

# Statement by South Africa

52<sup>nd</sup> session of the Scientific and Technical Subcommittee

Committee on the Peaceful Uses of Outer Space

Delivered by Ambassador T Seokolo

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Agenda Item 3: General exchange of views

# Mr Chair,

It is with great pleasure that the South African delegation participates in this 52<sup>nd</sup> session of the Scientific and Technical Sub-committee of COPUOS. We are confident that under your able leadership the meeting will make substantial progress on all the agenda items before us. My delegation also wishes to express its appreciation for the work carried out by the Office for Outer Space Affairs, and the Secretariat for their dedicated work in the preparations for this session.

#### Mr Chair

Over the years, South Africa has benefitted from the many activities of the United Nations Programme on Space Applications. It is therefore with pleasure that we inform the Subcommittee that South Africa will have the privilege to host the United Nations Basic Space Technology symposium in September 2015 in Cape Town. The South African National Space Agency in partnership with Space Commercial Services, a private company, and the University of Cape Town will host the symposium. The symposium will address the status of capacity-building in space technology development, in particular, as related to small satellite activities with a focus on Africa. It will consider opportunities for regional and international cooperation as well as legal and regulatory issues of space technology development, including the long-term sustainability of outer space activities. The development of the UN curriculum on basic space technology will also be discussed. We look forward to welcoming you to Cape Town in September to attend this workshop.

# Mr Chair,

South Africa continues to monitor space weather effects and endeavours to raise awareness of space weather nationally for the benefit of our nation and in contribution to the improved global understanding of the space environment. In order to establish capacity to predict and forecast the regional impact of space weather over the African region, South Africa is undertaking various research and application development projects in partnership with industry and other global space weather centres.

South Africa is keenly aware of the economic benefits of space weather, and the need to quantify these benefits to demonstrate the value that can be derived from space. South Africa has taken note of the ICAO recommendations on space weather for aviation, and will be working closely with the aviation sector and global experts to ensure our ability to service the African region.

South Africa will continue to build on its efforts to understand, predict and forecast space weather effects for the benefit of our nation, our industry, and as a contribution to the global efforts. In this regard, Dr Lee-Anne McKinnell from the South African National Space Agency (SANSA) represented our delegation at the workshop on Space Weather Services to build Global Resilience that was held in support of this UNCOPUOS Scientific and Technical subcommittee agenda item on space weather.

# Mr Chair,

My delegation shares the concerns that have been expressed by other delegations on the importance of preserving the space environment from degradation due to natural and anthropogenic causes, so that we may all continue to enjoy the societal benefits of space science and technology. In this regard, my delegation is pleased to note the progress that has been made under that agenda item on the long-term sustainability (LTS) of outer space activities, and in the working group on this topic under the chairmanship of Mr Peter Martinez of South Africa, as summarised in the latest draft of the LTS guidelines.

My delegation supports the extended work plan for the working group and believes that this provides a realistic timeframe to achieve positive results of this important work of the Subcommittee, which is anxiously awaited by many space actors. In this regard, my delegation is pleased to note the submission of a number of proposals for new guidelines in this session by several member States. We will study these proposals with interest and look forward to participating in the Working Group discussions of these new proposed guidelines.

My delegation would like to reiterate its previously stated view that the LTS guidelines should not have the effect of raising barriers for developing nations to conduct their own outer space activities and believes that this risk can be mitigated through adequately addressing capacity building as an integral part of the guidelines.

#### Mr Chair,

I'm pleased to report in this meeting progress in space related activities in my country that we have achieved since the fifty-first session of the Scientific and Technical Sub-Committee in February last year.

South Africa's first nano satellite, Tshepisosat, completed its first year in orbit in November 2014. During that period the satellite was commissioned in orbit and commenced deployment of its HF antenna. The HF beacon payload was developed to calibrate space weather instrumentation located at the South African Antarctic base. Although analysis of satellite telemetry indicates that the HF beacon antenna may not have deployed fully, Tshepisosat has inspired many young South Africans and has been a valuable learning experience, making contributions to science and engineering.

South Africa is proud to announce that work has begun on our second nano satellite, a three unit Cube Sat, which is expected to make significant contributions to space science in South Africa.

#### Mr Chair,

The South African National Space Agency is involved in various initiatives aimed at showcasing the value of satellite earth observation data in South Africa and the SADC region. To this end, a number of Earth Observation activities have been carried out.

On human settlement mapping; recognising that urbanisation and human population growth remains one of the biggest global challenges, our space agency has embarked on a flagship project aimed at monitoring urbanization and the growth of settlement and transformation of housing from temporary to permanent structures. This project provides

tools and important information for decision making when monitoring service delivery projects and town planning.

In the area of disaster monitoring and post disaster assessment, our space agency regularly provides information in response to disasters in South Africa and the SADC region. Disasters monitored regularly are floods in Southern Africa and fires in South Africa. We also contribute daily satellite earth Observation data that is used in the Advanced Fire Information System (AFIS), the first near real-time satellite-based fire monitoring system in Africa. AFIS uses the internet viewer to provide remote sensing and geographical information systems to aid operational fire control and management of fire monitoring in the Southern African region. Post fire assessment is regularly needed by insurance companies that seek to establish the origin and extent of fires.

South Africa also contributes to regional course of disaster management as part of the Committee on Earth Observation Satellite (CEOS) and other regional initiatives. Our space agency participated in UN SPIDER Technical Advisory Mission, from 26-30 April 2014, and CEOS Disaster training workshop in Namibia also in 2014.

As part of the collaboration with SADC disaster groups, SANSA together with the Zambia Remote Sensing Centre were engaged in a research project that uses satellite Earth Observation for drought, soil and vegetation monitoring.

#### Mr Chair,

On the regulatory front, the South African Council for Space Affairs is currently leading a review of the Space Affairs Act of 1993, to bring our domestic legislation into alignment with developments in the local and international space arena since the legislation was adopted 20 years ago and to ensure that it will meet anticipated regulatory needs in the foreseeable future.

Our delegation has considered the agenda carefully and will make submissions during discussions of certain agenda items.

I thank you, Mr Chair.