

REQUEST FOR TENDER

for

the appointment of a Microsoft Azure Managed Service Provider to migrate and manage data systems and applications in a Microsoft Azure environment for the South African National Biodiversity Institute (SANBI) for a period of two (2) years

**South African National Biodiversity Institute (SANBI)
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South Africa**

Tender No: SANBI: BIPA392/2021

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1. Introduction and background

The South African National Biodiversity Institute (SANBI) contributes to South Africa's sustainable development by facilitating access to biodiversity data, generating information and knowledge, building capacity, providing policy advice, and showcasing and conserving biodiversity in its national botanical and zoological gardens.

Historically, SANBI has met its mandate for managing and disseminating biodiversity information through establishing a number of online data portals to provide access to various types of biodiversity data that were held in its data repositories. These data portals were built independently with no overarching architecture and were hosted on a mix of different solutions. Over time this has become complicated and cumbersome to manage effectively.

To improve its efficiency and productivity in delivering on its mandate, SANBI has developed a unifying architecture called the National Biodiversity Information System (NBIS). Through the development of NBIS, SANBI has streamlined its technologies and is in the process of redeveloping several applications to ensure a service orientated architecture. SANBI has settled on a hybrid cloud deployment model, with key systems linked to web services, hosted on-premise and secondary applications to be hosted in a Microsoft Azure environment. A Service Provider is required to migrate target SANBI systems into Microsoft Azure and manage the Azure environment for maximum efficiency and productivity in this hybrid model.

2. Invitation to tender

Tenders are hereby invited for a Microsoft Azure Managed Service Provider to migrate and manage data systems and applications in a Microsoft Azure environment for SANBI for a period of two (2) years.

The tender process will be co-ordinated by SANBI's Supply Chain Management (SCM) department, contactable at the following address:

Deputy Director: Supply Chain Management
The South African National Biodiversity Institute (SANBI)
Private Bag X101
Silverton
0184
Email: sanbi.tenders@sanbi.org.za

The tender closes on 13 August 2021 at 11:00

3. Non-compulsory briefing session

SANBI is committed to the health and safety of all bidders and staff members and reducing the spread of COVID-19.

No briefing session will be held, as this is a readvertisement. A Questions and Answers document from the first round is available on the tender website, which includes questions raised in the briefing session held for the previous round of this tender, as well as further queries that were submitted in writing. Any queries raised throughout the current tender period will be added to that document.

Bidders may direct technical and bidding procedure enquiries to the email addresses below.

- For bidding procedure enquires: sanbi.tenders@sanbi.org.za
- For technical enquires: b.daly@sanbi.org.za

SANBI will not respond to any questions or requests for clarification if received after 06 August 2021.

4. Scope of work

SANBI requires a Microsoft Azure Managed Service Provider to migrate and manage data systems and applications in a Microsoft Azure environment for the South African National Biodiversity Institute (SANBI) for a period of two (2) years, commencing in October 2021.

Currently, SANBI's Biodiversity Information Management (BIM) Directorate operates a hybrid environment due to a number of bespoke software applications that cannot be deployed on-premise, however these applications are required for SANBI's mandated operations. These applications are therefore hosted off-premise in the Xneelo (previously Hetzner) environment. With the development of NBIS, SANBI is targeting a more streamlined hybrid information architecture comprising of key systems of record being hosted on-premise at SANBI, and web services and secondary systems located in a Microsoft Azure environment.

The appointed Service Provider will be required to:

- Develop an Azure business strategy, migration plan, technical skilling plan and roadmap for the migration of data systems from Xneelo and the NBIS Azure testing environments to a Microsoft Azure environment
- Migrate the SANBI applications, databases and workloads that are currently in the Xneelo environment to a Microsoft Azure environment
- Migrate the NBIS application layers that are currently in an Azure testing environment of a third party developer to a Microsoft Azure Environment
- Create a testing and staging environment in Microsoft Azure for future workloads
- Provide Microsoft Azure management support for the staging and live environments for a period of two (2) years.

4.1 Requirements of the Service Provider

The successful Service Provider will be a certified Microsoft Azure Managed Service Provider with a team of certified Azure specialists, responsible for the following activities in line with the above scope of work:

- a) Initially the Service Provider will use the Infrastructure as a Service (IaaS) cloud service model with the option of later moving to Platform as a Service (PaaS), and develop an Azure business strategy, migration plan, technical skilling plan and roadmap for the migration of data systems from Xneelo and the NBIS Azure testing environment to Microsoft Azure, including:
 - Verifying the migration assessments on both the Xneelo environment and the Microsoft Azure testing environment
 - Finalising the technology architecture on Microsoft Azure with SANBI stakeholders for the staging and live environments
 - Finalising the workplan for all other components of the contract.
- b) Pay the fees for a two (2) year Microsoft Azure reservation for the SANBI systems, and manage the credit balance, subject to approval by the SANBI Information Systems Manager.
- c) Migrate the SANBI applications, databases and workloads that are currently in the Xneelo environment to a Microsoft Azure environment including:
 - Establishing a Virtual Private Network (VPN) between Microsoft Azure and the existing on-premise network, together with SANBI Business Information Technology (BIT).
- d) Migrate the application layers that are currently in a Microsoft Azure testing environment of a SANBI Service Provider to a Microsoft Azure environment.
- e) Create a testing and staging environment in Microsoft Azure for future workloads.
- f) Provide Microsoft Azure management support for the staging and live environments for a period of two (2) years including:
 - Developing a skills readiness plan to ensure that all relevant SANBI officials are capable of day-to-day management and support of the Microsoft Azure infrastructure. As far as possible, Microsoft Azure management support over the two years should focus on strategic interventions and troubleshooting, with SANBI staff being empowered to execute the routine management tasks.
 - Providing relevant training of Microsoft Azure for SANBI BIT, BIM and other relevant officials, as well as SANBI stakeholders where necessary.
 - Assisting key SANBI personnel to optimise and monitor security and governance processes.
 - Providing project reporting and administration support to SANBI BIM and BIT Divisions.

4.2 Key skills and competencies required

The Service Provider must be self-motivated and results driven, with the ability to work independently and deliver efficiently on the deliverables within the timeframes required. The Service Provider must be certified as a Microsoft Azure Managed Service Provider, and have proven ability to provide SANBI with the following:

- Microsoft Azure governance and pricing information
- Microsoft Azure architecture design, software development and database administration
- Implementation and management of Microsoft Azure storage, computer and networking resources
- Microsoft Azure system performance monitoring and management
- Perform backup and recovery
- Implementation and monitoring of Microsoft Azure Security

The Service Provider must also have the following additional skills and competencies:

- Excellent organisational and planning skills
- Strong written and verbal communication skills
- Experience in training users in Microsoft Azure

The following would be an added advantage:

- An understanding of SANBI's mandate

4.3 Deliverables and timeframes

The Service Provider will be appointed for a two (2) year period, commencing in July 2021. The Service Provider must be able to deliver on the scope of work and meet all the requirements in this Request For Tender (RFT). The Service Provider will be required to:

- Submit an overall project plan, outlining the process to be followed in the migration of the relevant SANBI business systems and applications into a Microsoft Azure environment, following an inception meeting with key SANBI staff. The project plan must provide for the management and support of SANBI's business applications in the Microsoft Azure environment.
- Submit detailed work plans for each phase of project implementation, as well as for the provision of management support.
- Submit project progress reports on the following:
 - Development of the roadmap for the migration of data systems from Xneelo and in the NBIS Azure testing environment to Microsoft Azure
 - Migrating the SANBI applications, databases and workloads that are currently in the Xneelo environment to a Microsoft Azure environment
 - Migrating the NBIS application layers that are currently in an Azure testing environment of a SANBI Service Provider to a Microsoft Azure Environment
 - Creating and configuring all testing, staging and live environments in Microsoft Azure including VPN to SANBI on-premise
 - Development of readiness plan and rollout of training for Microsoft Azure

- Attend short, monthly meetings with SANBI project management.
- Submit a short, written report covering issues in governance, security, performance and backups.
- Support SANBI in the development of an End Customer Investment Funds (ECIF) funding application.

5. Requirements for proposals

5.1 Mandatory documents required

Each submission must include the following **(failure to provide below documentation will result in the tender being rejected)**:

- A certified copy or original valid B-BBEE Status Level Certificate or sworn affidavit. Note that for this tender, the following pre-qualification criterion for preferential procurement will be applied: Section 4(1) (a) a Tenderer having a minimum B-BBEE status level of contributor, level 2.
- A letter of Good Standing from the office of the Compensation Commissioner as required by the Compensation for Occupational Injuries and Diseases Act (COIDA), if applicable. The letter should be issued by the Department of Labour.
- A copy of the Central Suppliers Database (CSD) registration report.
- Fully completed SBD forms.
- Pricing details (see Annexure 1 and 2). Annexure 1 A & B provides a list of infrastructure requirements for the migration of Xneelo and NBIS data systems and applications respectively to Microsoft Azure. The Service Provider must supply applicable pricing details in Annexure 2. **The pricing details must only be included in the 'original' document as per the section on submission below. Inclusion of pricing in the electronic copy delivered on USB will result in the tender being rejected (see Section 7).**
- UIF compliance demonstrated by submission of one of the following:
 - A valid copy of the UIF Letter of Compliance issued by the Department of Labour, or
 - Labour uFiling Employer Statement of Account indicating UIF payments or accruals not older than 12 months, or
 - SARS eFiling Employer Statement of Account indicating UIF payments or accruals not older than 12 months, or
 - Valid proof of exemption for UIF.
- Microsoft Azure certification to show that the Service Provider is a certified Microsoft Azure Managed Service Provider.

5.2 Other documents for evaluation

Service Providers interested in this RFT should submit a concise written proposal that addresses the scope of work and the above requirements. Failure to submit these documents will not result in disqualification, however, the information contained in them is required for evaluation purposes. The proposal must include:

- Details of the Service Provider, including relevant skills, experience, competencies and track record. An up-to-date CV(s) must be included. If the Service Provider is a company then the details and CV for the individuals responsible for the work must be provided.
- A proposal including a description of the approach and deliverables for the scope of work and addressing the requirements above, with the proposed start and completion date and timeframes for activities. As part of the proposal, an itemised schedule of activities is required that aligns to the pricing schedule to be completed in Annexure 2.
- References of at least four current or recent clients for which similar work has been done in the last five years. A summary of the scope of the work for each client must be provided (see Annexure 3).
- Details of the scope and scale of similar work done for past and present clients within the last five years.
- A detailed and complete budget for the proposed work, as indicated in Annexure 2, including professional fees (rate per hour), infrastructure costs, costs of additional activities and VAT for the two-year period. Each of these should be provided separately. The Service Provider's professional rate should include the cost of all overheads, for example telephone and cell phone costs, stationery and office requirements, etc. Travel and accommodation should NOT be included in the budget and will be arranged by SANBI, in line with its policies. Travel requirements will be discussed at the inception meeting. **Note: The budget must only be included in the 'original' document as per the section on submission below. Inclusion of pricing in the electronic copy delivered on the USB will result in the tender being rejected (see Section 7).**

SANBI reserves the right:

- To verify any information supplied in the tender submission;
- To not appoint any Service Provider;
- To cancel or withdraw this tender at any time without attracting any penalties or liabilities;
- To have the final say in the appointment of the Service Provider and that this will be binding;
- To disqualify a tender or cancel any subsequent contracts should it be found that:
 - Information was omitted that should have been disclosed
 - Factually inaccurate information was provided and/or
 - That a misrepresentation of facts has occurred.

SANBI shall not be held liable for any cost that has been incurred by the Service Provider in the preparation of the proposal, the obtaining of certificates or any other cost that might be incurred in submitting the proposal.

6. Pricing

The infrastructure requirements for the migration of data systems and applications to Microsoft Azure is provided in Annexure 1 for reference. The Service Provider will be required to pay the fees for a two (2) year Microsoft Azure reservation for the applicable SANBI systems. SANBI has an Microsoft Enterprise Agreement that covers Windows Server Standard and Datacenter (DC) as well as SQL Server Standard and Enterprise versions which will be used for Microsoft Azure hybrid use benefit. It is not anticipated that additional licensing will be required. However, if it is required, the service provider must include these costs in the budget.

For this bid, the Service Provider must provide costing for professional fees (rate per hour) for both the migration and deployment to Microsoft Azure as well as for the management and administration support infrastructure costing, including the cost of the two (2) year reservation for the applicable SANBI systems; itemised costing of any additional activities or items that are required but not covered through the professional fees or the infrastructure costs and VAT for the two-year period as per Annexure 2. The pricing provided must be fixed for the full term of the two-year contract period.

All services needed to meet the requirements of this tender must be itemised within Annexure 2.

7. Submission

The final price must be inclusive of VAT and will be considered the fees for the duration of the contract.

This is a two-envelope tender process. Service Providers are to submit **one (1) pack** of original proposals, marked "ORIGINAL" in an envelope, with pricing included, and **one (1) electronic copy on USB**, marked "COPY" in a second envelope. The electronic copy on USB must exclude pricing details.

Financial and pricing details must only be included in the pack marked "ORIGINAL".

NB. Failure to submit:

- one pack of original documents with pricing included; and
- one electronic copy on USB without pricing data

in the prescribed manner WILL lead to the bid being disqualified.

Tenders can be submitted in the tender box located in the reception area of the Biodiversity Centre Building at the Pretoria National Botanical Garden, 2 Cussonia Avenue, Brummeria, Pretoria, during office hours before the tender closing date and time.

Normal office hours are from 08:00 to 16:00 daily. E-mailed and faxed submissions will not be accepted. Late submissions will be disqualified.

8. Evaluation criteria

In accordance with the National Treasury Instruction Note on the Amended Guidelines in Respect of Bids that include Functionality as a Criterion for Evaluation (issued 3 September 2010), this bid will be evaluated in two stages:

The first stage will evaluate functionality according to the criteria listed in the table below.

Functionality Evaluation Criteria	Weight**
Technical merit of proposal including approach and understanding of the ToR in terms of: • Develop an Azure business strategy, migration plan, technical skilling plan and roadmap for the migration of business systems from Xneelo and the NBIS Azure testing environments to a Microsoft Azure environment • Migration of business systems and applications into a Microsoft Azure environment • Management and administration of SANBI business applications in a Microsoft Azure environment	30 (10) (10) (10)
Experience, skills and competencies of the Service Provider (specific reference must be made to the requirements listed in section 4 above) • Relevant experience and skills in migration of business applications into a Microsoft Azure environment • Relevant experience and skills in managing a Microsoft Azure architecture in a hybrid environment • Comprehensive CV(s) highlighting Microsoft Azure certification, skills and competencies	50 (20) (20) (10)
Overall track record • Quality of references for four relevant current or recent clients, within the last five years, for which similar work has been conducted (as per Annexure 3). • Ability to undertake the work, through reference to the scope and scale of similar work done for past and present clients within the last five years	20 (10) (10)
TOTAL	100

** Service Providers who fail to score a minimum of 70 points out of a possible 100 points on functionality criteria will not be eligible for further consideration.

Sufficient information must be provided to allow the Bid Evaluation Committee to evaluate bids against these functionality criteria.

The second stage will evaluate the price and preference points of those bids that meet the minimum threshold for functionality. In accordance with the Preferential Procurement Regulations, 2017 pertaining to the Preferential Procurement Policy Framework Act (No. 5 of 2000), the 80/20 point system will be applied in evaluating proposals that qualify for further consideration, where price constitutes 80 points and a maximum of 20 points will be awarded based on the bidder's B-BBEE Status Level Certificate.

9. Contract period

The appointment is anticipated to be for a period of two (2) years, potentially commencing in August 2021. The contractual appointment period will be as stipulated in the Independent Contract Agreement and Service Level Agreement.

10. General Safety, Health and Environmental requirements

All Service Providers entering into a contract with the South African National Biodiversity Institute (SANBI) shall, as a minimum, comply with the following requirements if applicable:

- The Compensation for Occupational Injuries & Diseases Act (Act 130 of 1996): The Service Providers will be required to submit a letter of good standing from the office of the Compensation Commissioner as required by the Compensation for Occupational Injuries and Diseases, if applicable. The letter should be issued by the Department of Labour.
- A current, up-to-date copy of the Compensation for Occupational Injury and Diseases Act (COIDA) shall be available on site at all times.
- National Environmental Management Act (Act No. 107 of 1998).
- The South African National Biodiversity Institute Health and Safety specification and relevant policies.

11. General

- All documents submitted in the response to this RFT must be written in English.
- Potential Service Providers should not assume that information and/or documents previously supplied to SANBI, at any time prior to this RFT, will be considered, and they shall not make reference to such information and/or documentation in their response to the RFT.
- The appointment of a successful Service Provider will be subject to all parties agreeing to mutually acceptable contractual Terms and Conditions. The preferred form of contract for the professional services as per this RFT will be the Independent Contract Agreement.
- The Independent Contract Agreement will be drawn up between SANBI and the Service Provider.
- Invoices will be paid for deliverables received as agreed in the Independent Contract Agreement.
- Invoices must indicate the deliverables provided. Supporting documentation in terms of evidence of software license purchase and proof of payment for the purchase must be provided.
- No upfront payments will be made. SANBI will pay for the satisfactory completion of work within 30 days of submission of invoices.
- Invoices must be addressed to the Director: Biodiversity Information Management and Planning.
- Accountability and reporting will be to the Director: Biodiversity Information Management and Planning at SANBI.

- Any or all information made available to the Service Provider by SANBI will be regarded as confidential and shall not be made available to third parties without the prior written consent of SANBI.
- All reports must be in MS Office format (Word or Excel preferred) and electronic versions of all reports must be submitted.
- The tender process will be coordinated by SANBI's Supply Chain Management (SCM) department, contactable at the following email address:
sanbi.tenders@sanbi.org.za
- Tender documents will only be available online on the SANBI website
www.sanbi.org

12. Annexure 1: Infrastructure requirements

Table 1A. The infrastructure requirements for the migration of NBIS data systems and applications to Microsoft Azure are as follows:

Service type	Function	Description
Search Engine Crawler	• Runs Windows console jobs that indexes the data • Connects to SANBI data sources and builds the search index • Infrastructure used has a direct impact on the time it takes to index the data	• OS: Microsoft Windows • CPU: Dual Core 2GHz or faster • RAM: Minimum 32GB (64GB + recommended) • Min storage capacity: 10GB
Index Server	• Stores the search indexes and returns the search query results	• OS: Microsoft Windows • CPU: Dual Core 2GHz or faster • RAM: 128GB or higher • Min storage capacity for installation: 10GB • Enough storage to support the RAM-to-storage ratio of 1:32. For example, if you use a host with 256 GB of RAM and the default ratio of 1:32, your host must provide 8192 GB of disk space
Database Server	• Storage of data such as user profiles, workflows and other content	• OS: Microsoft Windows • DBMS: Microsoft SQL Server • Min of 10GB free storage • CPU: Dual Core 2GHz or faster • RAM: minimum of 64GB
Application Server	• Web portal running the NBIS front-end	• OS: Microsoft Windows • Processor: 2.0 GHz or faster • RAM: 64GB • Min of 6GB free storage

Table 1B. The infrastructure requirements for the migration of Xneelo hosted data systems and applications to Microsoft Azure are as follows:

Service type	Function	Description
Virtual Machines	Web Server	1 D4s v3 (4 vCPU(s), 16 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units
Virtual Machines	SQL Server	1 E2s v3 (2 vCPU(s), 16 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units
Virtual Machines	GIS Server	1 DS3 v2 (4 vCPU(s), 14 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units
Virtual Machines	GEOCORTEX Server	1 DS11 v2 (2 vCPU(s), 14 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units
Virtual Machines	Metadata Server	1 DS11 v2 (2 vCPU(s), 14 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units
Virtual Machines	Web Server	1 DS11 v2 (2 vCPU(s), 14 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units
Virtual Machines	Amlib Server	1 E2s v3 (2 vCPU(s), 16 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units

Virtual Machines	SQL Server	1 E2s v3 (2 vCPU(s), 16 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S20, 100 transaction units
Virtual Machines	DIGI VOL	1 E8s v3 (8 vCPU(s), 64 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S30, 100 transaction units
Virtual Machines	CAS	1 B4MS (4 vCPU(s), 16 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S30, 100 transaction units
Virtual Machines	BOL SERVER	1 E8s v3 (8 vCPU(s), 64 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); Pay as you go; 1 managed OS disks – S30, 100 transaction units
Virtual Machines	Specify Webserver	1 B4MS (4 vCPU(s), 16 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S30, 100 transaction units
Virtual Machines	SQL	1 E4s v3 (4 vCPU(s), 32 GB RAM) x 730 Hours; AHB for Windows Server – (OS Only); 1 managed OS disks – S30, 100 transaction units
VPN Gateway		VPN Gateways type, VpnGw1 tier, 730 gateway hour(s), 100 GB, VPN outbound VPN gateway type
Application Gateway		Web Application Firewall tier, Medium Instance size: 1 Gateway hours instance(s) x 730 Hours, 100 GB Data processed unit(s), 100 GB Zone unit(s)

Network Watcher		100 GB Network Logs Collected, 10000 Checks for Network Diagnostics, 1 Connections for Monitoring, 1 Connection Metrics, 1 DNS or App Gateway Servers x 0 GB logs ingested, 1 GB logs collected for Traffic Analytics
Security Center		Standard tier, 13 nodes x 730 Hours

13. Annexure 2: Pricing schedule (to be fixed over the term of the contract)

	Cost per hour or per item/activity (Itemise lines as required to correspond to activities set out in the proposal)	Cost	VAT	Total cost over the contract period
Professional fees (migration and deployment)		R	R	R
Professional fees (maintenance, management and administration support)		R	R	R
Azure Infrastructure costs for a two-year reservation		R	R	R
Additional items or activities (costing per item or activity required)		R	R	R
TOTAL cost of contract				R

Note: The Service Provider must provide costing for professional fees (rate per hour) for both the migration and deployment to Microsoft Azure as well as for the management and administration support; infrastructure costing, including the cost of the two (2) year reservation for the applicable SANBI systems; itemised costing of any additional activities or items that are required but not covered through the professional fees or the infrastructure costs and VAT for the two (2) year period. The pricing provided must be fixed for the full term of the two-year contract period. All services needed to meet the requirements of this tender must be itemised under the table above.

14. Annexure 3: Relevant project experience template for required reference information

Item	References			
	1	2	3	4
Project title				
Name of Service Provider				
Role of Service Provider				
Client name				
Contract value				
Start and end dates				
Challenges, if any				
Contact details of a referee from the client organisation				
Number of systems migrated or deployed				
Number of current users of the solution				
If relevant to the entire project indicate to which section of work this reference is applicable				
Brief project description (maximum 300 words)				

Note: References of at least **four (4) current or recent clients** for which similar work has been done in the **last five (5) years** must be provided.