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Open consultation

Copyright and Artificial Intelligence

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Ministerial Foreword

Both our creative industries and our AI sector are UK strengths. They are vital to our national mission to grow the economy. This consultation sets out our plan to deliver a copyright and AI framework that rewards human creativity, incentivises innovation and provides the legal certainty required for long-term growth in both sectors.

At present, the application of UK copyright law to the training of AI models is disputed. Rights holders are finding it difficult to control the use of their works in training AI models and seek to be remunerated for its use. AI developers are similarly finding it difficult to navigate copyright law in the UK, and this legal uncertainty is undermining investment in and adoption of AI technology.

This status quo cannot continue. It risks limiting investment, innovation, and growth in the AI sector, and in the wider economy. It effectively prevents creative industries from exercising their rights.

There is great strength and breadth of feeling about the best way forward. This government recognises that it must tackle the difficult choices now to unlock growth, innovation and protect human creativity. This consultation seeks views on how we can deliver a solution that achieves our key objectives for the AI sector and creative industries. These objectives are:

1. **Supporting right holders' control** of their content and ability to be remunerated for its use.
2. **Supporting the development of world-leading AI models in the UK** by ensuring wide and lawful access to high-quality data.
3. **Promoting greater trust and transparency** between the sectors.

Our aim is to deliver these objectives through a package of interventions, to be considered together, that addresses the needs of both sectors, providing clarity and transparency.

The proposals include a mechanism for right holders to reserve their rights, enabling them to license and be paid for the use of their work in AI training. Alongside this, we propose an exception to support use at scale of a wide range of material by AI developers where rights have not been reserved.

This approach would balance right holders' ability to seek remuneration while providing a clear legal basis for AI training with copyright material, so that developers can train leading models in the UK while respecting the rights of right holders.

For this approach to work, greater transparency from AI developers is a prerequisite - transparency about the material they use to train models, how

they acquire it, and about the content generated by their models. This is vital to strengthen trust, and we are seeking views on how best to deliver it. Legislation may be required to provide legal certainty, and we will consider the case for it as we continue to develop our approach after the consultation.

We are also conscious that for this system to work there have to be simple technical means for creators to exercise their rights, either individually or collectively. This will require both the AI companies and creative industries to come together to create new technical systems to deliver the desired outcome of greater control and licensing of IP.

This approach aims to protect the interests of our creative industries and AI sectors. But successfully delivering it is not straightforward. It will require practical and technical solutions as well as good policy. We are open-eyed about this, but optimistic that we can succeed by working together – across our departments and both sectors.

We are grateful in advance for your responses and look forward to continuing our shared work to ensure the AI and creative industries continue to grow together in partnership.

A. Overview

A.1 Executive summary

1. As part of our national mission to grow the economy, the government is committed to supporting the growth of the creative industries and AI sectors while recognising the value of human-centred creativity.
2. The government is putting both the creative industries and the AI sector at the heart of our Industrial Strategy, to benefit people in every corner of the country with high-quality jobs and drive accelerated growth.
3. The creative industries drive our economy, including TV and film, advertising, the performing arts, music, publishing, and video games. They contribute £124.8 billion GVA to our economy annually, they employ many thousands of people, they help define our national identity and they fly the flag for our values across the globe. They are intrinsic to our success as a nation and the intellectual property they create is essential to our economic strength.
4. The UK is also well placed to seize the transformative opportunities presented by AI. According to the International [Monetary Fund World Economic Outlook](#)

<https://www.imf.org/en/Publications/WEO/Issues/2024/04/16/world-economic-outlook-april-2024>), this could in time unlock productivity gains of up to 1.5

percentage points annually. The government is committed to building an AI sector that can scale and win globally, ensuring that global AI companies want to call the UK home and boosting the responsible adoption of AI across all parts of the economy. We have commissioned Matt Clifford to deliver an AI Opportunities Action Plan to set out an ambitious roadmap to drive AI innovation and adoption across our public and private sectors. We have also committed to legislating to place requirements on those developing the most powerful AI models of tomorrow – these proposals will reduce regulatory uncertainty for AI developers, strengthen public trust and boost business confidence.

5. The fast pace of development of AI technology over recent years has led to a debate in the UK and across the world. This is about how the existing copyright framework should be applied to the activities that underpin the training of large AI models. The copyright framework provides right holders with economic and moral rights which mean they can control how their works are used. This means that copying works to train AI models requires a licence from the relevant right holders unless an exception applies.
6. As things stand, this framework does not meet the needs of UK's creative industries or AI sectors. Creative and media organisations are concerned that their works are used to train AI without their permission, and they are unable to secure remuneration through licensing agreements. They have also highlighted a lack of transparency from AI developers about what content is or has been used and how it is acquired, which can make it difficult to enforce their copyright. Likewise, AI firms have raised concerns that the lack of clarity over how they can legally access training data creates legal risks, stunts AI innovation in the UK and holds back AI adoption.
7. The lack of clarity about the current regime means that leading AI developers do not train their models in the UK, and instead train in jurisdictions with clearer or more permissive rules. Since copyright law applies in the jurisdiction where copying takes place, this means that AI developers are not obliged to respect rights under UK law. This harms our UK AI sector too, as investment from the major AI developers is limited and UK-based SMEs who cannot train overseas are disadvantaged.
8. We cannot allow this to continue. We need to act now to help accelerate growth in our creative industries and in our AI sectors - both of which are essential parts of the government's Industrial Strategy. This consultation seeks views on how we can achieve this by working in partnership with both sectors, and proposes an approach that aims to:
 - enhance right holders' control of their material and their ability to be remunerated for its use
 - support wide access to high-quality material to drive development of leading AI models in the UK

- secure greater transparency from AI developers to build trust with creators, creative industries, and consumers

9. The government believes that the best way to achieve these objectives is through a package of interventions that can balance the needs of the two sectors. That is why we are consulting on measures that would require increased transparency from AI developers. This includes the content they use to train their models, how they acquire it, and any content generated by their models. And it is why we are consulting on the introduction of an exception to copyright law for “text and data mining”. This improves access to content by AI developers, allowing right holders to reserve their rights and thereby prevent their content being used for AI training. Progressed together, we believe these measures could meet our objectives above. These measures could come into operation when effective, proportionate, and accessible technological solutions were in place. This ensures the solutions are practicable and possible for right holders and AI developers of all sizes.

10. Although we recognise that much more detailed work will still need to be done, these are the broad parameters of our approach. The package is designed to enhance the ability of right holders to protect their material and seek remuneration for its use through increased licensing. It also aims to motivate AI developers to train leading models in the UK in full compliance with UK law. Delivering this will be challenging and will require practical technical solutions as well as a clear legal framework. It will require us to work closely with our international partners to progress towards an interoperable AI and copyright framework. We seek the constructive engagement of all stakeholders in this consultation process, in particular on the following issues.

Transparency

11. The success of any new approach to copyright and AI will depend on stronger trust between AI developers and right holders. The government believes that transparency will be key to this and seeks views on what level of transparency about the use of works to train models is required and how this can best be achieved fairly and proportionately.

Technical standards

12. Some useful tools that enable right holders to reserve their rights already exist, but more work is required to ensure these meet the needs of right holders and AI developers of all sizes. These tools have significant technical limitations and are insufficiently standardised and adopted. The government is therefore seeking views on whether and how it can support work to improve these tools and drive their adoption.

Contracts and Licensing

13. In a regime that empowers right holders to reserve their rights, licensing will be important to secure right holder remuneration and provide AI developers with access to high-quality training material at scale. We seek views on whether and how the government should support licensing, including collective licensing, and consider the needs of individual creators as part of this.

Labelling

14. The government believes that clear labelling of AI outputs would be beneficial to right holders and the public, but acknowledges the technical challenges involved. The government welcomes views on how to achieve this outcome, including how we can support the development of emerging tools and standards.

Computer generated works

15. There are additional issues regarding the ownership of AI systems' outputs. The UK currently provides copyright protection for purely computer-generated works, but it is not clear that this protection is widely used, or that it functions properly within the broader copyright framework. The government seeks views on potential reform to protections for computer-generated works.

Digital Replicas

16. The volume and quality of digital replicas generated by AI systems (sometimes called deepfakes) is increasing. This consultation seeks to gather evidence on the challenges posed by digital replicas. This responds to concerns around the emergence of deepfakes and AI-generated content that may replicate a person's voice, image, or personal likeness. It asks whether the current legal framework is sufficient to provide individuals with control over use of their likeness and whether further intervention is required.

Emerging issues

17. Rapid developments in AI's capabilities will continue to raise new policy and legal questions. The consultation seeks views on emerging issues related to the intellectual property framework for AI. For instance the clarity of UK law for AI systems that generate content on Internet Search or other processes that draw on datasets at inference. We are also interested to understand how increasing use of synthetic data to train AI models may affect the ecosystem.

Next steps

18. The government is committed to working with all stakeholders to work through these issues together, proceeding carefully, but with a degree of

urgency. These are complex issues, as underlined by the experience in other jurisdictions, and legislation is ultimately likely to be needed. We will use responses to shape how we implement our proposed approach to allow the creative industries and AI sectors to continue to grow together in partnership. DSIT and DCMS Ministers will continue to prioritise taking forward these proposals as the government further develops its approach to AI regulation.

A.2 How to engage with this consultation

19. The consultation is an opportunity for anyone with an interest in these issues to share their views on these proposals. You do not need to respond to every question and can send in a response only on the areas which affect you, for example.

20. You may respond via [Citizen Space](https://ipoconsultations.citizenspace.com/ipo/consultation-on-copyright-and-ai) (<https://ipoconsultations.citizenspace.com/ipo/consultation-on-copyright-and-ai>). Alternative, please send responses to copyrightconsultation@ipo.gov.uk. To ensure we can make best use of your evidence, please make sure relevant methodologies and data are included or clearly referenced as part of your response, where possible. Qualitative evidence is also welcome, such as case studies. Please consider the [guidance on providing evidence for policy making](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/510985/Guide_to_evidence_for_policy.pdf) (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/510985/Guide_to_evidence_for_policy.pdf) when drafting your response.

21. This consultation will run for 10 weeks. It commences at 10:30 on 17 December 2024 and will close at 23:59 on 25 February 2025.

22. During the consultation, we will also run wider engagement activity to help ensure that the full range of views is heard.

23. The government will assess responses after the consultation closes. The government will use the information it receives to help design the best possible policy to achieve the aims and objectives set out in this consultation.

A.3 Data protection and confidentiality

24. A summary of responses to this consultation will be published on GOV.UK. The government considers it important in the interests of

transparency that the public can see who has responded to government consultation and what their views are.

25. By responding to this consultation, you acknowledge that your response, along with your name and/or organisation may be made public. Responses to the consultation may be published in accordance with the access to information regimes. These are primarily the [Freedom of Information Act 2000](https://www.legislation.gov.uk/ukpga/2000/36/contents) (<https://www.legislation.gov.uk/ukpga/2000/36/contents>) (FOIA), the [Data Protection Act 2018](https://www.legislation.gov.uk/ukpga/2018/12/contents) (<https://www.legislation.gov.uk/ukpga/2018/12/contents>) (DPA) and the UK General Data Protection Regulation (UK GDPR).

26. Additionally, information provided in response to this consultation, including personal information or commercially sensitive information, may be made available to the public on request in accordance with the requirements of FOIA.

27. If you wish to highlight that information is confidential or sensitive, please advise us in writing when you provide your response. If there is a request to make any confidential information publicly available, we will consider the request according to the appropriate legislation. We will treat each request individually and in line with any request to maintain confidentiality.

28. The government may also publish consultation responses in response to any FOIA requests on GOV.UK. Please read the privacy statement and [privacy notice for consultation](https://www.gov.uk/government/publications/intellectual-property-office-privacy-notices/privacy-notice-for-personal-data-processed-for-consultations-and-stakeholder-engagement) (<https://www.gov.uk/government/publications/intellectual-property-office-privacy-notices/privacy-notice-for-personal-data-processed-for-consultations-and-stakeholder-engagement>) for more information.

B. Copyright and Artificial Intelligence

B.1 Background

29. Artificial intelligence (AI) continues to transform industries across the world and affect many aspects of our lives. The UK is among the leading AI nations. It has world-class research and talent with the third highest number of AI research paper contributions per capita in the world. The UK is at the forefront of innovation with the third most newly funded startups in the world between 2013 and 2022, as reported in the [Global AI Index 2024](https://www.tortoisemedia.com/intelligence/global-ai/#rankings) (<https://www.tortoisemedia.com/intelligence/global-ai/#rankings>) and the [AI Index](#)

30. The UK is also a world-leader in the creative industries, a high-growth sector powered by human creativity – from music, film, and design, to visual arts, theatre, and media. These industries enhance our lives and create economic and social value through the creation and exploitation of intellectual property – in particular, copyright.

31. AI can be used to accelerate innovation and enhance creative productivity in a range of ways, just as creative content helps drive AI development. Musicians and artists often use AI and other forms of technical innovation in their work. This means these sectors are closely linked and often need to work together in partnership. However, the rapid pace of AI development and its increasing adoption is undoubtedly challenging for all. All sectors are having to adapt to embrace the benefits of AI and grapple with its disruptive effect. This is particularly true in the creative industries, as highlighted by the debate over AI and copyright.

32. Companies that wish to train AI models in the UK expect to be able to access large volumes of high-quality data to drive innovation. This allows them to create exciting new products and maximise the benefits to our economy and society. In many cases, the data used to train AI models will include works protected by copyright or related rights.

33. Copyright underpins our creative economy. It helps creators to control the use of their works and seek payment for it. But copyright owners are not always able to control the use of their works with AI models, and the copyright law in this area is disputed.

34. It is important that the UK's world-leading creative industries share in the benefits of these new technologies. Creators rightly expect transparency about the works that are used to train AI models, and to be treated fairly when content they produce is used in this way. Creators and right holders should also be able to seek remuneration and agree licences for their content where appropriate. It is essential that AI supports, and does not undermine, human creativity and the creative industries.

35. Through this consultation the government is actively seeking evidence of the economic and other effects of the current situation and of the options put forward for change.

B.2 AI training and copyright

36. Copyright protects creative works, such as books, songs, artworks, films, broadcasts, and news publications. Similar protection is also provided

to performances and to databases. In this consultation, statements and proposals that apply to copyright will usually also apply to or have analogues in these related rights.

37. Owners of copyright have the right to authorise or prohibit certain acts. These acts include copying, distributing, and communicating works to the public, including making works available online.

38. The purpose of copyright is to protect creative expression and thereby encourage creativity and investment in the creative industries. By granting exclusive rights over the use of works, copyright enables those works to be licensed or sold and provides a means for creators to be paid for their work. Copyright underpins the success of our creative industries because it guarantees their economic and moral rights.

39. There are legal exceptions to copyright for certain specific purposes. For example, one legal exception allows reasonable quotation from one work in another. Exceptions are one of the ways that the broader public interest is considered in the copyright system.

AI training inputs

40. AI models are being trained on increasingly large volumes of data. Often this data is contained within copyright works. For example, a model which generates images may be trained on billions of images associated with descriptive keywords. By analysing those images and learning patterns and associations, a model can produce convincing graphical output in response to a text prompt.

41. The use of automated techniques to analyse large amounts of information (for AI training or other purposes) is often referred to as “data mining”. To carry out data mining using copyright works, relevant information needs to be extracted from them. If this process involves a reproduction of the copyright work, under copyright law, permission is needed from a copyright owner, unless a relevant exception applies.

42. Some works are licensed to AI developers for the purpose of AI training. Others may be available under open licences. But in many cases, AI models are trained using works made available to the public on the Internet. These are often not expressly licensed for AI model training, and the creators of those works are not compensated for their use. There is limited disclosure about the sources of works used to train AI models and creators will often not know if their works form part of a training dataset.

43. Because of this, while AI providers and AI users benefit from the rich variety of content that is made by our creators and creative industries, those creators often do not share in the value that is generated. Greater transparency could allow both creators and AI developers to share in that value.

44. The use of copyright works to train AI models has given rise to debate, in the UK and around the world. This is on the extent to which copyright law does or should restrict access to media for the purpose of AI training.

45. Some AI developers argue that existing legal exceptions in UK copyright law allow them to use copyright works when conducting training activity in the UK. If, their training activities take place in other countries, they may argue they are not subject to UK jurisdiction. But right holders reject these arguments. They maintain that, by making copies of their works to train models, AI developers are infringing their copyright in the UK.

46. Litigation to resolve these legal disputes is taking place in several jurisdictions, including the Getty Images vs Stability AI case before the High Court in the UK. However, it will likely take several years for these issues to be definitively resolved in case law.

47. We want to ensure that both the AI and creative industries can share in the benefits of AI, and that both sectors are able to grow together. Copyright law should enable creators and right holders to exercise control over, and seek remuneration for, the use of their works for AI training. But it should also ensure AI developers have easy access to a broad range of high-quality creative content. Alongside this, AI developers should be transparent about the inputs used to train generative models, and the outputs produced by them, enabling creators to understand when and how their work has been used.

48. The government does not believe that waiting for ongoing legal cases to resolve will provide the certainty that our AI and creative industries need in a timely fashion, or, potentially, at all. We are therefore considering a more direct intervention through legislation to clarify the rules in this area and establish a fair balance in law. We have not settled on the precise nature of that intervention - or, if necessary, the precise nature of any legislation. The first part of this consultation explores the balance that the government wants to achieve and seeks views on how the government should act.

Outputs of AI models

49. If a generative AI model includes a substantial part of a copyright work in its outputs, and there is no licence in place to allow this, this may infringe copyright – as both reproducing a protected work and communicating it to the public are copyright restricted acts.

50. Sometimes AI outputs will be co-creations of a human and an AI tool. Examples may include photographs which are digitally enhanced using AI and software written with suggestions from an AI assistant. In such cases, the human creator will be considered the author.

51. If a work is generated without human authorship that work may be protected as a “computer-generated work” in UK copyright law. For

example, this could be in response to a simple prompt. Its author will be whoever undertook the arrangements necessary for its creation.

52. There is debate about whether this balance within copyright law relating to the outputs of AI is right, between the traditional creator, the level of human input AI software might have, and the right holders in such works. These issues and proposals to address them are covered in the second part of this consultation.

B.3 Our objectives

53. The government believes both in human-centred creativity and the potential of AI to open new creative frontiers. The AI and creative sectors are both essential to our mission to grow the UK economy. It is clear that government action on AI and copyright is needed to achieve this, and to provide certainty for both sectors. Our goal is to find the right balance between encouraging innovation in AI in the UK while ensuring protection for creators and our vibrant creative industries.

54. We will assess the proposals set out in this consultation against the following objectives:

- **control:** Right holders should have control over, and be able to license and seek remuneration for, the use of their content by AI models
- **access:** AI developers should be able to access and use large volumes of online content to train their models easily, lawfully and without infringing copyright
- **transparency:** The copyright framework should be clear and make sense to its users, with greater transparency about works used to train AI models, and their outputs

55. Any proposals we take forward will be implemented in line with our existing legal obligations, domestic and international. Relevant international treaties include the Berne Convention, Rome Convention, WCT, WPPT and TRIPS Agreement. We also recognise that our approach will need to work within a global market, where UK content is accessible worldwide and AI developers seek the best jurisdictions to train their models. A successful approach will be one that encourages more AI model training to take place in the UK and enables rights under UK copyright law to be respected. This will require a balance of strong protections for the creative industries alongside an internationally competitive and interoperable regime for AI training.

B.4 Policy options

56. The government has considered a range of approaches to clarify copyright law and meet its objectives for AI innovators and the creative industries. Further detail can be found in the [summary assessment \(https://assets.publishing.service.gov.uk/media/676060d87d90cafba3f7d5e4/Summary-assessment-of-options.docx\)](https://assets.publishing.service.gov.uk/media/676060d87d90cafba3f7d5e4/Summary-assessment-of-options.docx). The options it has considered are as follows:

Option 0: Do nothing: Copyright and related laws remain as they are.

57. This option would mean the current lack of clarity remains for both right holders and AI developers. It would mean right holders continue to find it difficult to seek remuneration and to enforce their rights. AI developers will continue to face legal risks, which is likely to affect small firms and new entrants in particular. Many right holders have stated that the current disputed legal landscape around AI and copyright prevents them from effectively reserving their rights and hinders their ability to seek fair remuneration.

58. We do not wish to prolong the legal uncertainty of AI model training for both the creative industries and media sectors and AI/tech sectors. This would not meet our objectives of ensuring control for right holders, access for AI firms and trust and transparency across parties. However, we welcome further views on this option.

Option 1: Strengthen copyright requiring licensing in all cases

59. This option would mean AI models could only be trained on copyright works in the UK if they have an express licence to do so. Firms providing services in the UK could not get around this requirement by training in other countries. This option could involve clarifying existing legislation to provide legal certainty in how copyright law operates with AI models in the UK. It would also provide a clear route to remuneration for creators.

60. However, it is highly likely to make the UK significantly less competitive compared to other jurisdictions – such as the EU and US – which do not have such restrictive laws. This would make the UK a less attractive location for AI development, reducing investment in the sector. In doing so, it may not actually increase the level of licensing undertaken by AI firms.

61. Models trained in other jurisdictions which do not meet UK standards may be difficult to restrict from the UK market. There would also be a risk that some of the most capable AI models would not be available in the UK. This would significantly limit innovation, consumer choice, and wider benefits of AI adoptions across the UK economy.

62. In summary, this option could help to give right holders' greater control over their works. However, it would make it harder for AI developers to train

leading models in the UK. This could significantly damage the UK AI sector and have limited value for right holders too.

Option 2: A broad data mining exception

63. Under this option, we would introduce a broad data mining exception, allowing data mining on copyright works – including for AI training – without right holders’ permission. The exception would permit commercial use for any purpose and be subject to few or no restrictions.

64. A few countries provide broad exceptions that allow data mining expressly (for example Singapore). Alternatively, they may allow data mining where this meets a “fair use” standard (for example the US).

65. A broad exception with no restrictions would improve AI developers’ access to training material, and investment in the UK AI sector. However, it would not meet the needs of right holders, as they would not be able to control or seek remuneration for use of their works. Under a fair use approach, right holders may be able to control and license their content, but expensive litigation may be needed to establish this.

66. Such radical changes to the UK copyright framework are highly likely to constrain the growth of the creative and media sectors. Depending on the breadth of the exception, it may also be difficult to reconcile this approach with the UK’s wider obligations under international law.

Option 3: A data mining exception which allows right holders to reserve their rights, underpinned by supporting measures on transparency

67. This approach seeks expressly to balance the objectives of access to works by AI developers with control over works by right holders supported by increased trust and transparency for all parties. AI developers would be able to train on material to which they have lawful access, but only to the extent that right holders had not expressly reserved their rights. It would mean that AI developers are able to train on large volumes of web-based material without risk of infringement. Importantly right holders are also able to control the use of their works using effective and accessible technologies and seek payment through licensing agreements. Right holders may also pursue collective licensing where appropriate.

68. To ensure it is effective, this approach would be underpinned by robust measures to ensure developers are transparent about the works their models are trained on, and right holders either individually or collectively can easily reserve their rights. Further work would be needed to ensure rights reservation and transparency standards are effective, accessible, and widely adopted. This would allow for smooth application by AI developers and right holders alike. These measures would be fundamental to the

effectiveness of any exception, and we would not introduce an exception without them.

69. It is also recognised that for rights reservation and measures on transparency to work in practice, there will need to be appropriate support to encourage widespread adoption and compliance. This may include a need for dispute resolution mechanisms and oversight, although this may be achieved in different ways in alignment with or even outside the existing copyright framework.

70. The approach of a data mining exception allowing right holders to reserve their rights underpinned by transparency has the potential to support AI innovation. It will remove legal ambiguity, as well as create licensing opportunities for right holders and reduce barriers to remuneration.

71. It would do this by granting right holders enhanced control over how and when their work is used by AI firms. It would specify whether they require payment for this and would be supported by enhanced transparency over model inputs and outputs. This approach could bring clarity for right holders over how their work is used and resolve the current uncertainty around when remuneration can be sought through a licence. This would help safeguard the economic viability of the creative and media industries, ensuring right holders can control how their high-quality data contributes to AI innovation.

72. It is also an approach with aspects that many AI firms and right holders are already familiar with and are required to comply with in the EU, while noting that the approach in the EU is still being developed.

73. This approach would appear to have the potential to meet our objectives of control, access, and transparency, and enable licensing agreements, ensuring right holders are remunerated where appropriate. Because of this, a data mining exception which ensures that rights can be reserved, underpinned by developer transparency, is the primary object of this consultation.

74. We acknowledge that there is a range of opinion in this area. While the EU approach is a useful precedent, there is some uncertainty about how it works in practice and some aspects are still being developed. For example, the EU opt out should be machine readable, but the practical application of this has not been consistent. It is also unclear to what extent this approach has led to further licensing. In this consultation we would like to explore this approach in more detail, including several implementation options. We would welcome feedback on the overall approach, as well as the specific questions set out below.

Question 1. Do you agree that option 3 is most likely to meet the objectives set out above?

C. Our proposed approach

C.1 Exception with rights reservation

Key features and scope

75. The data mining exception and rights reservation package that is under consideration would have the following features:

- (a) It would apply to data mining for any purpose, including commercial purposes.
- (b) It would apply only where the user has lawful access to the relevant works. This would include works that have been made available on the internet, and those made available under contractual terms, such as via a subscription. This would allow right holders to seek remuneration at the point of access – for example, in the price of a subscription to a library of research material.
- (c) It would apply only where the right holder has not reserved their rights in relation to the work. If a right holder has reserved their rights through an agreed mechanism, a licence would be required for data mining. Possible types of rights reservation, and the extent to which they can be supported using technology, are explored in more detail below.
- (d) It would be underpinned by greater transparency about the sources of training material, to ensure compliance with the law and build trust between right holders and developers. Possible approaches to transparency are set out in more detail below.

76. This approach is similar to the EU's exception for text and data mining, provided by Article 4 of the Digital Single Market Copyright Directive (Directive (EU) 2019/790). The features of this approach are considered in more detail below.

Question 4. If so, what aspects do you consider to be the most important? If not, what other approach do you propose and how would that achieve the intended balance of objectives?

Question 5. What influence, positive or negative, would the introduction of an exception along these lines have on you or your organisation? Please provide quantitative information where possible.

Legal effects of the rights reservation

77. Giving right holders the ability to reserve their rights under the exception means that they will be able to prevent use of their works for AI training. If a developer were to copy a work to train their AI model, despite a right holder expressly reserving their rights in that work, then this would infringe copyright.

78. By reserving their rights, right holders would also be able to continue to license their works for AI training. For example, a news publisher might routinely reserve rights in its publications. By doing so, it would be able to negotiate licences with organisations that wish to use its works to train AI models, in exchange for remuneration. In this way, the exception supports and encourages a market in licensing works, collections, and datasets, alongside the use of other (usually lower value) material under the exception. Licensing activity may also be supported by accompanying transparency measures to ensure right holders are aware where their work is used in training AI models.

79. However, the experience of the EU to date has shown that it is not always clear what constitutes a valid rights reservation under this model. If we are to implement this approach, we want it to be as clear as possible to all parties when a work cannot be used under the exception, and what the consequences of using it will be.

80. To help ensure this, we propose that rights in works made available online should be reserved using effective and accessible machine-readable formats, which should be standardised as far as possible. This is explored in the section below. Where rights are reserved in an accepted format for any of the right holders in a work, the exception would not apply, and a licence would be required for data mining.

81. Such an approach will prevent the use of copies of a work to which a machine-readable reservation has been applied. But other copies of the same work may exist to which it has not been applied. In that situation, it may be desirable that the effects of a rights reservation apply more broadly than the individual copy to which it applies. This would require developers to make efforts to ensure that the use of any expression of the same work is avoided.

Question 6. What action should a developer take when a reservation has been applied to a copy of a work?

Question 7. What should be the legal consequences if a reservation is ignored?

Question 8. Do you agree that rights should be reserved in machine-readable formats? Where possible, please indicate what you anticipate the cost of introducing and/or complying with a rights reservation in machine-readable format would be.

C.2 Technical standards

82. There is a growing use of rights reservation protocols and standards by both AI developers and right holders. Over half of news publishers [block the main generative AI web-crawlers \(https://palewi.re/docs/news-homepages/openai-gptbot-robotstxt.html\)](https://palewi.re/docs/news-homepages/openai-gptbot-robotstxt.html) using the robots.txt standard. AI developers generally respect this standard and offer various implementations of it. For example, [Google \(https://developers.google.com/search/docs/crawling-indexing/overview-google-crawlers\)](https://developers.google.com/search/docs/crawling-indexing/overview-google-crawlers), [Microsoft Bing \(https://blogs.bing.com/webmaster/september-2023/Announcing-new-options-for-webmasters-to-control-usage-of-their-content-in-Bing-Chat\)](https://blogs.bing.com/webmaster/september-2023/Announcing-new-options-for-webmasters-to-control-usage-of-their-content-in-Bing-Chat) and [OpenAI \(https://platform.openai.com/docs/bots\)](https://platform.openai.com/docs/bots) each adopt their own approach.

83. Another approach is to associate metadata with a work itself, flagging to any AI model or its developer that the work is, or is not, available for training. Various standards have been developed to support this, though these are not consistently adopted by AI developers.

84. Some AI firms and dataset owners also offer right holders the ability to notify them more directly that they do not want their works to be used for training AI. Sometimes this requires that right holders notify AI firms about individual works. But technologies are available which simplify the process of notification, such as Spawning.AI's [“Do Not Train” \(https://haveibeentrained.com/\)](https://haveibeentrained.com/) registry. This type of approach can be used to block training on works which are already present in an AI training dataset, regardless of how they were obtained.

85. We welcome the development of these technologies. Their adoption will be key to a system that works for both the creative and AI industries. But at present there is a lack of standardisation in this area, with right holders often having to deal with multiple different systems. They are not always easily accessible, and may not meet their needs. There are also no

requirements for AI firms to have such systems in place. Some of the systems that do exist have been criticised for being difficult to use, especially at scale. For example, an image library or collective management organisation may wish to reserve rights in its whole catalogue of works but may find this difficult to achieve.

86. Additionally, the most widely-adopted standard – the robots.txt standard – cannot provide the granular control over the use of works that many right holders seek. It allows works to be blocked from web crawling at the site level but does not recognise reservations associated with individual works. It also does not enable right holders to distinguish between uses of works. For example, they may be content for web crawlers to use their works for search indexing or language training, but not for generative AI. Robots.txt does not currently allow for this degree of control.

87. We believe further standardisation in this area is needed, so that publishers of content on the internet can easily reserve their rights, and AI developers can easily respect these decisions. Regulation may also be required to support the adoption of standards and to ensure that protocols and metadata that are used to reserve rights are recognised and complied with.

88. Any regulation would need to avoid overly prescriptive provisions and concentrate on outcomes to ensure that it adapts to technical development. We would also want to engage with standards initiatives being taken forward by industry and by other international partners, such as the EU, to ensure a collaborative approach. An example is the recent workshop held by the IAB (Internet Architecture Board) to consider extending the robots.txt standard to communicate more granular opt-out choices.

89. We welcome your views on the approach that we should take to accelerate development of these tools and standards and ensure their adoption, including those with expertise in this area to develop the approach.

Question 9. Is there a need for greater standardisation of rights reservation protocols?

Question 10. How can compliance with standards be encouraged?

Question 11. Should the government have a role in ensuring this and, if so, what should that be?

C.3 Contracts and licensing

Contractual relationships

90. The Internet is not the only source of material for AI training. Material will often be licensed through contractual relationships. This may be done directly between a creator and an AI developer, or through a third party such as a publisher or collective management organisation to whom a creator has assigned or licensed their rights.

91. The party with ultimate control over how and whether rights are reserved will therefore often not be the original creator or performer, but the party to whom their works have been licensed. The creator or performer will have the opportunity to agree with that party, in their contract with them, whether they permit their work to be used for specific purposes.

92. It is an important principle in copyright law that right holders are free to contract their exclusive rights. However, some creators, performers and other right holders feel they do not always have sufficient control in these relationships. For example, standard terms and conditions for some services require works to be licensed on a broad basis which provide little choice to their users. It may be difficult for right holders to control the use of their work with AI, as terms relating to this may be bundled in with other contractual terms or framed in broad or vague language.

93. Creators and performers have complained about these practices. They also highlight that it is often difficult to avoid entering into such contracts where there is an industry expectation to use certain tools and services to create and publicise their content.

Question 12. Does current practice relating to the licensing of copyright works for AI training meet the needs of creators and performers?

Question 13. Where possible, please indicate the revenue/cost that you or your organisation receives/pays per year for this licensing under current practice.

Question 14. Should measures be introduced to support good licensing practice?

Collective licensing and data aggregation

94. Often creators and performers license their rights to collective management organisations (CMOs), who are given a mandate to license their members' works on a blanket basis. Collective licences are often the most efficient way to license large numbers of works. Licensing through a CMO is often convenient for right holders and provides them with better remuneration than they could achieve through individual licensing. Collective licensing is also often a convenient way for firms to gain access to large collections of works.

95. For AI developers to have easy access to licensed material, in particular small firms and new entrants, it will be important for collective licences to be available and accessible to them. It will also be important that collective management organisations are able to reserve the rights of their members effectively.

96. New structures may be needed to support the aggregation and licensing of data for AI training purposes. It is noted that some industry solutions are already beginning to emerge in this space, but it is not yet clear whether these new services will be able to meet demand.

97. The government intends to support good licensing practice where appropriate to ensure that right holders can seek fair remuneration for their work, and that AI developers have viable means to access datasets. Exploring a TDM exception with rights reservation mechanisms, underpinned by enhanced transparency measures, may be a viable route for facilitating the agreement of licences. This will meet the needs of both right holders and AI developers.

98. We welcome views on good licensing practice and whether current practices support right holder control. We also welcome views on the role of collective licensing and aggregation/brokering services in providing access to copyright works and remuneration for right holders.

Question 15. Should the government have a role in encouraging collective licensing and/or data aggregation services? If so, what role should it play?

Use of AI in education

99. Much of the public debate about copyright and AI concentrates on creative professionals, the creative industries, and AI developers. However, a range of other individuals and bodies also create and use copyright works and may be affected by any policy changes. We want to ensure that all views are considered.

100. For example, copyright and the use of AI tools is relevant to pupils, schools, and the wider education system. We want to find approaches to ensure that:

- high-quality AI tools that support teachers can be developed
- the rights of pupils as creators of intellectual property can be protected
- the management of pupil IP does not add unnecessary burdens to the education workforce

101. The IPO will support the Department for Education to explore this with children, young people, parents, carers, and teachers, to ensure their views

are considered in the design of any subsequent processes or solutions.

102. We would welcome views on issues relating to copyright and AI which affect other specific sectors, bodies, and individuals.

Question 16. Are you aware of any individuals or bodies with specific licensing needs that should be taken into account?

C.4 Transparency

103. The success of a new approach to copyright and AI will depend on it commanding the trust of its users and confidence that it can be applied in practice. Robust transparency measures are fundamental to building that trust, and we will not introduce an exception without them.

104. It is difficult for right holders to determine whether their works are being used to train AI models. Some developers use works from databases which are open to the public and can be scrutinised by third parties. But others do not disclose the source of the works they use in training, or only disclose limited information about them.

105. This can make it challenging for right holders to enforce their rights. Many right holders argue that AI developers should be more transparent about the sources of works used for AI training, and that they should meet minimum transparency standards.

106. The provenance of training data can also have important implications for those intending to implement AI tools. It has been argued that greater transparency would allow for a better assessment of legal liabilities for users and encourage uptake and deployment of new systems.

107. We believe these arguments have merit, and that increased transparency by AI developers will be crucial to ensuring copyright law is complied with and can be enforced. Transparency over AI model data is also crucial for consumers to understand the provenance of the content they are accessing. Regulation may be needed to ensure that this happens and the government will consider the case for it as it further develops its approach to AI regulation.

108. Transparency measures could include requirements for AI firms and others conducting text and data mining to disclose the use of specific works and datasets. Details of web crawlers could also be disclosed, for example including ownership and the purposes for which content is being crawled.

They could also include requirements to keep records, to provide certain information on request, or to evidence compliance with rights reservations.

109. However, disclosure of training materials may present practical challenges to AI developers (particularly small businesses and new entrants), when such a large quantity of works is used in the training process. The government will consider whether and how it should support the development of new technical tools supporting transparency, potentially including through research and development funding.

110. There are also legitimate reasons to restrict certain information – for example where it has been provided under a commercial contract or where disclosure would compromise trade secrets. We want to ensure that any transparency requirements are proportionate and justified.

111. [Article 53\(1\)\(d\) of the EU's AI Act \(https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202401689\)](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202401689) recently introduced a requirement that AI training sources are reported. AI providers are required to make publicly available a “sufficiently detailed summary” of training content. Such reporting does not have to be exhaustive. It can be achieved, for example, by listing the main data collections or sets that went into training a model, and summarising other sources. A template to support reporting is currently being developed.

112. Similarly, [California's Assembly Bill 2013 \(https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2013\)](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2013) (AB 2013) will require generative AI developers to disclose information about the datasets used to in, train, test, and validate their models. The bill will require that documentation includes, among other requirements, a high-level summary of the datasets used in the development of the system or service. We intend to engage with the EU and other international partners as they develop their approach and will consider international interoperability.

Question 17. Do you agree that AI developers should disclose the sources of their training material?

Question 18. If so, what level of granularity is sufficient and necessary for AI firms when providing transparency over the inputs to generative models?

Question 19. What transparency should be required in relation to web crawlers?

Question 20. What is a proportionate approach to ensuring appropriate transparency?

Question 21. Where possible, please indicate what you anticipate the costs of introducing transparency measures on AI developers would be.

Question 22. How can compliance with transparency requirements be encouraged, and does this require regulatory underpinning?

Question 23. What are your views on the EU's approach to transparency?

C.5 Wider clarification of copyright law

113. If we were to introduce a new exception in this area, we would also want to ensure that existing ambiguity in the law is removed. It should be clear to commercial AI providers operating in the UK what they need to do to comply with UK law. To ensure this, we will consider clarifying copyright law in the following areas:

Treatment of models trained in other jurisdictions.

114. Many AI models that are used in the UK have been trained outside the UK's jurisdiction. As copyright is territorial, that jurisdiction's copyright law will apply to the training of that AI model, rather than UK copyright law.

115. We believe the exception with rights reservation approach described above will make the UK's regime internationally competitive and encourage AI developers to train their models in the UK and in compliance with UK law. This would strengthen right holders' ability control use of their material to train AI and be remunerated for its use.

116. In addition, we want to encourage AI developers operating in the UK to comply with UK law on AI model training, even if their models are trained in other countries. This will help to ensure that developers which train their models in the UK are not at a disadvantage, and right holders can more easily enforce their rights. To encourage this, we want to ensure that the UK's copyright provisions are internationally interoperable and do not lead to unreasonable burdens for AI providers, which often operate across multiple jurisdictions.

117. To develop work towards international interoperability, we intend to engage with international partners, including the EU and US, and across international for a including the G7 and G20, to work together and align approaches, where appropriate.

118. We will also consider whether other measures could help to establish a level playing field between providers of models which are trained within the

UK, and those trained outside the UK but made available for use in the UK market.

Question 24. What steps can the government take to encourage AI developers to train their models in the UK and in accordance with UK law to ensure that the rights of right holders are respected?

Question 25. To what extent does the copyright status of AI models trained outside the UK require clarification to ensure fairness for AI developers and right holders?

119. **The “temporary copies” exception.** This exception permits temporary copies to be made during technological processes – for example, copies held in browser caches or displayed on computer screens. It has been argued by some that this exception applies to the training of generative AI models, but it is not clear if this would be the case. When this exception was introduced by the EU in 2001, generative AI technology was not as developed as it now is. In view of this current uncertainty, there may be a case for clarifying the scope of this exception.

Question 26. Does the temporary copies exception require clarification in relation to AI training?

Question 27. If so, how could this be done in a way that does not undermine the intended purpose of this exception?

C.6 Encouraging research and innovation

120. To meet its goal of supporting innovation and research, the government wants to ensure that any regulatory burdens that apply to AI developers in the UK, and innovators more widely, are proportionate to the issues they aim to address.

121. The current public debate on copyright and AI has concentrated on large, commercial, generative AI models. These models are the most widely used and their outputs are likely to have the greatest effect on the creative industries.

122. But AI and data mining have many other applications, whose outputs are unlikely to affect the creative industries to the same degree. These include research applications – for example, the use of AI to identify candidates for drugs or treatment pathways. They also include non-generative commercial applications such as image and music recognition –

technologies which may be employed by right holders to create commercial products or to prevent online piracy.

123. UK copyright law already provides a [specific exception for data mining](https://www.legislation.gov.uk/ukpga/1988/48/section/29A) (<https://www.legislation.gov.uk/ukpga/1988/48/section/29A>) for non-commercial research in section 29A Copyright, Designs and Patents Act (CDPA). This is in recognition of the particular benefits in the area of research. The EU also has a specific exception which permits data mining for research in Article 3 [Digital Single Market Directive](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A32019L0790#d1e953-92-1) (<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A32019L0790#d1e953-92-1>). These data mining research exceptions are broadly similar in aim. However, the UK's exception applies to both research institutions and researchers themselves. This means that individual researchers can benefit from the UK exception, whereas the EU's exception applies to specific research organisations and cultural heritage institutions. The EU exception also permits commercial research, and extends to databases as well as copyright works, whereas the UK's does not. We welcome views on whether the UK's approach remains fit for purpose.

124. More broadly, regulatory requirements may be adapted to consider the size of firms, or to the purpose and effect of the technology. This is the approach taken in the EU's AI Act, for example. We welcome views on whether a similar approach should be followed in copyright.

Question 28. Does the existing data mining exception for non-commercial research remain fit for purpose?

Question 29. Should copyright rules relating to AI consider factors such as the purpose of an AI model, or the size of an AI firm?

D. AI outputs

125. The final part of this document addresses the outputs generated by AI. Generative AI is now capable of outputting material that closely resembles human-created content. This has raised several concerns from the creative industries, including copyright infringement in outputs and the need for appropriate labelling. They also raise the extent to which copyright and other IP rights should apply to the outputs generated by AI.

D.1 Computer-generated works: protection for the outputs of generative AI

126. It is possible for the outputs of AI models to be protected by copyright. Three different types of protection may apply, depending on the type of output and how it was created.

127. First, output may qualify as a literary, dramatic, musical, or artistic work (an “authorial work”), under section 1(1)(a) of the Copyright, Designs and Patents Act 1988 (CDPA). To be so protected it must be original, in the sense that it is the intellectual creation of its author, reflecting their personality and creative choices.

128. In general, any work made using AI as a tool, but where the creative essence of the work comes from a human creator will fall in this category. An example could be where someone uses [Adobe’s Generative Fill](https://www.adobe.com/uk/products/photoshop/generative-fill.html?mv=search&mv=search&mv2=paidsearch&sdid=FMHMZ65L&ef_id=8705195e28241d67338e7f8bf49d2347:G:s&s_kwcid=AL!3085!10!79302485194484!79302880890653) (https://www.adobe.com/uk/products/photoshop/generative-fill.html?mv=search&mv=search&mv2=paidsearch&sdid=FMHMZ65L&ef_id=8705195e28241d67338e7f8bf49d2347:G:s&s_kwcid=AL!3085!10!79302485194484!79302880890653) tool to make edits to their own photograph. This would qualify for copyright under section 1(1)(a), based on originality in the photograph.

129. We will refer to such works as “AI-assisted works” – works with a human creator, making use of an AI tool. They are protected in similar terms in the EU and the US as they are in the UK.

130. Secondly, output may qualify as a sound recording, film, broadcast, or published edition. Such “entrepreneurial works” do not need to be original to benefit from protection. As such, a recording of AI-generated music will benefit from protection regardless of the degree of human input into that music. The owner of rights in such a work is the person who made arrangements for it to be produced.

131. Thirdly, section 9(3) of the CDPA provides specific protection for “computer-generated works” (CGWs). This protection, which lasts for 50 years, applies to a literary, dramatic, musical, or artistic work which is “generated by computer in circumstances such that there is no human author” of the work. The author of such a work is the person “by whom the arrangements necessary for the creation of the work are undertaken”. In the case of a general-purpose AI which generates output in response to a user prompt, the “author” will usually be person who inputted the prompt.

132. In 2021 the government consulted on the extent to which the CGWs provision is used and whether it should be kept, removed, or amended in scope and duration. Although some respondents indicated that they do use the provision, none provided specific evidence of this. Given the minimal evidence received and the likelihood of further technological developments, the government decided to maintain the legislation but to keep it under review.

133. At the time of that consultation, generative AI tools were not as developed or as widely available. Recent significant updates in generative

AI have brought renewed attention to how – and whether – AI outputs should be protected by copyright. We therefore believe it is appropriate to revisit this question.

Criticism of the computer-generated work provision

134. The section 9(3) computer-generated work provision has been criticised on two main grounds:

135. First, there appears to be a legal contradiction within section 9(3) which leads to uncertainty about its interpretation. This is because the provision applies only to literary, dramatic, musical, and artistic works which are original. The modern legal test for originality is that a work must be an “author’s own intellectual creation” which is the expression of their creative choices and reflects their “personal touch”. [\[footnote 1\]](#) This test is very much associated with human qualities, suggesting that a work created by a non-human could not be “original”. However, section 9(3) only applies to works “without a human author”.

136. This contradiction has led some to question whether the provision could ever apply in practice. In our view, it is unlikely that a court would conclude that it can never apply, as Parliament clearly intended the provision to have an effect. But it is unclear in the absence of case law how an “original” yet wholly machine-authored work would be defined.

137. The second criticism is that CGW protection (as a distinct category of protection) is not needed – that it either has no effect, or that it has a detrimental effect. The arguments here are both economic and moral. The economic argument is that CGW protection has little or no positive incentive effect, so is unnecessary regulation with unjustified costs to third parties. The moral argument is that only human-created works deserve protection, and that protection of CGWs is to the detriment of human creation.

138. Below we assess three policy options against the following objectives:

- **clarity:** The copyright framework should provide legal clarity on what is and is not protected by copyright, for the benefit of right holders and users
- **incentives:** Copyright should encourage and reward creative output but should not over-regulate where it is not needed
- **balance:** Copyright should encourage human endeavour while not hindering technological development

D.2 Policy options

Option 0: No legal change, maintain the current provisions

139. One option is to do nothing and maintain the status quo. This would be justified if there were evidence that CGWs protection is necessary to encourage the production of outputs by generative AI or other tools, and any legal ambiguity is likely to be resolved or of little effect.

140. An AI model does not respond to the same motives as human creators, such as economic reward and public recognition. It is therefore unlikely that copyright protection provides any motive to an AI service itself. However, it is possible that it acts as an encouragement to the users of AI services. We think it is unlikely to provide a motive to generative AI developers, given that copyright in outputs is likely to belong to users. However, there may be indirect effects. For example, it is possible that protections for CGWs encourage use and adoption of AI tools by individuals and organisations. If this were the case, CGWs protection could encourage adoption of AI across the economy, enhancing productivity and economic growth. Comparatively removing such protections could undermine adoption of AI and limit associated positive effects.

141. Many other countries – including the US and most EU member states – do not provide this type of protection. We are not aware of any evidence suggesting that use of AI is greater in the UK, or other countries with CGWs protection, compared to countries which do not provide specific CGWs protection.

142. Limited information was received during the 2021 consultation on the extent to which AI users and developers relied on CGW protection. Since that consultation, the capabilities of generative AI models have dramatically increased. Whether CGWs protection has played a role in encouraging the use or development of this technology is unclear.

143. The CGWs provision appears to have little, if any effect on the production of content or on AI development. Maintaining the current provision as drafted may also perpetuate legal uncertainty around its scope. However, there is in general a lack of evidence in this area. Generative AI outputs are much more sophisticated than they were in 2021 when evidence was last sought. In view of our current evidence base there does not appear to be a strong justification for maintaining this current form of protection. In view of these factors, the government is minded to reject the option to maintain the CGWs provision as presently drafted. However, we welcome information on whether this provision is being used, its economic effect, and how it is being interpreted in practice.

Question 30. Are you in favour of maintaining current protection for computer-generated works? If yes, please explain whether and how you currently rely on this provision.

Question 31. Do you have views on how the provision should be interpreted?

Option 1: Reform the current protection to clarify its scope

144. Under this option we would clarify the existing copyright protection for CGWs. Protection of AI outputs by “traditional” copyright (authorial and entrepreneurial) would be unaffected.

145. As described above, the criteria for protection of a CGW is not clear. There is a lack of clarity about how a work created without a human author can be “original”, as understood in copyright law.

146. Under this option, the role of “originality” in relation to CGWs would be clarified. This could be done by removing an originality requirement altogether – as is the case for existing “entrepreneurial works”.

147. Alternatively, originality could be defined in some way. For example, it has been suggested that a CGW could be taken to be original if an identical human-authored work would have been considered original.

148. Clarification of this provision would be justified if there is evidence that this form of protection has economic benefits, and that greater legal clarity would make it more effective. In particular, it would be justified if this provision is likely to encourage development or investment in generative AI services.

149. As noted under Option 0, there appears to be little evidence of use of this provision and its value is unclear. However, it is possible that a provision that is defined differently will be of greater value and provide the intended effect encouragement. The government will therefore assess this option considering evidence received through the consultation. We welcome information on whether this provision would be of value if clarified, how that should be approached, and evidence of its economic effects.

Question 32. Would computer-generated works legislation benefit from greater legal clarity, for example to clarify the originality requirement? If so, how should it be clarified?

Question 33. Should other changes be made to the scope of computer-generated protection?

Question 34. Would reforming the computer-generated works provision have an impact on you or your organisation? If so, how? Please provide quantitative information where possible.

Option 2: Remove specific protection for computer-generated works

150. Under this option we would remove the specific protection provided to CGWs by s9(3) CDPA. Works that are AI-assisted but which exhibit human creativity would continue to be protected. AI-generated music and video could continue to be protected as sound recordings, films, and broadcasts.

151. As other forms of protection will continue to apply, the main effect of removing protection (if any) would appear to be on content generated by AI without a human creator which takes the form of images or text.

152. Internationally, most leading AI nations do not provide copyright protection to works created without a human author. This is the case in the US and in most EU Member States. However, some countries do have similar provision to the UK, such as India, Ireland, and Singapore.

153. We are not aware of any evidence that the presence of a CGWs provision has led to an increase in generated AI outputs. We are also unaware of increased investment in AI technology compared to territories that do not provide this protection. This suggests a specific CGW right is not necessary to encourage the production of content using generative AI.

154. Responses to the 2021 consultation suggested little evidence of reliance on CGWs protection, and some raised concerns about its potential effect on human creativity. Since then, as generative AI has developed, some creator groups have taken strong stances against protection of works which are wholly created by AI, such as the [Human Artistry Campaign](https://www.humanartistrycampaign.com/) (<https://www.humanartistrycampaign.com/>).

155. **Should consultation reveal insufficient evidence of positive effects from CGWs protection, our preference will be to remove it.** However, as the capability of generative AI has increased considerably since the 2021 consultation, we do not take a definitive view on this option at this stage, and we welcome up-to-date evidence with which to assess it.

Question 35. Are you in favour of removing copyright protection for computer-generated works without a human author?

Question 36. What would be the economic impact of doing this? Please provide quantitative information where possible.

Question 37. Would the removal of the current CGW provision affect you or your organisation? Please provide quantitative information where possible.

D.3 Computer-generated works interaction with designs

156. UK law on registered and unregistered designs includes similar provisions on computer-generated designs to those in copyright law. The author of a computer-generated design is “the person by whom the arrangements necessary for the creation of the design are made”. In the previous 2021 AI and IP consultation, no significant concerns were raised about these provisions. In this consultation we are not proposing any changes to the designs framework, but this will be considered separately in the future.

D.4 Infringement and liability relating to AI-generated content

157. Content generated by an AI model will infringe copyright in the UK if it reproduces a “substantial part” of a protected work.

158. Copyright does not extend to ideas and concepts as such but protects individual expressions of creativity. Although many AI models learn from copyright works, usually their outputs will not include the creative expression in those works. For example, if a text to image generative AI tool (which is trained on a dataset of millions of works) is asked to generate an image of a dog, it is unlikely to generate a copy of a specific work that it was trained on.

159. However, there is evidence that on occasion, such AI models can and do output individual copyright works, or substantial parts of them. It is a copyright infringement to reproduce a protected work, or to communicate that work to the public, without permission (unless a relevant exception applies).

160. Depending on the circumstances, both the user and provider of a model may be liable for infringement of copyright. For example, if a user specifically requests an AI service to reproduce an artist’s work and the service does so, each may be liable. We are aware that providers of generative AI services often take steps to avoid outputting protected works, for example by filtering prompts and outputs. It is not clear how effective such approaches are in practice.

161. In our view, the copyright framework in relation to infringing outputs is reasonably clear and appears to be adequate. As there are a wide range of AI technologies and uses, it will not always be easy to determine infringement or liability, but this is also true of other uses of technology to disseminate copyright works. We expect that greater control and

transparency over the inputs to AI models, such as the measures proposed above, is likely to have a significant effect on the availability of infringing outputs. However, we would welcome views on whether there are specific areas where you consider copyright law to be deficient, where it is applicable to AI outputs. We would also like to hear where there are any barriers to enforcement.

162. We would also welcome views on the value of practical measures that may be put in place by generative AI providers, such as keyword filtering.

Question 38. Does the current approach to liability in AI-generated outputs allow effective enforcement of copyright?

Question 39. What steps should AI providers take to avoid copyright infringing outputs?

D.5 AI output labelling

163. Various initiatives have been developed by industry to label the outputs of AI models, to better inform the public. Such approaches can be viewed as a form of transparency for AI outputs. They contribute to a variety of policy questions related to AI and have a particular value where they provide disclosure about information that is relevant in a copyright context.

164. At present, it can be difficult to determine whether a work has been generated by AI. There are several industry initiatives to label AI outputs. One example is Meta's 'AI info' label which users can click on for more information on the content.

165. We believe AI output labelling is beneficial to copyright owners and service providers and should be encouraged. Among the benefits are more informed consumer choice. For example, where a song is AI generated and labelled as such, music listeners would benefit from this information to make informed choices on the music they listen to. Labelling can also support source attribution, for example where AI is being used to summarise articles on a specific news story.

166. Regulation may be needed to help ensure labelling happens consistently and the government will consider the case for it as it further develops its approach to AI regulation. As part of this, we will consider the range of areas where output transparency can be valuable and ensure any interventions support consistency and avoid unnecessary complexity. We have noted with interest developments in other jurisdictions such as the EU. The EU AI Act establishes transparency rules for content produced by

generative AI. They require AI outputs to be machine readable and detectable as AI generated or manipulated. The EU's AI Office has been tasked with issuing guidelines and encourage codes of practice to ensure effective implementation of these obligations.

167. However, we appreciate there are practical challenges for AI developers to ensure consistent AI output labelling. There are considerations to what level or degree of AI should require an AI output label in any definitions and standards. For example, if an AI retouching tool was used on a non-AI-generated image, the whole image may be labelled as computer-generated. There are questions over how such images should be labelled and the degree of information that it is reasonable to provide about them.

168. Other technical challenges associated with AI output labelling may include scalability for content provenance initiatives. In addition, ensuring labels are resilient to manipulation either by editing the label itself or removing the label entirely from a piece of content. The government will consider whether and how it could support research and development into labelling tools that support transparency that is valuable for copyright.

Question 40. Do you agree that generative AI outputs should be labelled as AI generated? If so, what is a proportionate approach, and is regulation required?

Question 41. How can government support development of emerging tools and standards, reflecting the technical challenges associated with labelling tools?

Question 42. What are your views on the EU's approach to AI output labelling?

D.6 Digital replicas and other issues

169. Another area of concern to the creative industries, in particular to actors and singers, is use of AI to create “digital replicas” (sometimes called deepfakes). We define digital replicas as images, videos and audio recordings created by digital technology to realistically replicate an individual's voice or appearance.

170. The rapid development and use of AI tools has led to an increase in the volume and quality of digital replicas. Sometimes they are made without the consent of the individual featured in them. The AI tools used to make them may be trained on an individual's voice and appearance, and the

proposals set out in the first part of this consultation are relevant in these cases. It is possible that an approach which enables individuals to reserve their rights for copyright works at the input stage may also help them control the use of their voice or appearance at the output stage.

171. Some legal protection does already apply to “personality” in the UK. This includes existing intellectual property rights and the common law tort of passing off, which protects against misrepresentation in a commercial environment. Copyright and related rights may help people to control or prevent the creation of digital replicas. For example, rights in sound recordings may be used to prevent training on a singer’s voice contained in those recordings.

172. Rights in performances may also be relevant to the creation of digital replicas. Performers’ rights are set out in Chapter 2 of the CDPA 1988. They are given to performers to enable them to control or be remunerated in relation to their performances. For example, they may apply to an actor’s performance in a film or a vocalist’s performance on a record.

173. Some respondents to the 2021 consultation suggested performers’ rights should be reviewed in light of AI. They raised concerns that AI may be used to produce unauthorised reproductions of performances, via imitation, re-performance, or synthetisation, and suggested that stronger rights in performances may help to prevent this.

174. Another area of existing law that may be relevant is data protection. Under data protection law, individuals have various rights regarding the processing of their personal data. In the context of AI systems, various rights apply whenever personal data is involved. This includes instances where personal data is used to train AI models or appears in AI-generated outputs.

175. Some in the creative industries have proposed that “personality rights” should be introduced in the UK to give individuals greater control over how their likeness or voice is used. In particular, actors and singers argue that AI outputs like digital replicas put their livelihoods at risk.

176. We note recent developments in the United States, including the July 2024 US Copyright Office report on [digital replicas](https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-1-Digital-Replicas-Report.pdf) (<https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-1-Digital-Replicas-Report.pdf>), which recommends the introduction of a Federal Digital Replica Law. We also note the [California Assembly Bills 2602](https://legiscan.com/CA/text/AB1836/id/2884620) (<https://legiscan.com/CA/text/AB1836/id/2884620>) and 1836, which seek to provide protection to performers in the context of AI-generated digital replicas.

177. The legal landscape here is complex and extends beyond intellectual property rights. The introduction of a new type of intellectual property protection for personality in the UK would be a significant step and requires

careful consideration. However, the government recognises that some individuals wish to have greater control over whether content can be created that includes their personality or likeness and takes their concerns seriously.

178. While we are not consulting on specific proposals on personality rights, we welcome views on whether the current legal framework remains fit for purpose. This includes whether individuals have sufficient control over their personality. You are welcome to share your views with us and there will be opportunities to engage with us on this topic in the future.

179. [The Information Commissioner's Office \(https://ico.org.uk/GenAI\)](https://ico.org.uk/GenAI) (ICO) is currently reviewing the intersection of generative AI and data protection, and how the UK General Data Protection Regulation (UK GDPR) and the Data Protection Act 2018 apply. ICO's response to its consultation on generative AI and further guidance on this area will be issued in due course.

Question 43. To what extent would the approach(es) outlined in the first part of this consultation, in relation to transparency and text and data mining, provide individuals with sufficient control over the use of their image and voice in AI outputs?

Question 44. Could you share your experience or evidence of AI and digital replicas to date?

D.7 Other emerging issues

180. New questions will emerge about the application of the UK's copyright framework as AI capabilities and products continue to develop.

181. While this will be challenging, the government intends to keep track of emerging issues and front-footed in its approach. Where required, we are prepared to take further action to provide AI developers and adopters with certainty about how to innovate in compliance with the law, and to ensure that right holders' rights are clear.

182. The approach set out in this consultation addresses the issues we currently consider to be the most urgent and contested. We recognise the pace of technological progress and would like to hear views on what new developments in AI innovation are raising novel legal questions in relation to copyright may require attention.

183. For instance, some AI products interact with copyright works at inference. Inference is the process by which a trained AI system generates

outputs using new data. This is a separate process from model training which takes place before models are deployed. AI products can interact with copyright works at inference, for example if a user includes a copyright work in their prompt to the system. Or a system may interface with 'live' data sources in response to user prompts. For example, AI systems can summarise Internet searches or news publications, using retrieval-augmented generation (RAG).

184. The government also notes increasing use of synthetic data to train AI models. We would like to understand how this may affect the functioning of the licensing ecosystem and the UK copyright framework more broadly.

185. We would like to understand if the application of the copyright framework to these and other emerging products is clear, including its effects on right holders and AI innovation.

Question 45. Is the legal framework that applies to AI products that interact with copyright works at the point of inference clear? If it is not, what could the government do to make it clearer?

Question 46. What are the implications of the use of synthetic data to train AI models and how could this develop over time, and how should the government respond?

Question 47. What other developments are driving emerging questions for the UK's copyright framework, and how should the government respond to them?

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1. Introduced in the 2009 [CJEU ruling in Infopaq C-5/08](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:62008CJ0005) (<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:62008CJ0005>), and most recently confirmed by the Court of [Appeal in THJ Systems Ltd v Sheridan \[2023\] EWCA Civ 1354](https://www.bailii.org/ew/cases/EWCA/Civ/2023/1354.html) (<https://www.bailii.org/ew/cases/EWCA/Civ/2023/1354.html>).