Australia considers that new questions and issues will continue to arise and supports further opportunities to revisit the scope and objectives of the WIPO Conversation on Intellectual Property (IP) and Artificial Intelligence (AI).

**PATENTS (paragraphs 6-11)**

**Issue 1: Inventorship and Ownership**

3. Australia agrees that discussion of inventorship and ownership issues in relation to AI-generated inventions is of increased importance, especially in light of the recent filing of patent applications where AI is named as an inventor. Australia suggests additional questions to the effect of:

   - Should the law on inventorship/ownership by AI be codified or allowed to develop judicially?
   - Should there be consistency between jurisdictions as to whether AI can be an inventor/owner?
   - Can AI at most be a co-inventor, in conjunction with either the creator of the machine or the person who put the invention into practice (or both)?
   - Where an invention is developed by AI, is it merely an idea and not an invention until it has been reduced to practice by a human?
   - Should there be a principle that a patent should not be denied solely on the ground that AI was involved in the development of the invention?

4. Should the law permit AI to be named as an inventor/owner, Australia suggests further questions to the effect of:

   - Who is the beneficiary, for example of royalty payments or commercialisation/licensing agreements?
   - How would disputes over inventorship/ownership be resolved?

**Issue 2: Patentable Subject Matter and Patentability Guidelines**

5. Australia has no further questions in relation to this issue.

**Issue 3: Inventive Step or Non-Obviousness**

6. The concepts of the prior art base, the person skilled in the art and the test for inventive step may require further consideration in the context of AI. Australia suggests additional questions to the effect of:

   - Does the prior art base include any information that was used to train the AI?
   - Should an AI be regarded as a person skilled in the art?
   - Is an AI a tool that should be regarded as available to the person skilled in the art?
- Is any invention produced by an AI automatically obvious if the use of an AI would have been regarded as obvious to try?
- Should there be a different test for inventive step when AI was involved (and if so, what test)?

**Issue 4: Disclosure**

7. In determining whether a patent application meets the disclosure requirements, Australia suggests further questions to the effect of:

- Should the use of AI be included in the background discussion of the invention?
- Does the algorithm need to be disclosed where the invention makes use of the algorithm?
- Should all applications for a patent set out the role of a computer/AI in the development of the invention?

**Issue 5: General Policy Considerations for the Patent System**

8. Australia suggests additional questions to the effect of:

- Should AI generated inventions have a shorter term of protection as they are the outcome of machine effort rather than human effort?
- Should AI generated inventions be covered by a second tier protection?
- AI has the potential to generate ‘fake’ patent applications and ‘fake’ prior art base. Do these represent a challenge for the IP system? Alternately, is AI itself a potential solution to searching and identifying a possible proliferation of AI-generated prior art?

**New Issue: Infringement of Patents**

9. Australia considers that general discussion around the issue of patent infringement should be encouraged. Australia suggests questions to the effect of:

- If a learning machine is initially carrying out a process in a way that does not infringe a patent, is the machine infringing if it modifies its own operation through learning in a way that falls within the scope of the claims of a patent? If so, who has infringed? Does it matter whether the human owner of the machine was aware that the machine had changed its operation?
- If the commercial embodiment of a machine covered by a patent learns, and changes, does that alter the scope of the claims of the patent?
- Can the scope of a claim change where the subject matter of the claim is an AI machine which can learn and change? How would an infringer know whether the scope of the claim had changed?
- Where an AI is considered to be the sole holder of a patent, who, if anyone, can bring actions for infringement of that patent? Conversely, if an AI is alleged to have infringed, who will be the respondent to the infringement action?
  - What remedies should be available in these types of actions? For example, can injunctions be sought to restrict the further use of an AI that has allegedly infringed on a patent, even if the AI can also produce non-infringing outputs?
COPYRIGHT AND RELATED RIGHTS (paragraphs 12-16)

Issue 6: Authorship and Ownership

10. Australia agrees that the social purpose for which the copyright systems exists is important and considers it necessary to have further discussion on how AI-generated works interact with this social purpose.

11. Australia also considers that it may be helpful to draw out a diverse range of views from interested parties on whom, and what behaviours, the copyright system should incentivise, and invite stakeholders to provide more evidence about the effects of attributing copyright to AI-generated works. Australia suggests additional questions to further elaborate on question 12(i) to the effect of:

- What social and economic purposes of copyright would AI attribution fulfil?
- What would be the practical effect of attributing copyright to AI-generated works, for example, on human creative industries and markets?

12. Australia notes that the questions on the copyright authorship and ownership of AI-generated works are focussed on original literary and artistic works. Australia suggests broadening the scope to allow further discussion about whether AI-generated works such as sound recordings, broadcasts and performances should be protected by related rights.

13. Australia understands that many human creators could incorporate AI-generated works into their copyright works. Conversely, as outlined in the paper, it is likely that AI-generated works will use and incorporate human-created copyright works. It would be useful to understand what would be considered an ‘AI-generated copyright work’ and how much of a role AI should have in creating a work, in order for the AI to be attributed with copyright (depending on the views expressed to question 12(i)), as well as the possibility of joint-ownership arrangements between AI and human creators. It may also be prudent to consider the operation of moral rights in these circumstances. Australia suggests a question to the effect of:

- What are the copyright implications for works jointly created by AI and human creators?

Issue 7: Infringement and Exceptions

14. Australia notes that this paper discusses matters specifically around the appropriateness of exceptions, particularly in relation to data used for training by AI applications. Australia considers that some more general discussion should be encouraged around the issue of enforcement of copyright both where an AI-generated copyright work is infringed, as well as where an AI application infringes existing copyright works created by humans or generated by other AI. Australia suggests questions to the effect of:

- Are there any other additional issues which need to be considered for when AI-generated works infringe copyright, or when AI-generated works are infringed?
- Noting question 12(ii), should there be consideration around who is responsible for copyright infringement that occurs when an AI application infringes copyright?
15. Australia queries whether the question could be framed more broadly to expand the scope of possible solutions. Specifically, Australia queries whether equitable remuneration could be listed as an example of an option rather than as the main proposed option.

16. Australia queries whether deep fakes may also require consideration of the interaction with moral rights. Australia suggests a question to elaborate on any possible issues which might arise.

17. Australia notes this question includes the concept ‘copyright on bias in AI applications’ and suggests that a discussion on this issue before the question would be helpful.

18. Australia has no further questions in relation to these topics.

19. Australia agrees that the use of AI in IP administration raises issues regarding the accountability of those decisions. Australia suggests additional questions to the effect of:

   - Are there any ethical and/or cultural considerations in using AI and machine learning to support the processing and/or examination of IP rights?
   - Is there a risk of ambiguity as to who is the decision maker when there is AI assistance in the decision making process?
   - What record keeping is needed of the reasons for decision, where the decision is made (a) by the AI, (b) with the assistance of AI, or (c) where AI makes part of a decision?

20. It may also be useful to consider the examination process in this context. Australia suggests further questions to the effect of:

   - What skills will examiners need in order to use AI assistance in their decision making?
   - What workplace culture will be necessary to make proper use of AI assistance in examination?