



STATEMENT BY THE REPUBLIC OF SOUTH AFRICA

**THE 64TH SESSION OF THE UNITED NATIONS COMMITTEE ON THE
PEACEFUL USES OF OUTER SPACE**

**AGENDA ITEM NO 16: OTHER MATTERS
1 SEPTEMBER 2021**

Application for observer status by the SKA Observatory

Chairperson, and Distinguished delegates

South Africa has a vibrant scientific community working on astronomy (both radio and optical domain). It is home of the MeerKAT radio telescope and future home of the SKA-MID telescope. The MeerKAT telescope is currently the most powerful radio interferometer in the world and it is a precursor of the SKA-MID which will greatly expand its capabilities.

The Square Kilometre Array (SKA) project is an international effort to build the world's largest radio telescope. The SKA is a Mid and Low array to be constructed in South Africa and Australia.

Chairperson,

The radio telescopes in radio quiet and coordination zones cannot avoid seeing emissions from satellites when satellites are above the horizon, owing to their various sidelobes, whether or not the satellite is licensed to operate in the administration operating the telescope.

Lately, we are experiencing a form of "space-race", where operators are filing plans to build even larger and larger constellations in low orbit. While the capacity of LEO orbits, is a three-dimensional problem, from an observer's point of view the sky is just not that vast. A radio astronomy antenna only sees a two-dimensional sky, where different satellite orbits are seen as stacked together effectively increasing the number of satellites per solid angle. The only feasible solution to this problem is an internationally managed orbital occupancy in LEO orbits, where a limit in satellite numbers is defined based on several aspects (including the effects on astronomy)

Chairperson,

South Africa has participated actively in the development and adoption of the Guidelines on the Long-Term Sustainability of OuterSpace Activities. The work of COPUOS is crucial for the future of the SKA telescope with regards to the concept of “Keep Dark and Quiet Skies for Science and Society”, which is being discussed under the agenda item on the long-term sustainability of outer space activities. The South African Delegation considers that the concerns raised by the Conference Room Paper “Recommendations to Keep Dark and Quiet Skies for Science and Society”, presented by the International Astronomical Union [together with the various Delegations are very relevant and require attention at international level. In order to achieve that goal, it is suggested that UNOOSA is tasked with studying and proposing a suitable procedure for an ordered implementation of the most urgent CRP recommendations.

Chairperson

Countries involved in the SKA Telescope have come together in Rome, Italy, for the signature of the international treaty establishing the intergovernmental organisation that will oversee the delivery of the world’s largest radio telescope. Seven countries signed the SKAO treaty are Australia, China, Italy, The Netherlands, Portugal, South Africa and the United Kingdom.

The South African delegation wishes to endorse the application for observer status by the Square Kilometre Array (SKA) Observatory.

Thank you Chairperson & distinguished delegates for this opportunity