

1 The **Intellectual Property of Singapore (IPOS)** would like to respond to the invitation by the World Intellectual Property Organisation (WIPO) to participate in the **Public Consultation on Artificial Intelligence and Intellectual Property Policy**.

2 IPOS is grateful to WIPO for holding this Public Consultation and hopes that this will spur crucial discussions on the interplay between IP and artificial intelligence (AI). In November 2019, Singapore launched our National AI Strategy¹, spelling out Singapore's plans to deepen the use of AI technologies to transform Singapore's economy. Many countries around the world have also recognised the revolutionary impact of AI².

3 This timely Consultation underscores the importance of frank and open conversations on how our IP system should adapt in the face of AI advances. IPOS notes that the Consultation is aimed at developing a draft list of issues that might provide the basis of shared understanding of the main questions and provides its response in paragraphs 4 to 13. IPOS looks forward to a fruitful consultation, as well as to future conversations and collaborations in intellectual property, vis-à-vis AI.

GENERAL OBSERVATIONS

4 IPOS would like to encourage a non-dichotomous approach to the conversation on the various issues, to ensure a wider discussion that is not prejudged or predetermined. An example is the fundamental question of ownership of AI-generated works that cuts across all IP rights. It may be constructive to relook at the principles or parameters on which inventorship, authorship and ownership of works are determined in application to AI-generated works. Similarly, in this vein, IPOS would suggest a consideration of whether a body corporate or legal person could be named as an inventor or author.

PATENTS

5 Policymakers and IP offices need to be cognisant of the role of the patent system in supporting the development and deployment of new AI technologies. According to WIPO data, there has been a surge in AI-related patenting since 2013; and the ratio of scientific papers to inventions has decreased from 8:1 in 2010 to 3:1 in 2016³, indicative of the increasing commercial interest and application of AI technologies.

6 Specific to Issue 1, IPOS would like to invite the consideration of a joint inventorship framework, with recognition that collaborations between humans and AI are increasing.

7 Specific to Issue 4, IPOS suggests a discussion on the practical challenges to IP offices should AI-generated content qualify as prior art, e.g., the additional volume of prior art and the readability of AI-generated content.

¹ <https://www.smartnation.sg/whats-new/press-releases/national-artificial-intelligence-strategy-unveiled>

² Many countries have strategies or task forces set up in preparation for the advent of AI, including but not limited to: China's New Generation Artificial Intelligence Development Plan, Kenya's Distributed Ledgers Technology and Artificial Intelligence Task Force, as well as the US' national strategy on artificial intelligence.

³ WIPO Technology Trends 2019, Artificial Intelligence, WIPO, <https://www.wipo.int/publications/en/details.jsp?id=4386>

8 IPOS also suggests a discussion to identify where AI may be relevant to the areas of exploitation and enforcement. This would broaden the discussion to all aspects of the patent system for completeness.

COPYRIGHT AND RELATED RIGHTS

9 IPOS notes the multi-faceted principles that underlie the copyright regime. Therefore, with reference to Issue 7 in paragraph 12 of the Draft Issues Paper, IPOS would like to suggest that the discussion be reframed and not be limited to just the principle of human creativity. The Copyright system has evolved over the years to encompass the considerations of other doctrinal justifications such as economic incentivisation for the creation of new works or the dissemination of knowledge. Overlooking these principles may unintentionally stifle valuable discussion on the Issues for Copyright and related rights.

10 With regard to Issue 7 in paragraph 13 of the Draft Issues Paper, IPOS would suggest that the question under sub-para (i) as to whether the unauthorised use of data (which may potentially include copyright protected works) for machine learning constitutes copyright infringement be treated separately from the discussion on the scope of possible exceptions to infringement. This would allow a wider conversation as to the nature of copyright infringement where there may arguably be no consumption, trade in, or competition with, the expressive value of such works.

11 Issue 8 on deep fakes is increasingly important and relevant for policymakers globally. Deep fakes is relevant not only to the Copyright regime; it also interfaces with other areas of law such as criminal law and tort law. Seeing that this issue cuts across many fields, IPOS would like to invite WIPO and member states to consider a multi-disciplinary approach to the conversation on deep fakes.

TECHNOLOGY GAP AND CAPACITY BUILDING

12 IPOS acknowledges the different developmental levels of WIPO member states, and accordingly different levels of expertise and capacity in AI. The WIPO Conversation on IP and AI is a useful effort to support the global community in achieving collective progress through AI technology. IPOS would like to encourage deep conversations on different measures, including policy, legal and administrative/practical measures, with the objective of raising the AI capacity in the area of IP administration of IP offices.

ACCOUNTABILITY FOR DECISIONS IN IP ADMINISTRATION

13 In relation to Issue 13, IPOS would like to suggest a discussion around the types of decisions that administrative bodies should leave to AI applications in the first place. In addition, it may be useful to consider the possible route(s) of 'appeal' for such decisions, particularly in light of the fact that AI applications may not necessarily be able to provide reasons for their decisions.

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