



**GMES
AND AFRICA**



**Wetland Monitoring and Assessment Service for
Transboundary Basins in Southern Africa**

SASSCAL REGIONAL SECRETARIAT REQUEST FOR PROPOSALS

**CONSULTANCY SERVICES
TO DEVELOP EARTH OBSERVATION
SERVICES AND ENHANCE THE GEOPORTAL
FOR We MAST PROJECT**

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Issued September 7,2020

Procurement Number:01/AU/GMES/SASSCAL/QCBS/2020

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**GMES
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SECTION 1. LETTER OF INVITATION

Southern African Science Service Centre for Climate Change and Adaptive Land Management.

September 7,2020

TO: Prospective Consulting Firms

1. The *Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL)* has received funds from The *African Union* toward the cost of **Wetland Monitoring and Assessment Service for Transboundary Basins in Southern Africa** and intends to apply a portion of this funding to eligible payments under this Contract, reference number **01/AU/GMES/SASSCAL/QCBS/2020 - Consultancy services to develop Earth Observation Services and Enhance the Geoportal for the We MAST Project.**
2. **SASSCAL** now invites firms to provide the following consulting services: **Develop Earth Observation Services and Enhance the Geoportal for the We MAST Project.** More details on the services are provided in the attached Terms of Reference in Section 6.
3. This Request for Proposals (RFP) is open to all eligible bidders who can demonstrate that they are qualified and experienced to perform the services.
4. A firm (s) will be selected under **Quality Cost Based Selection (QCBS)** and procedures described in this RFP.
5. The RFP includes the following documents:
 - Section 1 - Letter of Invitation
 - Section 2 - Information to Consultants
 - Section 3 – Data Sheet
 - Section 4 - Technical Proposal - Standard Forms
 - Section 5 - Financial Proposal - Standard Forms
 - Section 6 - Terms of Reference
 - Section 7 - Standard Forms of Contract.
6. Please inform us, upon receipt:
 - (a) that you received the letter of invitation; and

Section 1. Letter of Invitation

- (b) whether you will submit a proposal alone or in association.
7. Consultancy Firm(s) must comply with the following:
- (a) Duly completed and signed Technical and Financial Proposals submission forms.
 - (b) Traceable references
 - (c) Completed and signed Curriculum Vitae – use prescribed and attached form in 4F.
 - (d) The Proposal is valid for at least the period required (90days)
8. This is a two-proposal bidding. Technical and Financial proposals should be submitted as separate documents to the specified email address.
9. Proposals must be emailed to the address below on or before, **Friday 2nd October 2020** by 17h00 **hours (Namibian Time Zone)** and should be clearly marked as **We MAST: Consultancy Services to develop Earth Observation Services and Enhance the Geoportal for the We MAST Project.**
Ref: 01/AU/GMES/SASSCAL/QCBS/2020.

Yours sincerely,



Dr. Jane Olwoch
SASSCAL Executive Director

SECTION 2. INFORMATION TO CONSULTANTS

- 1. Introduction**
- 1.1 The Client named in the Data Sheet will select a firm from those listed in the Letter of Invitation, in accordance with the method of selection specified in the Data Sheet.
 - 1.2 The consultants are invited to submit a Technical Proposal and a financial proposal. The proposal will be the basis for contract negotiations and ultimately for a signed contract with the selected firm.
 - 1.3 The assignment shall be implemented in accordance with any phasing indicated in the Data Sheet. When the assignment includes several phases, the performance of the consultant under each phase must be to the Client's satisfaction before work begins on the next phase.
 - 1.4 The consultants must familiarise themselves with local conditions and take them into account in preparing their proposals. To obtain first-hand information on the assignment and on the local conditions, consultants are encouraged to visit the Client before submitting a proposal.
 - 1.5 The Client will provide the inputs specified in the Data Sheet, assist the firm in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
 - 1.6 Note that: (i) the costs of preparing the proposal and of negotiating the contract, including a visit to the Client, are not reimbursable as a direct cost of the assignment; and (ii) the Client is not bound to accept any of the proposals submitted.
 - 1.7 SASSCAL/ policy requires consultants to provide professional, objective, and impartial advice, and at all times hold the Client's interests paramount, without any consideration for future work, and strictly avoid conflicts with other assignments or their own corporate interests. Consultants shall not be hired for any assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of not being able to carry out the assignment in the best interests of the Client.
 - 1.7.1 Without limitation on the generality of this rule, consultants shall not be hired under the circumstances set forth below:
 - (a) Conflict between consulting activities and procurement of goods, works or services: A firm that

has been engaged to provide goods, works, or services for a project, and each of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and each of its affiliates, shall be disqualified from subsequently providing goods, works or services resulting from or directly related to the firm's consulting services for such preparation or implementation (other than a continuation of the firms earlier consulting services for the same project).

(b) Conflict among consulting assignments: Neither consultants (including their personnel and sub-consultants) nor any of their affiliates shall be hired for any assignment that, by its nature, may be in conflict with another assignment of the consultants.

(c) Relationship with SASSCAL staff: Consultants (including their personnel and sub-consultants) that have a business or family relationship with a member of SASSCAL staff (or of the Client staff, or of a beneficiary of the assignment) who are directly or indirectly involved in any part of: (i) the preparation of the TOR of the contract, (ii) the selection process for such contract, or (iii) supervision of such contract may not be awarded a contract.

1.7.2 As indicated in paragraph 1.7.1 (a) above, consultants may be hired for downstream work, when continuity is essential, in which case this possibility shall be indicated in the Data Sheet and the factors used for the selection of the consultant should take the likelihood of continuation into account. It will be the exclusive decision of the Client whether or not to have the downstream assignment carried out, and if it is carried out, which consultant will be hired for the purpose.

1.7.3 In the event of 1.7.2. and in order to ensure fairness and transparency in the selection process, it is required that consultants or their affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to the assignment in question. To that end, all information that would in that respect give a consultant a competitive advantage shall be made available to all the short-listed consultants together with the request for proposals.

1.8 SASSCAL requires that Officers of SASSCAL, as well as

Bidders/ Suppliers/ Contractors/ Consultants, observe the highest standard of ethics during the procurement and execution of such contracts.¹ In pursuance of this policy SASSCAL:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) “corrupt practice”² is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (ii) “fraudulent practice”³ is any act or omission including a misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) “collusive practice”⁴ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) “coercive practice”⁵ is impairing or harming or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) “obstructive practice” is deliberately destroying, falsifying, altering or concealing of evidence material to any investigation or making false statements to investigators in order to materially impede any investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation;

¹ *In this context, any action taken by a bidder, supplier, contractor, sub-contractor or consultant to influence the procurement process or contract execution for undue advantage is improper.*

² *“another party” refers to an officer of SASSCAL acting in relation to the procurement process or contract execution. In this context, “officer of SASSCAL” includes staff and employees of other organisations taking or reviewing procurement decisions.*

³ *a “party” refers to any officer of the SASSCAL; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.*

⁴ *“parties” refers to any participants in the procurement process (including officers of SASSCAL) attempting to establish bid prices at artificial, non competitive levels.*

⁵ *a “party” refers to any participant in the procurement process or contract execution.*

- (b) will reject a recommendation for award of contract if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded an African Union financed contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, an African Union financed contract.

1.9 Consultants shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive, coercive or obstructive practices issued by the SASSCAL in accordance with the above subparagraph 1.8.

1.10 Consultants shall furnish information as described in the Financial Proposal submission form (Section 4A) on commissions and gratuities, if any, paid or to be paid to agents relating to this proposal, and to execute the work if the firm is awarded the contract.

1.11 Consultants shall be aware of the provisions on fraud and corruption stated in the Standard Contract under the clauses indicated in the Data Sheet.

2. Clarification and amendment of RFP Documents

2.1 Consultants may request a clarification of any of the RFP documents up to the number of days indicated in the Data Sheet before the proposal submission date. Any request for clarification must be sent in writing by mail, facsimile, or electronic mail to the Client's address indicated in the Data Sheet. The Client will respond by facsimile, courier or electronic mail to such requests and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited consultants who intend to submit proposals.

2.2 At any time before the submission of proposals, the Client may, for any reason, whether at its own initiative or in response to a clarification requested by an invited firm, amend the RFP. Any amendment shall be issued in writing through addenda. Addenda shall be sent by mail, facsimile, or electronic mail to all invited consultants and will be binding on them. The Client may at its discretion extend the deadline for the submission of proposals.

3. Preparation of

3.1 Consultants are requested to submit a proposal (paragraph 1.2)

Proposal

written in the language(s) specified in the Data Sheet.

Technical Proposal

- 3.2 In preparing the Technical Proposal, consultants are expected to examine the documents constituting this RFP in detail. Material deficiencies in providing the information requested may result in rejection of a proposal.
- 3.3 While preparing the Technical Proposal, consultants must give particular attention to the following:
- (i) If a consultant considers that it does not have all the expertise for the assignment, it may obtain a full range of expertise by associating with individual consultant(s) and/or other consultants or entities in a joint venture or sub-consultancy, as appropriate. Consultants may associate with the other consultants invited for this assignment only with approval of the Client as indicated in the Data Sheet. Consultants must obtain the approval of the Client to enter into a joint venture with consultants not invited for this assignment. The consultants are encouraged to seek the participation of local consultants by entering into a joint venture with, or subcontracting part of the assignment to consultants who are Nationals of African Union Member States.
 - (ii) For assignments on a staff-time basis, the estimated number of professional staff-months is given in the Data Sheet. The proposal shall, however, be based on the number of professional staff-months estimated by the firm. For fixed-budget-based assignments, the available budget is given in the Data Sheet, and the Financial Proposal shall not exceed this budget.
 - (iii) It is desirable that the majority of the key professional staff proposed be permanent employees of the firm or have an extended and stable working relationship with it.
 - (iv) Proposed professional staff must, at a minimum, have the experience indicated in the Data Sheet, preferably working under conditions similar to those prevailing in the Country specified for Performance of the Services.
 - (v) Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.
 - (vi) Reports to be issued by the consultants as part of this assignment must be in the language(s) specified in the Data Sheet.

3.4 The Technical Proposal shall provide the following information using the Standard Forms attached in Section 4:

- (i) A brief description of the firm's organisation and an outline of recent experience on assignments (Section 4B) of a similar nature. For each assignment, the outline should indicate, inter-alia, the profiles of the staff proposed, duration of the assignment, contract amount, and the firm's involvement.
- (ii) Any comments or suggestions on the Terms of Reference and on the data, a list of services, and facilities to be provided by the Client (Section 4C).
- (iii) A description of the methodology and work plan for performing the assignment (Section 4D).
- (iv) The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member, and their timing (Section 4E).
- (v) CVs recently signed by the proposed professional staff and the authorized representative submitting the proposal (Section 4F). Key information should include number of years working for the firm/entity and degree of responsibility held in various assignments during the last ten (10) years.
- (vi) Estimates of the total staff input (professional and support staff; staff time) needed to carry out the assignment, supported by bar-chart diagrams showing the time proposed for each professional staff team member (Sections 4E and 4G).
- (vii) A detailed description of the proposed methodology, staffing, and monitoring of training, if the Data Sheet specifies training as a major component of the assignment.
- (viii) Any additional information requested in the Data Sheet.

3.5 The Technical Proposal shall not include any financial information.

Financial Proposal

3.6 In preparing the Financial Proposal, consultants are expected to take into account the requirements and conditions outlined in the RFP documents. The Financial Proposal should follow the Standard Forms in Section 5. These list all costs associated with the assignment, including (a) remuneration for staff, (foreign and local, in the field and at headquarters); and (b) reimbursable expenses such as subsistence (per diem, housing).Where

appropriate, these costs should be broken down by activity, and, if appropriate, into foreign and local expenditures.

- 3.7 The Financial Proposal shall include all the costs the consultant incurs to provide the services (including travel expenses, translation, printing and the taxes the consultant pays for its business requirements by the law of the domicile country of the consultant), but shall exclude all local taxes levied within African Union Member States on the invoice issued by the consultant (such as local sales tax, services tax or withholding tax).
- 3.8 Consultants must express the price of their services in US Dollar currency (USD). The Client may require consultants to state the portion of their price representing local costs in the Currency of the Country specified for performance of the Services if so indicated in the Data Sheet.
- 3.9 The Data Sheet indicates how long the proposals must remain valid after the submission date. During this period, the consultant is expected to keep available the professional staff proposed for the assignment. The Client will make its best effort to complete negotiations within this period. If the Client wishes to extend the validity period of the proposals, the consultants who do not agree have the right not to extend the validity of their proposals.

4. Submission, Receipt, and Opening of Proposals

- 4.1 The original proposal (Technical Proposal and, Financial Proposal; see paragraph 1.2) shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the firm itself. Any such corrections must be initialed by the persons or person signing the proposal.
- 4.2 An authorised representative of the firm initials all pages of the proposal. The representative's authorisation is confirmed by a written power of attorney accompanying the proposal.
- 4.3 For each proposal, the consultants shall prepare the number of copies indicated in the Data Sheet. Each Technical Proposal and Financial Proposal shall be marked "Original" or "Copy" as appropriate. If there are any discrepancies between the original and the copies of the proposal, the original will govern.
- 4.4 The original and all copies of the Technical Proposal must be send in a separate electronic file and clearly marked "Technical Proposal," and the original and all copies of the Financial Proposal in a separate electronic file clearly marked "Financial Proposal" and warning: "Do Not Open with the Technical Proposal."

- 4.5 The completed Technical and Financial Proposals must be submitted to the specified address on or before the time and date stated in the Data Sheet. Any proposal received after the closing time for submission of proposals shall be returned unopened.
- 4.6 After the deadline for submission of proposals, the Technical Proposal shall be opened immediately by the Bid Opening Committee. The Financial Proposal shall remain unopened and retained securely until all submitted proposals are opened publicly.
- 4.7 The Firm may withdraw its Proposal after the Proposal's submission, provided that the written notice of the withdrawal is received by the Client prior to the deadline prescribed for submission of Proposals. The Firms' withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of clause Deadline for Submission of Proposals. The withdrawal notice may also be sent by telex or fax but followed by a signed confirmation copy. No Proposal may be modified subsequent to the deadline for submission of proposals. No Proposal may be withdrawn in the Interval between the deadline for submission of proposals and the expiration of the period of proposal validity specified by the firm on the Proposal Submission Form.

5. Proposal Evaluation

General

- 5.1 From the time the bids are opened to the time the contract is awarded, if any consultant wishes to contact the Client on any matter related to its proposal, it should do so in writing at the address indicated in the Data Sheet. Any effort by the firm to influence the Client in proposal evaluation, proposal comparison or contract award decisions may result in the rejection of the consultant's proposal.
- 5.2 Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is completed.

Evaluation of Technical Proposals

- 5.3 The evaluation committee appointed by the Client, as a whole, and each of its members individually, will evaluate the proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria (typically not more than three per criteria), and point system specified in the Data Sheet. Each responsive proposal will be given a technical score (St). A proposal shall be rejected if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.
- 5.4 In the case of Quality-Based Selection, Selection Based on

Consultant's Qualifications, and Single-Source Selection, the highest ranked firm, or the firm selected on a single-source basis, is invited to negotiate a contract on the basis of the Technical Proposal and the Financial Proposal submitted in accordance with the instructions given in paragraph 1.2 and the Data Sheet.

**Public Opening
and Evaluation
of Financial
Proposals:
Ranking (QCBS,
Fixed-Budget,
and Least-Cost
Selection
Methods Only)**

- 5.5 After the evaluation of technical quality is completed, the Client shall notify those consultants whose proposals did not meet the minimum qualifying score or were considered non-responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify the consultants that have secured the minimum qualifying score, indicating the date and time set for opening the Financial Proposals. The opening date shall not be sooner than two weeks after the notification date. The notification may be sent by registered letter, facsimile, or electronic mail.
- 5.6 The Financial Proposals shall be opened publicly in the presence of the consultants' representatives who choose to attend. The name of the consultant, the technical scores, and the proposed prices shall be read aloud and recorded as the Financial Proposals are opened. The Client shall prepare minutes of the public opening.
- 5.7 The evaluation committee will determine whether the Financial Proposals are complete (i.e., whether they have costed all items of the corresponding Technical Proposals; if not, the Client will cost them and add their cost to the initial price), correct any computational errors, and convert prices in various currencies to the single currency specified in the Data Sheet. The official selling rates used, provided by the source indicated in the Data Sheet, will be those in effect on the date indicated in the Data Sheet. The evaluation shall exclude those taxes, duties, fees, levies, and other charges imposed that are subject to the African Union exemption on the payment of taxes and duties and estimated as per paragraph 3.7.
- 5.8 In case of QCBS, the lowest priced Financial Proposal (F_m) will be given a financial score (S_f) of 100 points. The financial scores (S_f) of the other Financial Proposals will be computed as indicated in the Data Sheet. Proposals will be ranked according to their combined technical (S_t) and financial (S_f) scores using the weights (T = the weighting for the Technical Proposal; P = the weighting for the Financial Proposal as indicated in the Data Sheet. $T + P = 1$); The firm achieving the highest combined technical and financial score using the formula:

$$S = S_t \times T\% + S_f \times P\%$$

will be invited for negotiations.

- 5.9. In the case of Fixed-Budget Selection, the Client will select the firm that submitted the highest ranked Technical Proposal within the indicated budget price. Proposals that exceed the indicated budget will be rejected. In the case of the Least-Cost Selection, the Client will select the lowest evaluated cost proposal among those that passed the minimum technical score. The selected firm will be invited for negotiations.

6. Negotiations

- 6.1 Negotiations will be held at the address indicated in the Data Sheet. The aim is to reach agreement on all points and sign a contract.
- 6.2 Negotiations will include a discussion of the Technical Proposal, the proposed methodology (work-plan), staffing, and any suggestions made by the firm to improve the Terms of Reference. The Client and firm will then agree final Terms of Reference, staffing, and bar charts indicating activities, staff, periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the “Description of Services” and form part of the contract. Special attention will be paid to getting the most the firm can offer within the available budget and to clearly defining the inputs required from the Client to ensure satisfactory implementation of the assignment.
- 6.3 Financial negotiations will reflect agreed technical modifications in the cost of the services, and will include a clarification of the firm’s tax liability (if any) in the Country specified for performance of the Services, and the manner in which it will be reflected in the contract. The financial negotiations will not normally involve either the remuneration rates for staff (no breakdown of fees), or other proposed unit rates under QCBS, Fixed-Budget Selection, or the Least-Cost Selection methods. For other methods of selection, an Appendix will be provided for the firm to explain the required information on remuneration rates.
- 6.4 Having selected the firm on the basis including an evaluation of proposed key professional staff, the Client expects to negotiate a contract on the basis of the experts named in the proposal. Before contract negotiations, the Client will require assurances that the proposed experts will be actually available. The Client will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the assignment. If this is not the case and if it is established that key staff were offered in the proposal without confirming their availability, the firm may be disqualified.

- 6.5 The negotiations will conclude with a review of the draft form of the contract. On completion of negotiations, the Client and the firm will initial the agreed contract. If negotiations fail, the Client will invite the firm whose proposal received the second highest score to negotiate a Contract.
- 7. Award of Contract**
- 7.1 The contract will be awarded following negotiations. After negotiations are completed, the Client will promptly notify other consultants on the shortlist that they were unsuccessful and return the unopened Financial Proposals of those consultants who did not pass the technical evaluation (paragraph 5.3).
- 7.2 The firm is expected to commence the assignment on the date and at the location specified in the Data Sheet.
- 8. Confidentiality**
- 8.1 Information relating to the evaluation of proposals and recommendations concerning awards shall not be disclosed to the consultants who submitted the proposals or to other persons not officially concerned with the process, until the winning firm has been notified that it has been awarded the contract.

SECTION 3. DATA SHEET

ITC Clause Reference

ITC Clause 1.1 The name of the Client is: **Southern African Science Service Centre for Climate Change and Land Adaptive Management (SASSCAL).**

The method of selection is: **Quality Cost Based Selection Method (QCBS).**

ITC Clause 1.2 **Technical and Financial Proposals are requested and must be submitted separately.**

The name, and Procurement Number of the assignment are:
**WeMAST-Consultancy Services to develop Earth Observation Services and Enhance the Geoportal for the WeMAST Project.
Procurement Number: 01/AU/GMES/SASSCAL/QCBS/2020**

ITC Clause 1.5 The Client will provide the following inputs:
**SASSCAL will provide:
Relevant documents and available data.
Introduction of Consultant to relevant stakeholders.
Technical Support and oversight
Quality Assurance will be provided by Technical Group from members of the WeMAST Consortium
Any other services approved and deemed necessary by the Client**

ITC Clause 2.1 Clarifications may be requested up to 5 working days before the submission date.

The addresses for requesting clarifications is:

The WeMAST Project Manager: Mr Panduleni Hamukwaya
Email: panduleni.hamukwaya@sasscal.org
Tel: +264 (0) 61 248 693

AND

The SASSCAL Contracts and Fundraising Officer: Mrs Chenai Marangwanda
Email: chenai.marangwanda@sasscal.org
Tel: +264 (0) 61 248 693

ITC Clause 3.1 Proposals should be submitted in the **English language.**

ITC Clause 3.3(ii) The estimated number of professional staff-months required for the assignment is: **Four (4) Months**

ITC Clause 3.3(iv) The minimum required experience of proposed professional staff is:

The consultancy should be African owned. The consultant is required to indicate the proposed team composition to be able to successfully complete the assignment. The team will have to demonstrate to what extent its team lead and members are meeting the qualifications and experience below.

Legal Entity and Capacity

- Be a registered Consultancy and offering products and services on earth observation/geospatial applied to environment, agriculture, wetlands, etc. The applicant will have to provide the relevant legal documents proving that the Consultancy(s) is/are legally registered in Africa.
- The Consultancy(s) should be owned by an African citizen (proven by the citizenship legal document of the owner)
- The consultancy should be tax compliant and up to date.
- The Consultancy(s) should have at least five (5) employees and should demonstrate the availability of five (5) full-time employees, including the Project lead for this work.

Team Lead

To manage the activity from the consultancy’s side and serve as the main technical focal point during the implementation of the assignment. To ensure coordinated communication with the WeMAST consortium and ensure quality deliverables. The Team Lead must be an African expert with the following educational background and experience. Proof of citizenship may be required.

Academic Qualification:

- A Ph.D. degree in Environmental Sciences and Management and related field including remote sensing, geospatial, geomatics, earth observation, cartography, geographic Information System (GIS) with a minimum of ten (10) years of experience. OR
- A Master’s degree in geomatics, remote sensing, earth observation, cartography, or geographic Information System (GIS) and related field, applied to environment, wetlands, hydrology, agriculture, agrometeorology with a minimum of fifteen (15) years of experience.

Relevant Experience:

- Ten (10) years of experience in managing earth observation/geospatial projects, including sustainable wetlands assessment and monitoring, protected area and wildlife data management, agrometeorological indicators development, and promoting data governance (data policy, standards and guidelines, and environmental best management practices).

- Ten (10) years of experience in developing wetland-related indices in an integrated and unified manner using various data sources, including land use/land cover, raw satellite imagery, vegetation indices, agrometeorological indicators, flood events, wetlands inventory, water extent, soil moisture, rainfall, and/or burnt area (fire) indices.
- Five (5) years of experience in designing, developing and implementing dynamic geodatabases and integrated online information-service platforms capable of cost-effectively and timely capturing and updating earth observation georeferenced information.
- Experience in undertaking and or leading at least five (5) similar assignments specifically in the fields of earth observation and/or geospatial and allied technologies applied to wetlands trend indicators, protected areas, agricultural lands management, flood monitoring and assessment services, and other natural resources management.
- Excellent interpersonal skills, quick drafting, editing, and reporting skills, planning and organizational skills, analytical skill.
- Ability to work in a multi-cultural environment and ability to work under pressure and with a short time notice
- Fluent in English. German and Portuguese are an added advantage.

Technical and IT Team

The Team Lead will be supported by a technical team of both subject matter experts and software developers. The technical team composition must be based on the following minimum skills and expertise:

- Bachelor's degrees in and demonstrated proficiency in the following fields: integrated water resources management, biodiversity conservation, ecosystem service, spatial analysis, Web-GIS, remote sensing, and/or geospatial Information technology (Geo-IT), data science, computer science and/or software engineering.
- Strong knowledge of the hydrology of wetlands.
- Proven expertise in spatial database development and web-application development in remote sensing
- Demonstrated knowledge and expertise in open source technologies: Bootstrap, PostgreSQL, PostGIS, GeoServer/MapServer, OpenLayers, D3, PHP, Python, JavaScript, Ext JS, GeoExt, GeoDjango, mapbox, or similar technologies.
- Proven experience in developing dashboards to support decision-making at policy and grass-roots level.
- Proven quality of service, technical documentation skills, and capacity development experience.
- Fluent in English, excellent communication skills, both verbal and written.

ITC Clause
3.3(vi)

Reports that are required under the assignment shall be submitted in the **English language.**

- ITC Clause 3.4(viii) Additional information required in the Technical Proposal is:
Comments and suggestions to the provided Terms of Reference
- ITC Clause 3.10 Proposals must remain valid for **90 calendar days** after the submission date.
- ITC Clause 4.3 Consultants must submit an original and **one (1)** copy of each proposal. Submissions must be submitted in PDF version.
- ITC Clause 4.4 The address for submission of proposals is:

The WeMAST Project Manager: Mr Panduleni Hamukwaya
Email: panduleni.hamukwaya@sasscal.org
Tel: **+264 (0) 61 248 693**
- AND**
- The SASSCAL Contracts and Fundraising Officer: Mrs Chenai Marangwanda
Email: chenai.marangwanda@sasscal.org
Tel: **+264 (0) 61 248 693**
- Heading of email should be: We MAST Consultancy Services to develop Earth Observation Services and Enhance the Geoportal for the We MAST Project.**
Procurement Number: 01/AU/GMES/SASSCAL/QCBS/2020
- ITC Clause 4.5 Proposals must be submitted no later than *17h00* hours on *2nd October 2020*.
- ITC Clause 5.1 The address for communications to the Client is:

The WeMAST Project Manager: Mr Panduleni Hamukwaya
Email: panduleni.hamukwaya@sasscal.org
Tel: **+264 (0) 61 248 693**
- AND**
- The SASSCAL Contracts and Fundraising Officer: Mrs Chenai Marangwanda
Email: chenai.marangwanda@sasscal.org
Tel: **+264 (0) 61 248 693**
- ITC Clause 5.3 The number of points to be given under each of the technical evaluation criteria are:

Points

(i) **Specific experience of the consultants related to the assignment [10]**

Background information of the consultant: Profile and examples of similar work carried out and capability and capacity of the consultant to undertake the assignment.

(ii) **Adequacy of the proposed work plan and methodology in responding to the Terms of Reference [50]**

Demonstration of the understanding of the work: Proposed methodology and approach on how to undertake the assignment. A clear work plan of activities.

(iii) **Qualifications and competence of the key staff for the Assignment [40]**

Competency and experience: Qualifications and expertise of consultants, years of relevant experience and at least three (3) references from contactable referees on similar work previously undertaken. Personal CV of team members must be included with clear identification of the Team Leader.

Total Points: 100

The minimum technical score required to pass is: 70 points.

ITC Clause 5.7 The single currency for price conversions is: **EURO (EUR)**

The date of exchange rates is submission date indicated in ITC4.5.

ITC Clause 5.8 The formula for determining the financial scores is: $S_f = 100 \times F_m/F$
Where S_f is the financial score, F_m is the lowest price and F the price of the proposal under consideration.

The weights given to the technical and Financial Proposals are:
Technical = 70% and
Financial = 30%

ITC Clause 7.2 The assignment is expected to commence on: **As soon as the process has been finalized.**

SECTION 4. TECHNICAL PROPOSAL - STANDARD FORMS

- 4A. Technical Proposal submission form.
- 4B. Firm's references.
- 4C. Comments and suggestions of consultants on the Terms of Reference and on data, services, and facilities to be provided by the Client.
- 4D. Description of the methodology and work plan for performing the assignment.
- 4E. Team composition and task assignments.
- 4F. Format of curriculum vitae (CV) for proposed professional staff.
- 4G. Time schedule for professional personnel.
- 4H. Activity (work) schedule.

4A. TECHNICAL PROPOSAL SUBMISSION FORM

{*Location, Date*}

To: {*Name and address of Client*}

Sir / Madam:

We, the undersigned, offer to provide the consulting services for {*Title of consulting services and Procurement Number*} in accordance with your Request for Proposals dated {*Date*} and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial⁶ Proposal sealed under a separate envelope.

We declare that we have no conflict of interest as defined by Section 1.7 of the Information to Consultants in relationship to performance of this assignment.

If negotiations are held during the period of validity of the Proposal, i.e., before {*Date*} we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorised Signature:
Name and Title of Signatory:
Name of Firm:
Address:

⁶ In Quality-Based Selection, the proposal may include only a Technical Proposal. If this is the case, delete “and a Financial Proposal sealed under a separate envelope.”

4B. FIRM'S REFERENCES

Relevant Services Carried Out in the Last Five Years That Best Illustrate Qualifications

Using the format below, provide information on each assignment for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

Assignment Name:		Country:
Location within Country:		Professional Staff Provided by Your Firm/Entity(profiles):
Name of Client:		No. of Staff:
Address:		No. of Staff-Months; Duration of Assignment:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current EUR):
Name of Associated Consultants, If Any:		No. of Months of Professional Staff Provided by associated Consultants:
Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:		
Narrative Description of Project:		
Description of Actual Services Provided by Your Staff:		

Firm's Name: _____

4C. COMMENTS AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE AND ON DATA, SERVICES, AND FACILITIES TO BE PROVIDED BY THE CLIENT

On the Terms of Reference:

- 1.
- 2.
- 3.
- 4.
- 5.

On the data, services, and facilities to be provided by the Client:

- 1.
- 2.
- 3.
- 4.
- 5.

**4D. DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR
PERFORMING THE ASSIGNMENT**

4E. TEAM COMPOSITION AND TASK ASSIGNMENTS

1. Technical/Managerial Staff		
Name	Position	Task

2. Support Staff		
Name	Position	Task

4F. FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position: _____

Name of Firm: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____

Years with Firm/Entity: _____ Nationality: _____

Membership in Professional Societies: _____

Detailed Tasks Assigned: _____

Key Qualifications:

{Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use about half a page.}

Education:

{Summarize college/university and other specialized education of staff member, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.}

Languages:

{For each language indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.}

Employment Record:

{Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages. }

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

_____ Date: _____
{Signature of staff member and authorized representative of the firm} Day/Month/Year

Full name of staff member: _____

Full name of authorised representative: _____

4G. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL

Name	Position	Reports Due/Activities	Months (in the Form of a Bar Chart)												Number of Months		
			1	2	3	4	5	6	7	8	9	10	11	12			
																Subtotal (1)	
																	Subtotal (2)
																	Subtotal (3)
																	Subtotal (4)

Full-time: {key} Part-time: {key}

Reports Due: {key}

Activities Duration: {key}

Signature: _____

{ Authorised representative }

Full Name: _____

Title: _____

Address: _____

4H. ACTIVITY (WORK) SCHEDULE

A. Field Investigation and Study Items

	<i>[1st, 2nd, etc. are months from the start of assignment.]</i>												
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Activity (Work)													

B. Completion and Submission of Reports

Reports	Date
1. Inception Report	
2. Interim Report (a) First Status Report (b) Second Status Report	
3. Draft Final Report	
4. Final Report	

Section 5. Financial Proposal - Standard Forms

- 5A. Financial Proposal submission form.
- 5B. Summary of costs.
- 5C. Breakdown of price per activity.
- 5D. Breakdown of remuneration per activity.
- 5E. Reimbursables per activity.
- 5F. Miscellaneous expenses.

5A. FINANCIAL PROPOSAL SUBMISSION FORM

{Date}

To: {Name and address of Client}

Sir / Madam:

We, the undersigned, offer to provide the consulting services for {Title of consulting services and Procurement Number} in accordance with your Request for Proposals dated {Date} and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of {Amount in words and figures}. This amount is exclusive of the local taxes which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e., {Date}.

Commissions and gratuities, if any, paid or to be paid by us to agents relating to this Proposal and Contract execution, if we are awarded the Contract, are listed below:

Name and Address of Agents	Amount and Currency	Purpose of Commission or Gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorised Signature:
Name and Title of Signatory:
Name of Firm:
Address:

5B. SUMMARY OF COSTS

Cost Elements	Currency(ies) ⁷	Amount(s)
<p>Total Amount of Financial Proposal</p>		<hr/>

⁷ Maximum of three currencies in addition to the Currency of the Country specified for performance of the Services.

5C. BREAKDOWN OF PRICE PER ACTIVITY

Activity No.: _____

Description: _____

Price Component	Currency(ies)	Amount(s)
Remuneration		
Reimbursables		
Miscellaneous Expenses		
Subtotal		_____

5D. BREAKDOWN OF REMUNERATION PER ACTIVITY

Activity No. _____

Activity Name: _____

Names	Position	Input ⁸	Remuneration Currency(ies) Rate	Amount
Regular staff				
Local staff				
Consultants				
Grand Total				_____

⁸ Staff months, days, or hours as appropriate.

5E. REIMBURSABLES PER ACTIVITY

Activity No: _____

Name of Activity: _____

Item No.	Description	Unit	Quantity	Currency	Unit Price	Total Amount
1.	International flights	Trip				
2.	Miscellaneous travel expenses	Trip				
3.	Subsistence allowance	Day				
4.	Local transportation costs ⁹					
5.	Office rent/accommodation/ clerical assistance					
	Grand Total					_____

⁹ Local transportation costs are not included if local transportation is being made available by the Client. Similarly, in the project site, office rent/accommodations/clerical assistance costs are not to be included if being made available by the Client.

5F. MISCELLANEOUS EXPENSES

Activity No. _____

Activity Name: _____

Item No.	Description	Unit	Quantity	Currency	Unit Price	Total Amount
1.	Communication costs between _____ and _____					
2.	Drafting, reproduction of reports					
3.	Equipment: vehicles, computers, photocopiers, etc.					
4.	Software					
5.	Other (specify)					
	Grand Total					_____

SECTION 6. TERMS OF REFERENCE

6.1. BACKGROUND

Wetlands in southern Africa are undergoing both natural and human-induced pressure which, if not managed sustainably, can negatively impact their importance for ecosystem biodiversity, their cultural significance, and their socioeconomic value. The WeMAST initiative aims to implement interventions that promote the use of satellite-based Earth observation (EO) data to inform wetland-related policy and decision making, and support practitioners in the sustainable management of wetlands in the SADC region. WeMAST (Wetland Monitoring and Assessment Service for Transboundary Basins in southern Africa) is funded through the GMES and Africa Support Programme of the European Union Commission and African Union Commission.

WeMAST is implementing a wetland monitoring and assessment information-service platform (WeMAST platform) to support initiatives for sustainable wetland management in the four transboundary river basins of southern Africa, including the Zambezi, Okavango, Limpopo and the Cuvelai river basins. Leveraging latest open source technologies, the platform provides information to monitor and assess changes in hydrological conditions, biodiversity, and socio-economic activities within and around wetlands. Furthermore, the platform effectively supports monitoring the extent of wetland degradation and succession and therefore complement existing initiatives in wetland-related policy and decision-making to ensure sustainable management of wetlands in the SADC region. Target users include but are not limited to basin commissions, water authorities, environmental management agencies and the general public.

This terms of reference (ToR) document provides details of the technical support required from private sector through consultancy services to enhance the functionality of the WeMAST platform.

6.2. OBJECTIVES

SASSCAL seeks consultancy services from the private sector to contribute to two interrelated activities:

- Design and development of the wetlands monitoring and assessment service (WeMAST Service), and
- Design, development, and enhancement of the WeMAST platform for deriving, analysing, exploring and visualising EO products, (such as land use/cover change, vegetation cover, water quality, soil moisture, rainfall, temperature and burnt area (fire),) to provide geospatial intelligence and information for monitoring and assessing wetlands in southern Africa.

6.3. SCOPE OF WORK

Embracing agile project management, the following work packages representing the WeMAST service and modules of the platform will be implemented:

This section is the same as the one below it

SUMMARY OF ACTIVITIES BY WORK PACKAGES

Work Package 1: WeMAST service development

- Lead design session in consultation with the WeMAST consortium to ensure that the service is well defined. Define, and implement service workflows, algorithms, and models for EO data pre-processing, fusion, product derivation and service integration.
- Determine the geospatial intelligence and information needs required for wetlands monitoring and assessment, by processing and analysing EO data products such as land use/cover change, vegetation cover, water quality, soil moisture, rainfall, temperature and burnt area (fire) and derive procedures for integrating these into indicators for wetland monitoring and assessment.
- Define service workflows for determining wetland conditions (degrading/succession) over time based on derived wetland indicators, including indicators depicting human activities over time (land use).
- Update the WeMAST Service Development Plan as required during the service design process.
- The WeMAST service development geo-intel will serve as input towards the design and development of the service platform, more so for the WeMAST data processor module, below.

Work Package 2: WeMAST Spatial Database

- Lead the conceptual and logical database model design in consultation with WeMAST technical team and document the output (thematic areas, entities, attributes, metadata standards, coordinate system, considering linkages with the SASSCAL Data and Information Portal for storage of metadata and sharing of spatial datasets)
- Define, document, test and implement the physical database model based on the Open Data Cube (ODC) platform and ensure seamless integration with other modules (*WeMAST data processor* and *WeMAST geoportal*)

Work Package 3: WeMAST Data Processor

Using the Open Data Cube (preferred) or similar software, design, develop, test, and implement:

- ingestion algorithms for the identified satellite-derived products
- processing (including clipping) and classification algorithms for the ingested products to produce visualization-ready products for storage into the WeMAST data cube (cater for both raster, vector, and tabular data)
- a web-based portal for performing the ingestion, processing, classification, and storage of results into the WeMAST spatial database; automate the processes; and integrate with and serve the requests from the WeMAST geoportal to analyze and visualize data on the fly (*WeMAST data processor* serving a role of a controller in the MVC design pattern)

Work Package 4: WeMAST Geoportal – Map View

The geoportal will contain two main sub-modules: The Map View and the Dashboard View. The Map View will provide the full functionality of the geoportal to visualise and present maps and statistical data about selected layers or indicators. It will also provide functionality for technical users allowing them to download or upload data products and benefit from the built-in analysis and visualisation of the geoportal. The Map View will prioritise displaying the map while providing charts that are can be displayed or hidden from the view.

Improve the geoportal Map View design with an interactive map view, translucent search and collapsible filter panels, and rich user-interaction features:

- to handle actions originating from map, search or filter panel
- introduce slider panels (time-based, and layer based) for product comparison
- introduce collapsible chart/graph panels to portray statistics available for product

Design and implement functionality to optimize the use of UX design aspects above to allow the user to select an area of interest, such as a basin, sub-catchment area, reference wetland, or custom area and:

- View associated metadata and summary information about the selected AOI
- View one or more mapping products by thematic area, and compare through the map or charts (including timelines), e.g. temperature or SPI indicators

Work Package 5: WeMAST Geoportal – Dashboard View

The Dashboard View will prioritise displaying statistics and descriptive information over displaying the map and will make available comparative statistical and mapping information for predefined indicators to support monitoring and assessing wetland conditions at basin scale or wetland scale.

To support decision-making with geo-intelligence, design, develop and implement:

- visualisation of land use land cover changes over time - using product or time sliders
- charts and maps for the various product indicators to provide information such as:
 - area, number, and distribution of agricultural land in use for crop farming, horticulture, and gardening (LULC crops).
 - timeseries, historical to current situation analyses of rainfall, temperature, and soil moisture patterns, wetland inventories including water extent layers
 - area and frequency of fire occurrences
 - mapping and indicator statistics for vegetation cover changes contributed by agriculture (livestock) citing overgrazing or change in species composition
 - impact of human activities such as construction, pollution, deforestation, sand mining, etc., impact changes in land cover, siltation, and land clearing
 - the extent of wetland infringement by development activities around wetlands
 - invasive species over time and wetland status over time

Supplementary Requirements and Overarching Activities

- Develop an activity implementation plan with timelines
- Design, develop and implement user administration and data management module for the platform
- Implement features to save and download summarized information and maps in various formats, e.g. PNG, PDF, CSV, etc.
- Implement functionality to provide an introductory tour for the two user-facing modules for quick user orientation purposes
- Conduct integrated acceptance testing for all modules developed

- Conduct user feedback collection and validation of datasets of derived products to ensure quality deliverables
- Hand over developed platform including functional source code, deployment guide, and user guide
- Provide a technical training to the SASSCAL development team
- Coordinating and communicating effectively with SASSCAL and the WeMAST consortium
- Implementing an agile software development approach and routinely hold regular consultative meetings with SASSCAL and the WeMAST consortium, mainly the technical team, to detail the functional requirements for each task identified above as the functionalities are being implemented.
- Ensure usability of geoportal on commonly used web browsers (Chrome, Edge, Fire Fox, Safari) and on tablets and smart phones.
- Recommend better, or build upon technologies currently in use to develop the geoportal (Ext JS, GeoExt, Bootstrap, PostgreSQL, PostGIS, GeoServer, OpenLayers, D3, PHP, JavaScript, etc.)

6.4. DURATION OF CONTRACT

The assignment is scheduled for a period of four (4) months from October 15, 2020 to January 15, 2021.

6.5. INSTITUTIONAL ARRANGEMENT AND QUALITY ASSURANCE

SASSCAL will provide technical support and oversight to the Consultancy. Quality assurance will be provided by a Technical Group drawn from members of the WeMAST consortium.

6.6. QUALIFICATIONS AND EXPERIENCE

The consultancy should be African owned. The consultant is required to indicate the proposed team composition to be able to successfully complete the assignment. The team will have to demonstrate to what extent its team lead and members are meeting the qualifications and experience below.

6.6.1. Legal Entity and Capacity

- Be a registered Consultancy and offering products and services on earth observation/geospatial applied to environment, agriculture, wetlands, etc. The applicant will have to provide the relevant legal documents proving that the Consultancy(s) is/are legally registered in Africa.
- The Consultancy(s) should be owned by an African citizen (proven by the citizenship legal document of the owner)
- The consultancy should be tax compliant and up to date.
- The Consultancy(s) should have at least five (5) employees and should demonstrate the availability of five (5) full-time employees, including the Project lead for this work.

6.6.2. Team Lead

To manage the activity from the consultancy's side and serve as the main technical focal point during the implementation of the assignment. To ensure coordinated communication with the WeMAST consortium and ensure quality deliverables. The Team Lead must be an African expert with the following educational background and experience. Proof of citizenship may be required.

Academic Qualification:

- A Ph.D. degree in Environmental Sciences and Management and related field including remote sensing, geospatial, geomatics, earth observation, cartography, geographic Information System (GIS) with a minimum of ten (10) years of experience. OR
- A Master's degree in geomatics, remote sensing, earth observation, cartography, or geographic Information System (GIS) and related field, applied to environment, wetlands, hydrology, agriculture, agrometeorology with a minimum of fifteen (15) years of experience.

Relevant Experience:

- Ten (10) years of experience in managing earth observation/geospatial projects, including sustainable wetlands assessment and monitoring, protected area and wildlife data management, agrometeorological indicators development, and promoting data governance (data policy, standards and guidelines, and environmental best management practices).
- Ten (10) years of experience in developing wetland-related indices in an integrated and unified manner using various data sources, including land use/land cover, raw satellite imagery, vegetation indices, agrometeorological indicators, flood events, wetlands inventory, water extent, soil moisture, rainfall, and/or burnt area (fire) indices.
- Five (5) years of experience in designing, developing and implementing dynamic geodatabases and integrated online information-service platforms capable of cost-effectively and timely capturing and updating earth observation georeferenced information.
- Experience in undertaking and or leading at least five (5) similar assignments specifically in the fields of earth observation and/or geospatial and allied technologies applied to wetlands trend indicators, protected areas, agricultural lands management, flood monitoring and assessment services, and other natural resources management.
- Excellent interpersonal skills, quick drafting, editing, and reporting skills, planning and organizational skills, analytical skill.
- Ability to work in a multi-cultural environment and ability to work under pressure and with a short time notice
- Fluent in English. German and Portuguese are an added advantage.

6.6.3. Technical and IT Team

The Team Lead will be supported by a technical team of both subject matter experts and software developers. The technical team composition must be based on the following minimum skills and expertise:

- Bachelor's degrees in and demonstrated proficiency in the following fields: integrated water resources management, biodiversity conservation, ecosystem service, spatial

analysis, Web-GIS, remote sensing, and/or geospatial Information technology (Geo-IT), data science, computer science and/or software engineering.

- Strong knowledge of the hydrology of wetlands.
- Proven expertise in spatial database development and web-application development in remote sensing
- Demonstrated knowledge and expertise in open source technologies: Bootstrap, PostgreSQL, PostGIS, GeoServer/MapServer, OpenLayers, D3, PHP, Python, JavaScript, Ext JS, GeoExt, GeoDjango, mapbox, or similar technologies.
- Proven experience in developing dashboards to support decision-making at policy and grass-roots level.
- Proven quality of service, technical documentation skills, and capacity development experience.
- Fluent in English, excellent communication skills, both verbal and written.

6.7. DELIVERABLES AND PAYMENT SCHEDULE

As a minimum, the following services, tools, reports and documents will be required as part of the assignment work to be completed:

- At least 4 Wetlands services develop, fully functional and automated
- Plan
- WeMAST service development report
- Functional and quality assured WeMAST platform modules:
 - a. WeMAST spatial database
 - b. WeMAST data processor
 - c. WeMAST geoportal map view
 - d. WeMAST geoportal dashboard view
- Service integrated and acceptance testing report
- Service and platform validation reports
- WeMAST platform integrated and acceptance testing report
- Monthly Activity Report

The consultant is required to provide a table of milestones, deliverables and proposed payments schedule that will be used to assess progress on activity implementation, quality, and timeliness of the consultancy service as well as guide the payment schedule. The table below may be used:

Derivable Reports	Description of deliverables	Timeline	Payment Schedule (as % of the fees)

6.8. DUTY STATION

The consultancy will be managed from SASSCAL Regional Secretariat (RS) based in Windhoek, Namibia. However, the consultancy firm team will be home based and will regularly consult and communicate with the SASSCAL RS via online meetings.

6.9. EVALUATION OF PROPOSALS

The Consultant will be evaluated based on the Technical and Financial criteria as indicated below:

6.9.1. Technical Proposal

- i. Background information of the consultant: Profile and examples of similar work carried out and capability and capacity of the consultant to undertake the assignment.
- ii. Competency and experience: Qualifications and expertise of consultants, years of relevant experience and at least three (3) references from contactable referees on similar work previously undertaken. Personal CV of team members must be included with clear identification of the Team Leader.
- iii. Demonstration of the understanding of the work: Proposed methodology and approach on how to undertake the assignment.
- iv. A clear work plan of activities.

6.9.2. Financial Proposal

- a) Financial proposal should be submitted detailing total number of days to complete work and daily rates inclusive of all anticipated costs in EUR during the period of assignment.

6.9.3. Scoring Methodology

The Consultant will be scored based on the following methodology:

- a) Technical Criteria weight: **70%** (only applications meeting minimum of 70% of technical evaluation shall be considered for the financial evaluation); and
- b) Financial Criteria weight: **30%**.

Contract awarding shall be made to the Consultant whose offer has received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the Terms of Reference.

6.10. SUBMISSION OF PROPOSALS

Friday 2nd October 2020 by 17h00 **hours (Namibian Time Zone)**

All interested consultants should visit the SASSCAL website and submit a Technical and Financial proposal online by 17h00(Namibia Time Zone) on Friday ,2nd October 2020. The submissions should include:

- a) Lead Person with contact details (telephone, e-mail address, office physical address);
- b) Short cover letter outlining the suitability of the Consultant for this assignment.
- c) A full technical proposal with detailed methodology, deliverables, and timelines.
- d) A detailed financial proposal in EURO (submitted separately from the technical proposal: bids which do not separate technical and financial proposals will be disqualified)
- e) CV and Summary of qualifications and experience for the consultants, categorising the Lead Consultant and supporting consultants clearly outlining respective roles in the consultancy.

Section 6. Terms of Reference

- f) Certified copies of academic certificates for all the team members.
- g) List of at least three (3) similar projects/assignment conducted by each Consultant over the last 5 years.
- h) Registration documents which include a certificate of incorporation, share certificates (list of Directors) and the latest Tax Clearance certificate (if it is a company); and
- i) Three (3) references from clients which similar work was conducted for over the last five (5) years.

Already stated in the sections above

SECTION 7. STANDARD FORM OF CONTRACT