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# **Request for Application: Hosting a SAPRIN Node in either the Eastern Cape, Northern Cape, Free State or North West provinces.**

## Summary

Due to the need for improved, science-based information and advice to direct development-oriented decision-making, investments and interventions, the Department of Science and Innovation (DSI) has established world-class scientific research infrastructure in a range of key sectors, of which one is the **South African Population Research Infrastructure Network** ([SAPRIN](https://saprin.mrc.ac.za/)). This request for applications aims to expand the current network of three rural nodes (Mpumalanga, Limpopo, KwaZulu Natal) and three urban nodes (Gauteng and Cape Metro and eThekwini) to incorporate an additional node in the Eastern Cape, Northern Cape, Free State, or North West provinces. The objective is to increase the population size and diversity under longitudinal surveillance by SAPRIN, thereby improving the ability of SAPRIN data to serve as triangulation for national datasets and the study of mechanisms driving the national statistics, such as rural-urban migration. SAPRIN will fund participating nodes to implement [the standard surveillance protocol](https://saprin.mrc.ac.za/SAPRINStudyProtocol.pdf). Eligibility criteria and the scope of funding are described below. Funding will follow the three-yearly funding cycle of DSI, and three-year sub-contracts will be negotiated with each node by the South African Medical Research Council. It is an open call and applicants need not have responded to the earlier Request for Expression of Interest. The **closing date** for applications is **02nd April 2024** and adjudication will be complete by the end of May 2024 and applicants inform by 28 June 2024. Please submit the application as a **single PDF document**. The budget can be included in this single document or submitted as a single Excel file. Join us for an **information session on 24th January 2024** at 11h00 to 13h00. Follow the [link to the webinar](https://bit.ly/48n5Hyx).

## Background

South Africa is striving to emerge from **a legacy of gross social injustice** and consequent health and socio-economic inequality, to becoming a country where residents can access ever-broadening opportunities to build productive lives for themselves. But, stewardship of the country faces several challenges, including high to very high levels of inequality, with a Gini coefficient of 0.66; an unemployment rate of 34.4%; a poverty headcount ratio of 57%; as well as colliding epidemics of HIV, TB and non-communicable diseases. This underlines **the need for improved science-based information and advice to direct development-oriented decision-making, investments and interventions**.

Through the **South African Research Infrastructure Roadmap** (SARIR)[[1]](#footnote-1), the Department of Science and Innovation is establishing world-class scientific research infrastructure in a range of key sectors, including humans and society, where SAPRIN, the **South African Population Research Infrastructure Network**, was established. SARIR has been developed to facilitate a research infrastructure investment programme and is intended to provide a strategic, rational, medium to long term framework for planning, implementing, monitoring and evaluating the provision of research infrastructures (RIs) necessary for a competitive and sustainable national system of innovation as outlined in the White Paper on Science, Technology, and Innovation[[2]](#footnote-2).

The research infrastructure established by SAPRIN consists of a network of health and demographic surveillance system, each of which is a standardised (see [Standard Protocol](https://saprin.mrc.ac.za/SAPRINStudyProtocol.pdf)), field-based information system engaged in the prospective and longitudinal collection of population, health and socio-economic data for geographically-defined sections of impoverished and developmentally-constrained communities, both rural and urban. Data and findings apply widely and are easily scalable. Individual and household indicators that are routinely collected and assessed include: **vital events, i.e. births and deaths (by cause), residence and migration, socio-economic status, disease monitoring, measures of wellbeing represented by labour status, education and social protection, and selected biomeasures, such as height, weight, blood pressure and measures obtained from collected dried blood spots.** The HDSS registration systems will be complemented by **linking to public sector records** of health system utilization, school performance, access to social grants and the population register, to enable research on the factors associated with access to services or lack thereof.

SAPRIN’s impartiality and independence from vested interests makes it well positioned as a credible knowledge partner for collaborating with key government departments to strengthen policy and better inform decision-making on health and socio-economic matters. The scientific evidence generated by SAPRIN will potentially contribute to objective, informed evaluations of the implications of policy options from a science perspective. To fully realise the potential benefits of public investments in Research Infrastructures (such as SAPRIN), the aim of SAPRIN is to be a source of trusted science advice (based on robust, peer-reviewed scientific evidence) to government and to civil society.

For SAPRIN to be an optimal national asset it needs to be part of a nexus of stakeholders: national public research institutions, core service ministries, and knowledge-building institutions. These three types of stakeholders have different roles to play in partnering with SAPRIN.

1. **National public research institutions**:

This group of stakeholders provide research standards and priorities and ensure high levels of public embeddedness and value for public policies.

* 1. Department of Science and Innovation (DSI); South African Medical Research Council (SAMRC); Human Sciences Research Council (HSRC); Statistics South Africa (Stats SA); Department of Planning, Monitoring and Evaluation (DPME)
1. **Core service ministries and donors**

These stakeholders will have two-way relationships with SAPRIN. Data on utilisation of public services needs to be linked to the SAPRIN databases in population nodes. Ministries providing public services will benefit from SAPRIN data to target new policies and evaluate the outcomes of policies aimed at improving the efficiency and impact of services and programmes.

* 1. Health; Social Development; Home Affairs; Basic Education; Labour
	2. International programme funders (UNAIDS, PEPFAR, etc)
1. **Knowledge-building institutions**:

These stakeholders will use SAPRIN data to support research projects, with single- or multi-centre longitudinal population data. The platform can be extended by embedding research projects, using external study-specific sources of funding to conduct observational or interventional research.

* 1. Pre-eminent scientists in Universities and Centres of Excellence
	2. Their doctoral students and research faculty
	3. International science funders (Wellcome Trust, Gates Foundation, NIH, etc)

## Aims

This initiative will provide funding to expand the current network of six nodes with a seventh node in either the Eastern Cape, Northen Cape, Free State or North West province. This node will contribute to and enhance the overall aims of SAPRIN:

1. **Regular Data Releases**: up-to-date, longitudinal data, representative of South Africa’s fast-changing poorer communities for research, interpretation, and calibration of national datasets.
2. **National Statistics Triangulation**: longitudinal SAPRIN data triangulated with National Census data for calibration of national statistics and studying mechanisms driving the national statistics.
3. **Interdisciplinary Research Platform:** an infrastructure for conducting observational and interventional scientific research, at population level, for researchers from universities, science councils, and other organisations, including regional and international collaborations.
4. **Policy Engagement:** providing evidence to underpin policymaking for cost evaluation and targeting intervention programmes, thereby improving the accuracy and efficiency of pro-poor, health, and wellbeing interventions.
5. **Scientific Education**: training using SAPRIN data and embedded research projects at associated universities, providing expanded capability in science that is effectively linked with national, regional, and international networks.
6. **Community Engagement**: coordinated engagement with communities in the surveillance areas to enable two-way learning between researchers and community members, maintain willingness to participate in research, ensure the dignity of research participants, enable the communities and their service providers to have access to and make effective use of research results, and enable effective and appropriate community participation in guiding and informing research processes.

## Objectives

The objective is to increase the population size and diversity under longitudinal surveillance by SAPRIN, thereby improving the ability of SAPRIN data to serve as triangulation for national datasets and the study of mechanisms driving the national statistics, such as rural-urban migration. At the same time this expansion will enhance the reach and capacity of SAPRIN as a transdisciplinary research platform for innovations in population-based science, policy impact assessment and the translation of basic science findings into measurable population impact.

## Remit

SARPIN will fund participating nodes to implement [the standard SAPRIN surveillance protocol](https://saprin.mrc.ac.za/SAPRINStudyProtocol.pdf), but nodes are encouraged to seek co-funding to extend the protocol and source external funding for research studies hosted on the population platform so established (see figure 1). Please note that currently funding is available to implement the household surveillance (including verbal autopsies) only. However, additional funding might become available in future to include the individual component, so consideration will be given to the potential ability of the node to implement this aspect of the protocol should funding become available. The SARIR vision is the long-term funding (10-15 years) of research infrastructure, but typically SAPRIN nodes receive funding contracts for three years of operation at a time, based on a Mid-term expenditure framework (MTEF) budgeting approach of National Treasury.



Figure 1 : SAPRIN Nodal Funding Model

To be eligible to respond, a research organisation or consortium must fulfil the following criteria:

1. Be a legal entity (or part of a legal entity, or in the case of a consortium, identify a designated institution that will act as the legal entity on behalf of the consortium) based in South Africa and associated with or part of a South African university or national research council, it is recommended that designated legal entity be based in the province where the node will be situated.
2. Possess a track record of conducting community-based research.
3. Possess an existing relationship with and access to the communities where they intend to base the node.
4. Express a vision and strategy for the population-based research that will be hosted by the node.
5. Have the experience and capability to manage the complex data management and field operations associated with longitudinal population surveillance.

## Scope and Funding Available

Funding will cover the cost of establishing the node, e.g. community engagement, meetings or site preparation including building renovations. An amount of up to R5,500,000 is available for this purpose during the first year of operation of the node. Thereafter, funding will be provided on an annual basis for the actual conduct of the surveillance in accordance with the SAPRIN standard protocol. This operational budget is fixed for all SAPRIN nodes and based on the following principles:

1. SAPRIN HDSS Nodes are funded for a population of 100,000, which provides a maximum for budgeting. The budget is proportionally adjusted if the nodal population is less than 100,000 but capped at a population of 100,000.
2. Costs are activity-driven.
3. For each financial year, a capped annual nodal budget is determined by SAPRIN Management for implementation of the full protocol of SAPRIN in a population of at least 100,000.
4. For the financial year April 2025 to March 2026, the capped annual nodal budget is R10,050,000 to implement the full protocol. Due to funding constraints protocol implementation has been curtailed, with only household surveillance supported in 2025.
5. When a node is not yet implementing a full protocol, the budget is costed for the activities being implemented and will be less than the capped nodal annual budget indicated in 4 above.
6. Major equipment (servers, call centre) should be included in the setup budget, as far as possible, as we don’t anticipate funding for major equipment in the annual operational budgets.
7. Data collection duration is 45 continuous weeks per year.
8. The remaining 7 weeks of the year are utilized for a) annual training (1-2 weeks), b) annual leave (3-4 weeks) and c) annual shutdown of institutions during the festive season (2 weeks).
9. In the standardised approach, calculation of staff numbers for each activity is based on: activity duration, probability of the activity happening, divided by the standard volume (net time available for a staff member to do the activity in a 45-week period, after discounting for public holidays, meetings/non-data collection days, anticipated sick leave, and a productivity factor of 75%).
10. The numbers of staff calculated in point 9 above are used as indicative required staff complement to fulfil the data collection demand in relation to implementation plan and the types and frequency of data to be collected for the SAPRIN protocol.
11. Nodes are free to organise the field staff in ways suitable to them if the resultant budget does not exceed the annual node budget (point 4) and conditional on whether the node’s population is at least 100,000 (see point 1) and all protocol activities are fully implemented (see point 5).
12. Population parameters, denominators and distribution will be supplied by the nodes.
13. SAPRIN Management has developed standard activity durations with nodal input, and these are available on request.
14. SAPRIN does not provide for direct costs of node administrative staff and node institutional operational costs. Instead, indirect costs are provided as operational support in a form of a percentage of total budget, conditional on making sure the resultant overall budget does not exceed the annual node allocated budget (see point 3 above). Therefore, the lower the direct costs are compared to the annual node allocated budget limit, the higher the percentage of the operational support costs and vice versa.

## SAPRIN Standard Protocol

The [full protocol](https://saprin.mrc.ac.za/SAPRINStudyProtocol.pdf), SAMRC Ethics approval EC010-3/2021, and can be summarized as follows:

The basis of the SAPRIN protocol is the longitudinal surveillance of the complete population in a defined geographic area. The eligible population are members of households that are resident within the health and demographic surveillance area (HDSA). These study site boundaries are predefined for each of the HDSS Nodes.

The longitudinal population platform will have the following components:

1. **Household component** consisting of one in-person interview and two telephonic interviews per year, with a household informant. The aim of this component is to maintain a dynamic cohort of the eligible population and record new cohort members who enter either through birth or in-migration, or exit the cohort through death, out-migration, or refusal to participate. Key to this component is the SAPRIN approach to include non-resident (externally resident) household members as part of the eligible population to allow us to record circular migration patterns. In addition to maintaining the household member roster, the household interview also administers a socio-economic status questionnaire.
2. **Individual component** conducted during one visit (coinciding with the visit to the household they are a resident member of) per year. During this interview a health status and health service utilization questionnaire is administered, and a dried blood spot (DBS) is collected from a finger prick.
3. A **verbal autopsy** interview with the care giver or close relative of everyone who has died.
4. **Linkage of** individuals in the study population to individual-level **service delivery data** obtained from public health, welfare, home affairs and education authorities.

## Duration

Funding follows the three-yearly funding cycle of DSI, and three-year Nodal sub-contract will be negotiated with each node by the South African Medical Research Council.

## Application Guidelines and Process

This is an open call and applicants need not have responded to the earlier Request for Expression of Interest.

## How to Apply

Complete and submit the application form. Letters of support are required from all collaborating institutions. Up-to-date curriculum vitae must be included for all named investigators. Please submit the application as a **single PDF document**. The budget can be included in this single document or submitted as a single Excel file. The completed application form must be emailed to **saprin@mrc.ac.za** by 16h00 02nd April 2024.

## Information session

The information session will be held on 24th January 2024 at 11h00 to 13h00. Follow the [link to the information session](https://bit.ly/48n5Hyx). Further questions can be directed to André Rose at andre.rose@mrc.ac.za

## Assessment Process and Criteria

The following criteria will be used in assessing the applications to host a SAPRIN node:

1. The node has to be hosted in **one** of the following provinces Eastern Cape, Northern Cape, Free State, or North West.
2. Establishment of the node is contingent on the DSI making **funding available** for the new node for at least three years and SAPRIN reserves the right not to fund the establishment of a node if sufficient funding is not received. Only one node will be funded. The indicative amounts provided above are subject to change based on the final funding allocation by DSI.
3. The **hosting institution and principal investigator must be based in the province** the node will be established in.
4. **A clear vision with scientific impact and potential**. For SAPRIN to achieve its objectives, it is imperative that each node hosts an innovative and impactful research programme that fully exploits the unique capabilities offered by a longitudinal population-based research platform. It is therefore critical that applicants express their vision, potential scientific impact, and ability to contribute to the SAPRIN objectives listed in this document. Applicants must quantify the co-investment they will leverage in the execution of this vision and how this investment will enhance the sustainability of the node. An added value will be a potential for the research programme to accommodate multi-nodal studies involving one or more other SAPRIN nodes.
5. **Robust leadership, management, training, and governance**. Nodes should have appropriate leadership and governance structure to set strategy and manage risks. Applicants must indicate their commitment to addressing transformation of the institutional landscape, that is, by including previous disadvantaged institutions, as well as demographics, and gender considerations in terms of who will lead and manage the nodes. Favourable consideration will be given to consortia applications which will bring different institutions or agencies in the same region together rather than applications dominated by a single institution.
6. **A clear plan and demonstrable ability and capacity to implement the SAPRIN protocol**. Including effective recruitment, rigorous data and sample quality and data governance. The SAPRIN protocol requires the complete enumeration of the population (100 000) in the designated surveillance area. Applications proposing sample surveys, or less than complete enumeration in the designated area (even if the target population of 100 00 can be reached) will not be considered for funding. Although it is possible to propose non-contiguous surveillance areas (each enumerated fully), this is not advisable because it significantly increases the operational complexity of the node.
7. **A commitment to support the vision expressed in the South African Research Infrastructure Roadmap**[[3]](#footnote-3) and White Paper on Science, Technology, and Innovation[[4]](#footnote-4) to develop an accessible national resource for population-based research. An added value will be a track record in managing a national research resource or facility.
8. **Meaningful engagement with the surveillance community**, the wider public, industry, policy makers and practitioners.

The assessment of the application will be done by an independent adjudication panel, with representation from SAPRIN stakeholders and senior local and international population scientists. The final decision on whether to approve a particular request for application for funding will be made by the SAPRIN Steering Committee.

## Key Dates

**Information session for interested applicants**: 24th January 2024 [link](https://bit.ly/48n5Hyx)

**Application submission closing date**: 17:00 on Tuesday 02nd April 2024

**Adjudication complete**: 30th May 2024

**Notice to successful applicants**: 28 June 2024

**Application Form: Establish an Additional SAPRIN Node.**

|  |
| --- |
| Application Summary |
| Application Title |
| This is the name of the proposed node |
| Name of the administering organisation |
| This is the organisation that will sub-contract with the South African Medical Research Council to host the SAPRIN Node |
| Geographic Area |
| This is the area or place where the node will be situated. Please attach a map showing the proposed boundaries of the Node. |
| Lead Applicant |
| **Title:** |  | **Full Name:** |  |
| **Department:** |  |
| **Division:** |  |
| **Organisation:** |  |
| **Address:** |  |
| **City/Town:** |  | **Postcode:** |  |
| **Telephone Nr:** |  | **Email:** |  |
| **1.4.1 Career History (current/most recent first)** |
| **From** | **To** | **Position** | **Organisation** |
|  |  |  |  |
|  |  |  |  |
| **1.4.2 Education/Training** |
| **From** | **To** | **Qualification** | **Subject** | **Organisation** |
|  |  |  |  |  |
|  |  |  |  |  |
| **1.4.3 What experience do you have in managing an institution, research infra-structure or collaboration?** |
|  |
| **1.4.4 What are your most important research-related contributions?** These may be from any stage of your research career. State what each contribution was, when it came about, why you think it is important and what impact it has had. Examples include publications and impacts on policy. |
|  |
| **1.4.5 Research Outputs.** List up to 20 of your most significant research outputs; at least five of these must be from the last five years. Research outputs may include (but are not limited to):* Peer-reviewed publications and preprints;
* Datasets, software and research materials;
* Inventions, patents and commercial activity.

Give the citation in full, including the title of paper and all authors (unless more than 6, in which case you may use 'et al', ensuring that your position as author remains clear). Citations to preprints must state "Preprint", the repository name and the articles persistent identifier (e.g. DOI). |
|  |
| **1.4.6 Research Funding.** List all research funding you have held in the last five years and any key funding before then. List the most recent first. State the name of the funder, name(s) of grant holder(s), title of the project, total amount awarded (and how much of this you received), your role in the project, and the start and end dates. State the percentage of your time spent on the research; if the grant is active state the number of hours per week that you spend on the research. |
| **1.4.7 How many hours a week will you spend on this initiative?** |  |
| **1.4.8 Applicant Signature:** |  |
| Co-Applicants (Repeat section for each co-applicant) |
| **Title:** |  | **Full Name:** |  |
| **Department:** |  |
| **Division:** |  |
| **Organisation:** |  |
| **Address:** |  |
| **City/Town:** |  | **Postcode:** |  |
| **Telephone Nr:** |  | **Email:** |  |
| **1.5.1 Career History (current/most recent first)** |
| **From** | **To** | **Position** | **Organisation** |
|  |  |  |  |
|  |  |  |  |
| **1.5.2 Education/Training** |
| **From** | **To** | **Qualification** | **Subject** | **Organisation** |
|  |  |  |  |  |
|  |  |  |  |  |
| **1.5.3 What experience do you have in managing an institution, research infra-structure or collaboration?** |
|  |
| **1.5.4 What are your most important research-related contributions?** These may be from any stage of your research career. State what each contribution was, when it came about, why you think it is important and what impact it has had. Examples include publications and impacts on policy. |
|  |
| **1.5.5 Research Outputs.** List up to 20 of your most significant research outputs; at least five of these must be from the last five years. Research outputs may include (but are not limited to):* Peer-reviewed publications and preprints;
* Datasets, software and research materials;
* Inventions, patents and commercial activity.

Give the citation in full, including the title of paper and all authors (unless more than 6, in which case you may use 'et al', ensuring that your position as author remains clear). Citations to preprints must state "Preprint", the repository name and the articles persistent identifier (e.g. DOI). |
|  |
| **1.5.6 Research Funding.** List all research funding you have held in the last five years and any key funding before then. List the most recent first. State the name of the funder, name(s) of grant holder(s), title of the project, total amount awarded (and how much of this you received), your role in the project, and the start and end dates. State the percentage of your time spent on the research; if the grant is active state the number of hours per week that you spend on the research. |
| **1.5.7 How many hours a week will you spend on this initiative?** |  |
| **1.5.8 Co-applicant Signature:** |  |
| Applicant SummaryComplete for lead applicant and each co-applicant listed above. |
| **Name** | **Organisation** | **Role in project** |
|  |  |  |
| Consortium SummaryComplete for administering organisation and each consortium member organisation. A letter of support must be included from each consortium member organisation. |
| **Organisation** | **Representing Applicant** | **Role in project** |
|  |  |  |
| Application |
| Application SummaryProvide a summary of your application. 300 words maximum |
|  |
| Scientific VisionExpress your vision for this node, its potential scientific impact and ability to contribute to the SAPRIN objectives listed in this document. Quantify the co-investment you will leverage in the execution of this vision and how this investment will enhance the sustainability of the node. Specify any added value involving one or more of the other SAPRIN nodes. (1500 words maximum) |
|  |
| Leadership, Management and GovernanceDescribed the proposed leadership and governance structures to set strategy and manage risks for the node. Describe how you will address transformation of previously disadvantaged institutions, demographics, and gender considerations. (1000 words maximum) |
|  |
| SAPRIN Protocol Implementation Plan Present your plan to implement the SAPRIN protocol. Provide a Gantt chart of the preparation phase leading up to the first round of household surveillance, including telephonic and verbal autopsy data collection. Although funding is not available in this funding round for the individual surveillance, biomeasures and dried blood spot collection, provide an outline of how you would progress to this stage of the surveillance. Provide details on how you will manage effective recruitment, rigorous data quality and data governance. (1000 words maximum) |
|  |
| Research Infrastructure SupportArticulate how you will support the vision expressed in the South African Research Infra-structure Roadmap and White Paper on Science, Technology and Innovation to develop an accessible national resource for population-based research. (300 words maximum) |
|  |
| Public EngagementSpecify how you will conduct meaningful engagement with the local surveillance community, the wider public, industry, policy makers and practitioners. (500 words maximum) |
|  |
| Geographic AreaThe area must be in an under-resourced rural area or poor urban area situated within the boundaries of a metropolitan area. Describe the area, population size and composition, your prior experience in conducting research in this area, the extent to which homesteads have been mapped in this area and the nature and extend of your interaction with and support by the community for longitudinal population surveillance. Include a map if available.  |
| **2.7.1 Area boundaries, population size and composition, available spatial information** (300 words) |
|  |
| **2.7.2 Prior experience in conducting research in this area** (300 words) |
|  |
| **2.7.3 What is the nature and extend of your interaction with and support by the community for longitudinal population surveillance** (300 words) |
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| **2.7.4 What is the nature of your relationship with local authorities in this area, including service delivery authorities, such as local health services?** (300 words) |
|  |
| **2.7.5 What local physical infrastructure is available as a base for field operations and data collection?** (300 words) |
|  |
| **2.7.6 How do you intend to manage electronic data collection and telephonic survey components of the protocol?** |
|  |
| **2.7.7 How do you intend to manage the biomeasures and do you have access to laboratory facilities for laboratory assays on the dried blood spots?** |
|  |
| Budget |
| **3.1 Provide a budget for the setup phase of the project (Year 1), maximum amount R4,368,000.** As a minimum the budget should contain line items for Human Resources, Operational Expenditure and Building & Equipment. This can be added as an appendix. Please submit as one document.  |
|  |
| **3.2 Provide a budget for the first year of household surveillance (Year 2), maximum amount R9,035,462** A suggested outline for the budget is as follows:**Staffing:*** Fieldworkers
* Fieldwork Supervision & Coordination
* Migration Reconciliation and Tracking
* Call Centre Agents
* Call Centre Supervision
* Data and GIS Management
* Community Engagement

**Equipment:*** Desktop & Laptop Computers
* Mobile data collection devices
* Server, Call Centre and Network Equipment
* Vehicles

**Transport:*** Field Team Vehicle Running Expenses

**Health & Safety:*** Security
* Protective clothing

**Community Engagement:*** Roadshows and community Dialogues
* Community Advisory Board

**Call Centre:*** Telephonic Interview Costs

**Other Operational Costs** |

1. <https://www.dst.gov.za/images/Attachments/Department_of_Science_and_Technology_SARIR_2016.pdf> [↑](#footnote-ref-1)
2. <https://www.dst.gov.za/images/2019/White_paper_web_copyv1.pdf> [↑](#footnote-ref-2)
3. <https://www.dst.gov.za/images/Attachments/Department_of_Science_and_Technology_SARIR_2016.pdf> [↑](#footnote-ref-3)
4. <https://www.dst.gov.za/images/2019/WHITE_PAPER_ON_SCIENCE_AND_TECHNOLOGY_web.pdf> [↑](#footnote-ref-4)