**Keynote Speech for the ITSO Symposium: 12th June 2018**

**Washington, D.C**

Dear colleagues, distinguished speakers, Ladies and Gentlemen.

A very good morning to you all and thank you so much for attending the first ITSO Symposium on Achieving Sustainable Development through Satellite Communications. I am delighted that we will address this important topic before opening our 38th Meeting of the Assembly of Parties tomorrow.

I wish to start our discussions today by addressing the issue of sustainable development. As you will recall, the three pillars of sustainable development are the environment, the economy and society, which implies that not only must we strive to meet human development indicators, but also ensure that we are protecting our natural resources and environment on which our economies and societies depend.

It is now also increasingly evident that widespread access to information and communication technologies (ICTs), especially broadband, is necessary for sustainable development. ICTs are a catalyst for enhancing economic growth, expanding productivity and competition, and aggregating knowledge. ICTs, especially broadband, allow and increase participation in the global economy. Through access to ICTs, developing countries and isolated communities are better able to gain access to education, healthcare, and commercial services.

The transformative power of ICTs as enablers of economic growth has been widely recognized, and access to broadband connectivity has become a key priority of the twenty-first century. The implementation of a

telecommunications infrastructure, in urban and rural areas alike, has become a major political and regulatory objective in many countries.

Nevertheless, the digital divide, that is, the gap in access to ICTs and use of the Internet, hinders economic growth in many countries. The sad reality is that about 52% [3.7 billion] of the world's population is not connected to the internet. And although there are estimates from the ITU that the 50% mark should be achieved by mid-2019 as a result of current strong gains in access and sophistication of technologies, still, there are concerns about new and growing inequalities between countries.

This gap is even more accentuated in rural and remote areas, where mainstream broadband infrastructure, such as fiber optic cables or microwave systems, is limited.

Against the foregoing background, it is now expected that ICTs will have an extensive role in the most well-known and expansive development program: the United Nation's Sustainable Development Agenda and the subsequent Sustainable Development Goals. The 17 broad goals are interrelated though each has its own targets to achieve. The total number of targets is 169. The SDGs cover a broad range of social and economic development issues. These include poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, urbanization, environment and social justice.

Throughout our Symposium, we will focus on the utilization of ICTs to achieve the SDGs.

Although ICTs are relevant to most of the SDGs, they are directly referenced in four goals, Goal 4, Goal 5, Goal 9 and Goal 17- as outlined in the SDG document.

Goal 4 which is to ensure inclusive and equitable quality education and promote life-long learning opportunities for all, references e-learning and e-education initiatives in its Target 9.

Goal 5 discusses the use of enabling technology, in particular information and communications technology, to promote the empowerment of women in its Target 8.

Goal 9 focuses on building resilient infrastructure. Its Target 8 aims to significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

Goal 17, Technology Target 3, discusses strengthening the means of implementation and revitalize the global partnership for sustainable development by using enabling technology, in particular information and communications technology.

However, it is not enough to simply discuss the benefits of ICTs for sustainable development. We must ensure that these technologies are adopted and utilized. Unfortunately, as I said before, a large portion of the global population is still offline due to a number of barriers, such as

infrastructure access, affordability, relevant content, and digital literacy that are preventing communities from accessing this vital resource.

We all know that the main transmission technologies for ICT services are terrestrial systems such as fiber optic cables and wireless radio systems, as well as satellite technologies. Each of these technologies has strengths and limitations.

It is important to note, however, that these technologies are not mutually exclusive and that no technology will achieve universal broadband coverage by itself. Depending on the specific requirements of a given deployment, any combination of these technologies can lead to the optimum technical and financial solution.

We also know that rural communities are often underserved by terrestrial infrastructure. This poses challenges to the sustainable provision of ICT services, especially when considered alongside the other traditional barriers to infrastructure in rural areas such as the absence of reliable power, the cost of deployment of optical fiber, and the high deployment and maintenance costs for microwave links.

Today, we are going to look at these barriers and discuss effective solutions. In particular, the focus will be on how satellite technology can deliver ICT services for sustainable development.

Satellite broadband services can be provided to end-users directly or in combination with other technologies, when specific circumstances warrant

such a combination. Satellite telecommunication represents a point-to-multipoint technology that can reach all geographic targets within a given footprint. Therefore, it instantly establishes service coverage over a region and the possibility to link many costumers to the broadband and Internet backbone network simultaneously.

Now that we have talked about the importance of satellite technology for the universal availability of ICTs, especially for reaching rural and remote areas, let's move forward to the role ITSO can play in achieving the SDGs through satellite technology.

ITSO's mandate incorporates the principle set forth in the UN resolution that established that satellite communication should be available to the nations of the world on a global and non-discriminatory basis. After ITSO's restructuring in 2001, the organization has been tasked with the mission to ensure that Intelsat meets its public service obligation. Since its establishment, ITSO has proved to be an efficient catalyst for global cooperation in satellite communications. It has promoted cross-border flows of information that are vital to business, trade, and peace, and it has been instrumental in facilitating the linkage between the developing countries to the global economy and in enhancing the competitiveness of their economies.

At ITSO, in addition to protecting non-discriminatory access to Intelsat's system and safeguarding the Parties Common Heritage orbital locations and associated frequencies, we also take part in promoting international public telecommunications services to meet the needs of the information and

communication society. One of the ways we do this is through our Capacity Building initiative where we provide our member States with training on the technical aspects of satellite technology and advice on policy and regulatory matters. ITSO also brings together partners for projects such as national governments and the private sector for the benefit of member States. An example of this is the ITSO-UCC-Intelsat Remote Connectivity Project in Uganda which you will hear more about later.

ITSO is also conscious of the challenges that exist in relation to the provision of satellite communications for sustainable development. As we will hear, market constraints can restrict satellite operators. Similarly, regulatory frameworks that are not created to provide for an enabling and open environment also hinder the provision of affordable services. As a result, we are actively participating with the ITU in the development of policy and regulations as they relate to satellite communications.

The evolution of technology is outpacing socio-economic development. New technologies such as IoT and 5G Mobile networks are exciting for us who live in connected areas, but unfortunately, we are the privileged minority. While we adopt these innovations, the majority of the global population does not even have access to the most basic services. So therefore, our never-ending challenge is to provide connectivity to the unconnected.

In conclusion, I would like to leave you with a few questions that hopefully our Symposium will help answer.

- How can we use the resources that are already available to us to bridge the digital divide?

- What opportunities does the future bring to expand the scope of the ICTs through satellite communications?
- What role do stakeholders such as international organizations like ITSO, the public sector and the private sector among others, have to play in relation to achieving sustainable development through ICTs?

So, without much ado, I would like to hand the floor to our moderator, Mr. Douglas May, the Director of International Communications and Information Policy in the U.S. Department of State, to guide through the day's events.

Once again, thank you all for attending, and I hope to see many of you tomorrow as well for our 38th Assembly of Parties.