Generative AI Training reinforces this conclusion from a different jurisdiction. The USCO explicitly rejected compulsory licensing as premature, noting that it would have 'significant disadvantages', set practices in stone, and risk stifling flexible market-based solutions. The report recommended allowing the voluntary licensing market to continue to develop without government intervention while endorsing Extended Collective Licensing (ECL) as a targeted, less intrusive alternative for sectors where voluntary licensing proves unworkable, thereby permitting authorised CMOs to negotiate rates in the free market rather than having them fixed by statute. The USCO also acknowledged that the growing licensing market does not yet establish that voluntary licensing is feasible at scale for all AI training and that the current market may be distorted by unsettled fair use questions. These findings support the conclusion that mandatory intervention is premature and that voluntary individual and collective mechanisms deserve the opportunity to develop.

Taxonomy of Collective Management Models

27. The compatibility of any collective management system with the Berne Convention and the TRIPS Agreement hinges significantly on the extent to which it allows authors and other rights holders to make choices.

28. **Voluntary Collective Management:** This model is based on the author's decision to grant a CMO the right to act as their agent. The CMO's right to license usually stems from the contract between the CMO and the author or other rights holder, rather than from legislation. This exercise of the author's exclusive rights is not a limitation upon them and is therefore fully compatible with the Berne Convention. The system is also voluntary from the user's perspective, as they choose to obtain a licence from the CMO. Users who proceed without a licence assume litigation risk, which is the ordinary mechanism by which contested boundaries are settled, particularly when the limits applicable to new technologies have yet to be precisely determined.

29. **Extended Collective Licensing (ECL):** This is a statutory mechanism that extends the legal effect of a CMO's licence to cover non-members in the same category, provided certain conditions are met. It is generally considered to be compatible with the Berne Convention if structured correctly. However, ECL regimes present challenges in this new environment. Those challenges are beyond the scope of this report.

30. **Mandatory Collective Management (MCM):** This is a statutory system that stipulates the exercise of certain rights exclusively through a designated CMO. Under MCM, individual rights holders cannot opt out and are not permitted to license their rights individually. They cannot refuse a licence, negotiate their own terms or, in many cases, choose a different CMO. In a sense, this system assumes a certain scope of infringement. This can be problematic when the boundaries of the author's rights have not yet been clearly established, generally through litigation. In normal circumstances, the rights holder must prove infringement, and the user can raise applicable defences.

4. Empirical Evidence on Compulsory Licensing in Practice

31. Decades of experience with compulsory licensing in various intellectual property contexts demonstrate that mandated licensing schemes often fail to benefit the rights holders they are intended to help. They can also create administrative inefficiencies and reduce incentives for innovation.

Non-Market-Based Remuneration

32. Statutory and compulsory licensing in the music industry, particularly in the United States, has been criticised for many years. The focus of this criticism has been the royalty rates set by these licensing mechanisms, which have been found to consistently fall below market value. Mechanical royalty rates have been a long-standing point of contention, with many songwriters and publishers claiming that they are not adequately compensated for the use of their work on streaming platforms.

33. The US Music Modernization Act, which came into effect in 2018, was designed to address this issue by establishing a more modern system for collecting and distributing royalties. However, the fundamental debate over fair value persists, indicating that even reformed compulsory licensing systems struggle to deliver market-appropriate compensation. The fact that this problem has persisted for decades despite being addressed through multiple legislative reforms demonstrates that administratively set rates often fail to accurately reflect the market value of works.

Administrative Inefficiency and Lack of Transparency

34. Many mandated licensing schemes rely on CMOs to collect and distribute royalties. The pathologies documented in mandated schemes, including alleged mismanagement, high administrative costs and a perceived lack of transparency in royalty distribution, can be consequences of the mandatory structure rather than of collective management as such, although some voluntary models have also led to similar criticisms, including in the EU. But when rights holders cannot exit and users cannot license elsewhere, the competitive discipline that keeps well-run voluntary CMOs efficient disappears. The high administrative overheads of some compulsory systems thus often consume a significant proportion of the revenues collected, thereby reducing the amounts ultimately received by copyright holders. Voluntary CMOs, by contrast, operate under both the transparency obligations of the CM Directive and the market pressure of members who remain free to leave.

35. AI training would compound these distribution difficulties with a problem of its own. Collective distribution conventionally rests on usage data: plays, copies, broadcasts, or statistical samples thereof. Training, by contrast, generates no immediately comparable per-work consumption events, however often it recurs. Models are retrained, updated, and fine-tuned on a recurring basis, and some content partnerships involve ongoing supply, but the value of a work to the developer is realised in model weights rather than in any easily countable per-work use; the frequency with which a work appears across training runs reflects corpus composition, sampling, and deduplication choices, and developers' internal training logs are in any event not likely to be observable to a CMO in the way that broadcast logs or sales data are.

International Complexity and Fragmentation

36. Mandated licensing schemes can lead to complex, fragmented national or regional systems for global copyright industries such as music and publishing. In contrast, individual licences and certain voluntary collective licences can apply to numerous territories.

37. The complexity of divergent national laws and varied royalty structures, coupled with the administrative burden of dealing with multiple CMOs in various countries, poses a significant challenge to rights holders when it comes to tracking and collecting earnings. Fragmentation poses a significant challenge to digital services operating across borders. It creates compliance issues and administrative costs.

European Analogues: Compulsory Licensing Failures in the EU Context

38. Some of the most directly relevant evidence of compulsory licensing's shortcomings comes from within the European experience. The administration of cable retransmission rights under Directive 93/83/EEC provides one example: the mandatory collective licensing regime introduced to facilitate cable distribution proved administratively complex, created persistent disputes over tariff levels, and produced uneven distribution outcomes across member states, with individual creators frequently receiving only a small fraction of the collected sums after CMO overheads and intermediary deductions. The harmonised framework did not prevent significant divergence in national implementation, illustrating the limits of directive-based uniformity.

39. Mechanical rights administration in Europe illustrates a distinct point: governance and transparency matter under any model of collective management. The licensing of mechanical reproduction rights for music has historically been managed by CMOs under national regimes that vary substantially in structure and tariff-setting methodology. Some operate efficiently; others do not. The fragmentation of territorial licensing for digital services is a persistent problem that necessitated the EU's 2014 Collective Rights Management Directive, which is itself a product of the interaction between mandatory and extended licensing systems. The CM Directive sought to address transparency and governance issues that had allowed some CMOs to operate with inadequate accountability to members. This is an argument for strengthening the accountability framework applicable to all CMOs, not for mandating membership in them.

40. It is also worth noting an important point that applies to both Europe and the US: the documented failures of certain compulsory systems have different effects on institutional rights holders (such as major publishers and record labels, which typically have the resources and legal capacity to monitor collection and dispute allocations) and on individual creators (authors, composers, and performers, who frequently lack the means to verify distributions and may receive disproportionately small shares of collected revenues). Any AI licensing regime that relies on CMO administration must address this distributional concern as a matter of governance design, not merely as an efficiency question.

The Pharmaceutical Patent Experience: Inadequate Compensation and Reduced Innovation Incentives

41. A preliminary note on the scope of the analogy is warranted. Patent rights and copyright rights are structurally distinct: a patent grants a single, limited-term right to exclude others from using a defined invention, whereas copyright grants a bundle of distinct rights (reproduction, distribution, communication to the public, adaptation) that subsist automatically and without formalities. Compulsory licensing in the pharmaceutical sector therefore operates on a different legal foundation than any analogous scheme for copyright. The analogy invoked here is not structural but functional: the concern in both domains is that administratively set compulsory rates systematically fail to replicate the allocative outcomes that voluntary, market-based negotiation would produce, thereby reducing the incentive to create or invest in the relevant subject matter. It is this common functional pathology of compulsory licences (below-market remuneration, reduced investment incentives, and administrative rigidity) that makes the pharmaceutical experience instructive for copyright policy, notwithstanding the doctrinal differences between the two regimes.

42. In the context of compulsory licensing for pharmaceutical patents, particularly for life-saving drugs, a common criticism is that the compensation provided to the patent holder is insufficient. Critics argue that this inadequate remuneration undermines the financial return needed to fund research and development of new drugs, thereby discouraging innovation. The pharmaceutical industry requires substantial initial investment in research and development, and most drug candidates fail to reach the market. When compulsory

licensing prevents these investments from being recouped through market-based pricing, the incentive to undertake high-risk research is reduced. None of this puts in question the legitimacy of compulsory pharmaceutical licensing as such: Article 31 of the TRIPS Agreement expressly authorises the practice, and the Doha Declaration confirms its role in serving public health objectives in defined circumstances. The functional lesson invoked here concerns the accuracy of administratively set rates, not the availability of the tool. Scholars have observed that compulsory licences are far cruder instruments than voluntary licences and that they often fail to achieve their initial objective because they are extremely difficult, if not impossible, to calibrate properly.[3]

Impact on Foreign Direct Investment

43. Concerns regarding compulsory licensing have been identified as a factor contributing to a decline in foreign direct investment in certain countries. Companies may hesitate to invest in a market if they feel that their intellectual property rights are not adequately protected and could be subject to compulsory licensing at below-market prices. The empirical literature on this point, drawn largely from the pharmaceutical and technology sectors, is contested as to causation, but the perception of expropriation risk is itself a cost that investors price.

44. A further note on the Foreign Direct Investment (FDI) analysis is warranted. The evidence that aggressive compulsory licensing regimes deter FDI draws principally on pharmaceutical and technology-sector data. It is equally important to acknowledge the reverse risk: excessive legal uncertainty about the scope of copyright in AI training and the threat of disproportionate liability exposure can itself chill AI development, driving training activities to jurisdictions with clearer or more permissive frameworks. *The policy objective is not simply to avoid mandatory licensing; it is to establish a framework that is legally certain, internationally consistent, and appropriately balanced between creator compensation and technological innovation.* The EU context is particularly salient here, because regulatory fragmentation across member states threatens to impose compliance costs on European AI developers that their US and Asian counterparts do not face, independent of the question of mandatory versus voluntary licensing.

45. Establishing the empirical baseline for what constitutes a 'market rate' for AI training uses not covered by an exception is methodologically contested. Few deals are publicly disclosed, and those that are often involve content partnerships (as discussed in Section 3) rather than simple licences of exclusive reproduction rights for training datasets.

46. The implication for this report's argument is double-edged: on one hand, the absence of established market rates means that administratively set compulsory rates would be set without reliable reference points, making below-market outcomes even more likely than in mature licensing markets; on the other hand, the absence of market rates also means that 'voluntary market-based pricing' is itself partly aspirational at this stage, and policy frameworks must be designed with that transitional uncertainty in mind. In effect, MCM negates the (in my view, necessary) process of price discovery.

47. The common thread running through these documented failures maps directly onto the risks that any mandatory AI licensing scheme would face in practice.

5. Current EU Context and Member State Fragmentation

48. The European Union's approach to AI and copyright highlights the difficulties involved in creating suitable licensing frameworks through regulation and the dangers of regulatory

[3] Richard A Epstein, *Overdose: How Excessive Government Regulation Stifles Pharmaceutical Innovation* (Yale University Press 2006) 48, 53.

fragmentation. Although the EU AI Act contains provisions addressing copyright and the use of copyrighted material for AI training, it does not explicitly require collective licensing. Instead, the Act refers to Articles 3 and 4 of the Directive on Copyright in the Digital Single Market, which allows rights holders, under art. 4, to reserve their rights and prevent their works from being used for text and data mining. If rights reserved in this way apply to some of the activities of companies training or using LLMs, a licence may be required, in which case a collective licence could be a viable option. However, it is imperative that this process is voluntary.

Legal Uncertainty: The LAION Case and TDM Exceptions

49. A German court in Hamburg ruled in September 2024 that AI training falls under the category of text and data mining, as defined in Article 3 of the Copyright in the Digital Single Market (CDSM) Directive. This classification is subject to a mandatory exception for scientific research, meaning no licence is required. The case involved LAION (Large-Scale Artificial Intelligence Open Network), a non-profit research organisation that created datasets for AI training purposes. The court's interpretation suggests that certain forms of AI training are indeed within the scope of existing TDM exceptions.

50. Meanwhile, on 11 November 2025, the Munich Regional Court ruled in favour of GEMA against OpenAI (Case ID: 42 O 14139/24), determining that OpenAI had infringed copyright law by incorporating song lyrics into its training datasets and reproducing them in ChatGPT outputs. The court rejected OpenAI's defence that it could not demonstrate precisely where the copyrighted works were stored. The court held that the reproduced passages were sufficiently long to rule out coincidence and establish a causal link between the training data and the outputs. Presiding judge Elke Schwager stated that 'both the memorisation in the language models and the reproduction of the song lyrics in the chatbot's outputs constitute infringements of copyright exploitation rights'. The court determined that copyright infringement could occur in passages as short as 15 words. According to this ruling, the quantitative threshold for copyrightability can be quite low when creative elements are present.

51. At the time of writing, both cases remain unresolved due to ongoing appeals. Consequently, the full scope of the TDM exception for commercial AI training is not yet clear. It is an issue that this report does not address. It is also likely that this matter will be addressed by the CJEU at a future date.

Lack of Consensus Among Rights Holders

52. Rights holders are far from unanimous regarding mandatory licensing proposals. Some creator organisations have advocated statutory remuneration models for AI training; other rights holders, particularly those with high-value catalogues, would rather negotiate direct licences at market rates than be forced into collective systems with administratively set tariffs. This heterogeneity is itself significant: the interests of rights holders genuinely diverge, which counsels against a one-size-fits-all mandate that would subordinate the preferred mode of exploitation of some rights holders to that of others.

53. Further regulatory fragmentation of licensing rules across EU member states would pose significant challenges to the development of AI in Europe. Companies would be faced with a complex patchwork of divergent requirements, which would make it difficult to develop and deploy AI systems that comply with all applicable national laws. This regulatory complexity would put AI developers operating in Europe at a competitive disadvantage compared to companies operating in jurisdictions with more harmonised, innovation-friendly regulatory frameworks.

54. Mandatory collective licensing systems could stifle AI innovation in Europe, hindering the EU's ability to capitalise on the technology's benefits for its population, including SMEs. To compete globally in AI development, European companies, particularly SMEs, require access to efficient, predictable licensing mechanisms. Systems of compulsory licensing that set rates below market value may seem to reduce costs in the short term. However, in the long term, such systems harm both creators, who receive inadequate compensation, and innovators, who face administrative complexity and legal uncertainty.

6. Additional Economic Analysis: Complementary vs. Substitutive Works

55. Economic analysis indicates that the welfare implications of collective management depend on the nature of the works being licensed—specifically, whether they are complementary or substitute factors of production. Parisi and Depoorter's work sheds light on the circumstances in which collective management can be beneficial or harmful to social welfare.

Complementary Works: Solving the Anticommons Problem

56. Where two or more works (A and B) are required to produce a derivative work or other commercially significant output, a lack of price coordination between the owners of the rights to A and B can lead to inefficiencies. This phenomenon is known as the 'anticommons pricing problem'. When copyrights are complementary, a competitive Nash equilibrium can result in pricing that is inefficient from both a private and a social perspective. The anticommons equilibrium can be understood as the outcome of a prisoner's dilemma faced by individual copyright holders when setting prices independently.

57. The competitive pricing of complementary goods results in greater social loss than under a monopolistic equilibrium. Each rights holder sets prices independently without considering the impact that their pricing has on demand for other complementary works. This results in higher total prices and fewer derivative outputs than would be produced under coordinated pricing.

58. In the complementary works scenario, a CMO's ability to set prices independently can have beneficial effects. In theory, a CMO could set prices lower than copyright holders would have done if they had all priced independently. When this happens, it can benefit individual copyright 'sellers', as they allow them to maximise their total profit from selling licences, thereby improving on the anticommons alternative. It can also be beneficial to users. Overall, this is another reason why market-based, efficient, *voluntary* collective licensing can create win-win efficiencies in the case of complementary works.

Substitutive Works: Creating Monopoly Distortions

59. By contrast, when users can choose from a range of alternatives to meet their needs, collective management can result in different economic outcomes. Price-fixing authority may enable the pricing of CMOs operating monopolistically to be sustained. This favours copyright owners, who can maximise total profit from selling licences, as would happen in a cartel. From a social standpoint, however, such coordination is inefficient compared to the alternative competitive equilibrium. This is because it prevents beneficial competition and creates social deadweight loss.

Implications for AI Training Licensing

60. This analysis has significant implications for the training of AI systems. To the extent that AI training datasets require diverse collections of works serving complementary functions (i.e., different genres, styles, languages and domains of knowledge), collective management used in parallel with individual licensing can solve coordination problems and increase both

rights holder compensation and AI developer access. In this case, the works complement each other because training on a comprehensive, diverse dataset produces better AI models than training on narrow selections.

61. The complementary nature of training data is not merely an academic observation; it has direct implications for the hold-up and anticommons problems that some AI developers may face. Because 'more data is better' in the sense that training on a larger, more diverse corpus generally produces more capable and less biased models, AI developers are structurally vulnerable to the anticommons problem identified by Heller and Eisenberg: when many rights holders each hold a veto over a complementary input, the aggregate price of assembling a complete training corpus can exceed the efficient level, leaving both sides worse off than they would be under coordinated pricing. Each rights holder, pricing independently, may fail to internalise the negative externality their pricing imposes on demand for other complementary works. The result can be deadweight loss: some training that would benefit both developers and creators does not occur because the transaction costs and aggregate pricing exceed the value of the use.

62. The prohibition on formalities, discussed above, compounds this problem by placing the burden of rights identification on potential licensees and intermediaries. They must not only locate rights holders but also determine, with limited information, what rights those holders actually possess, whether those rights have been assigned, and whether they cover the relevant territory and use. This information asymmetry is itself a source of inefficiency. Well-governed and well-managed voluntary intermediaries can reduce this asymmetry by aggregating rights information and functioning as single points of negotiation for rights they actually represent provided that their repertoires are adequately documented.

63. One further consideration deserves acknowledgement. In specific markets characterised by complementary goods and fragmented ownership, the 'market price' that emerges from individual negotiations may not be an efficient price: it may instead reflect the hold-up power of specific individual rights holders who know that a developer cannot easily substitute their works. The answer, however, is not to replace voluntary markets with government-set tariffs. The preferable response is to encourage the development of voluntary systems that can coordinate efficiently, potentially combined with the kind of bilateral negotiating structures (such as user coalitions or industry-wide framework agreements) that can counterbalance individual hold-up power.

64. The reality of AI training probably includes both complementary and substitutive elements. This suggests that achieving optimal outcomes may require a combination of individual and voluntary collective management. This approach would enable certain categories, especially those comprising high-value works, to be licensed individually. It would also enable collective licensing of works where transaction costs would otherwise render licensing impossible.

65. As long as users have the option to acquire more affordable bundled licences, the availability of per-use or individual licences does not significantly hinder efforts to address the problem of complementary works. This supports a system in which collective licences are available, but individual transactional licensing remains in use — exactly the structure of voluntary collective management.

How These Benefits Could be Achieved Through Voluntary, Not Mandatory, Collective Management

66. The economic impacts described above do not provide sufficient justification for implementing mandatory collective management. Quite the opposite, in fact. The anticommons problem can be solved when rights holders coordinate their pricing

voluntarily through a CMO. This coordination stems from the CMO's capacity to internalise the negative externalities engendered by independent pricing. However, this only occurs if the CMO is voluntary.

67. There are several reasons why mandatory systems are not as effective as voluntary systems in achieving better economic outcomes:

- *No supplementary coordination benefits are available.* Once rights holders have voluntarily joined a CMO, they will reap the benefits of coordination. Implementing mandatory membership does not enhance welfare by addressing the anticommons problem, since this issue has already been resolved for active members.
- *This measure eliminates beneficial competition.* When works are substitutes rather than complements, mandatory collective management hinders the positive competitive dynamics that are facilitated by voluntary systems. High-value rights holders, who could negotiate more favourable individual terms, are required to participate in the collective tariff, resulting in deadweight loss.
- *This will reduce the incentive for CMO efficiency.* Voluntary systems encourage CMOs to operate efficiently and set reasonable prices; otherwise, rights holders may choose not to join or to opt out. Mandatory systems eliminate this market discipline, which could result in higher administrative costs and fewer innovative licensing models.
- *It is not possible to distinguish between complement and substitute relationships.* In mandatory systems, the collective management of all works is mandated, regardless of whether they are complements or substitutes in AI training. In contrast, voluntary systems empower the market to categorise works based on their inherent complementarity. This allows works that benefit from coordination to be managed collectively, while those that do not require coordination can be licensed individually.
- *Prevents price discovery.* Some rights holders have the ability to license individually, which provides valuable price signals about the true market value of different types of works. These signals help CMOs to establish efficient collective tariffs. Systems that are mandatory do away with the price discovery mechanism.

68. This economic analysis corroborates the aforementioned conclusion that mandatory systems offer no additional coordination benefits, a result which is further substantiated by the analysis of the Berne Convention below.

7. Summary: Why Voluntary Systems Are Preferable to Compulsory Licensing

Respecting Exclusive Rights

69. Copyright law gives authors the exclusive right to authorise or prohibit the reproduction, adaptation and public communication of their works. Compulsory licensing systems fundamentally alter this balance of power by converting exclusive rights into mere rights to remuneration. Although compulsory licences are currently available in certain limited circumstances, extending them to AI training would represent a significant change to the exclusive rights that have characterised copyright law for centuries.

Preserving Market-Based Pricing

70. Four qualifications developed in the earlier analysis of this report should be carried into this summary. First, the economic analysis in Section 6 established that AI training data functions predominantly as complementary goods, making AI developers structurally vulnerable to the anticommons problem: fragmented rights ownership, combined with the

absence of formalities, means that aggregate pricing under individual negotiation may exceed the efficient level and produce deadweight loss. This may be an argument for well-governed voluntary CMOs that can coordinate pricing and reduce search costs, but not for mandatory systems. Second, in markets characterised by complementary goods and fragmented ownership, what appears to be 'market-based pricing' may in some cases reflect hold-up power rather than genuine social value. This concern should inform how CMO governance is designed, particularly regarding bilateral negotiating structures between rights holders and AI developers. Third, the practical effectiveness of voluntary licensing at scale depends on resolving the infrastructure deficit. Without meaningful rights-metadata registries, voluntary licensing may remain aspirational. These qualifications do not undermine the case for voluntary licensing, but they sharpen what 'support for voluntary licensing' must actually entail in practice. Fourth, in order to be able to ensure that remuneration reaches individual creators, which understandably is one of the EU's policy goals, the policies concerning CMOs' distributional practices must be explainable and transparent.

71. Voluntary licensing enables rights holders and users to negotiate terms that accurately reflect the value of works used in AI applications. The value of different works, or of different categories of works, may vary depending on factors such as quality, uniqueness, and relevance to a user. Compulsory licensing typically necessitates administrative rate-setting, which, as demonstrated by decades of experience in the music and pharmaceutical industries, often fails to capture this heterogeneity and under-compensates rights holders. This leads to distortions that discourage the creation of high-value works and subsidise inefficient AI development.

Encouraging Innovation in Licensing Terms

72. Crucially, voluntary systems allow for the exploration of various licensing models, including per-work fees, blanket licences, revenue-sharing arrangements and hybrid approaches. This flexibility enables the market to determine the most appropriate licensing structures for different types of works and AI applications.

73. If a rights holder and user disagree on the scope of a right or exception (e.g., TDM), even this can be incorporated into a licence agreement. In the specific case of AI, if a copyright holder believes that their rights (e.g., reproduction, communication to the public and/or making available) apply to the training and use of LLMs and that no exceptions apply, but a user believes that these rights do not apply (at least not to certain forms of training and use) and/or that exceptions may apply, they can negotiate a price that reflects this disagreement. This price should factor in the potential costs and uncertainty of years of litigation. Similar price adaptations are possible in a voluntary collective management context.

74. On the other hand, compulsory licensing imposes a single statutory framework with a predefined scope of presumed infringement that is likely to become obsolete as technology and practice evolve. For example, the US system of compulsory licensing of mechanical music rights was established to address the issue of *player pianos* (in 1909!). This illustrates how technology has deviated from its original purpose. The ability to voluntarily adapt licensing terms provides a level of resilience and responsiveness that mandatory systems cannot match.

Maintaining Creator Autonomy

75. Some creators may have legitimate reasons to want to exclude their works from AI training datasets, such as concerns regarding artistic integrity, objections to particular AI applications, or strategic business reasons. Compulsory licensing removes this choice in

those contexts by imposing a uniform framework on all creators and rights holders, irrespective of their individual preferences.

8. Incompatibility with the Berne Convention and TRIPS Agreement

MCM as a Limitation on Exclusive Rights

76. Mandatory collective management (MCM) is not merely a form of 'management' or 'exercise' of the author's right. It is a restriction on the exclusive right that is imposed by the state. This prevents the author from exercising their exclusive rights and effectively and forcibly replaces the author's exclusive right (the right to 'authorise or prohibit' at a market-negotiated price) with a simple right to remuneration (the right to be paid a non-negotiable, one-size-fits-all tariff). This legislative act divests the right of its most essential component, the power to exclude. It is possible to characterise this as a de facto expropriation of the author's control.

The Three-Step Test Framework

77. If MCM is considered a limitation on an exclusive right, it is only permissible under international law if it satisfies the universal standard for all such limitations: the three-step test. The test was first codified in Article 9(2) of the Berne Convention in 1967 and subsequently adopted and generalised by Article 13 of the TRIPS Agreement and Article 10 of the WIPO Copyright Treaty. This generalised test applies to all limitations and exceptions to exclusive rights, other than those specifically allowed by the Berne Convention or TRIPS.

78. The test consists of three conditions that are cumulative. A limitation is only permissible if it meets all three criteria:

- It must be confined to 'certain special cases'
- It must not 'conflict with a normal exploitation of the work'
- It must not 'unreasonably prejudice the legitimate interests of the author' ('right holder' in the TRIPS version)

Step One: Certain Special Cases

79. The first step in this three-step process is to establish a narrow scope for the limitation. It must be 'clearly defined and should be narrow in its scope and reach' according to the WTO panel report in the US Section 110(5) case. A mandatory collective management scheme that applies to all literary works for massive digital reproductions is thus not likely to be regarded as a 'special case'. In general terms, the exclusive right is substituted with a remuneration right for a designated class of exploitation.

Step Two: Normal Exploitation

80. This is likely the central and most determinative risk of failure for MCM under the three-step test. The concept of 'normal exploitation' is not static. It refers to all forms of making the work available to the public, including current and established markets, as well as potential markets that are likely to acquire considerable economic importance. It encompasses any current or anticipated principal means of producing and vending works. According to the WTO panel, it 'should be judged for each exclusive right individually'. An exception must be judged, said the panel, based on 'both actual and potential effects of the exemptions in question in the current market and technological environment'.

81. If a market exists, or is likely to acquire considerable economic importance, in which an author can license their work, that market forms part of the work's normal exploitation. MCM is defined by its prohibition on individual licensing. In any market where voluntary or direct licensing is reasonably feasible and predictable, MCM therefore conflicts with the normal exploitation of the work.

82. As expert legal commentary from Dr Mihály Ficsor, a leading international copyright expert and former WIPO Assistant Director General, notes, 'where efficient voluntary licensing mechanisms exist, the mandatory collective management of rights ought to be avoided'. The existence of a viable market for voluntary or direct licensing is indicative of 'normal exploitation'. In the context of AI training, functioning markets exist at least in certain areas where high-value rights holders can and do engage in direct licensing with AI developers. This licensing approach is the standard method of exploiting those works. An MCM scheme would prohibit this voluntary licensing and force those high-value rights holders into a collective, non-negotiable tariff system, thereby creating a direct conflict with normal exploitation.

Step Three: Unreasonable Prejudice

83. Even if a new MCM scheme were (incorrectly, in my view) deemed to not conflict with normal exploitation, it would almost certainly fail this third step. 'Legitimate interests' are not only economic; they also include the author's interest in receiving remuneration as well as their non-economic, or moral, interests in controlling the use, context, and integrity of their work. The replacement of the author's capacity to negotiate market-based, exclusive, high-value royalties with a one-size-fits-all collective tariff that the author did not choose is, by its very nature, prejudicial. A right to remuneration does not necessarily compensate for this prejudice. Therefore, it could be argued that the prejudice is 'unreasonable' in at least certain cases.

Limited Scope of Permissible Compulsory Licensing

84. A common counterargument is that some forms of compulsory licensing are permitted under the Berne Convention, and thus all forms of state-mandated licensing, including MCM, are permissible. This argument is not supported by the principles of the doctrine. It is difficult to reconcile with the *expressio unius est exclusio alterius* canon of interpretation. The Berne Convention is structured to grant authors exclusive rights as the default setting. It also allows national legislatures to impose 'conditions' or compulsory licences in specific, exhaustively enumerated articles.

85. Dr Ficsor clarifies this point: national legislation can only stipulate the mandatory administration of rights for which the Berne Convention permits the stipulation of the conditions for their exercise. The fact that the Berne Convention allows for this kind of limitation in a few, narrow cases proves that national legislatures do not have the general power to do the same for other rights.

86. The EU legislature's own recent choices confirm this reading *a contrario*. Article 12 of the CDSM Directive permits Member States to provide for extended collective licensing only subject to mandatory safeguards, including an effective opt-out for rights holders. Directive (EU) 2019/789, for its part, confined mandatory collective management to the retransmission right, faithfully tracking the carve-out in Article 11*bis*(2) of the Berne Convention. Legislating in 2019 with full awareness of the licensing difficulties created by digital uses, the Union twice declined to go beyond models that preserve individual choice. An MCM regime for AI training would exceed what the EU legislature has itself treated as the outer boundary of permissible collectivisation.

Cable Retransmission (Article 11bis(2))

87. This is probably the most frequently cited example of permissible MCM. However, it is important to note that its permissibility is not a general principle; it derives only from the specific text of Article 11*bis*(2) of the Berne Convention. Article 11*bis*(1) grants the exclusive right of broadcasting and retransmission. Article 11*bis*(2) immediately clarifies this matter, stating: 'It shall be a matter for legislation in the countries of the Union to determine the conditions under which the rights [in paragraph 1] may be exercised'. This is a specific, hard-wired compulsory licence built deliberately into the treaty. It was included because the drafters recognised the 'practical impossibility' of voluntary licensing for cable retransmissions as the technology stood in the 1960s, when the Convention was amended. This particular authorisation cannot be used as a model to justify MCM for other rights, such as reproduction, that do not include a comparable 'conditions' clause.

Mechanical Rights (Article 13(1))

88. Likewise, Article 13(1) of the Berne Convention expressly permits national legislatures to mandate compulsory licences for the 'mechanical reproduction' (recording) of musical works. This is another specific, enumerated exception that was included to address a particular market. As with Article 11*bis*(2), it is an exception that proves the rule, rather than a general principle that can be applied to other rights.

89. The mechanical rights analogy deserves closer attention in the AI context because it is sometimes invoked by proponents of mandatory AI licensing. The historical rationale for Article 13(1) was that piano-roll and phonograph manufacturers reproduced musical compositions in a physical medium encoding the music that the author could not identify in advance, monitor, or practically negotiate over individually. The compulsory licence was a response to a genuine practical impossibility of voluntary licensing given the technology of the time and the absence of a functioning CMO in many markets.

90. Proponents of mandatory AI licensing argue that an analogous impossibility exists for AI training: just as individual work-by-work negotiation with every piano-roll manufacturer was impractical in 1908, individual work-by-work negotiation with every AI developer is impractical today. There is surface plausibility to this argument. However, there are at least three important disanalogies. First, a voluntary licensing market for AI training is developing, including in some cases through collective mechanisms; this distinguishes AI training from 1908, when no voluntary licensing infrastructure existed at all. Second, AI training involves identifiable commercial actors processing identifiable corpora of data, not invisible copies made in remote manufacturing facilities; the practical impossibility of individual licensing is a transaction-cost problem amenable to institutional solutions (CMOs, IMEs, rights registries), not a structural feature of the activity. Third, and most importantly from a treaty law perspective, the Berne Convention's inclusion of Article 13(1) as an explicit, enumerated exception strongly implies that no general power to extend that approach to other rights exists. The drafters knew how to authorise compulsory licensing when they intended to and did so expressly. The mechanical rights precedent therefore cannot serve as a treaty-law basis or justification for mandatory AI training licensing.

91. A final treaty-law consideration concerns national treatment and the practicalities of distribution. AI training corpora are overwhelmingly multinational, and a large share of any remuneration collected under an EU MCM scheme would be owed to rights holders established outside the Union. Article 5(1) of the Berne Convention and Article 3 of the TRIPS Agreement require that those foreign rights holders receive treatment no less favourable than that accorded to nationals, including in the distribution of collected sums. The historical record of distributions to foreign rights holders, including non-distributable

or 'black box' income and culturally earmarked deductions, suggests that this obligation would create significant friction in practice. The resulting political economy is unstable in both directions: either the funds are anchored in a license and genuinely flow abroad, a result Member States may be reluctant to accept, or they do not, a result that invites complaints under WTO dispute settlement if the funds are anchored in a copyright or related right licensing transaction.

9. Distinguishing Rights to Remuneration from MCM: Private Copying

92. It is vital to make a clear distinction between mandatory collective management of exclusive rights and MCM for certain 'rights to remuneration'. This distinction is essential to understanding why MCM is used to administer private copying levies and why that use is often considered compatible with the Berne Convention. In contrast, MCM for exclusive rights, such as reproduction or public performance, is not.

The Legal Nature of Private Copying Levies

93. Many 'private copying' activities inherently escape control. These occur in private, in large numbers, and are considered impossible for rights holders to monitor, control, *or license on a large scale*. Enforcement of copyright in that context can give rise to significant challenges in relation to user rights such as privacy and personal data protection. Individual licensing is not a viable option. Therefore, a state-created exception for private copying does not conflict with normal exploitation (it passes Step 2 of the three-step test). It is likely that the exception will also meet the requirements of Step 1, which relates to certain special cases of private, non-commercial use.

94. However, it has been argued that this exception could fail Step 3 because widespread domestic reproduction can prejudice the legitimate interests of authors and rights holders if it were all permitted for free. In order to address concerns regarding what some legislators considered to be 'unreasonable prejudice', the law in those jurisdictions introduced a *compensatory levy*. It is important to note that this should be viewed as a form of compensation rather than a licence. These forms of compensation can be delegated to CMOs. As previously stated, there are ongoing concerns regarding the transparency and fairness of the aforementioned distribution schemes.

95. In this context, *MCM is not based on the exercise of an exclusive right*. The levy, where it was imposed, *is not a licence* proper. In this particular instance, the exclusive right has already been deemed unenforceable. The MCM is a practical mechanism for collecting and distributing an 'equitable remuneration'.

Why This Distinction Matters for AI Licensing

96. In contrast to private copying, AI training does not take place in situations where voluntary licensing is not feasible or practical. Voluntary licensing mechanisms (individual and collective) are either in place or being developed. Key publishing houses have established direct licensing arrangements with AI companies. It is evident that the forms of AI training and use that imply an exclusive right and are not covered by an exception represent a 'normal exploitation' market. In such a market, individual and voluntary licensing is possible.

97. Therefore, the introduction of mandatory collective management for AI training cannot be justified on the same grounds as private copying levies. Replacing an unenforceable exclusive right with a 'right to remuneration' would constitute a violation of an exclusive right by force of conversion, transforming a property rule into a liability rule.

98. Some readers may interpret this logic as providing an indirect argument for mandatory remuneration in the AI training context: if AI training at scale were ever found to be practically unlicenceable on an individual basis, would the private copying analogy not then support a levy? This inference should be resisted. The distinguishing feature of private copying is that infeasibility of enforcement is inherent and permanent in the nature of the act (private, domestic, and unmonitorable). AI training, by contrast, takes place in an industrial context involving identifiable commercial actors using identifiable corpora; it is precisely the kind of activity for which voluntary licensing can operate. Parties can also determine the conditions of confidentiality (for example, via aggregation or data sampling) or other user needs in the license agreement. It is not just, in other words, about payment.

10. Policy Recommendations

Support Voluntary Licensing

99. While courts in the EU, the US and elsewhere continue to determine the scope of copyright rights and exceptions in the context of AI training and use, policymakers may decide to encourage the development of licensing for AI rather than imposing compulsory schemes. This suggests that:

- Regulatory frameworks should facilitate the formation and operation of *voluntary* licensing structures while ensuring accountability, efficiency, and transparency of management entities and preserving individual authorial prerogative. The EU's CM Directive already includes some relevant obligations in this regard. This approach would learn from the documented failures of compulsory licensing.
- As the licensing markets evolve, it is vital to establish safe harbours for good-faith licensing efforts during the transitional period.
- In order to address the global nature of AI development and to avoid the fragmentation that has plagued music licensing, it is essential to facilitate cross-border licensing arrangements.

100. The recommendation to support voluntary licensing would need to be fully developed by specifying what an effective voluntary system for AI licensing would require in practice. This is beyond the scope of this report. Put differently, 'abstract' support for voluntary licensing leaves open the question of whether such systems can actually function at the scale and speed that AI developers require. There remain important issues to address such as rights-metadata infrastructure, claims validation and distribution design, and cross-border coordination.

Maintain Compliance with International Obligations

101. It is imperative that any legislative action in this area be in accordance with international copyright obligations as outlined in the Berne Convention and the TRIPS Agreement. Broad compulsory licensing or mandatory exceptions for AI training would be very difficult to reconcile with the three-step test and would expose countries to a serious risk of WTO disputes.

102. Instead, it is recommended that countries implement the following measures:

- Maintain the voluntary nature of licensing
- Refrain from imposing any formalities that could hinder the exercise of exclusive rights, and

- Preserve the prerogative of rights holders to participate, or not, in any collective licensing systems.

Avoid Regulatory Fragmentation

103. It is worth noting again that voluntary licensing, if left to the market, tends naturally toward cross-border consistency through private ordering, as the licensing structures developed under Title III of the CM Directive illustrate, although the historical record of reciprocal representation agreements shows that this outcome requires sound governance rather than occurring automatically. Mandatory systems, by contrast, are structurally confined to national designation and enforcement and thereby tend to compound the fragmentation they are intended to solve.

Balance Innovation with Creator Rights

104. The policy challenge is not choosing between AI innovation and author compensation; rather, it is designing systems that advance both objectives within the framework of applicable rights, exceptions, and limitations. Voluntary licensing is an effective solution that achieves this balance when:

- AI developers require efficient access to large data sets of works at predictable costs. For those who wish to license the data, legal uncertainties can be incorporated into a price that can be adjusted as courts reduce the scope of uncertainty about copyright rights and exceptions.
- Creators can receive fair compensation through market-based, voluntary negotiations. This approach ensures that creators are not paid below market value, as is often the case with administratively set rates.
- Price discovery is necessary in this new environment. It must be nimble, rather than rates set administratively. In contexts such as music and pharmaceuticals, the latter approach has been demonstrated to fall short in accurately capturing market value.
- In jurisdictions with opt-out regimes or an equivalent thereof, creator autonomy is maintained regarding the usage of their works, recognizing that the absence of consensus among rights holders indicates a preference for individual control.
- Legal certainty is ensured, as is compliance with international obligations. This will help to avoid WTO disputes and foreign investment deterrence.

Learning from Past Failures

105. The empirical record surveyed in Section 4 provides the relevant cautionary lessons: Below-market remuneration, risk of mismanagement, entrenchment of structurally obsolete licensing arrangements, reduced innovation incentives, and deterred foreign investment. Those are not theoretical risks: they are documented outcomes of compulsory systems across several decades. Policymakers should treat them as the baseline expectation for any mandatory AI licensing regime, absent strong evidence that the structural conditions of AI training differ materially from those contexts.

11. Conclusion

106. The architecture of the Berne Convention and the TRIPS Agreement is built upon the primacy of the author's exclusive right, a right of individual control, choice, and formality-free exercise. This is a property rule, not a liability rule. The fundamental principle of international copyright law is the exclusive right of the author to authorize or prohibit uses of their work.

107. The market for licensing of data used by AI companies is still in formation, as courts and legislators adapt legal frameworks and interpret existing law. Rights holders are trying to decide which uses they are prepared to allow and on which terms, while users decide which uses they need and how much they are worth if not covered by an exception. This requires a nimble approach, including price discovery, data usage reporting modalities, APIs, and a host of contractual and technological tools that are still being tested and developed. In this context voluntary licensing is *by far* the best option.

108. Voluntary licensing can and will likely be done both by individual rights holders and certain CMOs and other management entities. Those entities can provide an effective solution for addressing some of the practical challenges of licensing on a large scale when used in conjunction with individual licensing. A well-managed, transparent CMO can lead to significant efficiency gains. By consolidating rights, standardising terms, and reducing transaction costs, CMOs can support both creator compensation and AI innovation. But the voluntary nature of such systems is essential to their legal validity and practical effectiveness. Voluntary collective management is an exercise of the exclusive right, not a limitation upon it. Indications suggest that voluntary licensing for AI training is being implemented, underlining the effectiveness of market-based mechanisms.

109. By contrast, mandatory collective management systems of the exclusive rights of authors and other rightsholders represent limitations on exclusive rights imposed by the state. These provisions effectively prevent authors from exercising their exclusive rights individually and remove the most fundamental aspect of copyright protection: the right to exclude. As limitations, they must satisfy the three-step test. Mandatory collective management almost invariably fails this test. Most critically, it creates a conflict with the normal exploitation of the work (Step 2) in any market where voluntary or direct licensing is possible.

110. Decades of experience with compulsory licensing in various sectors provide empirical confirmation of these theoretical concerns. The negative impact on the amounts ultimately received by creators flows from the structure of certain compulsory schemes themselves: administratively set rates, the absence of competitive discipline, high administrative costs, and a lack of transparency.

111. The limited circumstances in which compulsory licensing is permitted under the Berne Convention (Articles 11*bis*(2) and 13(1)) are clearly defined and specific. Over time, the reasons for these exceptions have become less clear. Consequently, these are best regarded as exceptions that substantiate the prevailing norm; their existence serves to underscore the absence of any such general power pertaining to other rights. The legitimate use of mandatory collective management to administer rights to remuneration that do not involve a licensed use, such as private copying levies, is legally and doctrinally distinct. It should be noted that the mechanism in question does not constitute a limitation on an exercisable right.

112. Therefore, the imposition of a mandatory collective management system on an exclusive right that are capable of being normally exploited through voluntary means is fundamentally incompatible with the letter and spirit of the international copyright framework. While compulsory licensing systems may appear to offer a viable solution to the complex licensing challenges faced by many, such systems would be very difficult to reconcile with fundamental international copyright obligations. Studies of other mandatory schemes suggest that these systems would not be beneficial for the very rights holders whom they are designed to support.

113. It is noteworthy that there is no consensus among rights holders themselves regarding mandatory licensing proposals in the EU context. Many rights holders recognise that such

systems would compel them to enter collective frameworks with below-market tariffs, rather than allowing them to negotiate direct licences at market rates and would be likely both to increase administrative costs and reduce transparency. The wide range of approaches adopted by EU member states demonstrates the policy pressures for action and the risks of uncoordinated responses, which would hinder European AI development.

114. The path forward requires supporting voluntary licensing while maintaining compliance with international law. This approach respects creator rights as property rules, not liability rules, facilitates innovation through efficient market mechanisms, and preserves the legal framework that has historically driven both cultural production and technological progress. This framework is designed to adapt quickly to changes in the legal landscape, including court decisions.

115. In my view, policymakers should avoid the temptation to implement compulsory licensing schemes. Instead, they should focus on fostering the development of voluntary licensing markets. This approach would enable these markets to function efficiently. It would also enable policymakers to draw lessons from the documented failures of compulsory systems in other contexts.

About the Author

Daniel J. Gervais, PhD, is the Milton R. Underwood Chair in Law at Vanderbilt University Law School, where he directs the Vanderbilt Intellectual Property Program. He is also a Senior Associate Professor (part-time) at Vrije Universiteit Amsterdam and a Distinguished Fellow of the University of Amsterdam, where he previously held a chair in information law.

Professor Gervais is a leading international expert on copyright, collective management, and global intellectual property governance. Before entering academia, he held senior legal and policy positions at the GATT (now the WTO), the World Intellectual Property Organization (WIPO), and Copyright Clearance Center (CCC), where he serves as an academic Board member, giving him extensive first-hand experience with international norm-setting, multilateral negotiations, and the operation of collective rights management systems in practice. He later served as Acting Dean of the Common Law Section of the University of Ottawa Faculty of Law and has been a visiting professor at major universities across Europe and Asia. In 2022, he held the Distinguished Fulbright Chair at Carleton University in Ottawa.

He is the author of *The TRIPS Agreement: Drafting History and Analysis*, widely regarded as the leading treatise on the WTO TRIPS Agreement (Sweet & Maxwell, 5th edn, 2023), and co-editor of *Collective Management of Copyright and Related Rights* (Wolters Kluwer, 4th edn, 2025), the principal international reference work on collective licensing and rights administration. He has also authored and edited books with Cambridge University Press and Oxford University Press. His scholarship has appeared in leading law reviews and peer-reviewed journals, including *Science*. He is also the editor of collectivemanagement.net.

Professor Gervais was elected to the Academia Europaea in 2012. He is a member of the American Law Institute, where he serves as Associate Reporter for the *Restatement of the Law, Copyright*, and is a past president of the International Association for the Advancement of Teaching and Research in Intellectual Property (ATRIP).

He studied computer science and law at the Université de Montréal, McGill University, the Graduate Institute of International and Development Studies (Geneva), and the University of Nantes. His recent work also explores the interaction between law, technology, and artificial intelligence, including through fiction, notably *Forever*, the first volume of the *Coexistence Trilogy*.

References and Sources

Legislative materials

1. Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence (EU AI Act)
2. Directive (EU) 2019/790) on Copyright and Related Rights in the Digital Single Market Copyright
3. Music Modernization Act, Pub. L. No. 115-264, 132 Stat. 3676 (2018) (US)
4. United States Copyright Act

Cases

5. Landgericht München I (LG München I), Urteil vom 11. November 2025 – 42 O 14139/24 (GEMA – OpenAI)
6. Hanseatisches Oberlandesgericht Hamburg (OLG Hamburg), Urteil vom 10. Dezember 2025 – 5 U 104/24 (Kneschke ./. LAION e.V.), Berufung gegen LG Hamburg, Urteil vom 27. September 2024 – 310 O 227/23
7. WTO Panel Report, *United States – Section 110(5) of the US Copyright Act*, WT/DS160/R (15 June 2000)

International treaties and conventions

8. Berne Convention for the Protection of Literary and Artistic Works, Paris Act of July 24, 1971, as amended on September 28, 1979
9. Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, April 15, 1994
10. WIPO Copyright Treaty (WCT), December 20, 1996

Scholarly sources and expert Commentary

11. Katharina de la Durantaye, 'Garbage In, Garbage Out. Regulating Generative AI Through Copyright Law' (28 August 2023) SSRN <https://papers.ssrn.com/abstract=4572952>.
12. Sari Depreeuw, 'Mandatory Collective Management of Copyright: When the Road to Deadlock Is Paved with Good Intentions' (Kluwer Copyright Blog, 9 February 2022) <https://legalblogs.wolterskluwer.com/copyright-blog/mandatory-collective-management-of-copyright-when-the-road-to-deadlock-is-paved-with-good-intentions/> accessed 28 January 2026.
13. Richard A Epstein, Overdose: How Excessive Government Regulation Stifles Pharmaceutical Innovation (Yale University Press 2006) 48, 53.
14. Mihály Ficsor and others (eds), Collective Management of Copyright and Related Rights (3rd edn, Wolters Kluwer 2022).
15. Daniel Gervais, 'The Three-Step Test Revisited: How to Use the Test's Flexibility in National Copyright Law' (2014) 29(3) *American University International Law Review* 581–626.
16. Daniel Gervais, 'The Economics of Collective Management' in Ben Depoorter (ed), *Research Handbook on the Economics of Intellectual Property Law*, vol 1 (Edward Elgar Publishing 2019).

17. Daniel Gervais, *The TRIPS Agreement: Drafting History and Analysis* (5th edn, Sweet & Maxwell 2023).

18. Daniel Gervais and João P Quintais (eds), *Collective Management of Copyright and Related Rights* (4th edn, Wolters Kluwer 2025).

19. Jane C Ginsburg, 'Extended Collective Licenses in International Treaty Perspective: Issues and Statutory Implementation' (2017) https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3066&context=faculty_scholarship accessed 28 January 2026.

20. Michael A Heller, 'The Tragedy of the Anticommons: Property in the Transition from Marx to Markets' (1998) 111 Harvard Law Review 621.

21. Francesco Parisi and Ben Depoorter, 'The Market for Intellectual Property: The Case of Complementary Oligopoly' in Wendy J Gordon and Richard Watt (eds), *The Economics of Copyright: Developments in Research and Analysis* (Edward Elgar Publishing 2003).

22. Pamela Samuelson and Kathryn Hashimoto, 'Is the US Fair Use Doctrine Compatible with Berne and TRIPS Obligations?' in Tatiana Synodinou (ed), *Universalism or Pluralism in International Copyright Law* (2nd edn, Kluwer Law International 2025).

23. Martin Senftleben, 'Generative AI and Author Remuneration' (2023) 54 IIC – International Review of Intellectual Property and Competition Law 1535.

24. Martin Senftleben, 'AI Act and Author Remuneration – A Model for Other Regions?' (24 February 2024) SSRN <https://ssrn.com/abstract=4740268>.

25. Martin Senftleben, 'Copyright Data Improvement for AI Licensing – The Role of Content Moderation and Text and Data Mining Rules' (4 May 2024) SSRN <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4817796>.

26. Martin Senftleben, 'TDM, GenAI and the Copyright Three-Step Test' (24 July 2025) SSRN <https://ssrn.com/abstract=5373903>, forthcoming International Review of Intellectual Property and Competition Law.

27. Tara Steinmetz, 'Stringing Along the Songwriter: Successes and Shortcomings of Copyright Policy in Title I of the Music Modernization Act' (2024) 98 *Southern California Law Review* 205.

28. US Copyright Office, 'Copyright and Artificial Intelligence, Part 3: Generative AI Training' (pre-publication version, 9 May 2025) <https://www.copyright.gov/ai/>.