

STATEMENT BY THE REPUBLIC OF SOUTH AFRICA

67TH SESSION OF THE UNITED NATIONS COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

AGENDA ITEM 10: SPACE AND WATER

Date: 25 June 2024

Thank you, Chairperson for giving me the floor.

South Africa's climatic conditions coupled with escalating water demands, and water pollution, are affecting the country's quantity and quality of water. Despite these challenges, South Africa is committed to addressing and monitoring water scarcity and quality. To achieve this, our country is continually advancing scientific, engineering and technological competencies through human capital development.

Space technologies, especially remote sensing, have shown proven effectiveness in addressing water resource management challenges. In collaboration with industry and public institutions, the South African National Space Agency continues to support the Mzansi Amanzi tool, which utilizes earth observation data to provide accurate monthly information on water resources nationwide. Additionally, the National Human Settlement Layer offers valuable data on the locations of both formal and informal settlements, helping users identify areas of growth and plan for adequate provision of potable water. In disaster management, flood risk mapping has also facilitated proactive mitigation efforts and supported national recovery initiatives.

Chair,

We are assisting communities by providing space-based products to monitor water quality, with a current focus on turbidity. Various factors influence water turbidity, including sediments from erosion, re-suspended bottom sediments, waste discharge, and urban runoff. Toxic elements in river sediments often originate from industrial discharge (such as waste from mining activities), agricultural and urban runoff, and natural geological processes. These elements can pose significant risks to aquatic ecosystems and human health if present in elevated concentrations. As part of working towards decision support tools to assist in decision making on eutrophication related matters. SANSA has initiated the production of The Normalized difference turbidity index (NDTI), which is used to identify the water turbidity.

By leveraging space technologies, and through the recently concluded national cooperation arrangement between SANSA and the South African Water Research Commission we are committed to advancing sustainable water management and protecting our vital water resources.

Thank you.