

NATIONAL SPACE CONFERENCE 2025

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Space for Societal Resilience, Transformation and Intelligence

DATE: 20 – 22 August 2025

VENUE: CSIR ICC, Tshwane, South Africa



science, technology
& innovation

Department:
Science, Technology and Innovation
REPUBLIC OF SOUTH AFRICA



sa air force

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Defence
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TECHNICAL SESSION 1

SHORT BIO

Tshisikhawe Mphaphuli is the Chief Advisor Geoscience at the National Transmission Company South Africa (NTCSA), a subsidiary of Eskom Holdings. With an MSc in Geospatial Science and Systems and 24 years of experience in Remote Sensing and GIS across government, municipal, and Eskom sectors, she leads the establishment of NTCSA's GIS department. Her role includes delivering advanced geospatial services, integrating new technologies, and supporting climate resilience initiatives. A registered GPrGISc (1512) with the SA Geomatics Council, she actively contributes to internal and external committees, conferences, and publications.

Harnessing Space and Earth Observations to strengthen transmission infrastructure and national resilience



Tshisikhawe Mphaphuli
Chief Advisor Geospatial - NTCSA



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Powerline Inspection Robot

"Electricity is the lifeblood of our developing world,
and power lines make up the arterial network."



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Powerline Inspection using UAS



Thank You



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