

Annex - Response form

After you have read the consultation document, please consider the questions below. There is no expectation or requirement that all questions are completed. You are welcome to only answer the questions that are relevant to you, your business or organisation.

A copy of this response form is available to download from GOV.uk.

There are two sections on this form:

A. Questions arising from this consultation

B. Information about you, your business or organisation

When you are ready to submit your response, please email this form and any other supporting documentation to Alcallforviews@ipo.gov.uk.

The closing date for responses is at 23:45 on 7 January 2022.

The options for computer generated works, text and data mining and patent inventorship are summarised in the following tables.

Computer generated works	
Option 0	Make no legal change
Option 1	Remove protection for computer-generated works
Option 2	Replace the current protection with a new right of reduced scope/duration

Text and Data Mining (TDM)	
Option 0	Make no legal change
Option 1	Improve licensing environment for the purposes of TDM
Option 2	Extend the existing TDM exception to cover commercial research and databases
Option 3	Adopt a TDM exception for any use, with a rights holder opt-out
Option 4	Adopt a TDM exception for any use, which does not allow rights holders to opt out

Patent Inventorship	
Option 0	Make no legal change
Option 1	“Inventor” expanded to include humans responsible for an AI system which devises inventions
Option 2	Allow patent applications to identify AI as inventor
Option 3	Protect AI-devised inventions through a new type of protection

Section A

Copyright - computer generated works (CGW)

1. *Do you currently rely on the computer-generated works provision? If so, please provide details of the types of works, the value of any rights you license and how the provision benefits your business. What approach do you take in territories that do not offer copyright protection for computer-generated works?*

→ **"We do not rely on "the computer-generated works provision."**

Because, at present, there do not exist any of computer-generated works which are "the computer-generated works" in a genuine sense without human intervention; or the existence thereof is not a matter in question.

2. *Please rank these options in order of preference (most to least preferred) and explain why.*

→ **The order from most to least preferred options we consider is "Option 0 -> Option 2 -> Option 1" and we consider that the application of the current law should be clarified first before the change of system.**

In the current UK copyright law, the author of "the computer-generated works" is defined as "the person by whom the arrangements necessary for the creation of the work are undertaken." In addition, construction of an AI system or a program for creating "the computer-generated works" includes involvement of human creativity, and there is some extent of necessity to recover the investment for the construction. It is therefore considered that as the determination of each country, it is reasonable to maintain the current law while selecting Option 0.

Meanwhile, regarding "person by whom the arrangements necessary for the creation of the work are undertaken," it is requested to present: the previous judicial administration such as the need to prove or disprove based on what fact is needed to assert the attribution of a right by applying this provision; and practical analytical results or guidelines on, for example, regarding the entity of attribution of a right, which of (i) an AI developer, (ii) a creator of data for learning and (iii) an AI user has been identified as an author.

Further, an incidental item for consideration is to clarify a judgement criterion on whether or not the act of an AI system to create "the computer-generated works" falls under infringement of a third party's copyright. A criterion that does not prevent the development of AI technologies or culture is needed, and it is therefore considered necessary to pay attention to avoid: the case where those that should be originally responsible consequently become immune; and the case where those that should not be responsible are laden with (excessive) responsibilities. In addition, in the case that a copyright of an AI-generated work is admitted, one possible option is that an owner of that

copyright should also hold responsibility for infringement related to the generated-work, that is regarding rights and responsibilities as a unit.

3. *If we introduce a related right for computer-generated works, as per option 2, what scope and term of protection do you think it should have? Please explain how you think this scope and term is justified in terms of encouraging investment in AI-generated works and technology.*

→ **Option 2 is a progressive option, which is not unequalled in the world at present, and it is interesting. With an aim at a balanced solution that brings benefits to both copyright owners and users, we agree to gather a wide range of opinions and deepen discussions.**

4. *What are your views of the implications of the policy options and of AI technology for the designs system?*

→ **At present, we do not feel the necessity for a particular law revision.**

5. *For each option, what are your views on the risk that AI generated works may be falsely attributed to a person?*

→ **In the case that Option 1 or Option 2 is particularly introduced, it is considered that the way of differentiating "the computer-generated works" from human-created works would be a question, or there is a possible abuse that an AI-generated work is falsely and intentionally claimed as a human-created work. A possible solution is a unified copyright management by utilizing a new technology such as NFT or constructing a database.**

Copyright - text and data mining (TDM)

6. *If you license works for TDM, or purchase such licences, can you provide information on the costs and benefits of these? For example, availability, price-point, whether additional services are included or available, number and types of works covered by the licence etc.*

→ **Although there are some cases where licensing is available, we consider that the premise for arguments is it is highly necessary to select the rights management by right restriction provisions, rather than the rights management by licensing.**

The Directive on Copyright in the Digital Single Market established in April, 2019 stipulates that reproductions of lawfully accessible works can be made not only for the purposes of scientific research (Article 3) but also for the purposes of text and data mining (any automated analytical technique aimed at analysing

text and data in digital form in order to generate information which includes but is not limited to patterns, trends and correlations (Article 2 (2))) (Article 4), introduction of which has to be made by each state of EU regardless commercial or non-commercial. The reason therefor is the use thereof is expected to allow to acquire novel findings or find new trends or possibilities, and it is assumed that elimination of lawful uncertainty is indispensable for EU to hold superiority in the field of scientific research.

Likewise, it is assumed that the use thereof in UK would provide the social significance or the public good such as developments of technologies and culture beyond disadvantages on copyright owners. Thus, it is considered highly necessary to select the rights management by right restriction provisions, rather than the rights managements by licensing with high uncertainty.

7. *Is there a specific approach the government should adopt in relation to licensing?*

→ No, because we are not premised on solution by licensing.

8. *Please rank the options in order of preference (most to least preferred) and explain why.*

→ The order from most to least preferred options we consider is "Option 4 -> Option 3 -> Option 2 -> Option 1 -> Option 0.

It is assumed that use of works for TDM would provide the social significance or the public good such as developments of technologies and culture beyond disadvantages on copyright owner and therefore, the scope of current right limitation should be expanded. However, in the case that Option 4 is selected, use of copyrights for TDM should be limited to, for example, (i) the case where the use does not have purposes of enjoying ideas or emotions expressed by copyrights, or allowing others to enjoy, and the case where (ii) within a limit admitted to be necessary, (iii) the use does not unreasonably harm the interests of copyright owners in light of the type and use of copyrights and the form of the use.

In the case of selection of Option 3, the use limitation is eliminated like "for any use by anyone, commercial or non-commercial" while the opt-out is available. However, the condition that the opt-out is not available should be imposed on the use on "commercial scientific research" with no exception.

9. *If you have experience of the EU exception with opt out for rights holders, how has this affected you?*

→ We have no experience.

10. *How would any of the exception options positively or negatively affect you? Please quantify this if possible.*

→ As stated in Question 8, it is assumed that as long as use of works to TDM made within an appropriate scope, it would have positive influences from the viewpoint of the development of culture; however, quantitative evaluation thereof is difficult at present.

Patents

11. *Please rank these options in order of preference (most to least preferred) and explain why?*

→ The preference for Option 0 is far higher than other Options, and various opinions make it difficult at present to clearly indicate the superiority or inferiority of Options 1 to 3.

(1) Prerequisite to discuss the necessity of the amendment of the law (Option 0 vs. Options 1-3)

Creation of inventions by the use of AI still requires a great deal of human involvement. Therefore, as a prerequisite for discussing the law revision, UKIPO should verify first whether there exists today a new legislative fact, in this case, the fact that an invention is indeed created without any human who meets inventorship criteria under the current law. It should be noted that such new fact is something a person demanding the law revision needs to demonstrate in ordinary circumstances.

(2) Options to take for the law amendment

As a result of such verification,

(i) If the existence of such fact is not confirmed, it must be to select Option 0.

(ii) If it is confirmed, the globally harmonized law revision should be sought for by evaluating the pros and cons of various options for law revision, without introducing a system peculiar to UK alone.

Regarding the problem on AI inventorship, as described above, whether or not an invention is created without a human inventor is quite an important problem. What is necessary to deal with this problem is to determine whether or not a human involved is an inventor in light of the requirement under the current law when an invention is created using AI. Therefore the criterion for making such determination is necessary. Regrettably, the patent offices all over the world including UKIPO fail to indicate a proper criterion.

Accordingly, before the law revision, it is absolutely necessary for UKIPO to properly organize and indicate such a criterion. Then, after the determination on whether or not a human inventor is identified according to the criterion, the necessity of the law revision should be discussed.

(3) In studying various options including Options 1 to 3, the following points should be taken into consideration.

(i) The necessity to create a new right (Option 3) is considered low at present. Regardless of whether there is a human inventor (invention protected under the current law) or not (could be protected under the revised law), it is sufficient that the protection requirements or the scope of the protection on a created invention may be basically the same as the protection under the patent law. It is enough to consider the introduction of protection by a new right only when it reaches the stage that an invention is created with very little or no human involvement (which could be decades ahead), and therefore it is too early to do so.

(ii) For creation of an invention by use of AI, it is necessary to improve AI by repeating a cycle of construction of AI, its use, evaluation of its output, and reconstruction, reuse and re-evaluation numerous times with the aim of solving a specific problem. In order to create an invention by use of AI, it is a reality that a human has to spend enormous time and effort today and for some time in the future.

If a person who developed AI by programming etc. is actually involved in the process of the above cycle for invention creation and makes a technical contribution to solution to the specific problem, that person can be an inventor under the current law. Meanwhile, it is not necessary to recognize, as an inventor, a person who programmed but not is involved at all in the inventing cycle.

Option 1 of UKIPO may recognize a person as an inventor on the ground that the person did AI programming regardless of whether the person has been involved in the process of the cycle for invention creation. It should be noted that there are opinions to clearly oppose to such law revision, depending on the technical field.

12. Would the changes proposed under Options 1, 2 and 3 have any consequential effects on the patent system, for example on other patentability criteria?

→ Introduction of Options 1 to 3 may affect other patent requirements. Thus, in the case that the issue of AI inventorship is treated differently in different countries, various patent requirements besides the inventorship may also be varied depending on the country, and causing a large adverse impact. To avoid the adverse impact, it is considered that the statutory treatment of an inventor should be harmonized internationally and it should be also necessary to issue internationally harmonized guidelines, which indicate determination criteria to identify an inventor.

For options 1 and 2:

13. If UK patents were to protect AI-devised inventions, how should the inventor be identified, and who should be the patent owner? What effects does this have on incentivising and rewarding AI-devised inventions?

- > (i) For determination criteria on the statutory treatment on who should be an inventor or a patent owner, the harmonization is important.
- (ii) If the root issue of the Patent Law is treated in a different manner for each country, the international protection on AI-devised inventions cannot be made, preventing the incentivising of AI-devised inventions or the development of AI technologies. Further, as described above, the harmonization on other problems may be hampered.

14. *In considering the differences between options 1 and 2, how important is it that the use of AI to devise inventions is transparent in the patent system?*

- > (i) For discussions on the law revision, regarding the transparency (and accountability) of use of AI, not only the use of AI (whether and how AI is used) but also "whether a person involved is an inventor" would be a matter in question.
- (ii) Such transparency in AI usage may be a matter in question at both stages to determine the necessity of the law revision and to examine individual patent applications under the revised law. Among other things, the transparency for the former and the clarity on the determination criteria would be quite important.

15. *Would the UK adopting option 2 affect your global patent filing strategy, if so, how?*

- > If the system is different depending on the country in the future, the possibility would arise that even the same invention is protected in one country but not protected in the other country; and consequently, this possibly affects the selection of countries in which an application is filed.
For example, in the case that many patent rights on AI-devised inventions are granted based on Option 2 in UK and exercise of these patent rights is activated in UK, there is a concern that some global companies may refrain from developing businesses in the UK market. Further, after an application on an invention is filed in UK, the predictabilities on the patent acquisition on the same invention and its scope of the protection outside UK is lowered and filing of applications in UK is possibly avoided.

For option 3:

- 16. *What term and scope of protection should a new right offer?*
- 17. *What should the criteria for grant of a new right be and why? Particularly should it:*
 - a) *Replicate the current requirements for a patent?*

- b) *Set a different bar for inventive step?*
- c) *Be an automatic or registered right?*
- **The necessity to create a new right may be low at present.**

General

18. *What role does the IP system play in the decision of firms to invest in AI?*
19. *Does the first mover advantage and winner-take-all effect prevail in industries adopting AI? How would this affect the impact of the policy options proposed on innovation and competition?*
 - **Easing of the patentability or the inventors on AI-devised inventions leads to strengthening of first mover advantage or winner-take-all effect, hampering the competition, and instead, possibility leading to inhibition of innovation. For example, in the medical and biotechnology field, a claim on "a method for screening an XX inhibitory compound using YY protein" is patentable in the trilateral patent offices while a so-called reach-through claim on "a compound obtained by the screening method" is not (rejected from the viewpoint of the disclosure requirement). In the AI field, an invention on an AI tool is completely different from an invention on a work obtained by the use of AI tool (e.g., compound). Thus, just because an invention on AI tool is obtained, a work (e.g., compound) obtained by using the AI tool is not automatically completed. Thus, the system that allows a person having invented an AI tool to enjoy winner-take-all should not be adopted.**
20. *How does AI adoption by firms affect the economy? Does the use of AI in R&D lead to a higher productivity?*
21. *Do the proposed policy options have an impact on civil society organisations? If so, what types of impacts?*

Section B: Respondent information

A: Please give your name (name of individual, business or organisation).

████████████████████

B: Are you responding as an individual, business or on behalf of an organisation?

- ~~1) Business – please provide the name of your business~~
- 2) Organisation – please provide the name of the organisation
- ~~3) Individual – please provide your name~~

Japan Intellectual Property Association (JIPA)

C: If you are a responding on behalf of an organisation, please give a summary of who you represent.

████████████████████

D: If you are an individual, are you?

- ~~1) General public~~
- ~~2) An academic~~
- ~~3) A law professional~~
- ~~4) A professional in another sector – please specify~~
- ~~5) Other – please specify~~

E: If you are responding on behalf of an organisation, are you?

- ~~1) An academic institution~~
- 2) An industry body
- ~~3) A licensing body~~
- ~~4) A rights holder organisation~~
- 5) Any other type of organisation - please specify

JIPA is a non-profit, non-governmental organization with more than 1,300 members in various industrial fields. It represents industries and users of the intellectual property (IP) system and provide relevant agencies around the world with the right opinions at the right time to improve and use the IP system.

<http://www.jipa.or.jp/english/index.html>

F: If you are responding on behalf of a business or organisation, in which sector(s) do you operate? (choose all that apply)

- 1) Agriculture, forestry and fishing
- 2) Mining and quarrying
- 3) Manufacturing – Pharmaceutical products
- 4) Manufacturing – Computer, electronic and optical products
- 5) Manufacturing – Electrical equipment
- 6) Manufacturing – Transport equipment

- 7) Other manufacturing
- 8) Construction
- 9) Wholesale and retail trade; repair of motor vehicles and motorcycles
- 10) Transportation and storage
- 11) Information and communication – Publishing, audio-visual and broadcasting
- 12) Information and communication – Telecommunication
- 13) Information and communication – IT and another Information Services
- 14) Financial and insurance activities
- 15) Real estate activities
- 16) Scientific and technical activities
- 17) Legal activities
- 18) Administrative and support service activities
- ~~19) Public administration and defence~~
- 20) Education
- 21) Human health and social work activities
- 22) Arts, entertainment and recreation
- 23) Other activities – please specify

G: How many people work for your business or organisation across the UK as a whole? Please estimate if you are unsure.

- 1) Fewer than 10 people
- 2) 10–49
- 3) 50–249
- 4) 250–999
- 5) 1,000 or more

H: The Intellectual Property Office may wish to contact you to discuss your response. Would you be happy to be contacted to discuss your response?

Yes.

I: If you are happy to be contacted by the Intellectual Property Office, please provide a contact email address.



J: Would you like an acknowledgement of receipt of your response? Yes/No

Yes.