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**TERMS OF REFERENCE FOR A SOLICITED WRC PROJECT**

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| **KEY STRATEGIC AREA** | **KSA 9 (Business Development and Innovation)** |
| **THRUST** | **3 (Business Development)** |
| **PROGRAMME** | **XX (Sector Strategic Responses)** |
| **TITLE** | **Developing a sustainability readiness framework and strategy to drive and guide water and sanitation institutional RDI global competitiveness** |

***Background and Rationale***

The South African Water and Sanitation sector consists of, and is advised by various Research, Development and Innovation (RDI) entities, academic partners, consultancies and internally established units. However, very few have positioned themselves and developed sustainable capabilities to compete globally in new areas such as next generation sanitation in relation to safety and hygiene. The WRC has made significant investments into WASH (water, sanitation and hygiene) research and innovation projects prior to and during the COVID-19 pandemic. Through a partnership with the Bill and Melinda Gates Foundation (BMGF), the WRC aims to utilise the case of the University of Kwa Zulu-Natal’s WASH Research and Development Centre (UKZN-WRDC) to develop a framework and strategy that can place a research entity onto a globally competitive pathway, whilst creating local industry impact.

The Department of Science and Innovation (DSI) and the National Research Foundation (NRF) have supported the concept of and criteria for Centres of Excellence (CoE) and Centres of Competence (CoC) in support of specific Research, Development and Innovation (RDI) capabilities for South Africa (SA). Organised research units or Academic Institutes have also emerged across traditional disciplinary boundaries to create inter-disciplinary capabilities.

Within the South African context there is a push to improve the understanding of current expertise, it’s intentional development and the draw on multiple disciplines to ensure that RDI in Water, Sanitation and Hygiene (WASH) has a positive impact on the sector, industry and creation of local and regional opportunities. National and international strategies and plans such as the Sustainable Development Goals (SDGs), National Development Plan (NDP, 2011); National Water and Sanitation Master Plan ,led by the Department of Water and Sanitation (DWS); and The Water and Sanitation Industrial Master Plan, led by the Department of Trade, Industry and Competition (DTIC), all require a shift from traditional R&D to support Innovation from a user and sector perspective. It requires a transition from traditional WASH R&D units established in academic institutions to develop capabilities that will develop and drive local expertise into a space where new capabilities lend to global competitiveness in chosen WASH areas and industries.

The UKZN-WRDC was created in 2020 out of the UKZN Pollution Research Group (PRG), under the guidance of late Professor Chris Buckley. UKZN-WRDC is an important partner for all in the sanitation sector due to its: a) 40-year history of addressing the sanitation problem; and b) its unique relationship with local authorities and country government, the latter through its relationship with the WRC. Furthermore, as part of the national Department of Science and Innovation (DSI) and BMGF coordinating platform, SASTEP, it is envisaged that a significant amount of embedding of new skills and knowledge will be required to set up the sanitation industry, and the UKZN-WRDC will be core to the capacity building for South Africa and globally that will be required.

The UKZN-WRDC is uniquely positioned to be scaled into a sustainable centre due to its strong contribution to water and sanitation. As a strategic partner to the WRC, and now the BMGF, UKZN-WRDC will need to consider:

* it’s financial sustainability in relation to institutional structure, legal status, funding and financial mechanisms and opportunities, positioning and networks;
* reviewing institutional structures, leadership capacity and capability, required areas of expertise, attraction and retention of senior and women researchers and innovators, attraction and development of emerging researchers, and focused training and capacity development in order to make the transition and be an attractive entity for funding opportunities.

This project aims to utilise the UKZN-WRDC as a case study to develop a strategy, readiness framework, financial sustainability plan , and capability and capacity building plan towards a diversified, sustainable and globally competitive entity.

This project forms part of a broader WRC, BMGF and UKZN strategic partnership.

***Objectives***

***General***

This terms of reference aims to: Develop a readiness framework and strategy that will enable and guide organised research units/centres towards financial sustainability and leadership in WASH; and translate these into plans (financial and capability) for achieving strategic recommendations.

***Specific:***

* Undertake desktop research and in-depth engagements with key national and international RDI Experts and Institutes towards developing indicators and targets for a global competitiveness framework;
* Undertake in-depth engagement with the partnership structures, specifically UKZN-WRDC, to better understand
  + Legal and financial systems and processes, leadership capabilities and financial and funding status, networks and opportunities such as business development, education and training and lab services, to name a few;
  + Internal training and development, institutional and staff structures, business capabilities, processes, leadership capabilities, internal investment allocations that would be required to attract and maintain globally competitive capabilities for South Africa;
* As part of the financial sustainability strategy and 4-year plan, to outline potential operational models, CoE/Institute options, blended resourcing and impact dissemination & engagement recommendations that could be implemented by the UKZN-WRDC;

Proponents are required to demonstrate expertise in financial, funding, strategy development and capacity and capability building at organisational/institutional level.

**Deliverables:**

1. Inception report and plan that includes the:
   1. Desktop research report
   2. Expert, Institution and Team engagement list (National and International)
   3. Approach/methodology for the readiness framework
   4. Approach/methodology for the strategy and plan formulation
2. Partnership workshop to engage on and test:
   1. Transition requirements and recommendations
   2. Institutional and business structures
   3. Readiness framework with indicators
   4. Operational models
   5. Financial and funding models
   6. Structures and Systems
   7. Leadership gaps, capabilities and recommendations in relation to global competitiveness
   8. Training and Development recommendations (current, future, emerging and women)
   9. Risks and Opportunities linked to recommendations
3. Final Report pack:
   1. Financial sustainability strategy and 3-year plans:
      1. Financial and funding plan
      2. Capability and capacity building plan
   2. Water Wheel article on RDI Readiness Pathways for Global Competitiveness

**Lighthouse:**

* Sustainable Water Behaviours

**Knowledge Tree**

* Human Capital Development
* Sustainable solutions

**Time Frame: 5 months** (February – June 2022).

**Total Funds Available:** R 450 000.00 (vat incl)

Funds above are strictly for research, analysis and development and do not include allocations that will support the implementation of plans and recommendations.