

Session Guidance Note

Session 3

Leveraging Frontier Technologies in LDCs, SIDS and LLDCs for SDG Implementation: Strategies, Experiences and Challenges

Day 2

09:00-10:30 5 June 2019

1. Background & Objective

With the advent of the Fourth Industrial Revolution, frontier technologies characterized by Artificial Intelligence (AI), Internet of Things (IoT), blockchain, big data analytics, cloud computing, robotics and machine learning, provide enormous opportunities to transform the way government works and delivers services to its citizens. To effectively reap the benefits of frontier technologies, more and more countries have been developing and implementing strategies and policy initiatives, including the strategies and mechanisms to promote collaboration with academia, the private sector, and civil society organizations to create an enabling environment for leveraging emerging technologies.

Nevertheless, there exist varied challenges in leveraging the frontier technologies for SDG implementation. The adoption and application of those frontier technologies are still limited particularly in less developed countries due to gaps in human resources, science and technology and finance. Furthermore, the pace of enacting or amending laws and regulations to adapt to frontier technologies lags behind the accelerated pace of their proliferations, further exacerbating legal and ethical concerns.

Against this backdrop, this Session aims to examine the strategies for and experiences of leveraging frontier technologies in LDCs, SIDS and LLDCs for achieving sustainable development. The Session will also provide an opportunity to discuss the challenges LDCs, SIDS and LLDCs face in harnessing frontier technologies and the solutions to address those challenges from legal, ethical, financial and technological dimensions.

2. Main Questions to be Addressed during the Session

- What are the benefits of leveraging frontier technologies that are particularly relevant to LDCs, SIDS and LLDCs? What is/are the enabling factor(s) that enable LDCs, SIDS and LLDCs to effectively harness frontier technologies?
- What are various gaps (e.g. data, resource, capacity, and infrastructure) in using frontier technologies in LDCs, SIDS and LLDCs?
- What could be practical strategies to use frontier technologies in LDCs, SIDS



and LLDCs, both to optimise the potential and to mitigate the possible risks?

- What are the modalities and channels to mobilize academia, ICT industries and civil society organizations to work together with government institutions to mobilize frontier technologies for delivering better and inclusive public services and engaging people in decision-making?
- What are the policy solutions to safeguard the possible adverse impact on ethics, equity, security, and etc. and build digital trust in using frontier technologies?
- What are some recent efforts and (integrated) policy initiatives of LDCs, SIDS and LLDCs to overcome those challenges?