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To:
WIPO,
Geneva

**REF: Impact of Artificial Intelligence on IP Policy: Call for Comments-
Response from a Global South Perspective**

General Introduction and Objective

This is a response to a call by WIPO on an open conversation on IP and AI with an aim of developing a policy paper. The response is provided, the issues raised, and proposals below are concentrated on the from a global south perspective. However, this is not to say that the issues in the call but not addressed below are not relevant. To the contrary, we believe in the totality of the conversation but insist on having a special focus on the global south. The conversation should be gradual and incremental. We strongly believe that for the global south countries, the conversation and priority should significantly focus on their institutional and infrastructural capacities as this affects the adoption of AI and AI inventions.

Context: Least Developed Countries; Global South; Developing countries (DCs & LDCs)

Comments: Correct identification of issues/Missing issues to formulate so as to understand the main issues to be discussed.

Issues to Consider:

1. **Capacity for the developing countries:** technological/ infrastructure; human capacity to handle AI and AI Originated inventions. Are they ready? (Issue 25 & 26)

A. **Infrastructure:** Regarding infrastructure both technological and human resources to effectively adopt AI/AI inventions in their systems especially the social and economic structure. Developing and least developed countries require to have legal and institutional frameworks that would support the administration of AI and AI Inventions. These are existing gaps in the capacities to ensure effectiveness of the systems.

B. Issue 12: Capacity Building

I. What policy measures in the field of IP policy might be envisaged that may contribute to the containment or the reduction in the technology gap in AI capacity?

It would be important to consider how the use of AI has the potential to influence or affect human lives in developing and least developed countries which will determine what ethical considerations to apply.¹ This concept is broad and wide-ranging cutting across various aspects in these Comments. From the requirement of openness and collaboration of data required in the use of AI in IP Administration in WIPO between larger IP Offices and smaller ones which would undoubtedly have less data, actual equipment and skills; to the considerations of which persons seek to utilize these offices, the nature of their inventions and the ultimate practical application of the same. IP Policy should emphasise the use of a lens that is developing and least developed country focused, not only in the implementation of protections of AI via IP in these jurisdictions but also in the administration of IP governing the same. This means that there should be public interest led initiatives in the evaluation of these inventions to ensure fairness and justice just as AI for development initiatives should have strong privacy and security measures to prevent the abuse of their systems.²

II. Are any such measures of a practical nature or a policy nature?

They are both. Policy influences implementation. Thus, regarding Principles to be considered we suggest the following:

- i. Should incorporate the Responsible Machine Learning Principles and most importantly the Principle of Bias Evaluation i.e. representative and balanced datasets and removing societal biases from the processes (<https://ethical.institute/principles.html>)
 - a) Alternatively, there could be the implementation of the OECD AI Principles which are intergovernmental policy guidelines on AI that uphold international standards that aim to ensure AI systems are designed to be robust, safe, fair and trustworthy (<https://www.oecd.org/science/forty-two-countries-adopt-new->

¹ See Lindsey Anderson "Artificial Intelligence in International Development: Avoiding Ethical Pitfalls" *Journal of Public and International Affairs* www.jpia.princeton.edu/news/artificial-intelligence-international-development-avoiding-ethical-pitfalls (accessed on 4.02.2019). See also Web Foundation "Artificial Intelligence: Starting the Policy Dialogue in Africa" December 2017 www.webfoundation.org/docs/2017/12/Artificial-Intelligence-starting-the-policy-dialogue-in-Africa.pdf 6 (accessed on 7.02.2019) where the Web Foundation emphasises the need to ensure the creation of systems of transparency, liability, accountability, justification and redress for decisions made on the basis of AI including enabling the auditing of algorithms on social media and other relevant platforms by civil society and government.

² Ibid.

[oecd-principles-on-artificial-intelligence.htm](#)). These principles guide governments, organisations and individuals in designing and running AI systems in a way that puts people's best interests first and ensuring that designers and operators are held accountable for their proper functioning. These Principles include:

- b) AI should benefit people and the planet by driving inclusive growth, sustainable development and well-being.
 - c) AI systems should be designed in a way that respects the rule of law, human rights, democratic values and diversity, and they should include appropriate safeguards – for example, enabling human intervention where necessary – to ensure a fair and just society.
 - d) There should be transparency and responsible disclosure around AI systems to ensure that people understand when they are engaging with them and can challenge outcomes.
 - e) AI systems must function in a robust, secure and safe way throughout their lifetimes, and potential risks should be continually assessed and managed.
 - f) Organisations and individuals developing, deploying or operating AI systems should be held accountable for their proper functioning in line with the above principles.
- ii. Particular to AI implemented for the use of development, the Principles for Responsible AI in International Development may be considered.³

These principles include:

- a) Consider whether an AI solution is appropriate
- b) Involve Stakeholders throughout the development process
- c) Develop rigorous standards for openness and accountability in AI projects
- d) Build in privacy and security by design
- e) Clearly establish roles and create a protocol for transfer of responsibility

³ Ibid.

2. **Protection /recognition** of AI technology and AI Originated inventions as property capable of being protected; Sui Generis system or not: (Issue 11, 12)

The conversation for developing and least developed countries have concerns of having predatory registrations of IP for AI and AI inventions especially where the data originates from them. As suggested below, having an effective IP system is important in promoting innovation and economic growth. However, registration/recognition of private rights arising out of data mined/collected from subjects within developing and developing countries should be secondary or come after protection of public interest. As is the case for genetic resources from these countries, there is a high risk of having predatory registrations which would be well within the established legal systems, but which serve individual interests to the exclusion of the members of public.

Recognition, registration and protection of communal rights in the AI and AI inventions developed with or having any contribution from members of public should be adequately provided for.

3. **Exemptions/Exceptions to applicability**; flexibilities of any international treaty adopted-What is the nature of the flexibilities that would be adopted? (17-23)

Exemptions and exceptions have been used to enable countries especially the least developed and developing, comply with international obligations at different times or in varied manner. For instance, the exemptions under the TRIPS Agreement permit the developing and least developing countries to apply its norms in a manner that enables them to pursue their own public policies in certain fields.⁴

In the case of AI, we suggest the following:

- I. Similar approaches to flexibilities to existing in the international agreements allowing the developing and developed countries to adopt norms that enable them to pursue their own interests. In this case, the countries would implement the international requirements at varied periods of time, with varied responses e.g. through sui generis systems where applicable. Or
- II. Selective opt in and opt out and adoption: AI is at its nascent stages and is continuously and rapidly developing and has the capacity to be integrated into daily human life. The suggested framework is

⁴ https://www.wipo.int/ip-development/en/policy_legislative_assistance/advice_trips.html

therefore necessary especially in setting standards to be adopted. However, the flexibilities should extend to allowing countries to select and adopt the provisions that are compatible with their interests. For instance, though the question of inventorship is a significant issue for the creators especially in developed countries, it does not carry the same weight for the developing countries as they are often the consumers of the inventions. In such cases, the developing countries should be at liberty to opt in or out or not adopt provisions requiring development of frameworks that recognise protection of AI whether using the existing IP framework or adopting a *sui generis* system. Where a country opts out or does not adopt any international agreement regarding AI, the application of the principles suggested under issue 12 should be applicable.

4. **On IP Administration:** Capacity of the national offices receiving international applications under the various treaties (27)

National Offices' Capacity: The concern here is the reliance by the national office on the international office when examining international application. In most cases, the national offices rely 100% on the examination reports issued by the international offices due to capacity issues. Where the applications are examined exclusively by AI or AI enabled machines, the reports transmitted to the national offices will be as a result of an AI examination process. What happens, where the process in this case is either found to have error or to be discriminatory. This directly affects the offices with no capacities and should be considered as a separate issue to IP administration.

Disclosure: Where an application is examined or processed by AI, there should be a full disclosure to the other offices that such an application has been subjected to AI examination process. The disclosure should extend to the steps or the levels of AI intervention.

5. **On data:** Where the AI/AI Inventions rely on data generated from developing and least developed countries. Where data is mined/generated from them (ideally for their interest), refined in a western country and then the AI invention is imported back to these countries; What is the role of government as the holder or custodian of the people's trust/public interest (17-23) This maybe a sort of dual consent requirement i.e. after obtaining the consent of the data subjects in DCs/LDCs, should there be a requirement to obtain the consent of the state (Sovereignty of data).

Data: This is more so significant especially where the AI/AI Inventions rely on data generated from developing and least developed countries. Where

data is mined/generated from them ideally for their interest, refined in another country and then the AI invention is 'imported back' to these countries. The Convention should be anchored on ethical, just and transparent principles. Specifically, we suggest the following considerations:

- a. According data sovereignty on the data subjects and to an extent their country especially where data is transferred between countries.
- b. According data equal or more recognition and standard as the plant genetic resources under the Convention of Biodiversity and the International Treaty on Plant Genetic for Food and Agriculture.
- c. Having a clear and set out definition of ownership, access and benefit sharing between the data subjects, their countries and the processors/controllers. This would include setting similar international contractual and mandatory standards as those contained in the Standard Material Transfer Agreements (SMTAs) on transfer of biological materials whenever there is transfer of data.
- d. Whereas IP ownership incentivises inventions, the main objective of any international framework on AI/AI inventions and data should be to be guided by public interests as opposed to vesting ownership on private individuals. This should also be the guiding principle in dispute resolution mechanisms adopted.
- e. Recognition and adoption of 'farmers rights' equivalent vested in the sovereign data subjects and governments where the data is exported out of the country for any purpose.
- f. Should be comprehensive and in harmony with the existing human rights conventions, national laws, norms and practices of the people.

Where the data sovereignty vests with the government. We suggest the government should:

- a. Hold the data under the principles of public trust and interest. The government to be always a custodian of the data.
- b. As a prerequisite to vesting, enact and **implement** appropriate specific legal mechanisms to prevent unauthorized release of or misuse of data mined. For instance, the Data Protection Act in Kenya, proscribes any data processing that is likely to result in high risk to the rights and freedoms of data subject without a data impact assessment.

- c. Conditional requirements for data impact assessment include before implementation of AI and AI Inventions in administration (IP administration included). The assessment to consider
- i. Discrimination-Intentional (where a prejudiced decision maker skews training data to generate discriminatory results) and unintentional (where administration is based on data samples from different parties other than the subject).
 - ii. Protection of existing rights including any intellectual property rights registered and unregistered.
 - iii. Provide model contracts for sharing data and the resulting inventions where applicable with an aim to ensure clear proper data governance structures that are transparent and accountable.

Sincerely,

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