



STATEMENT BY THE REPUBLIC OF SOUTH AFRICA

**SCIENTIFIC AND TECHNICAL SUBCOMMITTEE
FIFTY – NINTH SESSION**

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Agenda Item No 18: Dark & Quiet Skies

Chairperson,

South Africa has a vibrant scientific community working on both radio and optical astronomy. It is home to the Southern African Large Telescope, the largest single optical telescope in the southern hemisphere. It is also home to the MeerKAT radio telescope which is the most sensitive telescope of its kind in the world and a precursor to the Square Kilometre Array radio telescope, to be built in South Africa and Australia.

Chairperson,

Radio astronomy observations from the surface of the Earth are intrinsically sensitive to radio interference from man-made sources. There are three categories of artificial interference that negatively impact astronomical observations: (a) urban illumination or artificial light at night; (b) optical/infrared trails of the satellites in low Earth orbit; and (c) radio transmission by ground and space emitters, especially from the satellites in low Earth orbit.

To optimize the environment in which radio astronomy observations are carried out, radio quiet zones (RQZs) have been implemented in South Africa and other parts of the world, as identified in report RA.2259 of the International Telecommunication Union (ITU).

Chairperson,

South Africa promulgated a national legislation, called the Astronomy Geographic Advantage Act of 2007, followed by national regulations to preserve the pristine environments for radio and optical astronomies in South Africa. The national legislation and regulations do not protect astronomy facilities from the constellations of communication satellites in Earth orbits, which present a new challenge to astronomy. It is for this reason that South Africa congratulates the International Astronomical Union (IAU) on the selection of the SKA Observatory (SKAO) and NSF's NOIRLab as co-hosts of the new IAU Centre for the protection of the Dark and Quiet Skies from Satellite Constellation Interference. The mission of the Centre is to coordinate efforts and unify voices across the global astronomical community with regard to the protection of the dark and quiet skies from satellite constellation interference.

Chairperson,

The South African delegation wishes to support the working paper on the protection of Dark and Quiet Skies for Science and Society, as submitted by the International Astronomical Union (IAU), European Southern Observatory (ESO), Square Kilometre Array Observatory (SKAO), and NOIRLab. The agenda item would offer a forum for delegations to present and discuss their respective position on the matter, technical updates and modifications to the current set of best practices guidelines.

Thank you Chairperson