

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

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Contribution by ITC

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

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UN Commission on Science and Technology for Development

ITC Submission

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

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.)

In late 2019, ITC explored using blockchain technology to improve visualization of transparency, traceability and accountability on voluntary sustainability standards. ITC used its Sustainability Map (www.sustainabilitymap.org) tool, which helps businesses, regardless of their position in value chains, chart their part toward more sustainable trade as a transparency and traceability platform. The purpose of the pilot initiative was to visualize block chain-based supply chain traceability data from multiple companies and sources, to support a culture of transparency and mutual accountability across global networks, while providing consumers with the sustainability information they demand.

Key aspects of the project were:

- Mapping businesses involved in the relevant value chains on the Sustainability Map network.
- Visualizing relations and product flows between value chain actors based on blockchain transaction aggregates.
- Managing data privacy and sharing back enriched profiles to the traceability systems providers.
- As a future goal - empowering micro, small, and medium-sized enterprises (MSMEs) with a digital identity, allowing them to control their data and credentials (including voluntary sustainability standards certifications) to participate in the digital traceability solutions.

The pilot was part of an initiative of the World Economic Forum's Platform for Shaping the Future of Advanced Manufacturing and Production and created in collaboration Everledger and Lenzing Group.

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?

Not explored as part of the project.

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

Some actions - relevant to the described project scope – might include:

- Helping MSMEs to understand and evaluate opportunities and challenges related to the block chain-based traceability, applicable to their business models and operations.
- Identifying the barriers that MSMEs - especially these from the developing countries - might face when engaging in blockchain-based traceability solutions.

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.

Grzegorz Tajchman (gtajchman@intracen.org) – responsible for the pilot project described above from ITC side.

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

Summary of the pilot project described above, as well as opportunities and challenges identified during the project, can be found at the following location:
www3.weforum.org/docs/WEF_Accelerating_Digital_Traceability_for_Sustainable_Production_2019.pdf

Below is a screenshot from the Sustainability Map platform, demonstrating the outcome of the pilot – visualized relations between supply chain actors, based on test traceability information from a 3rd party system:

The screenshot displays the Sustainability Map platform interface. At the top, there is a navigation bar with links for Standards Map, Virtual Network, Market Trends, and WEF Demo Lenzing Supply Chain. Below this, the International Trade Centre logo is visible, along with a navigation menu containing Our Solutions, Our Users, Collaborations, T4SD Hubs, and Resources. The main area features a map of the region around Macau, with a red line connecting King Tai and Chun AU Knitting Factory Ltd. A search panel on the left allows for filtering by Company Name, Country, and Generic search. A 'Create Company' button is also present. On the right, a 'Connection details' panel provides information about the link between King Tai and Chun AU Knitting Factory Ltd, including the number of transactions (49) within a 4-month period, the data source (TG Transaction Summary XLS (PoC data)), and the last update date (November 14, 2019 12:22 PM). Below this, a list of recent transactions is shown, each with an ID, timestamp, and description.

Id	Timestamp	Description
0MAM3110V303000L (https://tg-callback.url/transaction_id)	August 19, 2019 1:22 PM +02:00	500 pieces of 0MAM3110V303000L (blend ratio: 94% TENCEL™ Modal, 6% Elastene/Spandex), PO PT1005r1
0MAM3110V303000M	August 19, 2019 1:22 PM +02:00	210 pieces of 0MAM3110V303000M (blend ratio: 94% TENCEL™ Modal, 6% Elastene/Spandex), PO PT1005r1
0MAM3110V303000XL	August 19, 2019 1:22 PM +02:00	