

Space for the Great Reset

Boosting sustainable economic growth for a resilient COVID-19 recovery

Multi-Stakeholder Forum on Science, Technology and Innovation for the SDGs
5 May 2021, 12:30 EST

Experts from the United Nations Office for Outer Space Affairs (UNOOSA), UKspace, Nigerian Communications Satellite Limited (NIGCOMSAT) and Bahrain National Space Science Agency (NSSA) shared their insights on how space can boost sustainable economic growth for the COVID-19 recovery.

Speakers:

- Simonetta Di Pippo, Director, UNOOSA
- Aarti Holla, Secretary General, EMEA Satellite Operators Association
- Nick Shave, Chair, UKspace
- Abimbola Alale, MD/CEO NIGCOMSAT
- Mohamed E. Al-Aseeri, CEO, Bahrain National Space Science Agency

Science, technology and innovation are driving forces behind services and products that have become indispensable in our daily life. The COVID-19 pandemic not only confirms but reinforces this trend. Space technologies such as Earth Observation, Global Navigation Satellite Systems and satellite communications have played a key role in addressing the pandemic.

The COVID-19 crisis represents an opportunity to re-think our future, identify and act on those priorities that will help us bringing forward sustainability, equality and innovation, as proposed by the Great Reset Initiative of the World Economic Forum. As the world builds back better, countries need to maximize both the direct and indirect contribution that a strong space sector can make to the Sustainable Development Goals. In these endeavours, outer space represents an incredible asset.

The space economy is rapidly expanding with a huge rise in governmental and commercial actors on the global platform. These have brought significant contributions to the value chains, enabling digitalisation trends and new space systems coming of age. Never has there been so much interest and investments in the sector, with space economy reaching its next giant leap. The space industry is currently worth more than \$400 billion, and analysts expect the global space industry to becoming a trillion-dollar industry by 2040.

As applications of space technologies continue to increase, so does its derived effects. Some of the benefits already known are in relation to positive impacts on the gross domestic product (GDP), rise in employment and revenue gains. Space-based infrastructure continue to play a vital role in supporting critical societal functions and have become increasingly important in the global agendas of sustainability and development, especially for developing and emerging countries. Around 40 percent of 169 targets across all the 17 Sustainable Development Goals directly benefit from geolocation and Earth observation. With satellite communication the number is well over 50 percent. With many spill overs in various areas of the economy such as health, agriculture and transport, space has become an indispensable tool for economic growth.

The recent COVID-19 pandemic reached almost every country in the world and affected livelihoods, businesses and global economies drastically. The consequences of COVID-19 will ripple throughout markets for a prolonged period. The near-term outlook remains highly

uncertain hence policymakers need to continue to sustain the recovery, and gradually look into growth-enhancing policies. Nonetheless, the pandemic has not had a total negative impact as it enabled the sector to be more recognised and demonstrated how connectivity became an essential commodity in the lockdown.

Space supported telemedicine applications and satellite broadcasting in a new and innovative way providing dedicated educational channels and health & safety information. It was used to connect pop-up health centres, hospital ships, mobile clinics, and temporary test centres which all proved critical in identifying potentially affected patients, referrals and exchange of information between central hospitals and monitoring sites.

To address the lack of connectivity in remote regions, Nigeria provided educational connectivity trainings to over 600 youths in isolated areas. This created educational and job opportunities while enabling communities to stay connected during the pandemic period - "Connectivity is currently the currency for communication". Out of this emergency, such a newly skilled workforce becomes key for economic growth and to safeguard the future success of the next generation.

As the world prepares for a post pandemic world, countries need to re-think capabilities to face the digital and environmental future. The pandemic with its political, economic and social disruptions has fundamentally changed our traditional perspective for decision-making. It has exposed the inconsistencies, inadequacies and contradictions of our systems and norms; hence it is time to re-think our societal priorities, business models, and most importantly economies.

In order to support the recovery process, a number of factors will need to be addressed such as resilience, sustainability, equality and innovation. Satellite communication is truly bridging digital, education, health, gender and social divides across diverse geographies and economies. It is also about ensuring safety and security at times of crisis. The fact that "satellite signals are blind to man-made borders" means that they do not discriminate between the rich and the poor. The space sector can support the overall recovery phase by introducing advanced technology, digitalization and automation adoption in many sectors such as transport, healthcare, tourism, energy, safety & security, education and more which have all been severely impacted by travel bans, closure of borders and shift to an online environment. These can take the form of mobility access with sustainable environmental solutions, telemedicine services, machine learning, artificial intelligence in diseases data analysis, remote learning solutions and more. All these advances are linked to current space technologies and applications.

Countries can build back better. However, space technology and multilateralism on science, technology and innovation are two key factors in the equation to support a sustainable and resilient COVID-19 recovery, and effective pathways of inclusive action towards the sustainable development.

The recording of the webinar is available on [UNOOSA Youtube channel](#).

More information about the events series on Space for the Great Reset is available on the [UNOOSA Space Economy webpage](#).