NATIONAL ADVISORY COUNCIL ON INNOVATION

Call for Proposals

THE REQUIRED PHYSICAL INFRASTRUCTURE TO ATTAIN THE VISION OF THE NSI

1. Purpose

Secondary School Education Component

(i) To highlight international best practice in terms of laboratory equipment and systems to support secondary school education from the perspective of entry into and optimal performance in tertiary level science and engineering courses.
(ii) To provide a detailed survey of the generic items of equipment and systems available on the market, together with an indication of their cost.

Competitive Component

(i) To identify the ideal public technology infrastructure to support the technology missions (information technology, biotechnology, manufacturing technology, beneficiation of natural resources, technologies to enable poverty reduction) identified in the National Research and Development Strategy (NRDS). Since 2002 these missions have been sharpened to include subsidiary areas such as energy technologies and nanotechnology.
(ii) To identify the ideal public technology infrastructure to support globally competitive large-scale research in the five areas identified in the NRDS as being well-placed to exploit the principle of 'South Africa's geographic advantage', i.e. astronomy and earth observation, indigenous knowledge, biodiversity, palaeontology, and Antarctica and the Southern Ocean.
(iii) To clearly establish how the 'ideal-type' scientific and technological infrastructure should be deployed in order to ensure that all strategically prioritised research has the necessary infrastructure support and that the infrastructure is optimally used.
(iv) To specify the capacity requirements needed to deploy and productively use the technologies identified.
(v) To indicate how the technological infrastructure will be deployed and managed in order to ensure optimal utilisation of facilities and equipment and the widespread availability of the infrastructure to all potential users.
(vi) To determine the gap between the existing scientific and technological infrastructure in South Africa and the 'ideal-type' which is urgently required for crafting a more productive and sustainable NSI in South Africa.

(vii) From a technological infrastructure perspective, to clearly spell out the raft of government interventions that are required to reposition the NSI on a higher, sustainable growth trajectory.

2. Expected Outputs

(i) A report which elucidates the minimum technological infrastructure requirements to support secondary school education.
(ii) A report which throws light on the required scientific and technological infrastructure to support the vision of an optimally productive and sustainable NSI in respect of global competitiveness.
(iii) Conversion of both reports into Ministerial advice.

3. Design

Secondary School Education

The service provider needs to:

(i) Analyse the technological infrastructure requirements of the new secondary school curriculum.
(ii) Organise a small group of experts who will be responsible for evaluating the minimum technological infrastructure required to support secondary school education in South Africa.

Competitive Level

The service provider needs to:

(i) Interrogate current science, technology and innovation policy documents and extract the parameters of an ideal-type NSI.
(ii) Identify the high priority sectors as highlighted in existing policy and strategy documents.
(iii) Critically analyse recent national and international equipment and systems surveys.
(iv) Conduct a stakeholder needs assessment.
(v) Organise an expert workshop.

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.