



<b>RFQ NUMBER</b>	SAC202308-001
<b>RFQ DESCRIPTION</b>	APPOINTMENT OF AN CONSULTANT TO CONDUCT A STUDY ON THE SKILLS AND COMPETENCIES REQUIRED FOR THE FUTURE NATURAL SCIENTIST AMID SOCIETAL GRAND CHALLENGES IN SOUTH AFRICA
<b>RFQ ISSUE DATE</b>	THURSDAY, 10 AUGUST 2023
<b>BRIEFING SESSION</b>	N/A
<b>CLOSING DATE &amp; TIME</b>	WEDNESDAY, 30 AUGUST 2023 AT 11:00 AM
<b>SUBMISSIONS</b>	ALL SUBMISSIONS SHOULD BE EMAILED TO: <a href="mailto:scm@sacnasp.org.za">scm@sacnasp.org.za</a>  <b>SUBJECT:</b> APPOINTMENT OF A CONSULTANT (SAC202308-001)

### 1. PURPOSE

The purpose of the Request for Proposal (RFP) is to appoint a consultant to conduct a study on the skills and competencies required for the future natural scientist amid societal grand challenges in South Africa.

### 2. INTRODUCTION

The South African Council for Natural Scientific Professions (SACNASP) is the registration and regulatory body for natural science professions in South Africa. SACNASP was established in terms of the Natural Scientific Professions Act No.27 of 2003 (the NSP Act) as amended by the Science and Technology Laws Amendment Act (7 of 2014). The Council is mandated as the Accounting Authority to implement the provisions of the Act, under the oversight of the Minister of Higher Education, Science and Innovation.

### 3. BACKGROUND

Globally, skill demands are changing due to amongst others, digital transformation, globalisation, the transition to a green economy, climate change adaptation and mitigation as well as urbanisation. The COVID-19 pandemic elevated certain global trends and challenges that were already impacting the labour market. Although COVID-19 may have amplified the existing challenges of unemployment, poverty and inequality; it has, however,

had a positive impact on the world of work, accelerated digitisation, and changed production and distribution across all sectors. The World Economic Forum report (WEF, 2021) highlighted that skills development can reduce unemployment and contribute towards economic growth by enhancing employability and assisting developing and underdeveloped countries to become more competitive. With the technological advancements of the Fourth Industrial Revolution (4IR) and linkages to the 2019 White Paper on Science, Technology and Innovation (STI) as well as the 2022 STI Decadal Plan, opportunities for increased economic growth and industrial competitiveness will arise. Therefore, the need to upskill and reskill the workforce to meet the demands of the future of work will become critical and needs to be prioritized. In light of the above, the study seeks to identify the current and future skill gaps, within the natural science context, which are not addressed in the existing skills list.

This study is a sequel to the Pathways into the Labour Market and Self-employment for Natural Science report (2021) that was commissioned by the SACNASP and undertaken by the Human Sciences Research Council (HSRC). One of the recommendations was to identify and mainstream emerging skills in the wake of the changing labour market dynamics. Therefore, the proposed study is also intended to respond to this recommendation. Noteworthy, the WEF's Future of Jobs Report (2023), traced the labour-market impact of the 4IR, identifying the potential scale of occupational disruption and growth alongside strategies for empowering job transitions from declining to emerging roles. It was reported that big data analytics, climate change and environmental management technologies, and cybersecurity will be the biggest drivers of job growth. Hence, the need to benchmark international and global trends within the labour market.

The enhancement of skills and competencies is the key driver of economic success and societal cohesion. It is therefore imperative to investigate the key drivers of change that are expected and mechanisms that will shape the natural science sector in South Africa. The approved STI Decadal Plan, which serves as an implementation guide of the 2019 White Paper on STI, identified three Societal Grand Challenges (SGCs) to address global trends: Climate Change and Environmental Sustainability; the Future of Education, Skills and Work; and the Future of Society. Furthermore, it highlights initiatives that are aimed at expanding and transforming the human resource base of the NSI. In a country that is replete with several skills plans and lists, with none focused on the natural sciences, the proposed study will provide useful inputs to efforts aimed at developing the Master Skills Plan (One Country One Skills Plan), but from the perspective of skills and competencies to address the societal grand challenges.

South Africa is seeing a rising problem of unemployed science graduates in general largely because of the mismatch between the skills produced and those in demand by the labour market. This matter is also highlighted in the Pathways into the Labour Market and Self-employment for Natural Science report. Cognizant of this challenge, the Minister of Higher Education, Science and Innovation called on science councils to embed skills development programmes in their Annual Performance Plans and to engage relevant sector education and training authorities (SETAs) for support of the identified skills development programmes. Among others, the study will inform SACNASP and its voluntary associations about such

skills development interventions. In addition, the study findings will assist SACNASP in its mandate of providing proactive advice to the government on the training of natural science professionals, with a focus on skills development.

#### **4. NATURE OF CONSULTANCY**

4.1 SACNASP is inviting suitably qualified consultant/s to conduct a comprehensive study of the future skills and competencies required by natural scientists in addressing societal grand challenges.

4.2 The study will entail:

4.2.1 Conducting a situation analysis on the existing skills lists relevant to the natural sciences, evaluating their applicability to present-day requirements and assessing whether they are future-proof (still applicable in the future).

4.2.2 Conducting a gap analysis to identify any missing or overlooked skills that are critical in the field.

4.2.3 Investigating the local and international key drivers of change that shape the natural science sector.

4.2.4 Using innovative approaches and methodologies to identify future skills and competencies required for natural scientists not addressed in the existing skills list in addressing societal grand challenges. Future skills and competencies should also take into account non-technical skills (such as softer skills) that may be required in the era of the 4IR.

4.2.5 Benchmarking South Africa's skills requirements in the natural sciences with the international labour market.

4.2.6 Making recommendations on the (market) intelligence and data gathering mechanisms for the updating of the skills required by natural scientists.

4.3 The consultant will be expected to:

4.3.1 Develop and submit a well-thought-through proposal with a work plan to guide the execution of the study.

4.3.2 Provide a sample of initial data-gathering instruments.

4.3.3 Present the research methodology and data collection tools to the study reference group appointed by the Council.

4.3.4 Provide a presentation of emerging findings to the study reference group before submitting a draft report.

4.3.5 Present a draft report to the study reference group, one month before submitting the final report.

4.3.6 Submit a final report (comprehensive, analytic, well-written and well-laid-out) within the time frames agreed to on the signed Service Level Agreement.

#### **5. REQUIREMENTS FOR THE CONSULTANCY**

5.1 The above assignment would be appropriate for a suitably qualified individual(s) who possesses the following:

5.1.1 Above-average understanding of the South African National System of Innovation (NSI) in general, and the South African skills development, and training landscape.

5.1.2 Prior experience in performing quantitative and qualitative research studies (a focus on skills development will be an added advantage).

5.1.3 Prior experience in Project Management.

5.1.4 Proven capabilities and experience in working with key stakeholders within the science and innovation sector.

5.1.5 Demonstrable institutional capacity (i.e. human, physical and financial resources) and support to undertake the study.

## **6. SACNASP SUPPORT**

Where necessary, SACNASP will provide support in seeking access to data by liaising with the relevant stakeholders and seeking approval for a request for data, but the SACNASP will not provide logistic or administrative support to the work of the consultant.

## **7. EVALUATION CRITERIA OF THE TENDER PROCESS:**

### **7.1. STAGE 1: MANDATORY REQUIREMENTS**

Service Providers should submit the following documents:

- (1) Proof of registration on the Centralised Supplier Database held by the National Treasury.
- (2) An original SARS tax clearance certificate.
- (3) An original or certified copy of the B-BBEE Certificate or an original affidavit signed by a Commissioner of Oaths about the B-BBEE status.
- (4) SBD 4 – Declaration of interest.
- (5) SBD 6.1 – Preference points claim form in terms of the Preferential Procurement Regulation 2017.
- (6) SBD 8 – Declaration of the bidder's past supply chain management practices.
- (7) SBD 9 – Certificate of independent bid determination

### **7.2 STAGE 2: FUNCTIONALITY ASSESSMENT**

An assessment of Functionality will be based on the evaluation criteria noted in the table below. Each of the evaluation criteria in the table will carry a weighting as indicated, and the bidder will be required to score a minimum of 75% to qualify and proceed to Stage 3 of the evaluation process.

<b>Functionality Assessment</b>	<b>Weight %</b>
<b>Criterion 1: References</b> <ul style="list-style-type: none"><li>• At least five (5) letters of completion from previous clients demonstrating doing research in the past 10 years = 20%</li><li>• At least four (4) letters of completion from previous clients demonstrating doing research in the past 10 years = 15%</li><li>• At least three (3) letters of completion from previous clients demonstrating doing research in the past 10 years = 10%</li><li>• At least two (2) letters of completion from previous clients demonstrating doing research and compiling career materials = 5%</li><li>• No letters of completion from previous clients demonstrating doing research in the past 10 years = 0%</li></ul>	20%
<b>Criterion 2: Relevant experience</b> <p>Attach proven experience by providing a list of current and past contracts during the past 5 years which are relevant to the required service in the bid specifications, according to the template in Part A: Client Base. Only the relevant experience shall be considered for bid evaluation purposes. Reference screening will be undertaken to</p>	20%

<p>confirm the validity of the referees provided.</p> <ul style="list-style-type: none"> <li>• More than 5 years of relevant experience= 30%</li> <li>• 4-5 years relevant experience = 20%</li> <li>• 3-4 years relevant experience = 10%</li> <li>• 0-2 years relevant experience = 5%</li> </ul>	
<p><b>Criterion 3: Qualifications and skills of the core project team</b></p> <p>For the structure and composition of the proposed team, the core project team should include two members, namely, a project manager and an expert in the higher education and skills development sectors.</p> <p><b><u>Higher Education and Skills Development expert (15%)</u></b></p> <ul style="list-style-type: none"> <li>• Relevant doctoral/Master's qualification and more than 10 years of experience in the higher education and skills development sector = 15%</li> <li>• Relevant post-graduate qualification and more than 10 years' experience in the higher/postgraduate education and skills development sector = 10%</li> <li>• Relevant post-graduate qualification and 5-10 years' experience in the higher/postgraduate education and skills development sector = 5%</li> <li>• No relevant postgraduate qualification and limited experience in the higher/postgraduate education and skills development sector = 0%</li> </ul> <p><b><u>Project Manager (15%)</u></b></p> <ul style="list-style-type: none"> <li>• Managed successfully (with client references attached) more than six relevant projects and has a postgraduate degree in Project Management = 15%</li> <li>• Managed successfully (with client references attached) less than four relevant projects and has a postgraduate degree in Project Management = 10%</li> </ul> <p>No projects managed and do not have an undergraduate degree = 0%</p>	30%
<p><b>Criterion 4: Quality of the Proposal in terms of addressing the expected deliverables.</b></p> <p>The methodology and approach provided should be comprehensive and logical and activities, milestones and timeframes should be well presented.</p> <p><b><u>The methodology should be responsive to the terms of reference and the scope of work (15%)</u></b></p> <ul style="list-style-type: none"> <li>• The project proposal is fully responsive to the scope of the Terms of Reference with logical and comprehensive data collection and analysis (research) methodologies = 15%</li> <li>• The project proposal is fully responsive to the scope of the Terms of Reference but inadequately formulated data collection and analyses (research) methodologies = 10%</li> <li>• The project proposal does not adequately respond to the scope of the Terms of Reference and the data collection and analyses methodologies are poor = 0%</li> </ul> <p><b><u>Project Plan (15%)</u></b></p> <ul style="list-style-type: none"> <li>• Project plan, with clear and realistic milestones meeting timeframes described with risks and corrective measures identified = 15%</li> <li>• Project plan, with clear and realistic milestones meeting timeframes described and an indication of resource allocation = 5%</li> </ul> <p>The project plan was poorly presented = 0%</p>	30%
<b>Total</b>	<b>100%</b>

Only quotations that achieved a minimum qualification score of 75 for functionality will be evaluated further using the 80/20 preferential scoring system where 80 points will be dedicated to price and 20 points to B-BBEE status.

## 8. DETAILS OF THE PROPOSAL

8.1 The service provider must submit a detailed and all-inclusive proposal.

8.2 An analysis of costs in South African Rands (including VAT), and where possible, costs should be linked with specific tasks to be undertaken.

8.3 The application should also include the CV of the service provider/team members who will participate in the project, demonstrating experience relevant to the task to be undertaken.

8.4 The name and contact details (telephone and/or mobile, fax, and email) of the service provider.

## 9. SERVICE LEVEL AGREEMENT

9.1 SACNASP and the appointed service provider will enter into a Service Level Agreement.

9.2 Regular meetings will be held between the service provider and Study Reference Group throughout the project.

9.3 The payment plan will be negotiated and agreed to between the SACNASP and the service provider. The final payment, however, will be made after the completion of the project and acceptance of the final report by SACNASP.

9.4 The service provider will be responsible for ensuring that the agreed deliverables are produced to a quality standard, on time, and within the budget.

## 10. References

10.1 World Economic Forum (WEF). 2023. Future of Jobs Insight Report. [https://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2023.pdf](https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf). [Accessed: 5 May 2023].

10.2 WEF. 2023. Upskilling for Shared Prosperity Insight Report. [https://www3.weforum.org/docs/WEF\\_Upskilling\\_for\\_Shared\\_Prosperty\\_2021.pdf](https://www3.weforum.org/docs/WEF_Upskilling_for_Shared_Prosperty_2021.pdf). [Accessed: 8 May 2023].

10.3 SACNASP. 2022. Pathways into the Labour Market and Self-employment for Natural Science report. <https://www.sacnasp.org.za/uploads/files/Final-Pathways-Report-March-2022.pdf>. [Accessed: 5 May 2023].

## 11. Submission of proposals

11.1 All technical enquiries should be sent in writing, to the specified person below:

### Contact Person:

Name : Dr Matshidiso Matabane

Designation : Science Communication Manager

E-mail : [mbmatabane@sacnasp.org.za](mailto:mbmatabane@sacnasp.org.za)

11.2 All submissions should be emailed to [scm@sacnasp.org.za](mailto:scm@sacnasp.org.za).

11.3 The closing date for the submission of bids is **Wednesday, 30 August 2023** by 11:00 am. No late bids will be considered. Bids sent to any other email address other than the one specified herein will be disqualified and will not be considered for evaluation. It is the bidder's responsibility to ensure that the bid is sent to the correct email address.

## Annexure A: Client Base

Name of client/organisation where the contract was/is being executed	Description of Contract Services	Contact persons and telephone numbers	Contract period (indicate start and end dates) e.g. 1 April 2021 to 31 March 2023	Is the contract Current or Past? (please indicate accordingly)
1.				
2.				
3.				
4.				
5.				