

**INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION  
ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)**

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**Contribution by WIPO**

to the CSTD 2020-2021 priority theme on “Harnessing blockchain for sustainable  
development: prospects and challenges”

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**PRIORITY THEME 1:** Harnessing blockchain for sustainable development: prospects and challenges

**United Nations Commission on Science and Technology for Development (CSTD)**

Dear international organization/UN entity/agency,

As you are aware, the CSTD 23<sup>rd</sup> annual session selected “Harnessing blockchain for sustainable development: prospects and challenges” as one of the priority themes for its 24<sup>th</sup> session (2020-21 period).

In an increasingly digitalized economy and society, the security and accountability of data transactions are critical elements for creating trust and enabling breakthrough innovations in the digital world. In this regard, blockchain technology has been perceived as a game-changer, with the potential to revolutionize processes from finance to pharmaceutical industries, from humanitarian work to development aid. The blockchain serves as the base technology for cryptocurrency, enabling open (peer-to-peer), secure and fast transactions. The application of blockchain has expanded to include various financial transactions (online payments and credit and debit card payments) as well as IoT, health and supply chain. However, issues associated with scalability, privacy concerns, uncertain regulatory standards and difficulties posed by the technology in integration with existing applications are some of the potential market constraints. The priority theme will focus on the importance of developing a local financial infrastructure that avoids financial exclusion of the most vulnerable communities. There is also the risk that the potential of blockchain for solving developmental problems had been somewhat inflated by its early adopters and the tech media and may not be as applicable for developing and least developed countries. What are the emerging uses of blockchain that can be breakthroughs in accelerating progress towards the SDGs? What are the potential negative unintended social and economic effects of this technology? How could governments maximize the opportunities and minimize the risks? The CSTD could consider this priority theme to examine the potential of harnessing blockchain for sustainable development.

The CSTD secretariat is in the process of drafting an issues paper on the theme to be presented at the CSTD inter-sessional panel meeting. In this context, we would like to solicit inputs from international organizations, UN entities and agencies on this theme. We would be grateful if you could kindly answer the following questions based on your organization’s work.

1. Could you share specific examples, projects or initiatives that have used or plan to use blockchain technology for the SDGs? What are the main challenges confronted while trying to implement these projects/initiatives? (Examples may include blockchain solutions for financial inclusion, trade facilitation, supply chains, health, energy, e-Government, etc.)

- [The Member States of WIPO established the Blockchain Task Force under the Committee on WIPO Standards \(CWS\) in 2018 in order to explore the possibility of using blockchain technology in the processes of providing intellectual property \(IP\) rights protection and prepare a proposal for a new WIPO standard supporting the potential application of blockchain technology within the IP ecosystem. In order to support the activities of the Task Force, WIPO Secretariat is developing a Blockchain whitepaper for IP ecosystem which is exploring the impact and potential use cases of the blockchain technology in the IP space. The whitepaper project, among others, aims at identifying business rationales and challenges of this technology in IP value chain from creation to commercialization of IP assets, and recommendations for consideration by IP community, including IP authorities, IP industry and end users. The whitepaper is still under preparation and is planned to be finalized by the end of 2020.](#)

2. What are the challenges that governments have faced or may face for promoting innovation and competence building in blockchain, to contribute to their national development priorities and accelerate the progress towards the SDGs?

- Governments, especially in developing and least developed countries, may face challenges related to technical infrastructure and human and financial capacity in order to make the necessary investments which are required to spur innovation.

3. What are the actions that the international community, including the CSTD, can take to contribute to harnessing blockchain for sustainable development?

- Facilitate the development of a shared understanding and knowledge base regarding blockchain which all countries can build on in a national capacity.

4. Could you suggest some contact persons in your agency responsible for projects/policies and international collaboration in this context as well as any experts (from academia, private sector, civil society or government) dealing with projects in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD inter-sessional panel and annual session.

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5. Do you have any documentation, references, technological assessments, future studies or reports on the priority theme?

[WIPO Blockchain Task Force: Background Information](#)

Please send your responses and any further inputs on the theme to the CSTD secretariat ([stdev@unctad.org](mailto:stdev@unctad.org)) by 7 October 2020. We look forward to receiving your valuable inputs.

Sincere Regards,

CSTD secretariat