United Nations Commission on Science and Technology for Development (CSTD)
Twenty-fourth annual session

High-level Roundtable on
"Harnessing blockchain for sustainable development: prospects and challenges"

19 May 2021, 14.00-16.00 (CEST)

Concept note

Background

The twenty-third annual session of the CSTD selected "Harnessing blockchain for sustainable development: prospects and challenges" as one of the priority themes for its twenty-fourth session (2020-2021 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 could be a game-changer, with the potential to revolutionize processes from finance to pharmaceutical industries, from government public services to humanitarian work and 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 (e.g., online payments and exchange platforms) as well as Internet of Things (IoT), health systems and supply chains.

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. There is also the risk that the potential of blockchain for solving developmental problems has been somewhat inflated by its early adopters and the tech media and may not be as applicable for developing and least developed countries.

Moreover, blockchain innovation has focused on financial applications dissociated from the real economy and aims to extract rents through financial intermediation and speculative gains in crypto assets instead of creating real value through new products. Such behaviour, combined with the lack of regulation and the fast pace of innovation, is a recipe for financial bubbles and bursts. At the same time, blockchain is potentially a key technology in a new technological paradigm of increasing automation and integrating physical and virtual worlds. Similar moments in the past technological revolutions offered windows of opportunity for some developing countries to catch up and others to forge ahead.

Therefore, governments of developing countries should seek to strengthen their innovation systems to guide blockchain innovation towards inclusive and sustainable solutions and strategically position themselves to benefit from this new wave of technological change.

Objective and guiding questions

The objective of the high-level roundtable is to explore national and international experiences in harnessing blockchain technologies for sustainable development as well as approaches to regional and global cooperation in this field and policy options to direct resources. The roundtable will seek to address the following questions:

- What are the emerging uses of blockchain that can be breakthroughs in accelerating progress towards sustainable development goals (SDGs)?
- What are the potential adverse unintended social and economic effects of this technology?
- How could governments maximize the opportunities and minimize the risks?

Format of the high-level roundtable

The roundtable will begin with the introduction of the Report of the Secretary-General E/CN.16/2021/3 by the CSTD Secretariat. Following the introduction high-level discussants will make their initial interventions (5-7 minutes), broadly addressing the guiding questions. Afterwards the Moderator will initiate an interactive discussion among the participants, including those from the floor.

Background document

- UNCTAD (2021): Report of the Secretary-General on Harnessing blockchain for sustainable development: prospects and challenges (E/CN.16/2021/3), https://unctad.org/system/files/official-document/ecn162021d3_en.pdf