The importance of technology for achieving the SDGs

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24 October 2017 Keynote Address, Nikhil Seth, UNITAR Executive Director

Excellencies,
Distinguished Delegates,
Ladies and Gentlemen

- 1. It is a pleasure to be here in Brussels, thank you to Mr. Fransaer, and thank you also to the other distinguished panelists.
- I would like to thank VITO and partners for convening and organizing the G-STIC conference, and also to thank UNITAR's CIFAL Office in Flanders, for co-organising this panel discussion in celebration of UN Day, marking the 72nd anniversary of the United Nations.
- 3. During these years there have been successes and setbacks. Awareness of human rights, gender equality, environmental degradation, climate change, health, nuclear and other disarmament and the quest for advancing the marginalized would have been much weaker without this great organization. But the struggle for peace, justice and human dignity is still unfinished business.
- 4. With the 2030 Agenda and the SDGs, the world has a plan, with goals, targets and indicators.

- 5. I strongly believe that recent and ongoing technological advances offer profound potential for accelerating progress on the Sustainable Development Goals. By bringing together policy makers, entrepreneurs, students, innovators and private companies, G-STIC is bridging the gap between technology and policy-making. I congratulate VITO and partners on this excellent initiative.
- 6. The role of technology will be especially important in four great transformations for the world we want by 2030:
- Agriculture, livestock farming and water (farm systems);
- Energy systems;
- Sustainable urban development;
- Sustainable consumption and production.
- 7. These are but a few of the SDGs. Technology applications can enhance each of the SDGs and the interaction between them.
- 8. Technology has huge potential to enable access to markets and financing. For example, in Zambia, the first Virtual Farmers' Market is being piloted. The app-based e-commerce platform, permits farmers' surplus and buyers' demand for crops to be matched, advertised and traded.
- 9. In other parts of the world, drones are changing our agricultural practices and enhancing productivity. For example, seed-planting drones are supporting commercial farmers and foresters, curbing deforestation and, by extension, mitigating climate change.

- 10. In medicine, East Africa is at the cutting edge of drone delivery. Since 2016, Rwanda has been using a fully automated drone delivery program, for delivering medical supplies such as blood, medications for HIV and malaria. Tanzania has also recently announced the initiation of a similar program.
- 11. In infrastructure, Mobilized Construction is a technology company that is changing how dirt roads are built, monitored and maintained across Kenya, Africa, and eventually the developing world. By using a software platform, governments can use labour-based road construction in place of heavy machinery. This not only creates hundreds of jobs in local communities, but also reduces the costs of road construction by 80 to 90%.
- 12. The sessions on agroecology for sustainable food systems yesterday, and the work of the New Alliance for Food Security in Africa (NAFSA) provides strong examples of how unlocking private investment can improve agricultural productivity, by simple technologies such as water harvesters, drought resistant seed varieties and precision farming techniques.
- 13. During the topical session yesterday, it was clear that Carbon Capture and Utilization technologies will provide striking opportunities to channel our CO2 emissions into fueling our economies. Within a 5-year horizon, we'll be able to convert CO2 in biofuels, to channel CO2 into desalinization plants to produce potable water, and utilize CO2 for improving efficiency of geothermal systems. These promising technologies will require investment and public backing to be mainstreamed and employed at a commercial scale.

- 14. Technology will change the way we work and the way we overcome global challenges. However, we must note that if technological progress is not managed well, we run the risk of exacerbating existing inequalities.
- 15. The question then becomes, how can we ensure that we use the benefits of science, technology and artificial intelligence as a force for good? And how can we ensure that no one is left behind in this age of rapid technological change?
- 16. Firstly, we need to close the digital divide between developing and developed countries, between the poor and the wealthy, and between women and men, girls and boys. We must at all cost avoid exacerbating inequalities.
- 17. Teachers must be trained, and curricula in schools and universities must be constantly adapted and improved to equip our children with 21st century skillsets. Lifelong learning opportunities will be equally important in the age of rapid technological change.
- 18. The influence of technology on our societies should be determined by the actions of us, humans, not by machines. Technology is here for us to explore, and for the use and benefit of all.
- 19. UNITAR's objective is to build capacity, change mindsets and bring about visible change, especially at the national and sub-national levels. UNITAR offers courses on the 2030 Agenda; sustainable energy; sustainable urban mobility; governance in urban sanitation; agriculture and climate change; the application of ICT in development; green energy, transportation and green cities to name but a few.
- 20. We are an institution dedicated to building bridges between actors, stakeholders and change agents from diverse sectors of society. For instance, we diffuse scientific and

technical research findings to policy makers and ensure that research is infused into evidence-based policy making.

- 21. UNITAR's centre for satellite imagery and data analysis, UNOSAT, is a pioneer entity when it comes to turning technology into usable applications to support evidence-based policy making. Through UNOSAT's work in the field of geographic information analysis (GIS), we bring technical support to development projects. We deliver training in satellite navigation and the use of telecommunication systems, to support strategic territorial and development planning. We understand that the use of satellite data and mapping is key to maximizing the use of natural resources, ensuring cost-effective investment in infrastructure, and measuring environmental degradation.
- 22. In Chad, for example, UNOSAT is working to develop national capacities in sustainable water management (SDG 6). Having knowledge about groundwater resources is fundamental for both the pastoral and agricultural economies, and food security depends on access to water and the proper management of these resources. Through the use of GIS, satellite imagery and field data analysis, we are mapping the water resources of this vast country and supporting government and civil society farmers to plan the effective use of resources to secure livelihoods.

23. I will stop here.

The United Nations stands ready as a platform for discussion, knowledge and mutual learning on this important topic and is strongly committed to fostering global cooperation and innovative partnerships on frontier issues stemming from progress in science and technology.

I look forward to our fruitful discussion and Happy 72nd Birthday to the United Nations!