

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?*

NA

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

0=>2=>1: At the present moment, the option we prefer the most is Option 0 (Make no legal change) because, as global technology companies carry out R&D activities across countries, whether or not the existing CGW protection system in the UK should be changed needs to be further discussed carefully, in consideration of the balance with the systems in other countries. If the discussion goes in the direction of adopting Option 2 in the future, consideration should also be given to the risk that in light of the current speed of the business cycle and the technological background that can generate a large amount of CGW, an unnecessarily long period of protection could rather adversely affect the freedom of innovation.

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.*

From the perspective of encouraging AI-related investment, we propose that if the intervention by an individual is found in the process of generating an AI-generated work (e.g., programming of an algorithm, setting of a parameter, collection of training data, and tuning of the generated work), the individual or the company affiliated with the individual should be granted a right to protection of the work.

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

NA

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

The issue of false impersonation as a copyright owner can occur for any work, irrespective of whether it is generated by an individual or by AI, so we currently do not find any problem specific to AI-generated works.

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.*

NA

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

If profit is monopolized or fairness of the market is undermined, the government can take some measures for adjustment as it can in other fields; however, it should in principle be left to the free market mechanism.

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

4=>3=>2=>1=>0: From the viewpoint of companies using TDM to carry out commercial research or provide products and services, a desirable environment would be one in which they can use materials for TDM when training AI, without exception where possible, if the expressions contained in the materials are not directly enjoyed (the materials are not enjoyed as "works"). If right holders are allowed to opt out or charge a licensing fee, this would necessarily increase R&D costs. In that case, the UK is less likely to be chosen as the country where these companies would establish their commercial research bases, as compared to the countries which adopt restrictions on rights that allow freer use of works for TDM, such as Japan and Singapore (through the amendment that came into force on November 21, 2021, Singapore introduced new provisions on restrictions on rights to allow the use of works for computational data analysis, along with the provisions to invalidate contracts that prohibit such use).

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

NA

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

NA

Patents

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

The option we prefer the most is Option 0 (Make no legal change), for the following reasons.

There may be three ways in which AI contributes to the conception of an invention: (1) a natural person uses AI as a tool when conceiving of the invention (an invention of an AI algorithm or invention of application of AI); (2) both a natural person and AI jointly conceive of the invention; and (3) an AI conceives of the invention independently (an AI-created invention). Of these, we believe that the first and second cases do not require any revision to current patent laws and regulations because a natural person who has contributed to the conception of the invention can be named as an inventor. On the other hand, in the third case concerning an AI-created invention, if the AI would be allowed to be named as an inventor and the product created by the AI would be recognized as an invention that is eligible for patent protection, we would express concern over too many patents being granted which could generate patent thickets and cause confusion in industrial activities. For this reason, the majority opinion is against the idea of giving patent protection to products created by an AI alone.

Looking at the definition of the term “inventor,” an AI cannot be an inventor under the current patent law because it is not an “individual.” Therefore, we consider that the definition of the term “inventor” under the current patent law need not be revised.

Meanwhile, an AI-created invention is assumed as an invention created without human intervention, and the “outcome of the results obtained by running an AI” would no longer be an AI-created invention if there is any human intervention. Accordingly, there is a view among the companies in JEITA that the “outcome of the results obtained by running an AI” should be protected by recognizing the natural person who has intervened in the creation of the invention as an inventor.

With regard to the issue of the degree of human intervention required as an inventor’s contribution, we consider that, not only inventors of patent inventions, but also the creators of designs created by running an AI and the authors of works created by running an AI should be considered in the same manner.

As an aside, the majority opinion among the companies joining JEITA with respect to AI-created inventions is against the idea of giving protection under the current patent system to such AI-created inventions that are created based only on an AI’s conception. On the other hand, some people argue that it is too early to have such discussion, whereas others argue that since AI-created inventions are a major technological trend, an effort should be made to protect these inventions while considering a separate protection framework, rather than putting the brakes on such advancement of technology.

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?*

We consider that the changes proposed under Options 1 and 2 would have consequential effects on the patent system.

We consider that it is not good idea to allow a person who trains an AI to be an owner of an invention created by the AI. For example, it may be possible that a company trains an AI model and sells the trained model to other companies. In such a case, it is fair to say that, if the purchaser company creates a new invention by using the trained model, the seller company would be an owner of the new invention. This could interfere with smooth conduct of business operations and therefore it should be avoided.

In reality, a “company” does not by itself train an AI. However, if an employee of a company trains an AI and makes sufficient contribution to the conception of an invention, the employee can be named as an inventor by reason of such human intervention. In this case, the company can be an owner of the “outcome of the results obtained by running an AI” according to, for example, an agreement between the company and the employee.

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?*

NA

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?*

We think that this question assumes the possibility of misappropriated applications. When the subject matter is a simple process through which the input of the same data in an AI generates the same work, the first-come-first-served rule would apply, and whether or not an application is misappropriated would not matter. If this question assumes a little more complicated case and asks about how to deal with misappropriated applications in such case, our view is that when a dispute arises, the parties to the dispute would disclose their respective processes to each other to end the dispute.

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

NA

For option 3:

16. *What term and scope of protection should a new right offer?*

NA

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?*

In principle, we consider it appropriate to determine prior art for AI inventions according to the same criteria as the current criteria applied to software-related inventions. However, we find practical problems regarding the criteria for prior art to be applied in the examination of AI inventions. For example, we request that the UKIPO avoid simply determining obviousness of an invention created by applying AI to a technology in a given field on the grounds that AI can be applied in various fields. At the same time, we also request that the UKIPO avoid easily finding an invention created by applying AI to a technology in the field of agriculture to be non-obvious just because AI is applied, although such invention may appear to be novel or non-obvious in light of only the state of the art in this field where knowledge of AI is scarce. Therefore, in the examination of AI inventions, due consideration should be given to the nature and characteristics of inventions created by applying AI. Recently, AI that can produce prior art references has been developed, but some of those references produced by AI may be nothing more than random combinations of existing technologies. Whether such references can be treated as prior art references should be carefully considered.

General

18. *What role does the IP system play in the decision of firms to invest in AI?*

NA

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?*

NA

20. *How does AI adoption by firms affect the economy? Does the use of AI in R&D lead to a higher productivity?*

NA

21. *Do the proposed policy options have an impact on civil society organisations? If so, what types of impacts?*

NA

Section B: Respondent information

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

Japan Electronics and Information Technology Industries Association

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

Responding on behalf of an organisation, and its name is the Japan Electronics and Information Technology Industries Association.

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

The objective of the Japan Electronics and Information Technology Industries Association (JEITA) is to promote the healthy manufacturing, international trade and consumption of electronics products and components in order to contribute to the overall development of the electronics and information technology (IT) industries, and thereby further Japan's economic development and cultural prosperity.

The world is now connected via the Internet, and electronics technologies and IT have become widespread everywhere. With the evolution of electronics and progress of IT, technologies in information, communications, imaging and audio are converging to create new systems and products, which are bringing enormous changes that go beyond conventional frameworks, not only in our economic society, but also in our lives and culture.

JEITA's mission is to foster a digital network society for the 21st century, in which IT advancement brings fulfillment and a higher quality of life to everyone.

The Association is also actively promoting environmental preservation countermeasures, including those to combat global warming.

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

No.

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

We are an industry body.

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

Especially 4),5),11),12),17) and 20).

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

NA

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?

We are happy to be contacted by you to discuss our response.

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

[REDACTED]

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

Yes.

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