



STATEMENT BY THE SQUARE KILOMETRE ARRAY OBSERVATORY

The 65th session of the of the United Nations Committee on the Peaceful Uses of Outer
Space

AGENDA ITEM 16: “Space2030” Agenda

Read by: Theunis Kotzé (SKAO Head of Legal)

Date: Wednesday the 8th of June 2022 (AM)

Check against delivery.

Chair and distinguished delegates,

Thank you for allowing me the floor.

We in the Square Kilometre Array Observatory (SKAO) believe that this agenda Item is closely linked to Item 9 Space and Sustainable Development, and that we as a Permanent Observer from the radioastronomy field, would be able to meaningfully contribute to discussions on the *Space2030 Agenda and Implementation Plan*.

Chair,

The SKAO is firmly directed towards outer space science and excited about the deliberations taking place in COPUOS. We believe that we can support Overarching Objective 3 para 3.5 of the Space2030 Agenda to “Increase knowledge of outer space, including through enhanced access to astronomical and space science data, for the benefit of humankind”. Furthermore, that we can aid with the Implementation Plan part to “provide broader opportunities to access space for purposes of science, innovation, research and development, education, and capacity-building”.

Chair,

Opportunities include accelerated technological development and education in both the science of astronomy and the engineering required to sustain it. Building the SKA will produce a cohort of highly accomplished engineers and scientists, who will be capable of applying their talents to a broad range of areas of great benefit to our Member State economies and societies. Through its broader impacts, the SKAO is helping to address global challenges by contributing to some of the United Nations’ Sustainable Development Goals (UN SDGs) to achieve a better and more sustainable future for all by 2030. As it is, the SKA member countries have education embedded in their development from the earliest stages, inspiring young people in time for them to become users of the telescope or engineers and scientists working with the SKA, and potentially encouraging more people to develop the STEM skills needed to maintain and grow the knowledge-based economy. We provide bursaries for tertiary education, and summer schools were hosted in our Member the People’s Republic of China, inter alia to practice data processing techniques

on the Chinese prototype SKA Regional Centre using data from SKA precursor and pathfinder telescopes, learning new techniques, and providing valuable feedback to the data Centre's design in the process.

Chair,

The unprecedented technical challenges the SKA must overcome in the fields of networking, Big Data and high-performance computing and the subsequent development of new technologies, cloud processing, data analysis and visualisation tools are likely to yield substantial benefits in other areas of everyday life.

The SKAO held its Second Science Data Challenge (“SDC2”) in 2022, seeing record participation by the global scientific community, multidisciplinary collaboration, and innovative methods of data analysis to tackle a huge model data set. The Data Challenges are designed to prepare future users to efficiently handle SKAO data, so that it can be exploited to its full potential as soon as the telescopes enter early operations, and to drive the development of data analysis techniques. They also assist the Observatory and its computing partners in preparing the systems and processes needed for the network of SKA Regional Centres which will store, process, and provide access to data for astronomers globally. Forty teams comprising 280 participants in 22 countries took part in SDC2, using the resources of 8 supercomputing centres from around the world.

Chair,

Realizing the vision of the Space2030 Agenda will require partnerships and cooperation among Member States, United Nations entities, and intergovernmental and non-governmental organizations, industry, and private sector entities. The SKAO stands ready to assist in any regard, as we have already done by co-hosting the new *International Astronomical Union Centre for the Protection of the Dark and Quiet Sky*.

I thank you Chair.