

**UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY  
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**Harnessing blockchain for sustainable development:  
prospects and challenges**

Statement submitted by

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## Speech

### **Distinguished Vice-Chair of the UN Commission for Science and Technology for Development,**

*(Mr. A Min Tjoa, Vice-Chair of CSTD)*

### **Distinguished Representative of the UNCTAD,**

*(Mr. Angel Gonzalez Sanz, Head, Science, Technology and ICT Branch, Division on Technology and Logistics, UNCTAD)*

### **Esteemed Representatives of the UN Member States,**

### **Distinguished Panellists,**

### **Honorable Participants,**

It is an honour for me to address such a distinguished group of people– thank you for the invitation.

I am personally delighted to see that the blockchain has been selected as one of the priority themes for the twenty-fourth session of the Commission for Science and Technology (CSTD).

It is one of the most important innovations of recent years that will deeply affect our lives, and promises to be as fundamental as the Internet in shaping how business will be made in the future.

Many governments and private organizations have been trying to improve their services by investing heavily in research and innovation on blockchain lately.

We also closely follow the developments in the blockchain technology and define the steps that we need to take in this field.

Our most recent development plan, the **11<sup>th</sup> National Development Plan**, draws the strategic framework and sets out long term targets in disruptive technologies including blockchain.

We also highlight the importance of blockchain technology and encourage the development of national blockchain infrastructure in **2023 Industry and Technology Strategy**.

The Government of Turkey attaches great importance to developing and supporting blockchain-based solutions to ensure that the blockchain ecosystem in Turkey thrives.

Our national Scientific and Technological Research Council, **TÜBİTAK**, is the leading government agency for R&D activities on blockchain technologies.

It established The Blockchain Research Laboratory, as the first governmental blockchain lab in Turkey. The lab carries out R&D activities especially on the infrastructure, security and privacy of blockchain technologies. Besides, TÜBİTAK offers attractive grant possibilities for the blockchain technology development projects of academia, public and private institutions.

In the fields of custom management; The Ministry of Trade of the Republic of Turkey has launched **MEDOS**, the electronic approval system of the Certificate of Origin and Circulation used in export transactions.

Turkish Central Bank will introduce **blockchain-based Central Bank Digital Currency**. We hope to take the necessary steps to create the economic, technological and legal infrastructure of digital currency by the end of the year.

### **Distinguished Participants,**

We support the international efforts for the achievement of the Sustainable Development Goals (SDGs) at the global scale.

UN Technology Bank for Least Developed Countries, located in Turkey, strengthens science, technology and innovation capacity in least developed countries.

**SDG Impact Accelerator**, a global accelerator, has been launched by the Turkish Ministry of Foreign Affairs and UNDP in 2018. It brings together Turkish and international partners both from public and private sectors to provide financing, mentoring and networking support to entrepreneurs and innovators.

SDG Impact Accelerator has supported a project from Turkey benefiting blockchain technology, a web application that enables its users to design, distribute and store smart certificates and open badges. Certificates are stored on a blockchain based system along with tags that represent the skills gained by qualifying to these certificates.

### **Honorable Participants,**

Ever disruptive technology is a chance for developing and emerging economies. Blockchain technologies can create opportunities to mobilize and scale up financing to achieve the SDGs.

However, we need to address several issues to scale up blockchain based technology solutions and unlock network benefits of blockchain.

While blockchain technology may seem exceptionally self-sufficient and trustworthy, we should not be relying solely on the integral characteristics of the system itself. We need to develop models to ensure reliability and accountability.

We must also make a concerted effort to set and enforce global standards and rules to achieve scale and further trust in blockchain.

We believe, the UN might play a key role in inclusive design of guidelines, norms and standards for blockchain applications.

Last but not least, high energy consumption of blockchain applications, particularly cryptocurrency mining, presents significant challenges for all of us. Development of a less energy intensive alternative to validate blocks will make blockchain more environmentally sustainable.

Before concluding my remarks, I would like to thank, in particular the Secretariat, for their hard work in the preparation of the blockchain report.

I believe that the report will guide the efforts of the UN Member States in benefiting from this revolutionary technology and expand its applications to areas supporting SDGs.

I wish that the conference will bear fruitful results and thank all the participants for their valuable contribution.