

Tender number: SANBI:BAM386/2021

Tender name: Appointing a Business Analyst to the South African National Biodiversity Institute (SANBI) to inform the design of a national system for population-level monitoring of traded wildlife through undertaking a needs assessment and a review of relevant existing systems and databases

There are two components to this document:

1. Answers to questions asked in non-compulsory briefing session

Briefing session was held: Thursday 13 May, from 11:00 to 11:45 via Microsoft Teams.

The following questions were asked at the briefing session and answers were provided in the meeting (except for Question 2, which needed SANBI Supply Chain Management to answer). All questions have been answered here:

Question	Answer
1. Can we use our mother entity's BBBEE status (we are a subsidiary of a University, but we are a separate legal entity)?	The legal entity that applies for the tender must have the minimum BBBEE status as specified in the Request for Tender document. SANBI Supply Chain Management will check that all the compulsory documents are in the same legal name as the tenderer.
2. Which SBD forms must we complete? Do we need all of the SBD forms? Some of the SBD forms are not applicable for this tender and we are unsure which to complete or what to do if they are not applicable.	All the SBD forms loaded onto the SANBI webpage of this tender are compulsory requirements for this tender. https://www.sanbi.org/wp-content/uploads/2021/05/SBD-formsBAM386-2021.pdf Please use sanbi.tenders@sanbi.org.za if you have further questions on the SBD forms.
3. For the interviews with key stakeholders: a) Would we be expected to initiate the interviews? What is the process? Will SANBI give us names and contact details?	Yes, the successful tenderer will be expected to initiate the interviews. SANBI will provide names and contact details of the key people we know will need to be interviewed. There may however be some names that will need to be determined as part of the Service Provider's initial investigations (e.g. who runs the C-more and SMART systems) as SANBI does not necessarily know all possible role players.
b) What will the intervention be if the owners of existing systems are reluctant to share their data? We will sometimes need to see the data to determine amount of cleaning etc.	At this specification phase, you may need to see the data if there aren't specific enough descriptions of data fields. And it may well be that the database/system owners do not want to share their real data. We have not yet engaged the owners of the systems yet. SANBI will support the contracted Service Provider by providing letters or engaging with the database/system owners as needed. Non-disclosure agreements might need to be signed and/or some kind of 'dummy export' could be requested. Build sufficient time into your workplans to account for negotiating with existing system holders.
c) May we utilise workshops to gain some of the information needed? Would there be any problems in getting stakeholders into one venue?	It is possible that some groups could be interviewed in a workshop situation. The workplan is welcome to specify workshops where these would be the most appropriate way of obtaining relevant information. Tenderers are welcome to use some individual interviews and some workshop formats if that makes the most sense.
4. Can you give us more information of what price range you are expecting on this tender?	No, we are not allowed to specify any information about pricing.
5. What is the expected timeframe for delivery?	The tender document notes that 6 months would be ideal, however tenderers are encouraged to put realistic timeframes in the workplan even if it is longer than 6 months, as the evaluation panel is interested in the work being done correctly and we want your opinion on how long this work will take. This is a consultancy tender, so the timeframes must be specified by the tenderers in their workplans.

6. Is it important for the tenderer to have wildlife/biodiversity knowledge?	This is not a requirement specified in section 4.4 of the Request for Tender document although it does say “preferably in the biodiversity sector”. It is SANBI’s experience that biodiversity data is very complex, and an analyst with some domain knowledge is preferable. It is vitally important that the Service Provider understands how biodiversity information is used to answer complex scientific questions, as that is the primary reason for the development of the national system.
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2. Answers to questions asked via email

The following questions were asked of SANBI in an email from one prospective tenderer on 19 May 2021:

a) *How many existing systems in total need to be analysed and assessed? (Appendix A refers to approximately 10 systems – is that the total?)*

Not necessarily. The Request for Tender document clearly has the following row in the expected tasks table on page 7 of 12:

Finalise the list of systems and tools available and/or in use (see draft list as Appendix A and expand) and create a work plan for the comprehensive review of the systems.	Service Provider to refine the list currently as Appendix A through their own online research and/or as a result of the initial interviews above; and create a detailed schedule of further investigation activities.	Final list of systems to be investigated and a detailed work plan explaining the timeframes for the review.
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b) *How many existing data sources need to be onboarded onto the future data platform.*

We don't know. This will be part of the scoping that the successful service provider will need to investigate for the build phase of the system. The Request for Tender document also clearly states that certainly priority species are being targeted for pilot phase, but that the system should ideally be scalable.

c) *Does this project include the onboarding, transformation and integration of these historic data sources into a single database / data platform that can be used for past analytics and insights?*

The build phase of the system might well have to cover data integration. This scoping and design phase will be advising on this aspect, but not doing the actual data integration.

d) *Approximately how many stakeholder interviews will be required? We estimated approximately 33 based on the TOR.*

There are 4+14+15= 33 people mentioned in the first row of the expected tasks table. Then further down in the workplan, it is very likely that some in-depth interviews will need to be conducted with at least some of the owners/managers of current systems listed in Appendix A. The tenderer is welcome to specify how all of these investigations will take place. As mentioned in the briefing session, some clusters of interviewees could be interviewed through a workshop process.

e) *Is a comprehensive future logical data model expected as a key deliverable?*

Yes, a data model would be expected as part of the specification document for the new system.

f) *Would data collection include both structured and unstructured data?*

Data collection and integration will happen during the build phase for the system, but please take these questions into consideration during the specification phase. Yes, the system would need to cater for both structured and unstructured data. Although there are biodiversity data standards that exist, (<http://biodiversityadvisor.sanbi.org/online-biodiversity-data/sabif-3/standards-protocols/>), South African institutions still have a long way to go to use these standards consistently. Furthermore, although a lot of data may be in relational databases, you will find that it is just free text data dumps, etc. You will also need to provide for a possible huge array in formats, and non-relational ‘databases’. Such matters should become clearer as the successful service provider interviews current owners/managers of existing systems.

g) *For the collection of monitoring data, is a Big Data platform envisaged in terms of expected data volumes and historic data?*

Yes, but not right now. Part of SANBI’s mandate is to act as data aggregator and disseminator. However, there is still a long road we have to walk with partners to standardise data types and to harmonise datasets.

We do this for key datasets required right now, but the capacity to deliver a big data platform is not yet possible. For this project, however, the possibility of a big data platform will depend on your assessment of the level of effort required – please keep this in mind and advise us accordingly.

h) Would the use of IoT devices be considered as a means to collect the required data?

No. We would expect to draw data from partner databases once the new system is built. For our own databases, SANBI itself does not use IoT devices to record/collect data.

i) Is a best practice Data Management framework preferred or can we prescribe?

SANBI does have data management policies and an information architecture in place.

(https://www.sanbi.org/sites/default/files/jobs/documents/Annexure%20A_0.pdf). As you can see, due to the complexity of biodiversity data, we do not have a singular enterprise solution (nor does one exist) for biodiversity data. A self-contained data management framework for this system can be prescribed, as long as it conforms to the overall SANBI information architecture and data management principles and standards.

j) Are there any legislative initiatives that are going to assist in addressing the issue of illegal wildlife trade?

There are already legislative measures in place that can lead to prosecutions for people involved in illegal activities – for example, under the National Environmental Management: Biodiversity Act (Act 10 of 2004) offenders can face a fine of up to R5 million or 5 years in prison on first offence and R10 million or 10 years on subsequent offences. Every province also has legislation in place – Conservation Ordinances or Acts.

k) How many different sites and types of monitoring technology are estimated and need to be assessed as part of the project?

This will be part of the scoping undertaken by the successful Service Provider – this is part of the reason why the successful tenderer must interview both the end users of the new system and the owners/managers of existing systems – we need to gain an understanding of what kinds of monitoring data are collected, how such data are collected, what technologies are used for collecting population-level species data, etc.

l) There is a mention "note: consultation with an Information Architect may be required". What are the existing Information Architecture standards / frameworks if any, that are in place and need to be considered as part of the system architecture/design?

Explained in i), above. The full, detailed SANBI architecture (300+ pages) can be accessed on request. The note in the Request for Tender document, however, refers to an IA as part of the service provider's team, to assist the Business Analyst in spec'ing the new system. The extent to which this system will integrate with SANBI's architecture will depend on the outcome of this analysis for the new system.