Terms of Reference


Location: South Africa. Home-based with meetings on site as needed.

Application Deadline: 10 August 2022

Category: Energy and Environment

Type of Contract: Firm

Language Required: English

Starting Date: Immediately

Duration of Assignment: 18 months

1. Background Summary

The National Development Plan (NDP) for South Africa aims to eliminate poverty, create jobs, reduce inequality and grow an inclusive economy by 2030. To achieve this kind of economic development, the NDP proposes to expand infrastructural investment opportunities, private investment, and entrepreneurialism. Biodiversity and ecological infrastructure are at the heart of economic growth, providing employment, contributing to food security, and shaping the development of the country, and the broader region. However, there is mounting concern of pressures to biodiversity assets and ecological infrastructure linked to development actions. Loss of natural habitats and fragmentation resulting from development, particularly agriculture, mining, and urbanisation, is cited as a primary cause for biodiversity loss.

‘Biodiversity offsets’ have become a commonly used mechanism to counterbalance for residual impacts of development and have gained attention across the globe with governments, organisations, businesses, financial institutions, and local communities. Biodiversity offsets are commonly defined as measurable conservation outcomes designed to counterbalance significant residual impacts arising from a development project after appropriate prevention and mitigation measures have been taken, typically through environmental impact assessment (EIA) processes associated with land development. Biodiversity offsets has seen use in South Africa since 2002, but with uneven application, as there was no national policy or procedural guidance in place. In March 2022 the Department of Forestry, Fisheries and the Environment
(DFFE) published a draft National Biodiversity Offsets Guideline. It is anticipated that greater policy certainty will stimulate greater offset implementation.

The development of a national biodiversity offsets register has been recognised as a key enabler for Biodiversity Offsets to ensure offsets are implemented successfully and consistently. The Biodiversity Finance Initiative (BIOFIN) has undertaken to fund this development.

BIOFIN is implemented by the United Nations Development Programme, with financial support from the European Commission and the Governments of Germany, Switzerland, Norway and Flanders. This global initiative is envisioned to transform the way in which biodiversity finance is mobilized allowing for greater resources to be enacted as required within the Aichi Targets defined in the CBD’s Strategic Plan (2011 – 2020). In South Africa, the BIOFIN project is implemented at a national level by the UNDP in partnership with the Department of Forestry, Fisheries and Environment (DFFE).

A core principle of BIOFIN is to build on existing processes and procedures. The South African National Biodiversity Institute (SANBI) have already developed a database of biodiversity offsets, including a web application for data entry and viewing; a SQL database and database schema which will serve as the basis for development of the National Biodiversity Offsets Register.

BIOFIN seeks to appoint a service provider to build on this and develop a National Biodiversity Offsets Register.

2. Objectives of the work

2.1 Development of a National Biodiversity Offsets Register, that meets the requirements as set out in the National Biodiversity Offsets Guideline, i.e:

2.1.1 As soon as possible after an offset site has been identified, it is recommended that the relevant competent authority (CA) records the site in the National Biodiversity Offsets Register.

2.1.2 The information in the register should be updated regularly to ensure that a record is kept of the status of biodiversity offsets.

2.1.3 The following information must be kept in the register (and are thus deemed to be the minimum information requirements for the system):

- Province and municipal area
- Date on which the EA was issued
- EA number
- EA holder
- Biodiversity offset conditions and amendments
- Date on which the biodiversity offset management plan was completed
- Date on which the biodiversity offset site was secured
- Delineation of the biodiversity offset site. (Spatial delineation plus description)
- Ecological description of the biodiversity offset site
Date on which the biodiversity offset implementation agreement was concluded
- Annual indication of the status of the offset intervention.

2.1.4 A spatial layer representing all biodiversity offset sites should be made publicly available to ensure locations of all sites are known and that they are avoided in future development applications and approvals.

2.2 Development of a front-end, accessible to the public, displaying useful summarised statistics of data held within the register, including the spatial layer outlined in 2.1.4 above.

2.3 Development of data entry forms to facilitate quick and easy data entry, whilst minimising potential user-error as far as possible. Specific thought will need to be put into standardised pick-lists, etc.

2.4 Development of an admin back end with a tiered user permissions structure, linked to access to system functionality.

2.5 Record all development issues in a ticketing system, including accumulated technical debt as well as out-of-scope development requirements emergent through testing.

2.6 Handover of the system to BIOFIN Project Leader and Project Task Team, along with the following documentation:
  - Installation, Operation and Maintenance
  - Technical design and Architecture
  - User Manual and explanatory guides
  - Database schema
  - Unresolved tickets with recommendations on way forward

3 Methodology and Scope

3.1 The system should be developed using an Agile development model, with key personnel from the DFFE and SANBI engaged in User Acceptance Testing. These personnel will be identified at the Inception and Planning stage.

3.2 The system should build on the existing biodiversity offset database, developed by SANBI. All system documentation, as well as the database schema will be shared with prospective service providers, on request.

3.3 The recommended system architecture is .NET/SQL server, designed for deployment in Microsoft Azure. The service provider must provide a proposal for this environment, however the service provider may also motivate and provide a proposal (including budget) for an alternative technology stack.

3.4 The target environment at this point is SANBI’s Azure tenant, although this will be confirmed during project inception.

3.5 The service provider will be required to provide at least 60 hours of troubleshooting and post-development support for bug fixes, etc.
3.6 At a minimum, in addition to the BIOFIN team, the appointed team will be required to present to the relevant project task team, DFFE Working Group 1 and 5 committees, as well as possibly MINTECH - this will be arranged by the DFFE.

3.7 Project phases:

<table>
<thead>
<tr>
<th>Area</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception and planning</td>
<td>Participate in an inception meeting and provide an inception report including an overall project implementation plan highlighting milestones and key deliverables.</td>
</tr>
<tr>
<td>Update of existing biodiversity offset database</td>
<td>Evaluation and full assessment, review and update of existing database.</td>
</tr>
<tr>
<td>Concept, Design / look and feel</td>
<td>Hold initial concept and user journey workshops to finalize content and look and feel/functionality requirements for the portal. Incorporate Legal and compliance information for the portal in workshops.</td>
</tr>
<tr>
<td>Technical Development and testing</td>
<td>Build Minimum viable product MVP using an agile framework. Schedule regular UATs and incorporate changes. Involves system testers in SCRUMs</td>
</tr>
<tr>
<td>Support, security and hosting</td>
<td>Develop, deploy, and configure a fully functional register into the target environment.</td>
</tr>
<tr>
<td>Implementation progress</td>
<td>Prepare regular progress plans and reports, coupled with monthly stand-up meetings with the project management team.</td>
</tr>
<tr>
<td>Finalisation</td>
<td>Conduct a handover meeting, complete with required technical documentation.</td>
</tr>
<tr>
<td>Support</td>
<td>Provide at least 60 hours of post development support and bug fixes, once the register is fully deployed.</td>
</tr>
</tbody>
</table>

4 Deliverables

The total duration of the assignment will be approximately 18 months starting from the date of contracting. The tentative timeframe, associated with five payment terms, is as follows:

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Duration</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participate in an inception meeting and submit an inception report detailing methodology, including a high-level project plan with milestones and key deliverables.</td>
<td>Within 2 weeks of contract</td>
<td>10%</td>
</tr>
</tbody>
</table>
2. Evaluation and full assessment, review and update of existing database.  
   | Within 2 weeks of inception meeting |

3. Hold concept workshops to finalize content and look and feel/ customer needs/user journeys / functionality list.  
   | Within 4 weeks of inception meeting |

4. Develop full set of wireframes for functionality/ look and feel – MVP.  
   | Within 4 weeks of Concept workshops |

6. Conduct UATs  
   | Within 6 months of inception contract |

7. Build a fully functional portal and upload biodiversity offset database  
8. Develop a hosting need, architecture guideline and platform security.  
9. Provide user support mechanism and plan for platform.  
10. Launch portal online and to the public.  

8. Develop a hosting need, architecture guideline and platform security.  
9. Provide user support mechanism and plan for platform.  
10. Launch portal online and to the public.  

11. Handover and technical documentation.  

12. Conduct a handover meeting with the BIOFIN Project Leader, Project Task Team and prepare and deliver a presentation of all work and support content.  
   | Before contract end |

13. Provide implementation support and troubleshooting  
   | Between handover and contract end |

The BIOFIN core team will be responsible for the coordination and approval for all of the deliverables. The evaluation of the team’s performance (e.g. the technical competence shown and the timeliness of the reports) will be determined by the project manager with guidance from the BIOFIN project management specialist. The contract may be extended to the third quarter of 2023 at no cost to UNDP if needed to accommodate uncertainties of COVID-19.

5 Required Skills and Experience:
The successful Digital Development Service Provider must have a minimum of the following competencies:

- At least 8 – 10 years of professional experience in areas of web development and user interfaces;
- 2 – 3 year design or web development degree/diploma; and a design or web development certificate for support team members
- Demonstrable experience in software developing using the ‘Microsoft stack’ of .NET, SQL, IIS, C#, and well as other relevant web design coding languages, e.g Python and R.
- Documented experience in development and design of web solutions;
- Documented experience in agile development methodology;
- Proficient and documented experience in hosting, architecture and security requirements;
- Additional functional competences of the Service Provider will also be considered an asset:
  - Team skills;
  - Ability and willingness to take initiative and remain flexible;
  - Very good communication, report writing and presentation skills;
  - Socio-cultural competence;
  - Good conflict management skills;
  - Efficient, partner- and client-focused working methods; and
  - Interdisciplinary thinking is highly encouraged.
- Ability to communicate in additional local languages other than English would be advantageous.

6 Evaluation Criteria:

The evaluation of proposals will be conducted according to UNDP's procurement rules. A two-stage procedure is utilized in evaluating the proposals. The first step is the evaluation of the technical proposals, which must be completed prior to moving on to the next step which is the opening and comparing of the costing/budget/financial proposals. Only the costing/budget/financial proposals for submissions that passed the minimum technical score of 70% and above of the obtainable score of 100 points in the evaluation of the technical proposal will be opened. The technical proposal is evaluated based on its responsiveness to the Terms of Reference (TOR).

In the second stage, the costing/budget/financial proposal of all contractors, who have attained the minimum 70% score in the technical evaluation will be compared. The contract will be awarded to the lowest priced technically qualified proposal.

Foreseeable travel costs should be included in the costing/budget/financial proposal as part of the application submission documents.
<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Max score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Methodology: A clear methodology must be described, and the methodology must outline how the Scope of Work will be carried out according to each deliverable. An agile approach with user centric design principles should be applied as well as latest technology and current trends incorporation.</td>
<td>20</td>
</tr>
<tr>
<td>Proposed Work Plan: Detailed work plan with milestones, timelines and resources and designated responsibilities of the consultant and any support members must be indicated in the proposal for achieving of the deliverables in line with requirements indicated in the Terms of references</td>
<td>20</td>
</tr>
<tr>
<td>Documented qualifications and experience: demonstration of necessary resources and technical expertise to undertake and successfully complete the project. Any relevant qualifications must be showcased, as well as experience, knowledge, proven track record and evidence of undertaking similar projects. (Max 18 extra points)</td>
<td>20</td>
</tr>
<tr>
<td>Technical proposals are encouraged to reflect a 30% gender requirement This will ensure gender mainstreaming and skills development. (Max 2 extra points)</td>
<td></td>
</tr>
<tr>
<td>Technical Capability showcasing expertise, track record and knowledge in the fields of Graphic design / Software development / Website development / software projects / User design / editing / layout, design, publishing and printings.</td>
<td>40</td>
</tr>
</tbody>
</table>

**UNDP is committed to achieving workforce diversity in terms of gender, nationality and culture. Individuals from minority groups, indigenous groups and persons with disabilities are equally encouraged to apply. All applications will be treated with the strictest confidence.**

7. **DUTY STATION:**

Foreseeable travel costs should be included in the Financial Proposal as part of the application submission documents.

Unforeseeable travel should be agreed upon, between the BIOFIN National Project Manager and the UNDP Project Management Specialist, prior to travel and will be covered and paid by UNDP from the BIOFIN Programme as per the UNDP reimbursable fees structure/guidelines.

In a case where there is a need to travel (unforeseeable travel), the costs including transport, lodging and terminal expenses will be covered and paid by UNDP based on UNDP rates. The fare will always be “most direct, most economical” and any difference in price with the preferred route will be paid for by the team. There is no anticipated travel outside the South Africa for this assignment.
8. **IMPLEMENTATION AND ADMINISTRATION**

The service provider will be appointed through UNDP processes.

Following the contracting process of the service provider, the service provider is expected to engage closely with the BIOFIN Project management specialist and assigned contact within DFFE and to participate in-person during an inception meeting.

Whilst the contract is held with UNDP, coordination and implementation modalities will be jointly shared with DFFE. UNDP and DFFE will have the overall responsibility for supervising the technical quality of the deliverables, calling and convening all meetings with the service provider, making logistical arrangements, and seeing to the overall day-to-day interaction directly with the service provider. UNDP is responsible for making payments and administration associated with contract management. To this end, UNDP will authorise payments upon written approval by both the BIOFIN Programme Manager in South Africa and BIOFIN Project Management Specialist. It is expected that there will be a minimum of a monthly meeting with UNDP and DFFE and this may be arranged in frequency as needed during the implementation to present Monthly progress reporting. Any proposed deviations from the original project implementation plan shall be explained to UNDP and DFFE in writing.

The consultant is expected to present monthly progress reports detailing:

- Progress against the project plan
- Risks/current challenges identified
- Items needing attention and decision making.
- Any proposed deviations from the original project implementation plan shall be explained to the BIOFIN National Project Manager, BIOFIN task team leader and UNDP in writing.

The project report(s) must be submitted in electronic format in English.

9. **RESPONSE FORMAT:**

To facilitate the analysis of responses, all interested parties are required to prepare their response in accordance with the instructions outlined in this section. All proposals should be electronically generated. Applicants are required to submit the following:

- A technical proposal outlining a methodology on the approach and implementation of the assignment.
- Personal CVs of all team members highlighting qualifications and experience in similar projects.
- Evidence and examples of similar projects that have been successfully completed.
- Minimum of 3 contactable work references – organization for whom you have conducted/undertaken similar assignments (email addresses).
- All-inclusive financial proposal (fixed cost bid) indicating consultancy fee (South African Rand) and a breakdown of expenses (unit price together with any other expenses) related to the
assignment. The proposal must incorporate all the costs including travel etc. for the team to achieve the required deliverables.