



New Space Economy ExpoForum 11 December 2020

### Keynote statement by Simonetta Di Pippo Director, United Nations Office for Outer Space Affairs (UNOOSA)

Ladies and Gentlemen,

It is a great honour to share the virtual stage with so many distinguished speakers and thanks to the organizers for the opportunity to address this NewSpace Economy Expoforum.

It is always great to have a chance to discuss the developments in space.

The prominence of the space industry has grown significantly in the past decade. And with it the widespread recognition of its role in modern society.

The benefits space assets provide are much better understood and communicated and as a result, investments in space are growing. And we speak about human power, finance but also diplomacy.

#### What we are witnessing today, is unlike anything we have seen in the space sector over the past six decades.

New technologies, applications and services predominantly developed either through commercial avenues or publicprivate projects.

The unprecedented amount of data collected from space assets. And space economy growing every year breaking records on the way.

The developments of the last decade led to a significant transformation.

With the miniaturization of satellites and declining costs of launches, it has become gradually easier to access space and the benefits it enables. The numbers do not lie.

So far in 2020, over 1,200 satellites have been launched - an annual record by a mile - doubling the highest figure we saw in 2019 standing at 581.

And what about governments and their spacefaring efforts? By 2010, 50 states managed to get a satellite to space either using their own or procuring foreign launch services.

Today, we stand at 83 and counting. And I am proud that UNOOSA together with JAXA supported Kenya and Guatemala to become one of the newest spacefaring nations.

## But what has changed is the composition of the space sector.

The pendulum is now swinging strongly towards a multi-player ecosystem of public and private stakeholders who are, collectively, contributing to the 'space economy'.

In the past, space activities had mainly concerned governments and space agencies, with public funding as the first, if not the only, source of investment. Today, the situation is different.



The space market has grown into astonishing diversity and numbers. Commercial actors, universities, organizations - all are capitalizing on the developments in the space sector.

No need to say more - over half of the small satellites launched since 2012 were non-governmental.

And there is every reason to celebrate these developments, as the economic implications of this progress are not negligible.

The commercial sector has been at the forefront of the NewSpace.

The value of space has grown by about 60 per cent in the last ten years, as compared to 35% growth of the global GDP.

And it is indeed commercial efforts that have contributed heavily. While government expenditures represent around 20 percent of the overall value of the space industry, commercial avenues account for 80 percent, and still growing.

But what is most important, is that the **space economy is growing around the world, including in emerging contexts.** It is estimated that the African space economy will grow over 40% in the next 5 years.

To explore this complex topic in more detail, earlier in the year **UNOOSA** organized a series of webinars dedicated to Space Economy.

The expertise from representatives from both public and private domains allowed us to delve deeper into the theme from various perspectives.



We explored how different countries strengthen their respective space sectors, and how different stakeholders can help to scale up commercial entities and enable access to finance.

The focus was also to explore the nexus between government, industry and academia for innovation and growth, and international cooperation.

Owing to the growing complexity of the sector, the interplay of these different actors is indeed a pre-condition for success in the space economy.

And we also sought ideas and perspectives on global developments. Covid-19, building back better, climate action, sustainable development - all played a prominent part in our discussions.

Space will be one of the key sectors in what many call the 'Great Reset'.

Owing to the great success of this series we are exploring avenues to continue shaping discussions along the lines of space economy in 2021. So stay tuned!

Ladies and gentlemen,

As the world is still struggling with the new coronavirus, the space sector fully manifested its importance in addressing health issues, but also in opening new avenues for generating economic and social well-being.

Satellite-based communication has enabled telehealth and telemedicine, remote working arrangements and interpersonal contacts even under restrictions.



PNT services allowed us to monitor compliance with different measures adopted to curb the negative consequences of Covid-19.

And thanks to space-based Earth Observation, we have been able to monitor the impact of the economic slowdown.

The power of space cannot be overlooked. Science and technology are the very best of humanity and space exploration and use certainly sits at the top of human capabilities.

What COVID-19 also uncovered are major flaws in our behaviour.

#### The pandemic is a very tragic example of a crisis addressed in the wrong manner along three lines.

Firstly, COVID-19 crisis surprised us - not because there were no warnings about such a scenario, but because **we failed to listen and prepare**.

Secondly, the **push for shared goals**, **sustainability**, equality and innovation on a global level is still short of the ambition.

And finally, there is still a lack of global cooperation.

So where do we have to put our focus?

Looking forward, we must move to a knowledge-based society driven by science, technology and innovation.

And we must do this in harmony among states and all stakeholders, aligning on what we want to achieve and where we want to go.



While the latter is clearly envisioned in the internationally agreed frameworks, including the 2030 Agenda on Sustainable Development, Paris climate agreement or the Sendai Framework, we see limited progress and an appetite to reverse from an international, cooperative approach.

The challenges we face can only be mitigated by working together. We must forget nationalism, individualism and competition.

We indeed live in a multipolar world, shaped by converging but also, at times, polarizing interests.

But what we can all agree on is that everyone wishes for a better world - for themselves, their families and communities, villages and cities, their countries and ultimately, for civilization.

#### By embracing cooperation, inclusiveness and diversity we can get there.

# These are the values at the core of the United Nations.

We assign utmost importance to tackling the challenges facing humanity in synergies among our Member States, and together with all stakeholders.

This Decade of Action requires resources, ideas and views, perspectives and contributions from everyone.

This is the only way to ensure that future generations will live in better conditions for the remainder of the 21st century and beyond.



### UNITED NATIONS Office for Outer Space Affairs

I, therefore, welcome that we gather here this week to build bridges and make sure that what we do individually, locally or nationally matters globally and benefits everyone. There is no substitute to such multi-stakeholder approach.

And how to apply this to space?

We must bring even more countries and stakeholders into the sector, sparking further progress in the industry, and in states and their space economies.

For this, **we must remain committed to two critical things. Capacity-building** and support to emerging and nonspacefaring nations. **And** the **dedication to protect** the safety, security and sustainability in **space**.

And it is here where I would like to delve more in detail into the role of UNOOSA. As the only entity devoted to the peaceful uses of space in the UN, we capitalize on the unique position in the system, vis-à-vis the Member States and in relation to external stakeholders.

UNOOSA, as the only entity devoted to the peaceful uses of space in the UN, advances international cooperation to bring the benefits of space to humankind.

We devote our work to advancing international cooperation and to bringing the benefits of space to humankind - in every corner of the world.

How does it look in practice? From the capacity-building perspective, we have been actively contributing to expanding capabilities of countries and individuals to use space science, technology and applications for development.



Space policy and law, remote sensing, satellite navigation, satellite meteorology, disaster management, e-education and basic space science - just a glimpse of what participants to our events get to learn about.

And we remain innovative in the delivery of capacity-building activities. The requirements for the 21st-century capacity-building are evolving and so are we with our novel, modern and holistic approach.

Right now, our Access to Space for All initiative offers a range of activities from micro- and hyper-gravity research, satellite development and launch, and access to space stations for educational and research purposes.

We strive to continue our efforts in expanding this portfolio of opportunities available to the UN Member States.

And let me also touch upon the safety, security and sustainability aspects in space.

**Bringing more stakeholders into the sector is only part of the success.** Space is a limited resource where actions of one stakeholder influence everyone else.

Currently, the unprecedented rate at which we have been launching satellites in the last few years is largely untapped. And sooner, rather than later, we will be in trouble.

But I am not suggesting to stop launching, not at all. I am only highlighting that we need to act before it is too late.



As a convener, we provide unique platforms for stakeholders to get together and debate these issues.

The recent success of the 2<sup>nd</sup> World Space Forum is a great example.

And we are also actively helping states to follow international space law and other relevant measures.

Through 'Space law for new space actors', we support emerging space players in developing an enhanced understanding of the fundamentals of international space law and to implement existing international agreements such as the Outer Space Treaty.

Overall, the long history of productive multilateral collaboration at the UN in the space sector is a great example of what the international community can achieve.



With robust institutional support, political will and a common goal anything is possible.

And to conclude, let me summarize what I intended to underline here today.

The world needs a strong, prosperous and global space economy where all stakeholders can participate in a levelplaying field.

But we must enable access to space in a manner **that upholds the highest standards regarding safety, security and sustainability** of this environment.

That is the core of our work at UNOOSA and we remain at the disposal of our Member States and all space stakeholders to help shape a better planet for all of us.

Thank you