

STATEMENT BY THE REPUBLIC OF SOUTH AFRICA

59TH SESSION OF THE SCIENTIFIC & TECHNICAL SUB-COMMITTEE OF THE

UNITED NATIONS COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

AGENDA ITEM 4 GENERAL EXCHANGE OF VIEWS

Date: 07-18 February 2022

Mr Chair,

On behalf of the South African Government, I am honoured to address this 59th session of the Scientific and Technical Sub-Committee of the United Nations Committee on the Peaceful Uses of Outer Space. Allow me to congratulate Your Excellency, Ambassador Juan Francisco Facetti on chairing this Session. We are confident that we will achieve a successful outcome under your able leadership.

South Africa extends its deepest appreciation to Ms. Simonetta Di Pippo, the Director of the Office for Outer Space Affairs and her dedicated team at the Secretariat for the outstanding preparations made in convening this Session amidst challenging circumstances. We further commend Ms Di Poppo for her commitment and astute leadership during her tenure and wish her well in her future endeavours.

At the onset, my delegation associates itself with the statements delivered on behalf of the African Group and the Group of 77 and China respectively.

Mr Chair,

South Africa recognises the Scientific and Technical Subcommittee as an essential forum for the exchange of views and sharing of best practices on scientific and technical issues of outer space activities. South Africa also welcomes Angola, Bangladesh, Kuwait, Panama and Slovenia as new members of the Committee. South Africa reiterates its commitment to international cooperation for mutually beneficial and peaceful uses of outer space.

Mr Chair,

From a national perspective, South Africa is pleased to inform the Subcommittee that it launched three locally produced nanosatellites under Space X's Transporter Mission on 13 January 2022. The full Maritime Domain Awareness Satellite (MDASat-1) constellation will be an operational constellation of nine satellites that will detect, identify, and monitor vessels in real time in support of the maritime industry. The MDASat-1 launch is a significant milestone for South Africa, marking the first launch of a satellite constellation developed entirely on the African continent. The 3-cubesat constellation is communicating well with the ground stations and is currently being commissioned.

Mr Chair,

Since 2010, South Africa has been actively supporting indigenous rocket engine technologies' development. The support is aligned with the strategic goal of space industry development to encourage advanced manufacturing, research and development, human capital development and local private sector development, and is part of a 20-year launch vehicle technology development plan for South Africa.

We are equally pleased to announce that Mechanical Engineering Masters and Doctoral students at the University of KwaZulu-Natal's Aerospace Systems Research Group have designed and successfully tested a powerful liquid-propellant rocket engine as the first step towards developing a launch vehicle for placing satellites into Earth orbit. The successful Ablative Blow-down Liquid Engine (ABLE) test campaign took place in the Western Cape over a three-week period. The ABLE combusts liquid oxygen and jet A-1 fuel to produce just under two tons of thrust and is similar in design to engines powering the newest small satellite launch vehicles. Although there are bigger commercial engines in operation, ABLE is one of the most powerful student-built liquid rocket engines ever produced.

Mr Chair,

South Africa is home to the Southern African Large Telescope, the largest single optical telescope in the southern hemisphere. It is also home to the MeerKAT radio telescope which is the most sensitive telescope of its kind in the world and a precursor to the Square Kilometre Array radio telescope, to be built in South Africa and Australia.

At the beginning of February 2022, the South African Radio Astronomy Observatory (SARAO) released a new MeerKAT telescope image of the centre of our Galaxy, showing radio emission from the region with unprecedented clarity and depth. According, South Africa supports the Working Paper on the Protection of Dark and Quiet Skies and its recommendations to include an agenda item entitled "Impact of satellite constellations on astronomical facilities" in the Scientific and Technical subcommittee. This would allow for delegations to share views as well as provide technical updates and modifications to the current set of best practice guidelines.

Mr Chair,

South Africa emphasizes the need to ensure the long-term sustainability of outer space activities, including the safety of space operations. LTS guidelines should not create barriers for developing nations in conducting their own outer space activities and should include. We hope that both the agreement and implementation of the guidelines will allow for future generations to enjoy the benefits of outer space.

Mr Chair,

In ensuring that outerspace remains safe and usable for all countries, South Africa expresses its concern over the increasing space debris and calls for greater responsibility of decongesting outer space through remediation. South Africa encourages countries to take common but differentiated responsibilities, especially actors responsible for creating space debris. They should also provide scientific and legal expertise through cooperation agreements to countries with lower levels of space development.

Mr Chair,

South Africa welcomes the adoption of Resolution 76/3 titled: "The 'Space2030' Agenda: Space as a Driver of Sustainable Development" by the General Assembly in

October 2021. The Space 2030 Agenda and its implementation plan offers a blueprint to reach the Sustainable Development Goals by tapping into the data, technology, innovative products and other tools gained through space exploration.

As evident during the current pandemic, space-based technologies are playing a growing role in furthering global health objective. Remote sensing technologies have also been useful in monitoring infectious disease patterns. In this regard, South Africa supports the draft General Assembly Resolution on Space and Global Health encouraging a multisectoral approach in all key space activities relevant to global health.

Mr Chair,

In conclusion, let me reiterate my delegation's full support for a successful and productive session.

I thank you.