



PROSPECTUS

PUBLIC – PRIVATE PARTNERSHIPS (PPP) IN RESEARCH AND INNOVATION GRANTS

THE SCIENCE GRANTING COUNCIL INITIATIVE IN SUB- SAHARAN AFRICA



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INTRODUCTION

This prospectus gives a detailed description of the public – private partnerships in research and innovation grants being issued under theme 3 of the Science Granting Councils Initiative (SGCI). It gives further guidance to the call for proposals issued under this programme and lays considerable emphasis on the envisaged systemic approach to the expected proposals. The prospectus is to be read together with (and is designed as a further guidance to) the advert for the “*Call for Proposals – public – private partnerships*” published in the local dailies and other electronic and print media. If you need any further clarification, do not hesitate to contact us on email directorgeneral@ncst.mw with a copy to sgci@ncst.mw and sgci_ppp@scinnovent.org. The email should have the subject/heading “Further enquiry: public – private partnership projects” clearly specified.

RATIONALE AND JUSTIFICATION

The key defining feature of the PPP grants scheme is its deliberate emphasis on the need to move from research to innovation. It recognizes that whereas the universities and research institutes have been generating technologies and other research outputs, translating these into commercial products that could spur socio-economic development have been slow at best. The PPP grants are designed to break the barriers to the uptake and application of research for economic and social development by facilitating universities and research institutes to be the champions of the process of translating outputs of their research (e.g. new technologies, new varieties, prototypes, new business models) into products and services in the market place. To achieve this, PPP grants will fund research and innovation activities involving collaborations between universities with other actors who are not their traditional partners (particularly, the private sector) as well as promote multi-disciplinary approaches (teams of experts from diverse disciplines) working together on identified research problems.

The involvement of the private sector is key to the success of this programme and the private sector will be encouraged to support the process through additional financing and other forms including sharing of equipment; faculty and student placements, secondments and internships; research priority setting etc. In return, the private sector will gain access to expertise within the universities and research institutes; aid in the renewal and expansion of technology; improve access to students as potential employees and leverage internal research capabilities

SECTION 1: PROPOSAL TEMPLATE

The full proposal should address the following areas:

1. EXECUTIVE SUMMARY

This section provides a succinct high-level summary of the proposed project. The summary should be in plain English, avoiding the use of jargon and acronyms. Please note that this summary will be published in the SGCI Virtual Hub and partner institutions websites. The summary should be short but detailed enough to stand alone. It must not be more than one page long.

2. BACKGROUND AND RATIONALE

Describe the problem that is to be investigated and the questions that will guide the research process. Provide a brief overview of the body of knowledge related to the problem and indicate the knowledge gaps that the proposed research will fill. To show the importance of the problem, this section should discuss: how the research relates to the country's development priorities; the scientific importance of the problem; the urgency and magnitude of the problem and how the research results will contribute to its solution; the special importance of the project for the private sector; and the need to build up research capacity in the proposed area of research.

3. PROJECT GOAL AND SPECIFIC OBJECTIVES

The overall goal should state the development goal being pursued by the research. The specific objectives should indicate the specific types of knowledge (or other outputs) to be produced/realized, the audiences to be reached, the forms of capacity to be reinforced, and the partnerships to be established. These are the objectives against which the success of the project will be judged.

4. PROJECT METHODOLOGY/ APPROACH

Explain how each specific objective will be achieved in sufficient detail to enable an independent scientific assessment of the proposal. This section should show how the research questions will be answered in the most rigorous way possible. You must be clear about the activities envisaged to achieve each objective. The methodology (which should be justified) should discuss the following details as appropriate:

- **Conceptual and theoretical framework.** Define the frame of reference that will guide the research (for more on this see section on innovation systems).
- **User participation.** Indicate whether (and if so, how) the ultimate users of the research findings (in this case, the private sector) were involved in the design of the project and how they will participate in the execution of the project or implementation of the results.
- **Data collection.** Indicate the approaches and methods that will be used to collect data as well as how the research instruments will be developed. If the research includes studies on human populations, indicate how ethical questions relating to confidentiality will be achieved (see below). Where applicable, details must be provided with regard to the collection and handling of biological samples, and all laboratory procedures and protocols must be stipulated.
- **Data analysis.** Describe the methods of data analysis and modeling to be used, if any. This should include any statistical processes/ softwares (if necessary) as well as how the data will be secured, accessed, shared, stored and archived.

5. ANTICIPATED OUTPUTS AND OUTCOMES

Define the major outputs (e.g., publications, policy briefs, books, technologies, protocols, guidelines, etc.) expected from the research (please be **specific** about the numbers of publications, briefs, etc.). Based on these outputs, define the outcomes expected. Outcomes are defined as changes in actions, behaviours, and relationships of the users and target audiences (refer to "[Outcome Mapping](#)"). What is likely to change as a result of research findings, to whom, when and where? Describe whether the project findings are likely to influence policy and at what levels (national, regional, continental?) How will the project engage with policy and decision actors at these levels?

6. KNOWLEDGE UTILIZATION AND DISSEMINATION PLAN

Describe how the research findings will be disseminated or used. Who are the target audience/ beneficiaries? How will the findings be used to influence policy and practice? What media engagements plans are envisaged? Is open access (OA) part of your university's/institute's policy? Relate the specific dissemination method/approach to the target audience and briefly explain the rationale for the choice of the approach.

7. PROJECT GOVERNANCE

Briefly explain how the project will be governed. Describe whether the project plans to incorporate advisors to provide overall oversight. What is the composition of the research team, their qualifications and specific roles in the proposed project? Is any partnership planned with other universities/ research institutes in your country (if the focus is national); or in other countries (if the focus is regional)? How will the private sector and other beneficiaries be involved in the design/ management/ execution of the project? What is the role of the university's/institute's management (if any) and how might this governance structure influence the success of the programme?

8. SUITABILITY OF THE HOST UNIVERSITY/INSTITUTE

Describe the suitability of your university/institute in coordinating this project by highlighting the specific factors that make it uniquely qualified. Provide an overview of the technical infrastructure, human capacity, and other resource endowments that demonstrate the existing capacity to undertake the proposed research. Explain the university's previous/ current activities, outreach and impact in the proposed area. Describe any existing or anticipated links with the private sector and other actors in the country/national system. Briefly demonstrate how this project will fit into the overall design of the university's/institute's overall research strategy

9. CAPACITY BUILDING

Describe how the project plans to contribute towards both individual and organizational capacity building. How might post-graduate students (MSc. and PhD) be involved in the project? What other training activities are envisaged under the project? Are their plans to enhance the capacity of project partners (and if so, in what areas)?

10. MONITORING AND EVALUATION STRATEGY

The project could incorporate the "Outcome Mapping" (OM) methodology and program into its monitoring and evaluation strategy. "Outcome Mapping" focuses on one specific type of result: behavioral change in people, groups and organizations. By using this approach, a project does not claim the achievement of development impacts; rather, the focus is on its contributions to achieving these outcomes (in other words, emphasize "contribution" rather "attribution"). These outcomes, in turn, enhance the possibility of development impacts—but the relationship is not necessarily a direct one of cause and effect. Thus, the evaluation will focus on partners' fulfillment of their roles.

11. GENDER, ETHICS AND SUSTAINABILITY

Describe how ethical approval will be obtained. All projects that include human subjects must ensure that their privacy, dignity, and integrity are protected. Projects that will collect corporate or personal information must detail how informed consent will be obtained and confidentiality maintained.

Carefully describe the links of the proposed project to ongoing projects within the university/Institute (regardless of whether these projects are undertaken by the PI). If the project builds on other funded projects then provide accurate and verifiable information about the funding sources and whether the proposed activities are new. Explain how the project will be sustained beyond the project support. Are any donor partnerships anticipated, and if so, which ones? Provide details of any ongoing discussions with other funders.

Identify the key risks that may arise during the implementation of the proposed research and how each will be addressed. For each potential risk, outline the key assumptions and a mitigation plan.

12. PROPOSED PROJECT TIMELINE

Provide a chart of key activities and timelines as below

Project Activities	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

13. LITERATURE CITED

Include key literature/references that have been cited in the proposal

SECTION 2: INNOVATIONS SYSTEMS AS A GUIDING FRAMEWORK

Innovation systems are conceived as a 'a network of firms and other economic agents that, together with the institutions and policies that influence their innovative behavior and performance, bring new products, new processes and new forms of organization into economic use' (Lundvall, 1992; Nelson, 1993). The innovation systems approach is particularly useful for the PPP projects mainly because it doesn't regard 'research to the market/use' as a linear track, nor limit innovations to those at the frontier of knowledge. Instead innovation is understood to include processes by which firms/organizations master, modify and implement the design and production of goods and services that are new to them, their countries or the world. This "newness to context" is important – it emphasizes that an innovation needs not be new to the world, but that if introduced and applied in a different context where it has not been used before, it would still be an innovation in that context.

One of the key strengths of the innovation systems approach is its focus on the interactions among actors/agents in the system and their embeddedness in organizational and institutional contexts that influences their behavior and performance. Institutions are understood as the "sets of common habits, routines, norms, rules and established practices that regulate the relations and interactions between individuals and groups" (Edquist, 1997) , prescribe behavioral roles, constrain activity and shape expectations, or what is sometimes called 'informal institutions'. These habits and practices are learned behavior patterns marked by the historical specificities of a particular place and moment in time (¹Mytelka, 2000).

Innovation systems approaches also acknowledge the importance of policies and policy making processes in learning and innovation. Whether tacit or explicit, policies play a role in setting the parameters within which actors make decisions about learning, innovation, investment and collaboration. From a policy perspective, innovation systems approaches draw attention to policy dynamics and the way these emerge from the interaction between policies and the habits and practices of the actors whose behavior is targeted by policy. The impact of policies will thus vary across different organizational and institutional contexts. The innovation systems approach, therefore, provides a guiding framework within innovation projects. It allows the integration of other analytical approaches and methods.

¹ Mytelka, Lynn K (2000). 'Local systems of Innovation in a Globalized World', *Industry and Innovation*, Vol. 7, No. 1: 15-32

Proposals under this call should therefore give adequate attention to the following:

FOCUS ON INNOVATION

The literature on innovation systems extends the focus beyond research, science, technology or invention, to the application of knowledge. It is important therefore that the applicants demonstrate that they are in sync with this shift by elaborating how the knowledge they hope to generate through their research will be applied in enhancing productivity and efficiency in the private sector OR how, through the PPP projects, they hope to catalyze the uptake and application of prior existing knowledge to improve processes and practices within the private sector. In other words, innovation can result from learning, research, experiences or just new combinations of existing knowledge. Innovation is a key plank in this programme and proposals that fail to demonstrate how the knowledge generated through research will be applied will be automatically disqualified.

ROLE OF COLLABORATIONS

It is widely recognized that innovation never occurs in isolation but instead involves a broad range of diverse actors in the public, private spheres. This brings into focus the need to build new linkages, partnerships and networks; or strengthen existing ones. This programme envisages a situation where the PPP projects will form a nucleus around which other actors will coalesce to create new products and services of social and economic benefits. It is important therefore in the proposals for the applicants to demonstrate how these linkages will be built/strengthened, with which actors and to what ends (benefits). Proposals conceived and developed in silos will be rejected.

THE ROLE OF POLICIES

Innovation is not determined by the outcome of single policy, but a set of policies work together to shape innovative behavior. The applicants need to demonstrate that they are conversant with the relevant national laws, policies and regulations that influence/influenced by technological innovation and its linkages to the manufacturing sector. These may include taxation policies, investment policies, input supplies policies, R&D policies etc, but often go beyond that to include industrialization, finance etc. It is also important to make a connection with the government's development priorities as captured for example in their development blueprints or other such development plans. Where appropriate, it is also important to demonstrate understanding of the regional/continental policy contexts and make reference to efforts in the regional economic communities (RECs) or even the continental agenda such as STISA 2014 and the Agenda 2063. Of great interest to this programme is how the applicants think the proposed projects will be influenced/or influence these policy processes and how they will

position/organize themselves to respond to/effect such influences. Proposals should clearly specify if the projects may have any policy outcomes and if so, how they intend to achieve such policy influences.

INSTITUTIONS, GOVERNANCE AND SOCIAL DIMENSIONS OF INNOVATION

The habits and practices of organizations shape their propensity to interact, to learn, to access and share knowledge and to take risks. The universities and research institutes for example exhibit an organizational culture that differs fundamentally from how the private sector operates. It is important that these cultural differences between organizations/actors are taken into account as the project is designed and the applicants (depending on their choice of partners) should demonstrate an understanding of how such cultures will influence the project's success and how they will build on them/or react to their influences. The potential risks of working with multiple partners with different expectations and cultural orientations should be carefully considered and mitigation measures outlined.

LEARNING, COMPETENCIES AND SKILLS

Propensity to innovate, collaborate and share are learnt behaviors emerging through experiences, interaction, training. The project should demonstrate how it will encourage and facilitate joint/interactive learning amongst its partners. It is important to note that each partner will bring on board unique experiences and expertise for the benefit of the project. However, these experiences/expertise could also be an impediment to the success of the projects, especially if partners still hold to their disciplinary orientations. The applicants therefore need to show how such diversity in experiences/expertise will be harnessed/mobilized for the success of the projects and how new competencies will emerge from the joint learning experiences of the team