**EXPLANATORY MEMORANDUM**

1. **Briefly set out the history, objectives and implications of the agreement:**

In 2012 South Africa won the bid to host the SKA telescope, and since then the Department of Science and Innovation (DSI) has been working on a project to construct the MeerKAT (KAT = Karoo Array Telescope) telescope as a precursor to the SKA telescope. In April 2018, MeerKAT demonstrated science readiness, with 64 dishes erected and interlinked via high-speed digital electronics and computer systems to work successfully as an array telescope.

The purpose of the Convention is to establish under international law, an inter- governmental organisation (IGO), to be called the SKAO, which will govern the construction and operational phases of the global SKA project. The current pre-construction phase of the global project is governed through a company limited by guarantee, incorporated in the United Kingdom (based in Manchester), of which the South African National Research Foundation is the South African member organisation and the Director-General of the Department of Science and Innovation, the South African Voting Director. For the reasons elaborated below this is a governance model, which is not deemed suitable for the next phases of the project. The Convention was signed on 12 March 2019, at a ceremony hosted by the Italian Government, which had presided over its negotiation, now concluded.

Included at Annex A is the text of the Convention and its Protocols.

# Strategic focus of this Memorandum

Ensuring South Africa’s successful hosting of the global SKA radio telescope project is one of the strategic priorities of the Department of Science and Innovation. The signing of the Convention was crucial in order to provide the global partnership with the appropriate governance mechanism, which will ensure successful delivering of the project, and concurrently South Africa’s leveraging of the inward foreign investment, as well as skills and infrastructure development benefits, associated with the SKA project. There will also be significant international prestige and foreign policy gains to be leveraged, as the SKAO will be one of very few intergovernmental organisations exclusively dedicated to science and the only one in which Africa, was playing a strategic leadership role.

# Discussion

Purpose of the Convention and motivation for IGO: The governments participating in the SKA project after careful review had determined that the construction and operational phases of the global SKA project would best be implemented through a legal entity established under international law and not under any national legal jurisdiction, as this will:

(a) Enable relevant diplomatic privileges and immunities to be afforded to facilitate implementation of the project;

(b) Provide the project with the flexibility to design policies, such as procurement, best suited for the project (otherwise for example the national legislation would have to be followed of the country where the legal entity governing the project was incorporated); and

(c) Embed at the highest political level inter-governmental commitment to the project – Governments will be members of the IGO (as opposed to national organisations).

International organisations and science : The future SKA Observatory is in many instances modelled on the example of CERN – the renowned European Organisation for Nuclear Research, responsible for many pioneering scientific discoveries. Other examples of science-focused IGOs include the ESO (European Organisation for Astronomical Research in the Southern Hemisphere); ITER Organisation (International Thermonuclear Experimental Reactor); and the EMBL (European Molecular Biology Laboratory). The SKA Observatory will be unique in that it will be the first science-focused IGO, which will comprise membership from Africa, the Americas, Asia, Australasia and Europe.

Negotiation of the Convention: The negotiation of the Convention took place over the past three years under the leadership of the Government of Italy, one of the key SKA partners. The following governments participated: Australia, China, India, Italy, the Netherlands, New Zealand, Portugal, South Africa, Sweden, the United Kingdom, with observers: Canada, Germany and Spain. The legal basis of negotiation was a letter of Intent signed by all participating governments. The Presidency of the negotiations was entrusted to the Italian Ministry of Foreign Affairs. The South African delegation comprised senior officials of the Department of Science and Technology, the Department of International Relations and Cooperation, the Office of the Chief State Law Advisor (International Law) and the South African Radio Astronomy Observatory. Four formal negotiation rounds took place and significant work took place between sessions undertaken by a Task Force, chaired by South Africa.

In addition to the main text, the Convention also comprises two Protocols: the Protocol on Privileges and Immunities of the Square Kilometre Array Observatory; and the Financial Protocol of the Square Kilometre Array Observatory.

Architecture of the Convention: It is important to emphasise that the Convention does not deal with the details of any policies (e.g. Intellectual Property or Procurement) or rules (e.g. Financial or Human Resources) of the future IGO – as these so-called “Tier 2 documents” will be approved by the Council of the SKA Observatory, its highest decision-making body, once the IGO is established.

Furthermore, the Convention itself does not involve any financial commitment for the signatories – funding decisions with regard to the construction and operation of the SKA telescope will be taken by the future SKA Observatory Council – the Convention is focused on establishing the mechanisms to take these decisions.

With regard to rights and responsibilities of the host countries, details of South Africa (and Australia and the United Kingdom’s) hosting of the telescopes and the headquarters will be governed by separate bilateral “hosting agreements” to be concluded in future between the hosting countries and the IGO. There had been a historic agreement that the headquarters of the organisation governing the project would not be located in one of the telescope host countries, but in a third country.   The United Kingdom was selected as host for the headquarters through a competitive process and will pay a significant financial premium for the right to host.

Main provisions of the Convention: The Convention sets out the purpose of the SKAO. It defines Membership and other forms of cooperation, as well as the roles of the IGO’s organs (e.g. Council), and that of its Director-General and staff. The Convention also sets out high-level principles with regard to policies, which will govern finance, intellectual property, procurement, access to the telescope, etc. It also includes standard provisions in international law dealing with dispute settlement; withdrawal from the IGO; amendment of the Convention; entry into force; as well as termination.

Privileges and Immunities Protocol: The Protocol provides the IGO with immunity from legal process and inviolability of premises; exemption from direct taxation, as well as customs and indirect taxes. It also provides for specified privileges and immunities of staff and of representatives. The Department of International Relations and Cooperation played a crucial role in the Protocol’s development and it is provisions are fully compliant with South African regulations.

Financial Protocol: The Protocol sets out management principles for the conduct of the IGO’s financial affairs, including crucially for the development of the funding schedules, which will set out member countries’ financial contributions. It also sets out principles for project participation, i.e. contribution to different phases of the SKA project and governs the approval of budgets. Strategically, it provides for special provisions for telescope host countries (South Africa and Australia) with regard to credit they will receive against future contributions for their earlier precursor investments (e.g. MeerKAT in the case of South Africa). It also set out principles under which the IGO can take loans and incur liabilities.

# IMPLEMENTATION PLAN

The negotiations have been concluded at technical level by senior officials. To signal the consensus reached by heads of delegations the texts have been initialled, which is a legally non-binding act. The different governments are now undertaking national approval processes (legal and political) – for South Africa, this means obtaining a Presidential Minute.

The Convention will enter into force when a minimum of five countries have completed ratification (imperatively including the three host countries – i.e. South Africa, Australia and the United Kingdom). The entry into force of the Convention at the very earliest is therefore not expected until early 2020. The first Council meeting will, thus, not be convened until the beginning of 2020. As formal approval to construct the first phase of the SKA telescope, including approval of the relevant funding schedule requires the Council to meet, it was, thus, in the strategic interest of South Africa to work for early signature of the Convention and its entry into force.

In the interest of efficiency, upon signature of Convention, the signatory Governments will establish the Council Preparatory Task Force (CPTF) to undertake preparatory actions to facilitate the first crucial decision-making by Council. This will include negotiation of the first funding schedules; preparation for approval by the Council of policy documents, rules and regulations; engagement and negotiations with potential new members and associate members; and overseeing the institutional transition from the current company to IGO. It should be noted that the CPTF cannot make any binding decisions – all decisions would have to be ratified by Council.

From a South African perspective, the Convention is entered into with the aim to develop the national economy and to improve the socio-economic development through scientific and technological cooperation to the mutual benefit of participating international partners, and to promote South Africa’s participation in global astronomy. It is further expected that the cooperation and Convention will strengthen human resource development through the initiation of an exchange of scientists and researchers between the SKA partners.

It is expected that the newly established South African Radio Astronomy Observatory (SARAO) will manage the SKA Observatory activities in South Africa. Construction of the first phase of the SKA telescope (SKA-1) is expected to commence in 2020. In preparation for SKA Phase 1, prototype dishes are being built as part of the SKA consortium’s critical design review and the final stage of cost optimisation options before construction.

1. **Include a legal opinion by a state law advisor as to whether the agreement is consistent with the domestic law of the Republic, including the Constitution, with the international obligations of the Republic and with international law in general:**

Since the Convention is subject to ratification, it falls within the ambit of section 231(2) of the Constitution of the Republic of South Africa, 1996, requiring parliamentary approval for ratification. The Convention will only enter into force when minimum five countries have completed ratification (including three host countries – i.e. South Africa, Australia and the United Kingdom.

After consulting with the DSI Legal Services Directorate, the legal opinions by a state law advisors were secured as to whether the agreement is consistent with the domestic law of the Republic, including the Constitution, at the Office of the Chief State Law Adviser in the Department of Justice and Constitutional Development (DOJCD) and with the international obligations of the Republic and with international law in general, at Office of the Chief State Law Adviser (International Law) in the Department of International Relations and Cooperation (DIRCO). The legal opinions from DOJCD and DIRCO is included in Tag B and C respectively. Both Departments concur with the final draft of the texts and confirmed that the draft Convention and its associate Protocols are not in conflict with the domestic law of the Republic of South Africa or international law.

Details of South Africa (and Australia and the United Kingdom’s) hosting of the telescopes and the headquarters will be governed by separate bilateral “hosting agreements” to be concluded in future between the hosting countries and the IGO.

1. **State whether the agreement contains any self-executing provision that will become law in the Republic in terms of Section 231(4) of the Constitution upon the approval of the agreement by Parliament:**

None.

**4.** **Give an account of the projected financial and other costs of the agreement for the State:**

The signing of the Convention does not incur any financial commitments for the South African Government, which will only occur through the future approval of funding schedules, on which Cabinet and the Portfolio Committee will be consulted, as explained in summary of the Financial Protocol above.

**5.** **Contain all other information needed *(for example: explain the DoJ* & *CO's input regarding Articles* 7 *and 8 of Annex A)* by the Assembly in order to take an informed decision:**

 All the advice provided by the DOJCD and DIRCO was taken on board when concluding the negotiations on the Convention and the Protocols and the required procedure was followed for the signing of the Convention and its Protocols.