

**United Nations Commission on Science and Technology for Development (CSTD)  
Twenty-second Annual Session**

**Break-out sessions on the impact of rapid technological change on sustainable  
development**

**14 May 2019, 12:00-13:00  
Rooms XXII and XXVI, E-building, Palais des Nations**

**Concept Note**

**1. Objective**

To encourage direct exchanges among delegates during the twenty-second session of the CSTD, the secretariat will organise two parallel break-out sessions during the morning of 14 May 2019 as part of the agenda Item 3 “Science and Technology for Development” related to the priority theme 1 “The impact of rapid technological change on sustainable development”. This format is similar to the successful practice implemented at the inter-sessional panels in which break-out sessions are an integral part of the discussions.

The break-out session will bring together the CSTD delegates from member states, representatives of international organisations and accredited NGOs to discuss the current state of rapid technological change; to exchange best practices and to develop policy recommendations in support of the work of the CSTD and towards operational inputs for the resolutions to be discussed later in the week.

The themes to be discussed were highlighted in the discussions during the inter-sessional panel 2018-2019 in Vienna (14-17 January 2019), namely national strategies on artificial intelligence (AI) and mainstreaming gender in science, technology and innovation (STI) policy making.

The parallel break-out sessions will be facilitated by a moderator (a panellist or the Chair/a Vice-Chair of the CSTD) and the CSTD secretariat.

The outcome of the break-out sessions will be a short summary of the discussions that will be reported back to the plenary of the CSTD by the secretariat or the Chair on the morning of 15 May, during the agenda item 3.

**2. Parallel sessions**

**a. National strategies on Artificial Intelligence (Room XXII)**

Artificial intelligence has moved from theoretical research to being increasingly a part of recent innovation activities, as measured in patent applications. According to an analysis by WIPO, patent publications in AI have grown on average 28 per cent annually since 2012. Consequently, more than half of all patents in AI have been filed in the past 5 years. These more than 170 000 patents address aspects of artificial intelligence, spanning industries from telecommunication, health, transportation to agriculture. The increased patenting activity indicates the growing role of AI and consequently the impact on economy, workforce and overall society.

Therefore, STI policy makers should take these recent developments into account swiftly to devise policies that maximise the benefits from constantly evolving AI. National AI policies

might address several considerations, including links to the SDGs, economic diversification and transformation, human capital formation, innovation finance, intellectual property and data ownership, privacy, security and provenance.

This session aims to discuss the main opportunities and challenges countries face with respect to AI, best practices and good examples of national AI strategies, and actionable recommendations for consideration in CSTD resolutions and on-going work.

#### **Questions to be addressed**

- Does your country have a national policy or strategy on AI or a related theme? How does this national policy link to the SDGs? What are best practices and lessons learned in devising and implementing such a strategy?
- How can the international community – including the United Nations and the CSTD – engage in discussions about the normative frameworks guiding the use of AI?

#### **b. Gender perspectives of rapid technological change (Room XXVI)**

The gender workshop organised back-to-back with the inter-sessional panel 2018-2019 addressed the question of women and girls in STI and science, technology, engineering, and mathematics (STEM), identifying challenges and possible solutions. This session turns towards how rapid technological change impacts women and girls and consequences that arise in terms of STI policy making.

Only 12 per cent of leading machine-learning researchers are women, and only a third of entry-level positions in technology companies are being filled by women. There is evidence that some applications of artificial intelligence or big data may be subject to biases, including gender. Women constitute low numbers in the STEM job families. Hence, they may not be able to significantly shape rapid technological change to their own needs. Consequently, the increasing rate of technological change may widen existing gender digital and STEM divides.

The session will discuss the current state of integrating gender perspectives in STI policy making; examine best practices of gender-responsiveness in policy making; and aim to develop policy recommendations in support of the work of the CSTD and towards operational inputs to benefit the resolutions to be discussed later in the week.

#### **Questions to be addressed**

- What examples of new and emerging technologies to further gender equality exist in your countries? Which are the main challenges women and girls face which technologies do not yet address?
- How can the international community – including the United Nations and the CSTD – ensure that women and girls are fully integrated in discussion on rapid technological change?