STATEMENT BY THE REPUBLIC OF SOUTH AFRICA

TO

THE 64TH SESSION OF THE UNITED NATIONS COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE
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TO BE DELIVERED BY:
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AGENDA ITEM 10: SPACE AND WATER

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Chairperson, Distinguished Delegates

Water is central to many critical life applications such as health, food security, sanitation, broader economy, to mention a few, and impacts on integrated Earth Observations sciences ranging from climate change to human development.

According to the South African Water Sector Induction Manual, South Africa is a water stressed country due to low levels of annual rainfall, and certain parts of the country have been experiencing severe droughts since 2015 and with several metros seeing water usage restrictions imposed. This condition is exacerbated by factors such as rapid population growth, with consequential agricultural production, industrial development, environmental pollution and climate change, which exert tremendous amount of pressure on the limited freshwater resources. As a result, several challenges and concerns arise, which include security of supply, environmental degradation resource pollution and inefficient use of water. These multifaceted challenges and concerns grossly affect the state of water security in the country.

Chairperson

Understanding the complexity of water security challenges and how to effectively mitigate these challenges, has become an important challenge for sustainable development, therefore, reliable information on the status of temporal availability of water storage bodies, quality and how it changes in between seasonal variations is essential to effectively manage water resource' challenges in South Africa.

In this regard, Earth Observation data acquired from space, in situ, and airborne instruments have been identified as important tools to greatly enhance effective water resources management in South Africa.

Chairperson

Through the South African National Space Agency, SANSA, we strive to develop innovative solutions for water resources management in the form of Earth

Observation data to assist authorities in their decision-making processes. In the process of creating a conducive environment for industrial development in space related applications in South Africa, SANSA has entered into a multi-user agreement with two private sector companies, to provide services to government entities for the purpose of water management through the National Water Quantity Information Service also known as “Mzansi Amanzi” tool.

Mzansi Amanzi provides processed Sentinel-2 and 1 satellite data to compensate for all weather conditions, to calculate the monthly usage of surface water area and dam water volume levels across South Africa with respect to user needs, i.e. estimate usable water supply volume in a particular area, thus providing solutions to monitor water resources to satisfy the demand for information in near real time.

This information is very useful for the Department of Water and Sanitation for a wide range of applications such as monitoring of dams, calculation of surface water area (for SDG reporting), monitoring of water use for both management and compliance purposes, disaster management and other applications.

Chairperson, Distinguished Delegates, with these few words I thank you for your kind attention.