

Space Sustainability Forum 2024
Geneva, Switzerland, 10 September 2024

ITU Secretary-General's remarks
at the Space Sustainability Forum 2024

Good morning, ladies and gentlemen.

Welcome to ITU's first-ever Space Sustainability Forum!

It's exciting to see so many prominent space experts here in the room and online.

I'm told we have gathered participants from over 80 countries —

thank you for joining us.

Whether it's building innovative services to connect more communities via satellite broadband, including the third of humanity that's still offline; promoting the benefits that space can bring to your national or regional economies; or financing the projects that are pushing the boundaries of science and feeding humanity's insatiable drive to discover – each of you is committed to advancing the space endeavor in some way.

We have representatives from governments, the United Nations, space agencies, launch companies, the satellite industry, operators, researchers, civil society, academia — a real “who's who” of the space community.

And if you're here, it's also because you believe, like I do, in the power of collaboration when faced with complex technical challenges; in the potential that lies in pooling our collective talent, resources, and creativity to advance humanity's space ambitions responsibly and sustainably.

That is the “why” of this forum.

Now, some of you might be asking: “Why ITU? Why now?”

Let me give you three reasons.

First, the International Telecommunication Union has been part of the satellite and space story from the very beginning, when space was the exclusive domain of governments.

We became involved in satellite communications soon after the launch of Sputnik I, the first-ever satellite, in 1957.

A few years later, in 1963, the **Extraordinary Administrative Radio Conference** was held right here in Geneva to allocate frequencies to various space services and to revise parts of the Radio Regulations.

Over the decades, ITU has become an essential part of the space endeavour... because virtually everything we do in space relies on radiocommunication.

Even the dark side of the Moon is protected from radio-frequency interference thanks to a visionary ITU decision taken in 1971.

The work into the next four-year study cycle in the run-up to the **World Radiocommunication Conference 2027** is well underway — and about 80 per cent of the WRC-27 agenda is space-related.

And many of your entities are contributing to that work through our Study Groups, which are laying the technical and regulatory groundwork for different services to coexist, and even establish the technical foundation to communicate seamlessly on and around the Moon.

Under Mario [Maniewicz]'s able leadership, our Radiocommunication Bureau continues to evolve, alongside the surge in space innovation driven by your organizations.

Over the past 10 years, ITU has observed a significant increase in registered satellite filings destined for low-Earth orbit.

The last decade saw around 10,000 satellites launched, increasing the mass launched annually ten-fold.

Second, our Member States are placing more importance on space, with many new administrations joining the legacy leaders.

We've seen a wave of countries establish their first space agencies, including some represented here.

Right now, over 40 countries are collaborating to explore the Moon, whether under the Artemis Accords or China's lunar research station initiative.

More countries than ever have “space plans” — not just for new satellite services, but also for leveraging space-based data and building capacity and skills to nurture the next generation of space innovators.

Third, governments no longer dominate space activity as they did at the dawn of the Space Age.

In addition to more space-faring nations, we're seeing more companies in competition, and more diverse services and innovative use cases — from connecting unreached communities to better understanding climate change, including disaster prediction and early warnings.

These new space actors, including the private sector, have a voice and actively participate alongside more traditional players in shaping the future of space-based communication here at ITU.

Now, I may be biased — as some of you know, my own career began in satellite policy — but I truly believe space to be one of the most exciting topics out there.

The space economy is forecast to reach USD 1.8 trillion in the coming years (2035), growing at an average of 9 per cent per year.

That's well above the growth rate of global GDP.

With the deployment of low-Earth broadband constellations, most satellites launched will continue to be commercial.

And the significant level of investment and innovation we are seeing in space holds tremendous potential for advancing the **UN Sustainable Development Goals** (SDGs).

At least 40 per cent of the SDGs rely on Earth observation, remote sensing, and global navigation satellite systems — a testament to how satellites have become critical infrastructure supporting sustainable life on Earth.

But what about the sustainability of that very infrastructure itself?

How much more pressure on orbit and spectrum resources can the ecosystem take?

What kind of space environment are we leaving to future generations, and how might it affect their ability to connect, communicate, and explore the cosmos further?

There are so many facets of space sustainability: from physical safety to cybersecurity to regulation; from technical standards to economic and environmental concerns.

Many of you have diverse perspectives on how to approach them.

But what we can all agree on, I believe, is the need to prioritize a deeper understanding of not only the *why* — but the *how* of space sustainability.

For ITU, a sustainable space environment is one that is free from harmful radio interference – but also from debris that poses significant risks to satellites, including physical collisions that ultimately hinder the efficient use of spectrum and orbit resources.

There is too much at stake — including the one-third of humanity that is still offline and millions more who find themselves on the wrong side of the digital divide.

We must do everything we can to avoid jeopardizing the progress satellites are making in achieving our goal of universal, meaningful connectivity.

This is why ITU Member States recently adopted a series of resolutions instructing us to actively contribute to global efforts to promote space sustainability.

At the Plenipotentiary Conference in 2022, a milestone resolution underscored the urgent need to review technologies used in the geostationary orbit, as well as the increased numbers of satellites in non-geostationary orbits.

Building on that momentum, the **Radiocommunication Assembly 2023** adopted a resolution on space sustainability that not only acknowledges the urgency of space debris mitigation, but also instructs the Radiocommunication Sector (ITU-R) to develop guidance on safe and efficient de-orbit and disposal strategies.

It's why ITU-R Study Group 4 has already started collecting methodologies for non-geostationary satellites.

To support this work, the Radiocommunication Bureau has set up a dedicated portal to ensure that best practices are shared widely.

We'll hear more from Mario on this shortly.

I believe the “how” of creating a sustainable space environment also requires facilitating important debates like this one – and using our technical expertise and convening power as the UN agency for digital technologies to help advance humanity's space ambitions responsibly.

Let me add how glad I am to see my UN colleagues Celeste [Saulo] from the World meteorological Organization (WMO) and Aarti [Holla-Maini] from the United Nations office of Outer Space Affairs (UNOOSA) – as well as Nikhil Seth of the United Nations Institute for Training and Research (UNITAR) – here with us today.

Ladies and gentlemen,

We meet at a mission-critical moment for the space economy and the role of space in achieving the SDGs, only 17 per cent of which are on track.

The **Summit of the Future** — now just two weeks away — aims to adopt an ambitious, concise, and action-oriented **Pact for the Future**, which includes elements on space sustainability.

This Forum is our opportunity to look at all the tools in our toolbox and imagine how we might make the future of space as sustainable as possible.

We'll explore how to do that without stifling the wave of exciting innovation and progress we've witnessed over the past decade.

Today and tomorrow, I invite you to consider not only the challenges and unknowns — and those are many — but also identify opportunities for how this brilliant community might shape concrete actions towards a responsible space ecosystem from which all humanity can benefit.

When UN Secretary-General Antonio Guterres visited ITU just a few weeks ago, he urged us to “work together to build bridges.”

As we build those bridges back to the Moon, stars and beyond, let's look before we leap — and together, create a more sustainable space environment for all.

Thank you.