

## **Minister Naledi Pandor's statement to the International Space Forum**

Department of Science and Technology, South Africa

Trento, Italy

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I would like, in the first instance, to congratulate Minister Giannini and the Government of Italy, as well as the International Academy of Astronautics, on the initiative to organise this first International Space Forum. Space science and technology can make critical contributions to advancing global sustainable development. This exciting potential will, however, only be fully exploited through concerted international partnership. It is therefore highly appropriate that we convene at ministerial level to discuss working together, sharing resources, experience and expertise.

Space science and technology is a priority focus area in South Africa and one of the grand challenges identified in our Ten Year Innovation Plan. The South African National Space Agency, established in 2010, has three main functions - to implement a national space program, to advise the Minister of Science and Technology on strategy and programmes, and to acquire, assimilate and distribute space-derived data to various state entities.

Space data provides us with important information about food security, water and environmental resource management, and our safety and security. The resulting products and services not only improve the efficiency and effectiveness of many state socio-economic activities, but also provide much of the

knowledge and understanding needed to address local and global challenges. Earth observation, as outlined by Dr Aschbacher in his address, has an especially important role to play in supporting our ability to implement strategies for mitigating and adapting to climate change.

International partnerships in this context are critical and South Africa is therefore fully committed to the work of the Group on Earth Observation (GEO) and its development of a Global Earth Observation System of Systems (GEOSS.) With several international partners we are investing in the AfriGEOSS platform to enhance Africa's contributions to GEOSS.

AfriGEOSS aims to strengthen the link between the current GEO activities for establishing a coordinated global Earth observation system of systems with existing capabilities and initiatives in Africa. It provides the necessary framework for countries and organisations to access and leverage on-going bilateral and multilateral EO-based initiatives across Africa, thereby creating synergies and minimising duplication for the benefit of the entire continent.

In South Africa our National Space Agency and the South Africa-GEO initiative play a leading coordinating role in this context. This coordination has enabled SANSA to negotiate the distribution of data from SPOT 1-7 satellites to users in the Southern African Development Community (both government and private sector entities) and a number of African countries outside Southern Africa, namely Burundi, Cameroon, Central African Republic, Chad, Republic of Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Kenya, Rwanda, Somalia, South Sudan, Sudan and Uganda

Our combined efforts at enhancing Africa's space capabilities is of immense value to the scientific community but also governments in Africa. Space capabilities are vital in finding solutions in the challenges of health care provision, water resource, agricultural mapping, and urban planning and communications.

The establishment of the National Space Agency has enabled us to address African challenges. This capacity will be further boosted by South Africa's hosting of the Pan-African University's Institute for Space Sciences, which we hope will start its first programmes in 2017.

OECD countries dominate the space economy. But times are changing. The BRICS countries have invested substantially in recent years. Brazil, India, China and the Russian Federation are now leading contributors to the space economy. At our recent BRICS Science and Technology Ministerial Meeting in India, the BRICS nations committed to partnership in a number of space science-related domains such as astronomy and geospatial information.

And now it is Africa's turn. African governments and relevant institutions are increasing investments and awareness of the use of space for decision making processes. We are stimulating an African dialogue on the use of space for development, building African capacity in science and technology, and promoting continental coordination of space activities. These efforts resulted in the African Union adopting for the first time a comprehensive African space policy and strategy. Coordination of space activities across the continent is vital for unlocking the

promise that space holds for sustainable development and economic growth.

The dialogue and coordination I am talking about is beginning to yield positive results, as can be seen in the emergence of space agencies in Algeria, Nigeria and Egypt, as well as national programmes in Kenya and Sudan. These developments have increased the appetite of African countries for developing space assets. I would like to commend the efforts of other African delegations present here and re-commit South Africa to intensified continental collaboration.

In conclusion, it is important to report on progress of the Square Kilometre Array (SKA) global radio telescope project, which South Africa will co-host with Australia. The SKA is an iconic project for world science. It brings together groundbreaking science with cutting-edge technological innovations. The technologies that are being developed for the SKA and its precursors - such as signal processing, very fast computers and data transport, image processing and wireless - are key technologies for the future.

We are nearing the completion of the pre-construction phase, preparing for construction proper to start in 2018, following the critical design review in 2017. Under the very capable leadership of the Italian Government, which I want to acknowledge here, we are also negotiating the establishment of a new dedicated international treaty organisation, to be the international custodian of the SKA – a sign of global confidence in the project.

We are in partnership with eight other African nations that will host remote stations of the SKA and we are developing with them, in preparation of the full SKA, a new African network of telescopes, the African Very-long Baseline Interferometry Network or AVN. It is making a valuable contribution to the training of the next generation of African scientists and engineers.

The SKA will be the first large-scale global research infrastructure located in Africa. It will be a fitting symbol of a twenty-first century globally inclusive partnership - as foreseen by the Trento Space Statement.