



NATIONAL ADVISORY COUNCIL ON INNOVATION

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Call for Proposals

INVESTIGATION OF THE DYNAMICS LEADING TO COMPETITIVENESS

Background

The key to improved growth in South African industry lies in greater innovation and competitiveness. There is a perception that much of the innovation that occurs in South African industry flows from imported technology, and that a large portion of the growth that is experienced does not create the desired number of new jobs. Economic growth and greater levels of employment are fundamentally important national imperatives, and it is thus important for NACI to develop a deep understanding of the linkages between science and technology, technology and innovation, and innovation and competitiveness, and of how these might be enhanced to the benefit of the nation. This will require identification and consideration of the dynamics that are at play in these areas, and of how they may differ between large, medium, small and emerging industrial undertakings in South Africa. Given that the innovation process clearly depends upon an appropriately supportive infrastructure, it will be important to take into account relevant findings that emerge from the companion NACI investigation into the infrastructure that is necessary to promote innovation.

Purpose

The primary purpose of the investigations outlined below is to provide a sound basis for identifying and recommending to the minister interventions that should be made to improve the contribution of science, technology and innovation to the competitiveness of South African industry, and to recommend how the use of indicators to monitor innovation and competitiveness can be enhanced. More specifically, the objectives of the investigations are to:

1. *Investigate the dynamics of innovation and competitiveness in large, medium, small and emerging South African business*
2. *Review the role of Intellectual Property Rights in innovation and competitiveness*
3. *Identify how best to enhance the use of indicators in the monitoring of innovation and competitiveness*
4. *Develop advice and recommendations for Ministerial consideration*

Design of the project

The project is to be undertaken in three phases, as follows:

Phase 1: The first phase of the project will be to commission an investigation by an appropriate service provider to address the first two objectives set out above. The understanding acquired from this first phase of the work is expected to provide the insights necessary to arrive at well-directed investigations and efforts to achieve the third objective.

Phase 2: The second phase of the project will commence with preliminary review work once the first phase study has been commissioned. It will however need to wait for the outcomes of the first study before progressing to the final stages of identifying and formulating recommendations of how the use of indicators can be enhanced to monitor innovation and competitiveness in South Africa. It is envisaged that this phase of the study will be undertaken by the NACI secretariat.

Phase 3: The third phase of the study will involve a detailed review of the reports produced in the first and second phase studies by the NACI sub-committee to distill out of the work the interventions and recommendations that should be put forward as advice from NACI to the Minister. It will also involve the preparation of a high level summary report of the work undertaken for submission to the Minister in support of the advice that is put forward.

Investigations

Phase 1 Investigation: The scope of the work to undertaken in this phase of the project, by an external service provider, is broadly as follows:

Objective 1 - Investigate the dynamics of innovation and competitiveness in large, medium, small and emerging South African business:

- Review existing models of innovation and competitiveness, including relevant previous work of NACI, and against this background, the key factors related to innovation that determine the competitiveness of large, medium, small and emerging business in South Africa.
- Identify material linkages between competitiveness and science, technology and innovation, including the role of universities, science councils and their spin-off companies in these linkages, according to criteria developed for this purpose. The criteria to be presented and agreed with the NACI sub-committee prior to their use.
- Identify the constraints and positive influences that impact on these relationships, and on the development, transfer and diffusion of technology into competitive innovation.
- Clarify the extent to which the findings might differ between sectors
- Propose mechanisms to overcome the identified constraints, as well as outlining the role of key structures and players in doing so.

- Identify the role that women currently play in these processes and map the scope for enhancing this.
- Develop recommendations for effective intervention to improve both innovation and competitiveness.

Objective 2 - Review the role of Intellectual Property Rights in innovation and competitiveness:

- Review existing documentation relevant to this objective
- Identify any special IPR considerations that should be applicable to South Africa as a developing country, taking into account its position within the region.
- Noting the existence of national policy on Indigenous Knowledge Systems, investigate the concept of creative commons, and, of how best to handle indigenous knowledge within an internationally accepted system of property rights.
- Review IPR protection for individuals, as opposed to that for corporations, as well as the relationships with relevant international agencies.
- Develop recommendations for any interventions considered necessary

Outputs

- A comprehensive report incorporating all data, findings, analysis and recommendations.
- A summary report suitable for publication and public dissemination.

Phase 2 Investigation: The scope of the work to undertaken in this phase of the project is broadly as follows:

Objective 3 - Enhance the use of indicators in the monitoring of innovation and competitiveness:

- Review currently used and available indicators for monitoring innovation and competitiveness. Source data nationally and internationally, including that available at the University of Pretoria, the HSRC, OECD and UNESCO, to the extent that this is possible.
- Review the outcomes of the first phase investigation as a basis for identifying those indicators that are best suited to monitoring the key aspects of innovation and competitiveness in the South African context.
- Identify indicators that are best suited to allowing South African performance to be meaningfully compared over time, and with other countries.
- Noting the preference for using established indicators, identify or formulate any new indicators that might warrant special consideration in order to monitor key dynamics or linkages identified in the first phase investigation.

- Identify agencies and processes best suited for obtaining the information necessary for the selected indicators, as well as strategies for communication of industry performance.
- Develop recommendations for effective implementation.

Outputs

- A comprehensive report incorporating all data, findings, analysis and recommendations.
- A summary report suitable for publication and public dissemination.

Service provider

A call in the media will be published to invite suitable service providers to put forward proposals for undertaking the work specified in the phase 1 investigation. The NACI secretariat will put forward a detailed programme of activities to be undertaken to accomplish the second phase investigation.

INSTRUCTIONS

All submitted proposals should provide:

- Detailed information on the proposed design of the project.
- A detailed project management plan.
- An indication of the timeframe for the project.
- A detailed project budget.
- An indication of how the different tasks will be executed.
- List of at least three current and/or recent projects directly related to the present call for proposals.
- Résumés (i.e. qualifications and experience) of all consultants who would be involved in the project.

Submissions should reach the NACI Secretariat on or before Friday, 28 October 2005 at the following postal address: The National Advisory Council on Innovation (NACI), PO Box 1758, Pretoria, 0001. All enquiries should be directed to Ms Charlotte Mzolo: Tel (012) 392 9351; Fax (012) 392 9353; Email: Charlotte.Mzolo@dst.gov.za.