



Africa-UK Physics Partnership (AUPP) Programme

Intra-Africa Research Mobility and Networking

Call Framework Document

February 2025

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ACRONYMS AND ABBREVIATIONS

ACU	Association of Commonwealth Universities
AI	Artificial Intelligence
AIMS	African Institute of Mathematical Science
AUPP	Africa-UK Physics Partnership
BEIS	UK Department for Business, Energy and Industrial Strategy
DFG	German Research Foundation
ECR	Early Career Researchers
EDI	Equity, Diversity and Inclusivity
FCDO	United Kingdom's Foreign, Commonwealth and Development Office
HDI	Historically Disadvantaged Institutions
IDRC	Canada's International Development Research Centre
IOP	Institute of Physics
Norad	Norwegian Agency for Development Cooperation (Norad)
NRF	National Research Foundation
PI	Principal Investigator
SGCI	Science Granting Council Initiative in sub-Saharan Africa
Sida	Swedish International Development Cooperation Agency
SKA	Square Kilometre Array
SSA	Sub-Saharan Africa
STFC	Science and Technology Facilities Council

1. BACKGROUND AND CONTEXT

The fundamental study of physics has played a crucial role in our understanding of the natural phenomena and biological processes throughout history. Research and innovation in the physical sciences have produced some of the most important technological advances ranging from weather forecasting to vital drug developments, and new discoveries continue to drive forward our quest for solutions to global challenges.

Physics as a discipline however, has not advanced at an equal pace around the globe. In sub-Saharan Africa (SSA), physics research faces major challenges including gaps in human capital, infrastructural deficits, weaker support systems for innovation and barriers to international collaboration. These factors have limited the advancement of scientific solutions in SSA, and in turn reduced the contributions of the SSA physics community to developmental priorities.

Despite these challenges, in recent decades the shifting landscapes of higher education and policy have produced vibrant research communities with enormous growth potential across the continent. Harnessing this momentum and empowering the SSA physics community to translate science into practice has the potential to position physics as an agent for development. However, a preliminary analysis carried out by the United Kingdom's Institute of Physics (IOP) in 2019 found that of over 4,000 relevant projects across SSA, only a small proportion (5.5%) involved physics.

As a response to this gap, a multi-year Africa-UK Physics Partnership (AUPP) Programme has been designed to improve physics training, research, infrastructure and collaboration in SSA with the overall objective of supporting the SSA physics community to produce world-class research and contribute to developmental priorities. Preceding the design of the AUPP Programme proposal, an in-depth, participatory feasibility study was commissioned by the UK Department for Business, Energy and Industrial Strategy (BEIS) to investigate current challenges and identify strategic opportunities for intervention. This feasibility study was carried out in 2020 by the IOP and the Association of Commonwealth Universities (ACU).

In mid-2023, the IOP, in partnership with the Science and Technology Facilities Council (STFC), a component part of UK Research and Innovation (UKRI), received funding from the UK Department for Science, Innovation and Technology (DSIT) as part of the International Science Partnership Fund (ISPF) to implement the AUPP Programme by addressing the challenges identified in the 2020 feasibility study. This programme will be implemented through a range of activities including, but not limited to, the launching of collaborative research calls and support for short-term mobility between early career physicists.

2. AIM AND OBJECTIVES

The aim of the AUPP Programme is to unlock the potential of the SSA physics community through sustainable capacity-building in problem-based physics training, and innovation-focused research, to empower physicists in SSA to make fundamental discoveries, and significantly contribute to addressing major local and global challenges.

As indicated above, the Programme is delivered through a range of activities funded by the UK Department for Science, Innovation and Technology and jointly implemented by IOP and STFC. This document is an outline of the Call for Proposals to facilitate the Intra-Africa Research Mobility and Networks; specifically amongst early career physicists.

National, regional, and international collaborations and networks at various levels are essential for science. One of the aims of the 2020 feasibility study was to investigate the different levels of partnerships and networks that currently exist among SSA partner countries. The findings highlighted the following challenges:

- ✦ The presence and strength of collaborations was found to be highly varied – particularly strong partnerships were found in some disciplines and universities, while other physicists interviewed indicated no involvement in collaborations.
- ✦ The link between the private sector and academic research was reported as relatively weak, and this represented one of the main causes for low levels of innovation and commercialisation outputs from the SSA physics community.
- ✦ The majority of the partnerships were found to be bilateral in nature, there were very few multilateral/ consortia-based networks amongst the SSA physics community, especially by early career researchers.
- ✦ Respondents complained about the:
 - lack of information on available collaborating opportunities;
 - lack of knowledge of other scientists' activities and facilities available in Africa; - poor internet connectivity in Africa; and
 - challenges traveling between African countries.

The aim of this Call for Proposals therefore, is to provide research mobility grants to African early career physicists to travel across the African universities and create networks for capacity strengthening, training, access to infrastructure, and develop new networks for future research and innovation (R&I) collaborative projects.

The overall objectives are to:

- ✦ establish a platform where African physicists can collaborate;
- ✦ support existing physics networks between African universities,
- ✦ support networking through conferences and seminars;
- ✦ train and build new collaborations between physicists from South African Historically Disadvantaged Institutions (HDIs), including the two new South African universities and the African partner country universities (see **Annex I** for a list of these universities);
- ✦ strengthen research collaboration amongst African partner countries through networks;
- ✦ provide African early-career physicists with access to research infrastructure not readily available in their home countries; and
- ✦ where feasible and practical link African physicists with industry partners.

3. DURATION AND FUNDING LEVELS

The AUPP Intra-Africa Research Mobility and Networking programmes should be organised for the 2026 and/or 2027 calendar years. Funding will be made available for up to two calendar years. Researchers have the flexibility to design their networking initiatives in whichever way they see fit within these two years. The initiatives can be designed for only 1 year or for 2 years depending on the objectives and the deliverables of the initiatives. No networking activity will be allowed post-2027.

The total amount of funding available for the Intra-Africa Research Mobility and Networking grants is R35 million (£1.5 million). The number of grants to be awarded is highly dependent on the number of excellent proposals received.

Funded initiatives will fall within the following two funding streams:

✦ **Two-way** research mobility and networking grants at R1mil (around £50 000) each:

These grants are meant to strengthen collaboration between two different African countries.

The collaboration should include two or more higher education and research institutions from two different African countries.

There is no maximum number of institutions per application.

Networking activities can take different formats, see **Section 11** (funding regulations and eligible activities).

In instances where this is necessary and feasible, applying higher education and research institutions may partner with the private sector for information sharing and capacity strengthening purposes.

✦ **Multi-country** research mobility and networking grants at R2,5mil (around £100 000) each:

These grants are meant to strengthen or develop new collaboration between multiple African countries.

The collaboration should include higher education and research institutions from a minimum of four different African countries.

There is no maximum number of countries and institutions per application.

Networking activities can take different formats, see **Section 11** (funding regulations and eligible activities).

In instances where this is necessary and feasible, applying higher education and research institutions may partner with the private sector for information sharing and capacity strengthening purposes.

4. CALL SECRETARIAT

The National Research Foundation (NRF) of South Africa will serve as the Call Secretariat for the programme. The Call Secretariat will provide administrative and technical support to applicants regarding this Call for proposals, Call documents, and procedures. It is the primary point of contact between the applicants and the AUPP coordinators for all general matters in relation to this Call for proposals. The contact details for the Call Secretariat are as follows:

National Research Foundation (NRF), South Africa

Email: T.Ngomane@risa.nrf.ac.za

Telephone: +27 12 481 4171

Office hours: Mon-Fri 9AM-4PM (SAST)

The Call Secretariat will be working closely with the science granting councils/national funding agencies of all the eligible 18 African countries (see **Annex II** for a list of these granting councils). Although these science granting councils are not providing funding for the Call, they will be supporting the implementation of the programme and will be involved in the different stages of adjudicating this Call for Proposals.

5. THEMATIC AREAS OF THE CALL

The AUPP Programme has identified five thematic areas as critical in contextualising physics research within the external operating environment in SSA. Therefore, only proposals submitted within the following four themes will be considered eligible.

5.1. Energy

Energy is the most robust research theme, with strong existing capabilities in energy materials and renewable energy research and innovation. This area also has the highest number of researchers, postgraduate production, and research facilities, and produces the most reported innovation outputs. Africa is home to 55% of the world's potential renewable energy capacity, presenting an excellent opportunity for the field of energy research on the continent.¹ Strengthening this field will improve clean energy provision and promote industrialisation, education, health, and food security in SSA.

5.2. Climate and Weather

SSA's economy is still heavily dependent on agriculture, which is highly vulnerable to climate and weather variability². Available methods of farming are predominantly low-tech, with low irrigated land and widespread dependencies on rain-fed agriculture. The continent is therefore profoundly affected by natural temperature, precipitation, sunlight, and extreme weather events³. To ensure food security, there is a need to build capacity and skills in climate and weather forecasting that is locationspecific and widely available down to the level of farmers' crop fields. According to the UNDP's study on disaster recovery in Africa, it is the only continent that has had its share of reported natural disasters in the world increase over the past decade⁴. However, early warning and disaster management systems remain underdeveloped across the continent. There is an urgent need to integrate climate and weather information into decision-making processes, early warning and disaster management systems.

¹ UKRI (Durham Univ, Engineering) - Developing performance-based design for foundation systems of WIND turbines in AFRICA (WindAfrica) and IEA - Africa Energy Outlook (World Energy Outlook special report) 2019 [IEA; 2019].

² IPCC – Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security and greenhouse gas fluxes in territorial ecosystems [IPCC; 2019].

³ Kotir, J.H. Climate change and variability in Sub-Saharan Africa: a review of current and future trends and impacts on agriculture and food security. (Environment, Development, and Sustainability 13, 587–605 (2011)).

⁴ UNDP – Baseline Study on Disaster Recovery in Africa: transitioning from relief to recovery [UNDP; 2019] and UNDRR- Global Assessment Report on Disaster Risk Reduction [UNDRR; 2019].

5.3. Health

Medical physics in SSA suffers from low human capital development with departments overwhelmingly focused on training students for clinical work as opposed to research. As a result, levels of research and development in medical physics have remained low. There is a need to strengthen capacity and support an African medical physics community, which engages in both clinical work and research. Increasing the number of medical physicists can help address alarming trends in the prevalence of diseases, such as the global increase and burden of cancer⁵ reported by the World Health Organisation (WHO). Supporting interdisciplinary research teams between medical physics and biological sciences will not only produce more effective solutions to global health challenges, but also presents an opportunity to increase gender inclusivity in physics given higher numbers of female researchers in the biological sciences⁶. The world recently witnessed the contributions of biophysics

techniques, such as cryo-electron microscopy (cryoEM), to enhancing our understanding of COVID-19 and potential strategies for treatment⁶. Developing capacity for biophysics research and innovation in SSA, as a matter of urgency, can equip communities with the skills and capital to develop guards against future biological disasters and develop solutions.

5.4. Big Data and Artificial Intelligence

Although big data and Artificial Intelligence (AI) are in relatively nascent stages of development, they are critical tools for physics research and underpin much of the innovation and research within energy, climate and weather, and health. Among other examples, big data and AI are essential for big science at the Large Hadron Collider, synchrotron science, computational physics modelling, and the data intensive requirements of the Square Kilometre Array (SKA) project, involving several SSA partner countries.

The 4th Industrial Revolution has rapidly increased demands to build competency in big data and AI across a spectrum of applications ranging from public health to climate science. As a result, various universities in South Africa (e.g. Witwatersrand⁷, Stellenbosch⁸, Pretoria⁹, and Cape Town¹⁰) have introduced postgraduate degrees in Data Science at Honours and Masters' level. The Inter-University Institute for Data-Intensive Astronomy – a partnership between the Universities of Cape Town, the Western Cape and Pretoria – was recently established to cater for MeerKAT needs, preparing the university communities for the data challenges of the SKA. The African Institute of Mathematical Science (AIMS) has also launched the “African Master’s in Machine Intelligence”, an AI programme in Rwanda partnering with Google and Facebook¹¹. These factors all present opportunities to build big data and AI capacities in physics and to forge multidisciplinary research between physics, engineering, statistics, and computer science.

⁵ WHO Report on Cancer: setting priorities, investing wisely and providing care for all [WHO; 2020]. ⁶

UIS (UNESCO) - Women in Science (Fact Sheet, 55) (June 2019).

⁶ COVID-19: How physics is helping the fight against the pandemic – Physics World (19/3/20).

⁷ University of the Witwatersrand - BSc Big Data Analytics.

⁸ Stellenbosch – School for Data Science and Computational Thinking.

⁹ Pretoria – MIT in Big Data Science.

¹⁰ University of Cape Town – Masters programmes in Data Science.

¹¹ AIMS (African Institute of Mathematical Science) and Matekenya, D. et al Preparing Africa’s next generation for leadership in digital data and innovation (WB blog (11/5/20)).

6. GUIDING PRINCIPLES

The following principles and values have guided and shaped how the programme has been conceptualised. Applications should clearly demonstrate how these are integrated in their proposals, as appropriate. The manner and extent of the incorporation of these into proposals will inform the awarding of successful initiatives.

6.1. Regional Collaboration

Regional and international collaborations and networks at various levels are essential for science. With the global challenges of today, science has become a team activity. Expanding one's network can offer interdisciplinary expertise, maximise research and innovation outputs and impact, and provide the necessary flexibility to adapt to a wide spectrum of arising challenges. It enables shared learning, new research opportunities, establishing new research projects, and joint applications for funding. Applicants are therefore, expected to partner with as many institutions as possible within and between African countries, and across sectors in order to enhance opportunities for new bilateral and multilateral research collaborations and strengthen existing networks.

6.2. Networking for Sustainability

Regional mobility to be supported through this Call for Proposals is not meant to be a one-off affair. It is critical for applicants to illustrate how the envisioned research mobility and networking initiatives are to be sustained beyond the 2027 funding year. Successful applicants must demonstrate how the proposed research mobility and networking programme will accelerate the scientific research collaboration at a rate that would not have been possible without the grant. Sustainability plans must therefore be submitted as part of the proposal.

6.3. Support for Early Career Researchers

Early career researchers (ECRs) should be meaningfully and realistically included in the applicant's proposed research mobility and networking initiatives. For the purposes of this Call for Proposals, ECR will be considered in line with how they're defined by each participating African country. The Call for Proposals does not offer a single definition for this grouping as they are classified differently by different countries. Applicants should please provide, as part of the application, their respective country's policy stipulation on ECR and the classification thereof.

As part of the application, applicants are expected to include a strategy or approach to partner and collaborate meaningfully with ECR. The strategies outlined below serve as guidance; applicants are free to devise any strategy suitable to their envisioned mobility and networking initiatives:

- ✦ Providing training and support with and for ECR.
- ✦ Exposing early career researchers to world-class research infrastructure.
- ✦ Involving ECR in the design and planning of the proposed mobility and networking programme, for example, in setting up the agenda or the research questions.
- ✦ Recognising and valuing the contributions of ECR. This can include providing them with some sort of credit for their participation.

- ✦ Creating opportunities for ECR to provide feedback on their experience and reflect on the impact of their participation. This reflection can be included at the end of the proposed mobility and networking programme – during the reporting process.

6.4. Equity, Diversity and Inclusivity (EDI)

The 2020 feasibility study highlighted the shortage of women in physics as a critical issue. The shortage of women in physics is not unique to Africa; however, in the African context, it has been reported that gender norms, cultural barriers, family responsibilities and workplace harassment are significant barriers to gender inclusivity in physics. The proposed mobility and networking initiatives by applicants must demonstrate considerations of gender and diversity. These considerations will find effect in how the collaborating/networking teams are composed and how the activities are executed. How these considerations are integrated should be clearly articulated across the proposal.

7. ELIGIBILITY CRITERIA

Each application must be led by a single Principal Investigator (PI) who will serve as the leader of the collaborating team and bear the main responsibility for the network, including its technical and administrative coordination as well as timely delivery of both the technical and financial reports to the AUPP Call Secretariat. PIs are responsible for informing the rest of the collaborating team of any feedback received on the eligibility of the application, review outcomes, and any further information concerning the application. The higher education and research institution of the PI will be the main beneficiary. The private sector partners cannot serve as PIs but could be included as part of the network.

Below is the comprehensive list of eligibility criteria for this Call for Proposals. The criteria apply to all applicants irrespective of the selected funding stream. The eligibility criteria are grouped into four categories; that is, eligibility as it relates to:

- ✦ PIs and their collaborating team members;
- ✦ participating African countries;
- ✦ submitted mobility and networking proposals; and □ technical aspects.

7.1. Eligibility Criteria for Applicants

- ✦ PIs must be in possession of a PhD and may either be emerging researchers (up to seven years post-PhD) or established researchers (eight-plus years post-PhD).
- ✦ PIs and their collaborating team members must be based at higher education and research institutions of the 18 eligible African countries (see **Section 7.2** below).
- ✦ Collaborating teams are expected to incorporate capacity development (i.e. the development of ECR) – see **Section 6.3**.
- ✦ Project teams may include non-academic research partners (e.g. industry/private sector) to foster co-creation and co-learning in instances where this is necessarily or feasible. Evidence of such active engagement with the private sector will be important in the assessment of project proposals and may be demonstrated through submission of the letter of support from the participating industry partners. Private sector collaborating partners cannot lead the network or serve as PIs.

7.2. Eligible African Countries

This Call for Proposals is open to researchers based at higher education and research institutions of the 17 countries whose science granting councils are currently a participating member of the Science Granting Councils Initiative in Sub-Saharan Africa (SGCI) to apply. These countries include: (1) **Botswana**, (2) **Burkina Faso**, (3) **Côte d'Ivoire**, (4) **Ethiopia**, (5) **Ghana**, (6) **Kenya**, (7) **Malawi**, (8) **Mozambique**, (9) **Namibia**, (10) **Nigeria**, (11) **Rwanda**, (12) **Senegal**, (13) **Sierra Leone**, (14) **Tanzania**, (15) **Uganda**, (16) **Zambia**, (17) **Zimbabwe**. Please note that researchers based at (18) **South African** higher education and research institutions are also eligible to apply as the National Research Foundation (NRF) of South Africa serves as one of the funders of the SGCI.

The SGCI was launched in 2015 to strengthen the capacities of science granting councils to support research and evidence based policies that can contribute to economic and social development. The Initiative is supported by the following funding partners: United Kingdom's Foreign, Commonwealth and Development Office (FCDO), Canada's International Development Research Centre (IDRC), South Africa's NRF, the Swedish International Development Cooperation Agency (Sida), the German Research Foundation (DFG) and the Norwegian Agency for Development Cooperation (Norad). The NRF and IDRC oversee the implementation of the Initiative.

The SGCI has been implemented in two phases: SGCI-1 (2015-2020) and SGCI-2 (2018-2025). SGCI-1 focused on strengthening the ability of the science granting councils to (a) manage research; (b) design and monitor research programmes, and to formulate and implement policies based on the use of science, technology and innovation indicators; (c) support knowledge exchange with the private sector, and (d) establish partnerships among Councils and with other science system actors. SGCI-2 is deepening ongoing work with the science granting councils in areas related to those covered under SGCI-1. Several dimensions have been included to give effect to research excellence, strategic communications/ uptake of knowledge outputs, gender equality and inclusivity, engaging with research performing institutions, and private sector engagement.

Further information on the SGCI can be found on the SGCI website: <https://sgciafrica.org/>.

Please note that the SGCI councils are not providing funding for this Call for Proposals; they are only supporting the implementation of this Programme and are involved in the different stages of adjudicating this Call for Proposals. Therefore, applicants are more than welcome to contact their respective council for further information/ support. The full contact details are indicated in **Annex II**.

7.3. Eligibility Criteria for Submitted Proposals

- ✦ Submitted proposals must clearly indicate the relevant funding stream under which the proposal is being submitted; i.e. two-way or multi-country (see **Section 3**).
- ✦ Submitted proposals can focus on one or more of the four thematic areas of this Call for Proposals; namely: energy, climate and weather, health, big data and artificial intelligence (see **Section 5** above for details on these four themes).
- ✦ Submitted proposals should demonstrate awareness of the Call's sustainability requirements and should include plans showing how this requirement will be met (see **Section 6.2**).
- ✦ Submitted proposals must include ECR as part of the collaborating team (see **Section 6.3**).
- ✦ Submitted proposals must demonstrate how the proposal may help address any existing inequities in gender and diversity (see **Section 6.4**).

7.4. Technical Eligibility Criteria

- ✦ Each PI (and collaborating team members) are allowed to submit only one proposal and apply to only one funding stream.
- ✦ The PI cannot participate as a collaborating team member in other proposals.
- ✦ All submissions (partner search registration forms and full proposals) must be completed in English.
- ✦ All submissions (partner search registration forms and full proposals) must be made before the indicated deadlines as highlighted in **Section 12** of this document via the link: <https://nrfconnect.nrf.ac.za>.
- ✦ All proposed mobility and networking activities must be implemented and completed within two years (2026 and/or 2027). No activities shall be supported beyond 2027.

8. PREPARING AN APPLICATION

This Call for Proposals consists of two main phases:

1. Partner search registration form (not mandatory)
2. A full proposal submission (mandatory)

Each step is summarised below.

Partner search registration form

- Applicants interested in finding team members are invited to register by completing the partner search registration form [see **Annex III**] and connect with other researchers from the 18 eligible African countries who share similar interests and who are also seeking collaborations. Completing and submitting the form is not mandatory. This process aims to assist researchers with finding suitable team members and form effective research teams. Completed forms should be submitted to T.Ngomane@risa.nrf.ac.za. See **Section 9** for further details.

Submission of the full proposals

- For the submission of the full proposal, a standard online form is available through the NRF Online Submission System called the NRF Connect. Applicants must adhere to the questions stated on this form, the procedure given in the explanatory notes, and to the required maximum number of words and pages. The complete application form must be received by the Call Secretariat before the indicated deadline. No applications will be accepted after the submission deadline. See **Section 10** for further details.

Eligibility check and consideration

- As soon as possible after you have submitted your full proposal, you will hear from the Call Secretariat whether your full proposal will be taken into consideration. The Call Secretariat will determine this based on several administrative-technical criteria and will only take your full proposal into consideration if it meets all outlined conditions. You are requested to be available during the two weeks after submitting your full proposal to enter any possible administrative corrections so that your full proposal can (still) meet the conditions for submission. You will be given the opportunity to make the corrections, and you will be given five (5) working days to do this. If needed, a second opportunity may be granted with a maximum of two working days. See **Section 10** for further details.

Peer review process

- An International Panel of Experts will be appointed for the assessment of your full proposal. The Panel members will provide substantiated written comments on the full proposal, based on the assessment criteria (see **Section 10.3**), and will give the full proposal a numerical score per assessment criterion. Following the discussion, the Panel will draw up a written recommendation addressed to the Call Secretariat about the quality and ranking of the full proposals.

Funding decision-making

- The International Panel of Experts will make recommendations to the AUPP coordinators. The final decision on funding rests with the UK partners (STFC).

9. PARTNER SEARCH REGISTRATION FORM

Before submitting a full proposal, applicants are invited to announce their research mobility and networking initiatives to the Call Secretariat. This may enable potential partners to contact an applicant and possibly join a team or it may give applicants ideas on merging certain teams. To participate in this process, applicants should:

- ✦ download the partner search registration form (see **Annex III**) from the Call Secretariat web page;
- ✦ complete the partner search registration form; and
- ✦ save the completed form as a PDF file and email it to the Call Secretariat (T.Ngomane@risa.nrf.ac.za).

The Call Secretariat will share the submitted forms with other interested applicants and the Science Granting Councils of the participating African countries. A virtual event will be organised, in which this Call for Proposals and its conditions will be further highlighted. This virtual workshop will also serve as a platform for applicants to connect with each other and form teams.

The steps involved in joining the virtual event are:

- ✦ The PI of completed registration forms will be invited to a virtual event;
- ✦ Partners interested in joining a specific collaborating team should make themselves known by emailing the relevant PI or the Call Secretariat (T.Ngomane@risa.nrf.ac.za).

10. SUBMISSION AND ASSESSMENT OF FULL PROPOSALS

Some useful things to know for writing and submitting your full proposal:

- ✦ Log onto the NRF Connect (<https://nrfconnect.nrf.ac.za>), and complete the online form.
- ✦ You must write your application in English.
- ✦ It is important to start with your application on the online system on time as additional information may be requested.
- ✦ You can save the application and return to it at a later stage.
- ✦ Once you are satisfied with all aspects of your application you can submit it.
- ✦ Your submitted application will be received by the Call Secretariat.

10.1. Compulsory Attachments

- ✦ Curriculum vitae of PI, research team members, and the industry/private sector partners. CVs should be a maximum of 3 pages in length. There is no template for compiling the CV. Applicants should decide on what to highlight in relation to skills required.
- ✦ Detailed budget breakdown.
- ✦ A letter of support from the head of the PI's applicant institution (i.e. president/executive officer/executive secretary/director general). The letter should specify the nature and level of support expected from the institution in terms of technical, financial, and administrative contribution towards the proposed initiative.
- ✦ The letter of support should also indicate the commitment of the institution to actively and in a timely manner engage in pre-awarding and post-awarding administrative requirements, such as due diligence processes.
- ✦ Strategy or approach to partner and collaborate meaningfully with ECR including participating country's policy specification on ECR and how they are defined and classified.
- ✦ Plans for ensuring the suitability of the proposed initiative after the funding period.
- ✦ Letters of support from the participating industry (private sector) partners for those who have decided to involve industry partners in their initiatives.

Attachments must be uploaded to the NRF Connect separately from the application form. The system will provide instructions on how to upload attachments. All attachments, except for the budget, must be submitted as PDF files (without encryption). The requested detailed budget can be submitted in an Excel file. Any attachments other than those mentioned above are not permitted.

An application can only be submitted through the NRF Connect. Applications that are not submitted through this system will not be considered.

Applications submitted after the deadline will not be considered. For technical questions, please contact the Call Secretariat (T.Ngomane@risa.nrf.ac.za).

10.2. Conditions for the Full Proposal Phase

Your application will only be admitted to the assessment procedure if it meets the following conditions:

- ✦ The application is written in English.
- ✦ The PI and the collaboration partners meet the conditions stated in **Section 8**.
- ✦ The budget is drawn up in accordance with the conditions for this Call for Proposals.
- ✦ The online application form is correct, complete and filled out according to the instructions.
- ✦ The application is submitted via the NRF Online Submission System.
- ✦ The application is received on or before the set deadline.
- ✦ The proposed initiative is implemented and completed within two years (2026 and/or 2027).
- ✦ All of the required attachments have been submitted.

Full proposals that are eligible according to the above-stated criteria, submitted correctly, and within the deadline will undergo a peer review evaluation by an International Panel of Experts with relevant expertise in the field(s) concerned. Each expert panel member is independent, and no conflict of interest will exist in relation to the full proposal evaluated. Each full proposal will be reviewed by at least two expert panel members from different institutions. The composition of this panel is decided by the Call Secretariat. Full proposals are subjected to a thorough quality assessment by the panel in accordance with the assessment criteria outlined in the next sub-section.

10.3. Assessment Criteria for the Full Proposal Phase

- ✦ Excellence of the proposed initiative.
- ✦ Quality and efficiency of the implementation plan.

Excellence of the proposed initiative

- ✦ Degree to which the proposal fits one or more of the thematic foci of the Call for Proposals.
- ✦ Degree of novelty and innovation of the proposed initiative and its approach.
- ✦ Potential to be sustained after the funding period.
- ✦ Inclusion of capacity strengthening (engagement with early career researchers).
- ✦ Gender and diversity considerations.

Quality and efficiency of the implementation plan

- ✦ Quality and effectiveness of the work plan.
- ✦ Appropriateness of the management structures and procedures.
- ✦ Appropriateness of the allocation of tasks and the manner in which resources are assigned.
- ✦ Complementarity of the participants and the extent to which the collaborating research team brings together the necessary expertise.
- ✦ The budget is appropriate to the planned work and allows the achievement of the goals of the network/collaboration.

Evaluation scores will be awarded for each of the two main criteria. Sub-criteria are aspects that the experts will consider in the assessment of each criterion. Each criterion will be scored out of 5.

The 1-5 scoring system for each criterion indicates the following assessment:

1 - Poor. Proposal fails to address the criterion or cannot be assessed due to missing or incomplete information. The criterion is inadequately addressed, or there are serious inherent weaknesses.

- 2 - Fair.** *The proposal broadly addresses the criterion, but there are significant weaknesses.*
- 3 - Good.** *The proposal addresses the criterion well, but several shortcomings are present.*
- 4 - Very Good.** *Proposal addresses the criterion very well, but a small number of shortcomings are present.*
- 5 - Excellent.** *Proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.*

At the end of the review process, the International Panel of Experts will decide on one final ranking list of proposals based on the scores and review reports. The Call Secretariat will provide feedback to all applicants.

11. FUNDING REGULATIONS AND ELIGIBLE ACTIVITIES

All successful initiatives will receive funding for activities taking place across the 2026 and 2027 calendar years. The total amount of funding – R35 million – (i.e. £1,5 million) available for this Call for Proposals will be awarded as follows:

- ✦ Two-way research mobility and networking grant at R1 mil (£50,000) each
- ✦ Multi-country research mobility and networking grant at R2,5 mil (£100,000) each

The grant disbursement, for each of the funding streams above, will be made as follows:

- ✦ The first tranche of 60% will be released for payment immediately after the satisfactory completion of pre-award due diligence process for the grant recipient and receipt of the signed *Conditions of Grant* contract by the institution and the grant-holder.
- ✦ The second tranche (40%) will be released for payment based on claims from the PIs with a submission of a motivation for satisfactory performance and completion of some activities.

Applicants are free to design their research mobility and networking initiatives in a manner that they deem fit. Funds may be allocated to support activities mentioned below. Please note that these serve as examples; applicants can support these activities and more depending on the overall objectives of their networking initiative.

- ✦ Provide early career physicists with access to research infrastructure not readily available in their home country.
- ✦ Support the establishment of a new physics network. □ Postgraduate student exchange programmes.
- General research-related mobility, including workshops to prepare research proposals for funding.
- Train and build new collaborations between physicists from the South African historically disadvantaged institutions and its two new universities and African partner country universities. See **Annex I** for a list of South African institutions referred to here.
- Share information through a regional conference, joint workshops, seminars, and symposia. This may also include regional dissemination of research results aimed at involving stakeholders, and/or end-users from outside the consortium.
- Capacity building sessions such as participation in winter/summer schools, master classes, etc.
- Lecture presentations.

The budget must convincingly allow the achievement of the networking goals and must not exceed the funding limits indicated above.

Sustainability of the network is also an important objective, and successful proposals will be required to reflect on whether and how they intend to leverage additional collaboration and funding to sustain their network.

12. SUBMISSION DEADLINES AND TIMELINES

This Call for Proposals consists of two phases:

1. Partner search registration form; and
2. Full proposal submission phase.

The deadline for submitting the partner search registration form (not mandatory): **Friday, 14 March 2025, at 23:59:59 hours SAST.**

The deadline for the submission of full proposals (mandatory): **Friday, 02 May 2025, at 23:59:59 hours SAST.**

All applications are to be submitted to the Call Secretariat through the NRF Connect (link: <https://nrfconnect.nrf.ac.za>).

As applicants will be required to create an online account, some additional information may be requested such as an Orchid account). Therefore, applicants should start submitting applications at least one week before the deadline of this Call for Proposals.

Applications that are submitted after the deadline will not be taken into consideration.

Full Proposal Phase	
03 March 2025	NRF Connect (online application system) opens for submission of full proposals
02 May 2025	Submission deadline for full proposals
May- June 2025	Screening and International Panel of Experts meeting
July-August 2025	Funding decisions
August-Nov 2025	Due diligence
Nov-Dec 2025	Contracting of successful initiatives
December 2025	Start of the successful initiatives
Feb/March 2026	Workshop with PIs of all funded initiatives – to be organised by Call Secretariat
December 2027	End of implementation of the initiatives
End of financial year 2027	Submission deadline for final technical report and audited financial report

13. OBLIGATIONS FOR AWARDED INITIATIVES

13.1. Due Diligence Process

The NRF has adopted a standard approach to conducting due diligence, which will take place prior to and after awards are made. There will be a virtual due diligence process coordinated by a team comprised of the NRF Internal Audit in conjunction with external service providers via virtual platforms (i.e. desktop reviews of all documents, email communication and virtual meetings). For this reason, we will rely on your institution's effective communication.

The review will primarily focus on: (1) procurement, (2) financial management and grants management; and (3) risk management including anti-fraud and corruption mechanisms. As such, a list of documentation will be required by the NRF from the recipient institutions prior to the release of funds. This documentation covers: the organisational structure, risk management and anticorruption; audit, procurement and financial management; and sub-granting/ forwarding of funds.

Applicants are required to inform their institutions of this requirement prior to submission of applications, and to obtain assurance of support to proceed with the due diligence process, should the applications be successful. The relevant research, finance and internal audit functions of successful applicant institutions will be required to interface with the due diligence team. Due diligence postaward is linked to the performance reports submitted by the PIs.

13.2. Ethical Aspects

Ethics is an integral part of research collaboration and ethical compliance is considered pivotal to achieve research excellence. Applicants are responsible for determining whether an ethical statement or license is needed for the realisation of the proposed initiative. Applicants should ensure that this is obtained from the relevant institution or ethics committee on time. If the initiative is awarded funding, then the grant is issued under the condition that the necessary ethical statement or license is obtained before the latest start date for the initiative. The initiative cannot start until the Call Secretariat has received a copy of the ethical statement or license. The awarded amount will not be released for payment if a copy of the required ethical clearance certificate, as indicated in the application, is not attached to the *Conditions of Grant* contract.

13.3. Start and Duration of the Mobility and Networking Initiatives

Proposed initiatives should start within three months of being awarded. If the initiative has not started within three months, the Call Secretariat can decide to revoke the granting decision. Initiatives are expected to be completed by the end of December 2027.

13.4. Contracts and Contractual Relationships

Detailed contractual obligations will be outlined in the *Conditions of Grant* contract to be signed between the PIs and the Call Secretariat during the award process. PIs are responsible for ensuring the necessary documents for the start of the research mobility and networking initiatives (see **Section 11.1** for all the required documents).

13.5. Monitoring and Reporting

There are two reporting periods, i.e. end March 2026 and December 2027.

March 2026

This reporting period will be in the form of a workshop (to be organised by the Call Secretariat) with all the grant recipients and the AUPP coordinators. The aim of the workshop is to take stock of the implementation process of the different initiatives (whether completed or not). This workshop will be organised either virtually/ physically depending on the available budget.

End Financial year 2027

Funded PIs are expected to submit a technical report detailing the achievements (including outputs and lessons learned) of the funded initiatives against the agreed deliverables and objectives. A template shall be provided for this report.

This technical report must be accompanied by a financial report. This should be an audited financial report detailing expenditure accumulated in the implementation of the funded initiative and should be prepared by an independent auditor arranged and paid for by the grant recipient. The Call Secretariat will not accept unaudited and internally audited financial reports. All remaining funds should be returned to the Call Secretariat on approval of the submitted financial report.

14. ANNEX I: LIST OF HISTORICALLY DISADVANTAGED INSTITUTIONS IN SOUTH AFRICA

The following eight universities qualify as historically disadvantaged in line with the South African Department of Higher Education and Training Ministerial Statement on university funding:

NAME OF UNIVERSITY	PHYSICAL ADDRESS
UNIVERSITY OF LIMPOPO (UL)	C/O R71 Tzaneen Road and University Street Turfloop Campus Polokwane Sovenga, 0727
UNIVERSITY OF FORT HARE (UFH)	Alice Campus Ring Road Alice, 5700
UNIVERSITY OF VENDA (UNIVEN)	University Road Thohoyandou Limpopo, 0950
WALTER SISULU UNIVERSITY (WSU)	Nelson Mandela Drive Umtata Part 1 Mthatha, 5099
UNIVERSITY OF THE WESTERN CAPE (UWC)	245 Voortrekker Road Vasco Estate Cape Town, 7460

UNIVERSITY OF ZULULAND (UNIZULU)	Corner Guldengracht &, 2 Cent Cir, Road Richards Bay, 3900
MANGOSUTHU UNIVERSITY OF TECHNOLOGY (MUT)	511 Griffiths Mxenge Highway Umlazi Durban, 4031
SEFAKO MAKGATHO HEALTH SCIENCES UNIVERSITY (SMU)	Molotlegi Street Ga-Rankuwa Zone 1 Ga-Rankuwa, 0208

South Africa's two new Universities:

NAME OF UNIVERSITY	PHYSICAL ADDRESS
UNIVERSITY OF MPUMALANGA (UMP)	Corner R40 and D725 Roads Mbombela, 1200
UNIVERSITY OF FORT HARE (UFH)	10 Jan Smuts Blvd Civic Centre Kimberley, 8300

15. ANNEX II: COUNTRIES WHOSE COUNCILS ARE A MEMBER OF THE SGCI

COUNTRY	PARTICIPATING SCIENCE GRANTING COUNCIL	CONTACT PERSON	CONTACT EMAIL
BOTSWANA	Ministry of Communications, Knowledge and Technology (MCKT)	Abraham Mathodi	amathodi@gov.bw
BURKINA FASO	Le fonds National pour la Recherche et de l'Innovation pour le Developpement (FONRID)	Djibril Yonli	d.yonli313@gmail.com
COTE D'IVOIRE	Fonds pour la Science, la Technologie et l'Innovation (FONSTI)	Annette Ouattara	annetteouattara@yahoo.fr
ETHIOPIA	Ministry of Innovation and Technology (MinT)	Habtamu Abera Goshu	habtamu2016@yahoo.com
GHANA	Ministry of Environment, Science, Technology and Innovation (MESTI)	Wilfred Edem Dennis	wilfred.dennis@mesti.gov.gh
KENYA	National Research Fund (NRF)	Jacob Njagih	injagih@nrf.go.ke kamwariajacob@gmail.com
MALAWI	National Commission for Science and Technology (NCST)	Lyson John Kampira	lkampira68@gmail.com lkampira@ncst.mw
MOZAMBIQUE	Fundo Nacional de Investigacao (FNI)	Dirce Madeira	fni.mct@gmail.com edsonlffaria2012@gmail.com
NAMIBIA	National Commission on Research, Science and Technology (NCRST)	Luiza Ndapewa Shekup	nlupahla@NCRST.NA
NIGERIA	Tertiary Education Trust Fund (TETFund)	Salihu Bakari	sgbakari@yahoo.co.uk

RWANDA	National Council for Science and Technology (NCST)	Esperance Munganyinka	emunganyinka@ncst.gov.rw
SENEGAL	Ministry of Higher Education Research and Innovation (MESRI)	Tafsir Babacar Ndoye	ndoyetafsir@hotmail.fr
SIERRA LEONE	Ministry of Technical and Higher Education (MTHE)	Fatima Kaiwa	fatmata.kaiwa@mthe.gov.sl fatmata_kaiwa@hotmail.com
SOUTH AFRICA (call secretariat and one of the SGCI funders)	National Research Foundation (NRF)	Themba Ngomane	T.Ngomane@risa.nrf.ac.za
TANZANIA	Tanzania Commission for Science and Technology (COSTECH)	Neema Tinda	neematinda16@gmail.com neema.tindamanyire@costech.or.tz
UGANDA	Uganda National Council for Science and Technology (UNCST)	Geoffery Sempiri	g.sempiri@uncst.go.ug sempiri.geoffrey@gmail.com
ZAMBIA	National Science and Technology Council (NSCT)	Atridah Mulonga	amulonga@nstc.org.zm
ZIMBABWE	Research Council of Zimbabwe (RCZ)	Forbes Chinyemba	fchinyemba@rcz.ac.zw

16. ANNEX III: PARTNER SEARCH REGISTRATION FORM

All fields with a * must be filled in

Title		
First name*		
Last name*		
Email address*		
Organisation*		
Role/position		
Expertise*		
Country*		
I am looking for? * (indicate with an 'X')	<input type="checkbox"/>	Partner(s) to join my networking initiative for the AUPP programme (if this option is selected please complete Section A below)
	<input type="checkbox"/>	A project where I can potentially contribute my expertise as a team member (if this option is selected please complete Section B below)
	<input type="checkbox"/>	A project where I can potentially contribute my expertise as a non-academic partner (if this option is selected please complete Section B below)
Section A		
Title of prospective networking initiative proposal*		
Keywords*		

Description of the prospective networking initiative*	
Partners/organisations already involved in the network	
Any planned meetings to elaborate on the initiative	
Section B	
Brief outline in what ways you would like to potentially contribute to an AUPP Network*	
To be completed by all	
I give permission to share this completed form*	By email with others who have also completed this form
	By email with others who have completed this form and on the Science Granting Council(s)' website(s)
	No <i>(if you select this option, note that there is nothing that will be done with your completed form)</i>
I would like to be notified in case of further activities for the AUPP programme*	Yes
	No
Privacy Disclaimer	Personal data held by the NRF are carefully processed and protected in compliance with privacy legislation (GDPR, Dutch acronym AVG). See https://www.nwo.nl/en/privacy-statement for more information.
By submitting this form, I consent that all involved Science Granting Councils in the AUPP programme can view my personal information for organisational purposes only.	