

## REQUEST FOR PROPOSAL

**Issued on: 22 September 2025** 

# REQUEST FOR PROPOSAL FOR BATHYMETRIC SURVEYING AND SALINITY DISPERSION MODELLING ASSESSMENT OF PROPOSED SWRO DESALINATION SITES AT LÜDERITZ, NAMIBIA

#### PROCUREMENT NO: SC/RP/NW-011/2026

| CLIENT               | NAMIBIA WATER CORP | ORATION (NAMWATER) |
|----------------------|--------------------|--------------------|
| NAME OF BIDDER       |                    |                    |
| CONTACT PERSON       |                    |                    |
| E-MAIL ADDRESS       |                    |                    |
| POSTAL ADDRESS       |                    |                    |
| CONTACT PHONE NUMBER | WORK:              | MOBILE:            |

**Documents must be posted / delivered to:** 

#### The Quotation/Bid Box

Att: Procurement Management Unit (E-mail: bids@namwater.com.na)

Namibia Water Corporation Ltd.

Private Bag 13389

176 Iscor Street, Aigams Building

Windhoek

Closing Date: Tuesday, 04 November 2025 at 11h00
Pr-bid meeting: 8 October 2025 at 09h00 via Microsoft Teams (<u>Join the meeting now</u>)
NO LATE BIDS WILL BE ACCEPTED!

| T . | ٠ | . • |   |   |  |  |  |  |  |
|-----|---|-----|---|---|--|--|--|--|--|
| In  | 1 | t1  | а | S |  |  |  |  |  |

## **NOTICE TO BIDDERS**

□ Please take note of initializing all pages of the standard bidding document and initial all the supporting documents including company profiles, brochures, etc.
□ Take note to sign all relevant pages as stipulated in the biddingstandard document.
□ Copies of documents not certified by a Commissioner of Oath appointed in terms of the Justices of the Peace and Commissioners of Oaths Act.1963 (Act No. 16 of 1963) will not be accepted

#### **Table of Contents**

| PrefacePreface   |    |
|--|----|
| Section 1. Letter of Invitation  | 1  |
| Section 2. Instructions to Consultants   | 2  |
| Instructions to Consultants – Data Sheet   | 23 |
| Section 3. Technical Proposal - Standard Forms                                   | 29 |
| Section 4. Financial Proposal - Standard Forms                                   | 44 |
| Section 5. Terms of Reference  | 55 |
| Section 6. Sample Contract for Consulting Services - Small Assignment – Lump sum | 27 |

#### Section 1. Letter of Invitation

Procurement Reference No: SC/RP/NW-011/2026

Date: 22 September 2025

#### Dear Bidder

- 1. Namibia Water Corporation Ltd (NamWater) invites proposals to provide the following consulting services: Request for Proposal for bathymetric surveying and salinity dispersion modelling assessment of proposed SWRO desalination sites at lÜderitz, Namibia. More details on the services are provided in the Terms of Reference.
- 2. This Request for Proposal (RFP) bid is open to all Consultants in Line with Section 35 (2) of the Public Procurement Act, Act 15, 2015, as amended.
- 3. A firm will be selected under Quality and Cost-Based Selection and procedures described in this RFP, in accordance with the policies and procedures for public procurement in the Republic of Namibia.
- 4. The RFP includes the following documents:
  - Section 1 Letter of Invitation
  - Section 2 Instructions to Consultants (including Data Sheet)
  - Section 3 Technical Proposal Standard Forms
  - Section 4 Financial Proposal Standard Forms
  - Section 5 Terms of Reference
  - Section 6 Standard Form of Contract
- 5. Please inform us in writing at the following address: (Procurement Management Unit, email: bids@namwater.com.na), upon receipt:
  - (a) that you received the Letter of Invitation; and
  - (b) whether you will submit a proposal alone or in association.

| Yours sincerely,            |
|-----------------------------|
| Procurement Management Unit |
| (PMU)                       |

### **Section 2. Instructions to Consultants**

| Definitions  | 3                  |
|--|--------------------|
| 1 Introduction   | 4                  |
| Conflict of Interest   | 9                  |
| Fraud and Corruption   | 7                  |
| Eligibility  | 8                  |
| Eligibility of Sub-Consultants                                       | 9                  |
| Origin of Goods and Consulting Services                              | 9                  |
| Only one Proposal  | 9                  |
| Proposal Validity  | 9                  |
| 2 Clarification and Amendment of RFP Documents                       | 10                 |
| 3 Preparation of Proposals Error! Book                               | xmark not defined. |
| Technical Proposal Format and Content                                | 13                 |
| Financial Proposals  | 16                 |
| Taxes  | 16                 |
| 4 Submission, Receipt, and Opening of Proposals                      | 16                 |
| 5 Proposal Evaluation  | 18                 |
| Evaluation of Technical Proposals                                    | 18                 |
| Financial Proposals for QBS  | 18                 |
| Public Opening and Evaluation of Financial Proposals (only for QCBS, | FBS, and LCS) 18   |
| 6 Negotiations   | 19                 |
| Technical negotiations   | 20                 |
| Financial negotiations   | 20                 |
| Availability of Professional staff/experts                           | 20                 |
| Conclusion of the negotiations                                       | 21                 |
| 7 Award of Contract  | 21                 |
| 8 Confidentiality  | 22                 |
| 9 Debriefing   | 20                 |

#### Instructions to Consultants

[This section 'Instructions to Consultants' shall not be modified. Any necessary changes acceptable to the Public Entity to address any specific project issues, shall be introduced only through the **Data Sheet** (e.g., by adding new reference paragraphs)]

#### **Definitions**

- (a) "Client" means the Public Entity with which the selected Consultant signs the Contract for the Services.
- (b) "Consultant" means any entity or person that may provide or provides the Services to the Client under the Contract.
- (c) "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause 1 that is the General Conditions (GC), the Special Conditions (SC), and the Appendices.
- (d) "**Data Sheet**" means such part of the Instructions to Consultants used to reflect specific country and assignment conditions.
- (e) "Day" means calendar day.
- (f) "Government" means the government of the Republic of Namibia.
- (g) "Instructions to Consultants" (Section 2 of the RFP) means the document which provides shortlisted Consultants with all information needed to prepare their Proposals.
- (h) "LOI" (Section 1 of the RFP) means the Letter of Invitation being sent by the Client to the shortlisted Consultants.
- (i) "Personnel" means professionals and support staff provided by the Consultant or by any Sub-Consultant and assigned to perform the Services or any part thereof; "Foreign Personnel" means such professionals and support staff who at the time of being so provided had their domicile outside the Republic of Namibia; "Local Personnel" means such professionals and support staff who at the time of being so provided had their domicile in the Republic of Namibia.
- (j) "Proposal" means the Technical Proposal and the Financial Proposal.
- (k) "RFP" means the Request For Proposal to be prepared by the Client for the selection of Consultants.
- (l) "Services" means the work to be performed by the Consultant

pursuant to the Contract.

- (m) "Sub-Consultant" means any person or entity with whom the Consultant subcontracts any part of the Services.
- (n) "Terms of Reference" (TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.

#### 1. Introduction

- 1.1 The Client named in the **Data Sheet** will select a consulting firm/organization (the Consultant) from those listed in the Letter of Invitation, in accordance with the method of selection specified in the **Data Sheet**.
- 1.2 The shortlisted Consultants are invited to submit a Technical Proposal and a Financial Proposal, or a Technical Proposal only, as specified in the **Data Sheet**, for consulting services required for the assignment named in the **Data Sheet**. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Consultant.
- 1.3 Consultants should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Consultants are encouraged to visit the Client before submitting a proposal and to attend a preproposal conference if one is specified in the **Data Sheet**. Attending the pre-proposal conference is optional. Consultants should contact the Client's representative named in the **Data Sheet** to arrange for their visit or to obtain additional information on the pre-proposal conference. Consultants should ensure that these officials are advised of the visit in adequate time to allow them to make appropriate arrangements.
- 1.4 The Client will timely provide at no cost to the Consultants the inputs and facilities 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.
- 1.5 Consultants shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the

1.6

#### Consultants.

## Conflict of Interest

The Government of the Republic of Namibia requires that Consultants provide professional, objective, and impartial advice and at all times hold the client's interests paramount, strictly avoid conflicts with other assignments or their own corporate interests and act without any consideration for future work.

1.6.1 Without limitation on the generality of the foregoing, Consultants, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

## Conflicting activities

(i) A firm that has been engaged by the client to provide goods, works or services other than consulting services for a project, and any 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 any of its affiliates. shall be disqualified from subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation. For the purpose of this paragraph, services other than consulting services are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.

## Conflicting assignments

A Consultant (including its Personnel and Sub-(ii) Consultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant to be executed for the same or for another Client. For example, a Consultant hired engineering design prepare infrastructure project shall not be engaged to independent environmental prepare assessment for the same project, Consultant assisting a Client in the privatization of public assets shall not purchase, nor advise purchasers of. such assets. Similarly, a

## Conflicting relationships

Consultant hired to prepare Terms of Reference for an assignment should not be hired for the assignment in question.

- (iii) A Consultant (including its Personnel and Sub-Consultants) that has a business or family relationship with a member of the Client's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment, or (iii) supervision of the Contract, shall not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Client throughout the selection process and the execution of the Contract.
- 1.6.2 Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.
- 1.6.3 No agency or current employees of the Client shall work as Consultants under their own ministries, departments or agencies. Recruiting former government employees of the Client to work for their former ministries, departments or agencies is acceptable provided no conflict of interest exists. When the Consultant nominates any government employee as Personnel in their technical proposal, such Personnel must have written certification from their government or employer confirming that they are on leave without pay from their official position and allowed to work full-time outside of their previous official position. Such certification shall be provided to the Client by the Consultant as part of his technical proposal.

#### Unfair Advantage

1.6.4 If a shortlisted Consultant could derive a competitive advantage for having provided consulting services related to the assignment in question, the Client shall make available to all shortlisted Consultants together with this RFP all information that would in that respect give such Consultant any competitive advantage over competing Consultants.

## Fraud and Corruption

- 1.7 It is the policy of the Government of Namibia to require Public Entities, as well as consultants and their agents (whether declared or not), personnel, sub-contractors, sub-consultants, service providers and suppliers observe the highest standard of ethics during the selection and execution of contracts. In pursuance of this policy, the Client:
  - (a) defines, for the purposes of this provision, the terms set forth below as follows:
    - (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party<sup>2</sup>;
    - (ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation<sup>3</sup>;
    - (iii) "collusive practices" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party<sup>4</sup>;
    - (iv) "coercive practices" 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<sup>5</sup>;
    - (v) "obstructive practice" is
      - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede the Client investigation into allegations of a

\_

<sup>&</sup>lt;sup>1</sup> In this context, any action taken by a consultant or a sub-consultant to influence the selection process or contract execution for undue advantage is improper.

<sup>&</sup>lt;sup>2</sup> "Another party" refers to a public official acting in relation to the selection process or contract execution. In this context "public official" includes Public Entity staff and employees of other organizations taking or reviewing selection decisions.

<sup>&</sup>lt;sup>3</sup> A "party" refers to a public official; the terms "benefit" and "obligation" relate to the selection process or contract execution; and the "act or omission" is intended to influence the selection process or contract execution.

<sup>&</sup>lt;sup>4</sup> "Parties" refers to participants in the procurement or selection process (including public officials) attempting to establish contract prices at artificial, non competitive levels.

<sup>&</sup>lt;sup>5</sup> "Party" refers to a participant in the selection process or contract execution.

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, or

- (bb) acts intended to materially impede the exercise of the Client's inspection and audit rights provided for under paragraph 1.7.1 below.
- (b) will reject a proposal for award if it determines that the consultant 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 sanction a firm or an individual at any time, in accordance with prevailing procedures, including by publicly declaring such firm or individual ineligible for a stated period of time: (i) to be awarded a public contract, and (ii) to be a nominated sub-consultant<sup>b</sup>, sub-contractor, supplier, or service provider of an otherwise eligible firm being awarded a public contract.
  - 1.7.1. In further pursuance of this policy, Consultants shall permit the Client to inspect their accounts and records and other documents relating to the submission of proposals and contract performance, and to have them audited by auditors appointed by the Client.
  - 1.7.2 Consultants shall furnish information on commissions and gratuities, if any, paid or to be paid to agents relating to this proposal and during execution of the assignment if the Consultant is awarded the Contract, as requested in the Financial Proposal submission form (Section 4).

#### **Eligibility**

1.8

(a) A firm or individual that has been sanctioned by the Government of the Republic of Namibia in accordance with the above clause 1.7 shall be ineligible to be awarded a public contract, or benefit from a public contract during such period of time as determined by the Procurement Policy Unit.

<sup>&</sup>lt;sup>b</sup> A nominated sub-consultant, supplier, or service provider is one which either has been (i) included by the Consultant in its proposal because it brings specific and critical experience and know-how that are accounted for in the technical evaluation of the Consultant's proposal for the particular services; or (ii) appointed by the Client.

(b)A consultant that is under a declaration of ineligibility by the Government of Namibia in accordance with applicable laws at the date of the deadline for bid submission and thereafter shall be disqualified.

(c)Proposal from consultants appearing on the ineligibility lists of African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group and World Bank Group shall be rejected.

Links for checking the ineligibility lists are available on the Procurement Policy Unit's website: (www.mof.gov.na/procurement-policy-unit).

(d) Furthermore, the Consultants shall be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.

## **Eligibility of Sub-Consultants**

1.9

1.10

In case a shortlisted Consultant intends to associate with Consultants who have not been shortlisted and/or individual expert(s), such other Consultants and/or individual expert(s) shall be subject to the eligibility policy of the Client.

#### Origin of Goods and Consulting Services

Goods supplied and Consulting Services provided under the Contract may originate from any country except if:

- (i) as a matter of law or official regulation, the Republic of Namibia prohibits commercial relations with that country; or
- (ii) by an act of compliance with a decision of the United nations Security Council taken under Chapter VII of the Charter of the United Nations, the Republic of Namibia prohibits any imports of goods from that country or any payments to persons or entities in that country.

## Only one Proposal

1.11 Shortlisted Consultants shall submit only one proposal. If a Consultant submits or participates in more than one proposal, such proposals shall be disqualified. However, this does not limit the participation of the same Sub-Consultant, including individual experts, to only one proposal.

NB: Please note that your bids are free to propose to reduce the footprint survey area to have an appropriate trimmed budget befitting the scope

#### **Proposal**

1.12 The **Data Sheet** indicates how long Consultants' Proposals must remain valid after the submission date. During this

#### Validity

period, Consultants shall maintain the availability of Professional staff nominated in the Proposal. The Client will make its best effort to complete negotiations within this period. However, should the need arise, the Client may request Consultants to extend the validity period of their proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or, in their confirmation of extension of validity of the Proposal, Consultants could submit new staff in replacement, who would be considered in the final evaluation for contract award. Consultants who do not agree have the right to refuse to extend the validity of their Proposals.

## 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, or by standard electronic means to the Client's address indicated in the **Data Sheet**. The Client will respond in writing, or by standard electronic means and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Consultants. Should the Client deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure under para. 2.2.
- At any time before the submission of Proposals, the Client may amend the RFP by issuing an addendum in writing or by standard electronic means. The addendum shall be sent to all Consultants and will be binding on them. Consultants shall acknowledge receipt of all amendments. To give Consultants reasonable time in which to take an amendment into account in their Proposals the Client may, if the amendment is substantial, extend the deadline for the submission of Proposals.
- 3.2 In preparing their Proposal, Consultants are expected to examine in detail the documents comprising the RFP. 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:
  - If a shortlisted Consultant considers that it may (a) enhance its expertise for the assignment by associating with other Consultants in a joint venture or subconsultancy, it may associate with either (a) nonshortlisted Consultant(s), or (b) shortlisted Consultants if so indicated in the Data Sheet. A shortlisted Consultant must first obtain the approval of the Client if it wishes to enter into a joint venture with nonshortlisted or shortlisted Consultant(s). In case of association with non-shortlisted Consultant(s), the shortlisted Consultant shall act as association leader. In case of a joint venture, all partners shall be jointly and severally liable and shall indicate who will act as the leader of the joint venture.
  - (b) The estimated number of Professional staff-months or the budget for executing the assignment shall be shown in the **Data Sheet**, but not both. However, the Proposal shall be based on the number of Professional staffmonths or budget estimated by the Consultants.

For fixed-budget-based assignments, the available budget is given in the **Data Sheet**, and the Financial Proposal shall not exceed this budget, while the estimated number of Professional staff-months shall not be disclosed.

- (c) Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.
- (d) Documents to be issued by the Consultants as part of this assignment must be in English. It is desirable that the firm's Personnel have a working knowledge of English.

#### (e) Bid Security

- (i) The Bidder shall either furnish as part of its bid, a Bid Security or subscribe to a Bid Securing Declaration in the Bid Submission Form as specified in the BDS.
- (ii) The Bid Securing Declaration shall be in the form of a signed

subscription in the Bid Submission Form.

- (iii)The Bid Security shall be in the amount/percentage **specified in the BDS** and denominated in Namibian dollars, and shall:
  - (a) be issued by a commercial bank operating in Namibia.
  - (b) be substantially in accordance with the forms of Bid Security included in Section 3, Technical Proposal Standard Forms;
  - (c) be payable promptly upon written demand by the Purchaser in case the conditions listed in ITB Clause 3.3(e)(vi) are invoked;
  - (d) be submitted in its original form; copies will not be accepted;
  - (e) remain valid for a period of 30 days beyond the validity period of the bids, as extended, if applicable, in accordance with ITB Clause 1.12;
- (iv) Any bid not accompanied by an enforceable and substantially compliant Bid Security or not containing a subscription to a Bid Securing Declaration in the Bid Submission Form, if required, in accordance with ITB 3.4(h), shall be rejected by the Purchaser as nonresponsive.
- (v) The Bid Security of unsuccessful bidders shall be returned as promptly as possible upon the successful Bidder signing of contract.
- (vi)The Bid Security shall be forfeited or the Bid Securing Declaration executed:
  - (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Technical Proposal Submission Form; or
  - (b) if a Bidder refuses to accept a correction of an error appearing on the face of the Bid; or
  - (c) if the successful Bidder fails to: sign the Contract in accordance with ITB 6.5:
- (i) The Bid Security or Bid-Securing Declaration of a Joint Venture (JV) must be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid

Security or Bid-Securing Declaration shall be in the names of all future partners as named in the Technical Proposal Submission Form mentioned in Section 3 "Technical Proposal Standard Forms," when submitting in association.

- (ii) If a bid securing declaration is **required in the BDS**, and
  - (a) a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Technical Proposal Submission Form, except as provided in ITB 20.2;
  - (b) a Bidder refuses to accept a correction of an error appearing on the face of the Bid; or
  - (c) the successful Bidder fails to: sign the Contract in accordance with ITB 6.5;

the bidder may be disqualified by the Review Panel to be awarded a contract by any Public Entity for a period of time.

#### Technical Proposal Format and Content

3.4 Depending on the nature of the assignment, Consultants are required to submit a Full Technical Proposal (FTP), or a Simplified Technical Proposal (STP). The **Data Sheet** indicates the format of the Technical Proposal to be submitted. Submission of the wrong type of Technical Proposal will result in the Proposal being deemed non-responsive. The following mandatory documentary evidence is required to accompany the Technical Proposal;

- (i) have a valid company Registration Certificate; (certified by a Commissioner of Oath appointed in terms of the Justices of the Peace and Commissioners of Oaths Act.1963 (Act No. 16 of 1963). Applicable only to Namibian Registered Companies.
- (ii) have an original valid good Standing Tax Certificate; (certified by a Commissioner of Oath appointed in terms of the Justices of the Peace and Commissioners of Oaths Act.1963 (Act No. 16 of 1963). Applicable only to Namibian Registered Companies.
- (iii) have an original valid good Standing Social Security Certificate;
- (iv) have a valid certified copy of Affirmative Action Compliance Certificate, proof from Employment Equity Commissioner that bidder is not a relevant

- employer, or exemption issued in terms of Section 42 of the Affirmative Action Act, 1998; (certified by a Commissioner of Oath appointed in terms of the Justices of the Peace and Commissioners of Oaths Act.1963 (Act No. 16 of 1963). Applicable only to Namibian Registered Companies.
- (v) An undertaking on the part of the Bidder that the salaries and wages payable to its personnel in respect of this proposal are compliant to the relevant laws, Remuneration Order, and Award, where applicable and that it will abide to sub-clause 4.6 of the General conditions of Contract if it is awarded the contract or part thereof; and;
- (vi) Bid Securing Declaration.
  - The Technical Proposal shall provide the information indicated in the following paras from (a) to (g) using the attached Standard Forms (Section 3). Paragraph (c) (ii) indicates the recommended number of pages for the description of the approach, methodology and work plan of the STP. A page is considered to be one printed side of A4 or letter size paper.
- For the FTP only: a brief description of the (a) (i) Consultants' organization and an outline of recent experience of the Consultants and, in the case of joint venture, for each partner, on assignments of a similar nature is required in Form TECH-2 of Section 3. For each assignment, the outline should indicate the names of Sub-Consultants/ Professional staff who participated, duration of the assignment, contract amount, and Consultant's involvement. Information should be provided only for those assignments for which the Consultant was legally contracted by the Client as a corporation or as one of the major firms within a joint venture. Assignments completed by individual Professional staff working privately or through other consulting firms cannot be claimed as the experience of the Consultant, or that of the Consultant's associates, but can be claimed by the Professional staff themselves in their CVs. Consultants should be prepared to substantiate the claimed experience if so requested by the Client.
  - (ii) For the STP the above information is not required

and Form TECH-2 of Section 3 shall not be used.

- (b) (i) For the FTP only: comments and suggestions on the Terms of Reference including workable suggestions that could improve the quality/ effectiveness of the assignment; and on requirements for counterpart staff and facilities including: administrative support, office space, local transportation, equipment, data, etc. to be provided by the Client (Form TECH-3 of Section 3).
  - (ii) For the STP Form TECH-3 of Section 3 shall not be used; the above comments and suggestions, if any, should be incorporated into the description of the approach and methodology (refer to following subpara. 3.4 (c) (ii)).
- (c) (i) For the FTP, and STP: a description of the approach, methodology and work plan for performing the assignment covering the following subjects: technical approach and methodology, work plan, and organization and staffing schedule. Guidance on the content of this section of the Technical Proposals is provided under Form TECH-4 of Section 3. The work plan should be consistent with the Work Schedule (Form TECH-8 of Section 3) which will show in the form of a bar chart the timing proposed for each activity.
  - (ii) For the STP only: the description of the approach, methodology and work plan should normally consist of 10 pages, including charts, diagrams, and comments and suggestions, if any, on Terms of Reference and counterpart staff and facilities.
- (d) The list of the proposed Professional staff team by area of expertise, the position that would be assigned to each staff team member, and their tasks (Form TECH-5 of Section 3).
- (e) Estimates of the staff input (staff-months of foreign and local professionals) needed to carry out the assignment (Form TECH-7 of Section 3). The staff-months input should be indicated separately for home office and field activities, and for foreign and local Professional staff.
- (f) CVs of the Professional staff signed by the staff themselves or by the authorized representative of the

Professional Staff (Form TECH-6 of Section 3).

- (g) For the FTP only: a detailed description of the proposed methodology and staffing for training, if the **Data Sheet** specifies training as a specific component of the assignment.
- (h) the Bid Security or Bid-Securing Declaration, in accordance with ITB Clause 3.3(e), as specified in the **Data Sheet**:
- 3.5 The Technical Proposal shall **not** include any financial information. A Technical Proposal containing financial information may be declared non-responsive.

#### Financial Proposals

3.6 The Financial Proposal shall be prepared using the attached Standard Forms (Section 4). It shall list all costs associated with the assignment, including (a) remuneration for staff (foreign and local, in the field and at the Consultants' home office), and (b) reimbursable expenses indicated in the **Data Sheet**. If appropriate, these costs should be broken down by activity and, if appropriate, into foreign and local expenditures. All activities and items described in the Technical Proposal must be priced separately; activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.

#### **Taxes**

- 3.7 The Consultant, other than Namibian nationals, may be subject to local taxes (such as: value added tax, social charges or income taxes on non-resident Foreign Personnel, duties, fees, levies) on amounts payable by the Client under the Contract. The Client will state in the **Data Sheet** if the Consultant is subject to payment of any local taxes. Any such amounts shall not be included in the Financial Proposal as they will not be evaluated, but they will be discussed at contract negotiations, and applicable amounts will be included in the Contract.
- 3.8 Consultants, must express the price of their services in Namibia Dollars only.
- 3.9 Commissions and gratuities, if any, paid or to be paid by Consultants and related to the assignment will be listed in the Financial Proposal Form FIN-1 of Section 4.

#### 4. Submission, Receipt, and Opening of

4.1 The original proposal (Technical Proposal and, if required, Financial Proposal; see para. 1.2) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person who

#### **Proposals**

- signed the proposal must initial such corrections. Submission letters for both Technical and Financial Proposals should respectively be in the format of TECH-1 of Section 3, and FIN-1 of Section 4.
- 4.2 An authorized representative of the Consultants, **as specified in the Data Sheet** shall initial all pages of the original Technical and Financial Proposals. The signed Technical and Financial Proposals shall be marked "ORIGINAL".
- 4.3 The Technical Proposal shall be marked "ORIGINAL" or "COPY" as appropriate. The Technical Proposals shall be sent to the addresses referred to in para. 4.5 and in the number of copies indicated in the **Data Sheet**. All required copies of the Technical Proposal are to be made from the original. If there is any discrepancy between the original and the copies of the Technical Proposal, the original governs.
- The original and all copies of the Technical Proposal shall be 4.4 placed in a sealed envelope clearly marked "TECHNICAL PROPOSAL" Similarly, the original Financial Proposal (if required under the selection method indicated in the Data **Sheet**) shall be placed in a separate sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the Procurement reference number and the name of the assignment, and with a warning "Do Not Open With The Technical Proposal." The envelopes containing the Technical and Financial Proposals shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and reference number, and be clearly marked "DO NOT OPEN, EXCEPT IN PRESENCE OF THE OFFICIAL APPOINTED, BEFORE [04 NOVEMBER 2025 AT 11H00). The Client shall not be responsible for misplacement, loss or premature opening if the outer envelope is not sealed and/or marked as stipulated. This circumstance may be case for Proposal rejection. If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive.
- 4.5 The Proposals must be sent to the address/addresses indicated in the **Data Sheet** and received by the Client no later than the time and the date indicated in the **Data Sheet**, or any extension to this date in accordance with para. 2.2. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 4.6 The Client shall open the Technical Proposal immediately after

5.1

5.3

5.4

the deadline for their submission. The envelopes with the Financial Proposal shall remain sealed and securely stored.

## 5. Proposal Evaluation

From the time the Proposals are opened to the time the Contract is awarded, the Consultants should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Consultants to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Consultants' Proposal.

Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.

#### Evaluation of Technical Proposals

5.2 The Evaluation Committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in the **Data Sheet**. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP, and particularly the Terms of Reference or if it fails to achieve the minimum technical score indicated in the **Data Sheet**.

#### Financial Proposals for QBS

Following the ranking of technical Proposals, when selection is based on quality only (QBS), the first ranked Consultant is invited to negotiate its proposal and the Contract in accordance with the instructions given under para. 6 of these Instructions.

#### Public Opening and Evaluation of Financial Proposals (only for QCBS, FBS, and LCS)

After the technical evaluation is completed the Client shall inform the Consultants who have submitted proposals the technical scores obtained by their Technical Proposals, and shall notify those Consultants whose Proposals did not meet the minimum qualifying mark or were considered non responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify in writing Consultants that have secured the minimum qualifying mark, the date, time and location for opening the Financial Proposals. The opening date should allow Consultants sufficient time to make arrangements for attending the opening. Consultants' attendance at the opening of Financial Proposals is optional.

5.5 Financial Proposals shall be opened in the presence of the Consultants' representatives who choose to attend. The name of the consultants and the technical scores of the consultants shall be read aloud. The Financial Proposal of the Consultants

who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copy of the record shall be sent to all Consultants, upon request.

- The Client will correct any computational error. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the formers will prevail. In addition to the above corrections, as indicated under para. 3.6, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, no corrections are applied to the Financial Proposal in this respect. Prices shall be converted to Namibian Dollars using the selling rates of exchange issued by the Bank of Namibia, prevailing on the deadline for submission of proposals.
- 5.7 In case of QCBS, the lowest evaluated Financial Proposal (Fm) will be given the maximum financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be computed as indicated in the **Data Sheet**. Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) indicated in the **Data Sheet**: S = St x T% + Sf x P%. The firm achieving the highest combined technical and financial score will be invited for negotiations.
- 5.8 In the case of Fixed-Budget Selection, the Client will select the firm that submitted the highest ranked Technical Proposal within the budget. Proposals that exceed the indicated budget will be rejected. In the case of the Least-Cost Selection, the Client will select the lowest proposal among those that passed the minimum technical score. In both cases the evaluated proposal price according to para. 5.6 shall be considered, and the selected firm is invited for negotiations.

#### 6. Negotiations

6.1 Negotiations will be held on the date and at the address indicated in the **Data Sheet**. The invited Consultant will, as a pre-requisite for attendance at the negotiations, confirm availability of all Professional staff. Failure in satisfying such requirements may result in the Client proceeding to negotiate with the next-ranked Consultant. Representatives conducting negotiations on behalf of the Consultant must have written

6.2

6.3

6.4

authority to negotiate and conclude a Contract.

## Technical negotiations

Negotiations will include a discussion of the Technical Proposal, the proposed technical approach and methodology, work plan, and organization and staffing, and any suggestions made by the Consultant to improve the Terms of Reference. The Client and the Consultants will finalize the Terms of Reference, staffing schedule, work schedule, logistics, and reporting. These documents will then be incorporated in the Contract as "Description of Services". Special attention will be paid to clearly defining the inputs and facilities required from the Client to ensure satisfactory implementation of the assignment. The Client shall prepare minutes of negotiations which will be signed by the Client and the Consultant.

## Financial negotiations

If applicable, it is the responsibility of the Consultant, before starting financial negotiations, to contact the local tax authorities to determine the local tax amount to be paid by the Consultant under the Contract. The financial negotiations will include a clarification (if any) of the firm's tax liability in the Republic of Namibia, and the manner in which it will be reflected in the Contract; and will reflect the agreed technical modifications in the cost of the services. In case of Quality and Cost Based Selection, Fixed-Budget Selection, or the Least-Cost Selection methods, unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff nor other proposed unit rates. For other methods, Consultants will provide the Client with the information on remuneration rates described in the Appendix attached to Section 4 - Financial Proposal - Standard Forms of this RFP.

## Availability of Professional staff/experts

Having selected the Consultant on the basis of, among other things, an evaluation of proposed Professional staff, the Client expects to negotiate a Contract on the basis of the Professional staff named in the Proposal. Before contract negotiations, the Client will require assurances that the Professional staff 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 for reasons such as death or medical incapacity. If this is not the case and if it is established that Professional staff were offered in the proposal without confirming their availability, the Consultant may be disqualified. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate and shall be submitted by the Consultant within the period of time specified in the

letter of invitation to negotiate.

## Conclusion of the negotiations

6.5 Negotiations will conclude with a review of the draft Contract. To complete negotiations the Client and the Consultant will initial the Contract. If negotiations fail, the Client will invite the Consultant whose Proposal received the second highest score to negotiate a Contract.

## 7. Award of Contract

- 7.1 The Consultant whose bid attains the highest score, in accordance with the criteria and selection method set forth in the request for proposals, or the one with the least cost in the case of the Least Cost method of selection, shall be selected for award, subject to satisfactory conclusion of negotiation.
- 7.2 For contract above the prescribed threshold, the Client shall notify the selected Consultant of its intention to award the contract and shall simultaneously notify all other short listed consultants of its decision.
- 7.3 For contracts not exceeding the prescribed threshold, the client shall issue the Letter of Award.
- 7.4 In the absence of an application for review by any other consultant within 7 days of the notice under section 7.2, the contract shall be awarded to the selected Consultant
- 7.5 Within seven days from the issue of Letter of Award, the Client shall publish on the Public Procurement Portal (<a href="www.mof.gov.na/procurement-policy-unit">www.mof.gov.na/procurement-policy-unit</a>) and the Client's website, the results of the RFP process identifying the:
  - (i) name of the successful Consultant, and the price it offered, as well as the duration and summary scope of the assignment; and
  - (ii) an executive summary of the RFP Evaluation Report, for contracts above the prescribed threshold referred to in section 7.2.
- 7.6 After Contract signature, the Client shall return the unopened Financial Proposals to the unsuccessful Consultants.
- 7.7 The Consultant 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 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 publication of award. The undue use by any Consultant of

confidential information related to the process may result in the

- rejection of its Proposal and may be subject to the provisions of the Government's antifraud and corruption policy.
- 9. **Debriefing**9.1 The client shall promptly attend to all requests for debriefing for the contract made in writing, and within 7 days from the date the unsuccessful consultants are informed about the award.

## Instructions to Consultants – Data Sheet

| 1. Paragraph<br>Reference |  |
|---------------------------|--|
| 1.1                       | Name of the Client: Namibia Water Corporation Ltd (NamWater)   |
|                           | Method of selection: Quality and Cost-based Selection  |
|                           | Request for Proposals (RFP) in line with Section 35 of the Public Procurement Act, Act 15 of 2015, as amended.   |
| 1.2                       | Financial Proposal to be submitted together with Technical Proposal:  No  The bid should be submitted in one package containing two clearly marked separate envelopes: One with "Technical Proposal" and the other with "Financial Proposal". The Financial Proposal shall be sealed and no financial information shall be contained in the Technical Proposal. If financial information is included in the Technical Proposal, the Bid shall be rejected  Name of the assignment is:  Request for Proposal for bathymetric surveying and salinity dispersion modelling assessment of the proposed Sea Water Reverse |
| 1.3                       | Osmosis (SWRO) desalination site at Lüderitz, Namibia  A pre-proposal conference will be held: Yes, via Microsoft team (Join   |
|                           | the meeting now)   |
|                           | 8 October 2025 at 09h00 The Client's representative is: Puje Katjivena Address: 176 Iscor Street, Northern Industrial Telephone: +264 61 71 2288 Facsimile: +264 61 71 2097 E-mail: KatjivenaP@namwater.com.na   |
| 1.4                       | The Client will provide the following inputs and facilities: Access to site  |
| 1.6.1                     | The Client envisages the need for continuity for downstream work: No   |
| 1.14                      | Proposals must remain valid <b>120 days</b> after the submission date.   |
| 2.1                       | Clarifications may be requested not later than 14 days before the  |

|         | submission date.  |  |  |
|---------|---|--|--|
|         | The address for requesting clarifications is: Procurement Management Unit (PMU) Email: bids@namwater.com.na Tel: +264 (61) 712009   |  |  |
| 3.3 (a) | Shortlisted Consultants may associate with other shortlisted Consultants: $\underline{N/A}$   |  |  |
| 3.3 (b) | The estimated number of professional staff-months required for the assignment is: <b>4 months</b>   |  |  |
| 3.4     | The format of the Technical Proposal to be submitted is: Full Technical Proposal (FTP)  |  |  |
| 3.4 (g) | Training is a specific component of this assignment: No   |  |  |
| 3.4 (h) | Bid security <b>shall not</b> be required Bidders will be required to subscribe to a bid securing declaration.  |  |  |
| 3.6     | (1) a per diem allowance in respect of Personnel of the Consultant for every day in which the Personnel shall be absent from the home office and, as applicable, outside the Client's country for purposes of the Services; |  |  |
|         | (2) cost of necessary travel, including transportation of the Personnel by the most appropriate means of transport and the most direct practicable route;   |  |  |
|         | (3) cost of office accommodation, investigations and surveys;   |  |  |
|         | (4) cost of applicable international or local communications such as the use of telephone and facsimile required for the purpose of the Services;   |  |  |
|         | (5) cost, rental and freight of any instruments or equipment required to be provided by the Consultants for the purposes of the Services;   |  |  |
|         | (6) cost of printing and dispatching of the reports to be produced for the Services;  |  |  |
|         | (7) other allowances where applicable and provisional or fixed sums (if any); and   |  |  |
|         | (8) cost of such further items required for purposes of the Services not  |  |  |

|         | covered in the foregoing.  |
|---------|--|
| 3.7     | Amounts payable by the Client to the Consultant under the contract to be subject to local taxation: <b>Yes</b>   |
|         | If affirmative, the Client will  (a) reimburse the Consultant for any such direct taxes paid by the Consultant on its remunerations: <b>No</b>   |
|         | (b) pay such taxes on behalf of the Consultant: <b>No</b>  |
|         | (local Consultants will be subject to all taxes payable and should therefore submit their financial proposals inclusive of taxes.)   |
| 3.8     | Consultant to state local cost in the national currency: Yes   |
| 4.2     | (b)This authorization shall consist of written confirmation and shall be attached to the bid. It may include a delegation of power by resolution of the Board of a company or from the CEO, himself holding power from the Board or from a Director being a shareholder of a company or through a Power of Attorney. |
|         | The name and position held by each person signing the authorization must be typed or printed below the signature.  |
|         | Note: The power of Attorney or other written authorization to sign may be for a determined period or limited to a specific purpose   |
| 4.3     | Consultant must submit the 1 original and [2] copies of the Technical Proposal, and the original of the Financial Proposal.  |
| 4.5     | The Proposal submission address is: The Quotation/Bid box Att: Procurement Management Unit Namibia Water Corporation Ltd. Private Bag 13389 176 Iscor Street, Aigams Building  |
|         | Windhoek  Proposals must be submitted not later than the following date and time:  04 November 2025 at 11h00   |
| 5.2 (a) | Criteria, sub-criteria, and point system for the evaluation of Full Technical Proposals are:   |
|         | This checklist is designed to assist in the evaluation of bathymetric  |

survey service providers. Users can score each criterion (1–5) and provide remarks as needed **Evaluation Criteria** Weight (%) 5 1a. Ownership of and Company Experience. Years of establishment, indicating referenced similar reports and deliverables in the English language. Expert service providers only (No intermediaries). (> 10 years = 5points; 5-10 years = 3 points; less than 3 years= 0-3 points) 1b. Availability and ownership of Survey 10 **Equipment** a) multibeam, (2) b) singlebeam, (2) c) GNSS, (2) d)motion sensors (2) e) additional etc.) (2) 5 Adequacy of the proposed methodology and in responding to the Terms of Reference indicating technical approach and methodology, work plan, organisation and staffing of firm and of the project 2. Relevant certifications, Data Accuracy standards, and Compliance in use (e.g., IHO S-44) 5 3. Indicate existing Software & Data as well as 5 **Processing Capabilities** 4) Specific experience of the Consultants relevant to 10 the assignment, indicating experience on at least three similar projects (projects in the region give added advantage) a) above 3 projects (10) b) below 3 projects (5) 5. Key professionals/ Personnel, Qualifications & 15 Certifications, and competences for the

|     |  | ,               |
|-----|--|-----------------|
|     | assignment   |                 |
|     | a) Team Leader /field manager- Certified   |                 |
|     | Oceanographer, (IHO Cat A or B preferred); with  |                 |
|     | marine/coastal project experience and having   |                 |
|     | knowledge local Namibian sea environment is an   |                 |
|     | added advantage (5)  |                 |
|     | b) Salinity Dispersion expert/modeller (5)   |                 |
|     | c)Experienced hydrographers /surveyors, data   |                 |
|     | processors, and QA/QC staff /team to work with   |                 |
|     | single and double beam mounted sea vessels survey  |                 |
|     | and motion sensors equipment. (5)  |                 |
|     | 6. Company Safety (2.5) & Environmental (2.5)  | 5               |
|     | Compliance Measures and Personnel  |                 |
|     | 7. Quality Assurance / Quality Control (QA/QC)   | 7.5             |
|     | Procedures and Measures  |                 |
|     | 8. Indicate deliverables (charts, reports, digital   | 7.5             |
|     | models) all deliverables will be given to NamWater   |                 |
|     | 9. Give at least three Client References & Past  | 10              |
|     | Performance (Namibia, southern Africa, preferred)  |                 |
|     | 10. Project Timeline & Delivery Commitment (fully  | 10              |
|     | indicating mobilization, fieldwork, data delivery and  |                 |
|     | reports timelines)   |                 |
|     | 11. Local Namibian establishment (2.5) and after-  | 5               |
|     | survey support (2.5)   |                 |
|     | Technical sub total  | 100             |
|     | Total points for the criteria:   | 100             |
|     | The minimum technical score St required to pass is 70 l  | Points          |
| 5.7 | The formula for determining the financial scores is the [Insert either the following formula]  Sf = 100 x Fm / F, in which Sf is the financial score, Fr price and F the price of the proposal under consideratio [or insert another inversely proportional formula acceptional] | n is the lowest |
|     |  |                 |

|     | The weights given to the Technical and Financial Proposals are:  T = [weight: 0.7, and P = [weight: 0.3] |
|-----|--|
| 6.1 | Expected date and address for contract negotiations: To be communicated to the successful bidder         |
| 7.5 | Expected date for commencement of consulting services To be communicated to the successful bidder        |

#### **Section 3. Technical Proposal - Standard Forms**

[Comments in brackets [ ] provide guidance to the shortlisted Consultants for the preparation of their Technical Proposals; they should not appear on the Technical Proposals to be submitted.]

Refer to Reference Paragraph 3.4 of the Data Sheet for format of Technical Proposal to be submitted, and paragraph 3.4 of Section 2 of the RFP for Standard Forms required and number of pages recommended.

| Form TECH-1: Technical Proposal Submission Form  | 30 |
|--|----|
| Form TECH-2: Consultant's Organization and Experience  | 31 |
| A - Consultant's Organization  | 31 |
| B - Consultant's Experience  | 32 |
| Form TECH-3: Comments and Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be Provided by the Client | 33 |
| A - On the Terms of Reference  | 33 |
| B - On Counterpart Staff and Facilities  | 34 |
| Form TECH-4: Description of Approach, Methodology and Work Plan for Performing the Assignment  | 35 |
| Form TECH-5: Team Composition and Task Assignments   | 36 |
| Form TECH-6: Curriculum Vitae (CV) for Proposed Professional Staff   | 37 |
| Form TECH-7: Staffing Schedule <sup>1</sup>  | 39 |
| Form TECH-8 Work Schedule  | 40 |

#### Form TECH-1: Technical Proposal Submission Form

[Location, Date]

To: [Name and address of Client]

Dear Sir/Madam:

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope<sup>1</sup> (**Two envelope system**)

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Consultant]<sup>2</sup>

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in Paragraph Reference 1.14 of the Data Sheet, 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 undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in Paragraph Reference 7.5 of the Data Sheet.

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

We remain,

Yours sincerely,

| Authorized Signature [In full and initials]: |  |
|--|--|
| Name and Title of Signatory:                 |  |
| Name of Firm:                                |  |
| Address.                                     |  |

<sup>1 [</sup>In case Paragraph Reference 1.2 of the Data Sheet requires to submit a Technical Proposal only, replace this sentence with: "We are hereby submitting our Proposal, which includes this Technical Proposal only."]

<sup>2 [</sup>Delete in case no association is foreseen.]

## Form TECH-2: Consultant's Organization and Experience

#### A - Consultant's Organization

[Provide here a brief (around two pages) description of the background and organization of your firm/entity and each associate for this assignment.]

#### **B** - Consultant's Experience

[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under this assignment. Use around 20 pages.]

| Assignment name:   | Approx. value of the contract (in current Namibia Dollars equivalent):  |
|--|---|
| Country: Location within country:  | Duration of assignment (months):  |
| Name of Client:  | Total $N^{\underline{o}}$ of staff-months of the assignment:  |
| Address:   | Approx. value of the services provided by your firm under the contract (in current (in current Namibia Dollars equivalent):   |
| Start date (month/year): Completion date (month/year):                       | $N^{\underline{o}}$ of professional staff-months provided by associated Consultants:  |
| Name of associated Consultants, if any:                                      | Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader): |
| Narrative description of Project:  |   |
| Description of actual services provided by your staff within the assignment: |   |

Firm's Name:

### Form TECH-3: Comments and Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be Provided by the Client

#### A - On the Terms of Reference

[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activities you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]

# **B** - On Counterpart Staff and Facilities

[Comment here on counterpart staff and facilities to be provided by the Client according to Paragraph Reference 1.4 of the Data Sheet including: administrative support, office space, local transportation, equipment, data, etc.]

# Form TECH-4: Description of Approach, Methodology and Work Plan for Performing the Assignment

[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (about 50 pages, inclusive of charts and diagrams) divided into the following three chapters:

- a) Technical Approach and Methodology,
- b) Work Plan, and
- c) Organization and Staffing,
- a) <u>Technical Approach and Methodology.</u> In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.
- c) <u>Organization and Staffing.</u> In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.

# Form TECH-5: Team Composition and Task Assignments

| Name of Staff Eigen Against Took Assigned Took Assigned |      |                   |                   |               |  |  |  |  |
|---|------|-------------------|-------------------|---------------|--|--|--|--|
| Name of Staff   | Firm | Area of Expertise | Position Assigned | Task Assigned |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |
|   |      |                   |                   |               |  |  |  |  |

# Form TECH-6: Curriculum Vitae (CV) for Proposed Professional Staff

| 1.  | Proposed Position [only one candidate shall be nominated for each position]:  |    |
|-----|---|----|
| 2.  | Name of Firm [Insert name of firm proposing the staff]:   |    |
| 3.  | Name of Staff [Insert full name]:   | _  |
| 4.  | Date of Birth:Nationality:  |    |
| 5.  | <b>Education</b> [Indicate college/university and other specialized education of staff member, giving names institutions, degrees obtained, and dates of obtainment]:   |    |
| 6.  | Membership of Professional Associations:  | _  |
|     | Other Training [Indicate significant training since degrees under 5 - Education were obtained]:   | _  |
|     | Countries of Work Experience: [List countries where staff has worked in the last ten years]:  | _  |
| 9.  | Languages [For each language indicate proficiency: good, fair, or poor in speaking, reading, an writing]:   | nd |
| 10. | <b>Employment Record</b> [Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment name of employing organization, positions held.]: |    |
| Fro | m [Year]: To [Year]:  |    |
| Em  | ployer:   |    |
| Pos | itions held:  |    |

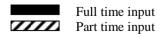
Full name of authorized representative:

| 11. Detailed Tasks Assigned                            | 12. Work Undertaken that Best Illustrates Capability to<br>Handle the Tasks Assigned  |
|--|---|
| [List all tasks to be performed under this assignment] | [Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]  Name of assignment or project:  Year:  Location:  Client:  Main project features:  Positions held: |
|  | Activities performed:   |
| describes myself, my qualific                          | to the best of my knowledge and belief, this CV correctly ations, and my experience. I understand that any wilful may lead to my disqualification or dismissal, if engaged.   |
| Signature of staff member or authori                   |   |

# Form TECH-7: Staffing Schedule<sup>1</sup>

| N° Name of Staff Staff Staff Staff Input (in the form of a bar chart) <sup>2</sup> Tot |               |                   |   |   |   |   | Total s | Total staff-month input |   |   |       |     |    |   |      |                    |       |
|--|---------------|-------------------|---|---|---|---|---------|-------------------------|---|---|-------|-----|----|---|------|--------------------|-------|
| IN.  | Name of Staff | 1                 | 2 | 3 | 4 | 5 | 6       | 7                       | 8 | 9 | 10    | 11  | 12 | n | Home | Field <sup>3</sup> | Total |
| Fore   | oreign        |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
| 1  |               | [Home]<br>[Field] |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
| 2  |               |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
| 3  |               |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
|  |               |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
| n  |               |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
|  |               |                   |   |   |   |   |         |                         |   |   | Subto | tal |    |   |      |                    |       |
| Loca   | l             |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
| 1  |               | [Home]<br>[Field] |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
| 2  |               |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
|  |               |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
| n  |               |                   |   |   |   |   |         |                         |   |   |       |     |    |   |      |                    |       |
|  |               |                   |   | 1 | I | I | 1       | 1                       | I | 1 | Subto | tal | I  | I |      |                    |       |
|  |               |                   |   |   |   |   |         |                         |   |   | Total |     |    |   |      |                    |       |

- 1 For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
- 2 Months are counted from the start of the assignment. For each staff indicate separately staff input for home and field work.
- 3 Field work means work carried out at a place other than the Consultant's home office.



# Form TECH-8 Work Schedule

| N° | Activity <sup>1</sup> | Months <sup>2</sup> |   |   |   |   |   |   |   |   |    |    |    |   |
|----|-----------------------|---------------------|---|---|---|---|---|---|---|---|----|----|----|---|
| 1  | Activity <sup>2</sup> | 1                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | n |
| 1  |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
| 2  |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
| 3  |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
| 4  |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
| 5  |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
|    |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |
| n  |                       |                     |   |   |   |   |   |   |   |   |    |    |    |   |

Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.

<sup>2</sup> Duration of activities shall be indicated in the form of a bar chart.

# Appendix to Bid Submission Form

# **BID SECURING DECLARATION**

(Section 45 of Act)

(Regulation 37(1)(b) and 37(5))

| <b>Date:</b> [Day/month/year]  |
|--|
| Procurement Ref No.:   |
| To:[insert complete name of Public Entity and address]   |
| I/We* understand that in terms of section 45 of the Act a public entity must include in the bidding document the requirement for a declaration as an alternative form of bid security. |
| I/We* accept that under section 45 of the Act, I/we* may be suspended or disqualified in the event of  |
| $(a) \qquad \text{a modification or withdrawal of a bid after the deadline for submission of bids during the period of validity;}$   |
| (b) refusal by a bidder to accept a correction of an error appearing on the face of a bid;   |
| (c) failure to sign a procurement contract in accordance with the terms and conditions set forth in the bidding document, should I/We $^*$ be successful bidder; or                    |
| (d) failure to provide security for the performance of the procurement contract if required to do so by the bidding document.  |
| $I/We^* \ understand \ this \ bid \ securing \ declaration \ ceases \ to \ be \ valid \ if \ I \ am/We \ are^* \ not \ the \ successful \ Bidder$                                      |
| Signed:  |
| Capacity of: [indicate legal capacity of person(s) signing the Bid Securing Declaration]   |
| Name:  |
| Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]   |
| Dated on day of,   |
| Corporate Seal (where appropriate) [Note*: In case of a joint venture, the bid securing declaration must be in the name of all partners to   |

the joint venture that submits the bid.]

\*delete if not applicable / appropriate



# Republic Of Namibia

# **Ministry of Labour, Industrial Relations and Employment Creation**

Written undertaking in terms of section 138 of the Labour Act, 2015 and section 50(2)(D) of the Public Procurement Act, 2015

# 1. EMPLOYERS DETAILS

| Company Trade Name:                    |
|--|
| Registration Number:                   |
| Vat Number:                            |
| Industry/Sector:                       |
| Place of Business:                     |
| Physical Address:                      |
| Tell No.:                              |
| Fax No.:                               |
| Email Address:                         |
| Postal Address:                        |
| Full name of Owner/Accounting Officer: |
|  |
| Email Address:                         |

# 2. PROCUREMENT DETAILS

| Procurement Reference No.:  |
|---|
| Procurement Description:  |
|   |
|   |
| Anticipated Contract Duration:  |
| Location where work will be done, good/services will be delivered:  |
|   |
| 3. UNDERTAKING  |
| I[insert full name], owner/representative   |
| of[insert full name of company]   |
| hereby undertake in writing that my company will at all relevant times comply fully with the relevant provisions of the Labour Act and the Terms and Conditions of Collective Agreements as applicable.                             |
| I am fully aware that failure to abide to such shall lead to the action as stipulated in section 138 of the labour Act, 2007, which include but not limited to the cancellation of the contract/licence/grant/permit or concession. |
| Signature:  |
| Date:   |
| Seal:   |

Please take note:

- A labour inspector may conduct unannounced inspections to assess the level of compliance
   This undertaking must be displayed at the workplace where it will be readily accessible and visible by the employees rendering service(s) in relations to the goods and services being procured under this contract.

# **Section 4. Financial Proposal - Standard Forms**

[Comments in brackets [ ] provide guidance to the shortlisted Consultants for the preparation of their Financial Proposals; they should not appear on the Financial Proposals to be submitted.]

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under para. 3.6 of Section 2. Such Forms are to be used whichever is the selection method indicated in para. 4 of the Letter of Invitation.

[The Appendix "Financial Negotiations - Breakdown of Remuneration Rates" is to be only used for financial negotiations when Quality-Based Selection, Selection Based on Qualifications, or Single-Source Selection method is adopted, according to the indications provided under para. 6.3 of Section 2.]

| Form FIN-1: Financial Proposal Submission Form                     | 45 |
|--|----|
| Form FIN-2: Summary of Costs                                       | 46 |
| Form FIN-3: Breakdown of Costs by Activity <sup>1</sup>            | 47 |
| Form FIN-4: Breakdown of Remuneration <sup>1</sup> (Lump-Sum)      | 47 |
| Form FIN-5: Breakdown of Reimbursable Expenses (Lump-Sum)          | 49 |
| Appendix: Financial Negotiations - Breakdown of Remuneration Rates | 50 |

# Form FIN-1: Financial Proposal Submission Form

[Location, Date]

To: [Name and address of Client]

Dear Sir/Madam:

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the lump sum of [Insert amount(s) in words and figures<sup>1</sup>]. This amount is exclusive of the local taxes (applicable only to consultants other than Namibian nationals), 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. before the date indicated in Paragraph Reference 1.14 of the Data Sheet.

Commissions and gratuities 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<sup>2</sup>:

| Name and Address of Agents | Amount in Namibia Dollars          | Purpose of Commission or Gratuity |
|----------------------------|------------------------------------|-----------------------------------|
| We understand you a        | re not bound to accept any Proposa | al you receive.                   |
| We remain,                 |                                    |                                   |
| Yours sincerely,           |                                    |                                   |
| Authorized Signature       | e [In full and initials]:          |                                   |
| Name and Title of Si       | gnatory:                           |                                   |
|                            |                                    |                                   |
| Address:                   |                                    |                                   |

<sup>1</sup> Amounts must coincide with the ones indicated under Total Cost of Financial proposal in Form FIN-2.

<sup>2</sup> If applicable, replace this paragraph with: "No commissions or gratuities have been or are to paid by us to agents relating to this Proposal and Contract execution."

# Form FIN-2: Summary of Costs

|  | Costs                         |
|--|-------------------------------|
| Item   | [Indicate<br>Namibian Dollars |
| (b) Total Costs of Financial Proposal <sup>1</sup> |                               |

<sup>1</sup> Indicate the total costs, net of local taxes, to be paid by the Client in each Namibia Dollars. Such total costs must coincide with the sum of the relevant Subtotals indicated in all Forms FIN-3 provided with the Proposal.

# Form FIN-3: Breakdown of Costs by Activity<sup>1</sup>

| Group of Activities (Phase): <sup>2</sup> | Description: <sup>3</sup>                       |   |   |                                   |
|---|---|---|---|-----------------------------------|
|   |   | Co  | ests  |                                   |
| Cost component                            | [Indicate Foreign<br>Currency # 1] <sup>4</sup> | [Indicate Foreign<br>Currency # 2] <sup>4</sup> | [Indicate Foreign<br>Currency # 3] <sup>4</sup> | [Indicate<br>Namibian<br>Dollars] |
| Remuneration <sup>5</sup>                 |   |   |   |                                   |
| Reimbursable Expenses <sup>5</sup>        |   |   |   |                                   |
| Subtotals                                 |   |   |   |                                   |

- 1 Form FIN-3 shall be filled at least for the whole assignment. In case some of the activities require different modes of billing and payment (e.g.: the assignment is phased, and each phase has a different payment schedule), the Consultant shall fill a separate Form FIN-3 for each group of activities. The sum of the relevant Subtotals of all Forms FIN-3 provided must coincide with the Total Costs of Financial Proposal indicated in Form FIN-2.
- 2 Names of activities (phase) should be the same as, or correspond to the ones indicated in the second column of Form TECH-8.
- 3 Short description of the activities whose cost breakdown is provided in this Form.
- 4 Use the same columns and currency of Form FIN-2.
- 5 Remuneration and Reimbursable Expenses must respectively coincide with relevant Total Costs indicated in Forms FIN-4, and FIN-5.

# Form FIN-4: Breakdown of Remuneration<sup>1</sup> (Lump-Sum)

(This Form FIN-4 shall only be used when the Lump-Sum Form of Contract has been included in the RFP. Information to be provided in this Form shall only be used to establish payments to the Consultant for possible additional services requested by the Client)

| Name <sup>2</sup> | Position <sup>3</sup> | Staff-month Rate <sup>4</sup> |
|-------------------|-----------------------|-------------------------------|
| Foreign Staff     |                       |                               |
|                   |                       | [Home]<br>[Field]             |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
| T 1 C/ 00         |                       |                               |
| Local Staff       | _                     | [Home]                        |
|                   |                       | [Field]                       |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |
|                   |                       |                               |

- Form FIN-4 shall be filled in for the same Professional and Support Staff listed in Form TECH-7.
- 2 Professional Staff should be indicated individually; Support Staff should be indicated per category (e.g.: draftsmen, clerical staff).
- 3 Positions of the Professional Staff shall coincide with the ones indicated in Form TECH-5.
- 4 Indicate separately staff-month rate and currency for home and field work..

# Form FIN-5: Breakdown of Reimbursable Expenses (Lump-Sum)

(This Form FIN-5 shall only be used when the Lump-Sum Form of Contract has been included in the RFP. Information to be provided in this Form shall only be used to establish payments to the Consultant for possible additional services requested by the Client)

| N° | Description <sup>1</sup>                                      | Unit | Unit Cost <sup>2</sup> |
|----|---|------|------------------------|
|    | Per diem allowances   | Day  |                        |
|    | International flights <sup>3</sup>                            | Trip |                        |
|    | Miscellaneous travel expenses                                 | Trip |                        |
|    | Communication costs between [Insert place] and [Insert place] |      |                        |
|    | Drafting, reproduction of reports                             |      |                        |
|    | Equipment, instruments, materials, supplies, etc.             |      |                        |
|    | Shipment of personal effects                                  | Trip |                        |
|    | Use of computers, software                                    |      |                        |
|    | Laboratory tests.   |      |                        |
|    | Subcontracts  |      |                        |
|    | Local transportation costs                                    |      |                        |
|    | Office rent, clerical assistance                              |      |                        |
|    | Training of the Client's personnel <sup>4</sup>               |      |                        |

<sup>1</sup> Delete items that are not applicable or add other items according to Paragraph Reference 3.6 of the Data Sheet.

<sup>2</sup> Indicate unit cost in Namibia Dollars.

<sup>3</sup> Indicate route of each flight, and if the trip is one- or two-ways.

<sup>4</sup> Only if the training is a major component of the assignment, defined as such in the TOR.

# **Appendix: Financial Negotiations - Breakdown of Remuneration Rates**

(Not to be used when cost is a factor in the evaluation of Proposals)

#### 1. Review of Remuneration Rates

- 1.1 The remuneration rates for staff are made up of salary, social costs, overheads, fee that is profit, and any premium or allowance paid for assignments away from headquarters. To assist the firm in preparing financial negotiations, a Sample Form giving a breakdown of rates is attached (no financial information should be included in the Technical Proposal). Agreed breakdown sheets shall form part of the negotiated contract.
- 1.2 The Client is charged with the custody of government funds and is expected to exercise prudence in the expenditure of these funds. The Client is, therefore, concerned with the reasonableness of the firm's Financial Proposal, and, during negotiations, it expects to be able to review audited financial statements backing up the firm's remuneration rates, certified by an independent auditor. The firm shall be prepared to disclose such audited financial statements for the last three years, to substantiate its rates, and accept that its proposed rates and other financial matters are subject to scrutiny. Rate details are discussed below.
  - (i) Salary

This is the gross regular cash salary paid to the individual in the firm's home office. It shall not contain any premium for work away from headquarters or bonus (except where these are included by law or government regulations).

#### (ii) Bonus

Bonuses are normally paid out of profits. Because the Client does not wish to make double payments for the same item, staff bonuses shall not normally be included in the rates. Where the Consultant's accounting system is such that the percentages of social costs and overheads are based on total revenue, including bonuses, those percentages shall be adjusted downward accordingly. Where national policy requires that 13 months' pay be given for 12 months' work, the profit element need not be adjusted downward. Any discussions on bonuses shall be supported by audited documentation, which shall be treated as confidential.

#### (iii) Social Costs

Social costs are the costs to the firm of staff's non-monetary benefits. These items include, *inter alia*, social security including pension, medical and life insurance costs, and the cost of a staff member being sick or on vacation. In this regard, the cost of leave for public holidays is not an acceptable social cost nor is

the cost of leave taken during an assignment if no additional staff replacement has been provided. Additional leave taken at the end of an assignment in accordance with the firm's leave policy is acceptable as a social cost.

## (iv) Cost of Leave

The principles of calculating the cost of total days leave per annum as a percentage of basic salary shall normally be as follows:

Leave cost as percentage of salary 
$$^{1} = \frac{total\ days\ leave\ x\ 100}{[365\ -\ w\ -\ ph\ -\ v\ -\ s]}$$

Or

Leave Cost = [(salary + bonus + housing subsidy + transport)/260 X leave credit days]

It is important to note that leave can be considered a social cost only if the Client is not charged for the leave taken.

# (v) Overheads

Overhead expenses are the firm's business costs that are not directly related to the execution of the assignment and shall not be reimbursed as separate items under the contract. Typical items are home office costs (partner's time, nonbillable time, time of senior staff monitoring the project, rent, support staff, research, staff training, marketing, etc.), the cost of staff not currently employed on revenue-earning projects, taxes on business activities and business promotion costs. During negotiations, audited financial statements, certified as correct by an independent auditor and supporting the last three years' overheads, shall be available for discussion, together with detailed lists of items making up the overheads and the percentage by which each relates to basic salary. The Client does not accept an add-on margin for social charges, overhead expenses, etc., for staff who are not permanent employees of the firm. In such case, the firm shall be entitled only to administrative costs and fee on the monthly payments charged for subcontracted staff.

## (vi) Fee or Profit

The fee or profit shall be based on the sum of the salary, social costs, and overhead. If any bonuses paid on a regular basis are listed, a corresponding reduction in the profit element shall be expected. Fee or profit shall not be allowed on travel or other reimbursable expenses, unless in the latter case an unusually large amount of procurement of equipment is required. The firm shall note that payments shall be made against an agreed estimated payment schedule as described in the draft form of the contract.

Where w = weekends, ph = public holidays, v = vacation, and s = sick leave.

# (vii) Away from Headquarters Allowance or Premium

Some Consultants pay allowances to staff working away from headquarters. Such allowances are calculated as a percentage of salary and shall not draw overheads or profit. Sometimes, by law, such allowances may draw social costs. In this case, the amount of this social cost shall still be shown under social costs, with the net allowance shown separately. For concerned staff, this allowance, where paid, shall cover home education, etc.; these and similar items shall not be considered as reimbursable costs.

# (viii) Subsistence Allowances

Subsistence allowances are not included in the rates, but are paid separately and in local currency. No additional subsistence is payable for dependents—the subsistence rate shall be the same for married and single team members.

UNDP standard rates for the particular country may be used as reference to determine subsistence allowances.

# 2. Reimbursable expenses

2.1 The financial negotiations shall further focus on such items as out-of-pocket expenses and other reimbursable expenses. These costs may include, but are not restricted to, cost of surveys, equipment, office rent, supplies, international and local travel, computer rental, mobilization and demobilization, insurance, and printing. These costs may be either unit rates or reimbursable on the presentation of invoices, in foreign or local currency.

#### 3. Bank Guarantee

3.1 Payments to the firm, including payment of any advance based on cash flow projections covered by a bank guarantee, shall be made according to an agreed estimated schedule ensuring the firm regular payments in local and foreign currency, as long as the services proceed as planned.

# **Sample Form**

| Consulting Firm: Assignment:   | Country:<br>Date:                            |
|--|--|
| Consultant's Representations Reg   | arding Costs and Charges                     |
| We hereby confirm that:  |  |
| (a) the basic salaries indicated in the attached tal<br>and reflect the current salaries of the staff members<br>within the normal annual salary increase policy as ap | listed which have not been raised other than |
| (b) attached are true copies of the latest salary sli  | ps of the staff members listed;              |
| (c) the away from headquarters allowances ind have agreed to pay for this assignment to the staff me   |  |
| (d) the factors listed in the attached table for so firm's average cost experiences for the latest three statements; and   |  |
| (e) said factors for overhead and social charges of profit-sharing.  | lo not include any bonuses or other means o  |
| [Name of Consulting Firm]  | _  |
| Signature of Authorized Representative   | Date   |
| Name:  | _  |
| Title:   | _  |

# **Consultant's Representations Regarding Costs and Charges**

(Expressed in [insert name of currency])

| Perso | onnel    | 1   | 2                              | 3                     | 4        | 5                | 6                                      | 7  | 8   |
|-------|----------|---|--------------------------------|-----------------------|----------|------------------|--|--|---|
| Name  | Position | Basic Salary per<br>Working<br>Month/Day/Year | Social<br>Charges <sup>1</sup> | Overhead <sup>1</sup> | Subtotal | Fee <sup>2</sup> | Away from<br>Headquarters<br>Allowance | Proposed Fixed<br>Rate per Working<br>Month/Day/Hour | Proposed Fixed<br>Rate per Working<br>Month/Day/Hour <sup>1</sup> |
| Home  | Office   |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |
| Fie   | eld      |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |
|       |          |   |                                |                       |          |                  |  |  |   |

<sup>1.</sup> Expressed as percentage of 1

<sup>2.</sup> Expressed as percentage of 4

# **Section 5. Terms of Reference**

# TERMS OF REFERENCE FOR CONSULTING SERVICES FOR

# BATHYMETRIC SURVEYING AND SALINITY DISPERSION MODELLING ASSESSMENT OF PROPOSED SWRO DESALINATION SITES AT LÜDERITZ, NAMIBIA



NAMWATER INFRASTRUCTURE PLANNING
JULY 2025



# TABLE OF CONTENTS

| TABLE OF            | FCONTENTS  | i    |
|---------------------|--|------|
| LIST OF F           | <u>FIGURES</u>   | ii   |
| LIST OF T           | <u>CABLES</u>  | ii   |
| 1 Intr              | roduction  | 3    |
| <u>1.1</u>          | Background   | 3    |
| <u>1.2</u>          | Location of the Study Area.  | 3    |
| <u>Ob</u>           | jectives   | 7    |
| 3 <u>Scc</u>        | ope of Works   | 7    |
| 4 Bas               | sic Seawater Condition and Design Specifications                                 | 8    |
| <u>4.1</u>          | <u>Lüderitz Raw Seawater Salinity</u>  | 8    |
| <u>4.2</u>          | Raw Seawater Temperature   | 8    |
| <u>5</u> <u>Tec</u> | chnical Specifications   | 9    |
| <u>5.1</u>          | Proposed Modularized Desalination Plant.   | 9    |
| <u>5.2</u>          | Quality of Raw Seawater at Lüderitz (see Table 3)                                | 9    |
| <u>5.3</u>          | Adapted Design Seawater SpecificationS   | 10   |
| <u>5.4</u>          | Hydrogen Sulphide (H2S), Tidal and Sand Windy Conditions                         | 12   |
| <u>5.5</u>          | Rock Topograpghy   | 12   |
| <u>5.6</u>          | Proposed Desalination Plant Processes  | 13   |
| <u>5.7</u>          | Potable Water Quality Standards and Parameters                                   | 14   |
| 6 Del               | <u>liverables</u>  | 14   |
| <u>7</u> <u>Du</u>  | ration   | 14   |
| <u>8</u> Qua        | alifications of the Consultant / Service Provider                                | 14   |
| 9 Rep               | porting and Supervision  | 14   |
|                     | Annexure 1: Namibia Potable Water Quality Guidelines, Water Resources Management | Act, |
| <u>11</u> <u>/</u>  | Annexure 2: KMZ file for Lüderitz proposed bathymetric survey area (20 km2)      | 26   |



# LIST OF FIGURES

| Figure 1: Lüderitz proposed bathymetric survey area (20 km²). See Annexure 2 for KMZ file at | tached.        |
|--|----------------|
|  |                |
| <u>Figure 2: Desalination Site Farm 132.</u>   | 5              |
| Figure 3: Map of Sensitive Habitat at Lüderitz Bay (Ref. 1).                                 | 6              |
|  |                |
| LIST OF TABLES   |                |
| Table 1: Lüderitz Raw Sea Water Salinity- (Excerpt from experiment on the use of Lüderitz se | <u>eawater</u> |
| in road Construction Netterberg, 2023)   | 8              |
| Table 2: Lüderitz Daily Temperatures   | 8              |
| <u>Table 3: Modularized Desalation Plant intake, Production and outfalls flow volumes.</u>   | 9              |
| Table 4: Lüderitz Seawater Quality.  | 11             |
| Table 5: Typical Seawater Design Specification - Atlantic Ocean (Swakopmund Area)            | 11             |

#### INTRODUCTION

This document is a Terms of reference (TOR) to source the consulting specialist services for Bathymetric Surveying and Salinity Dispersion Modelling. The Service Providers are to assess the suitability for SWRO Desalination Sites in Lüderitz Bay, Namibia. Based on the request for proposals by NamWater, the specialist provider / Consultant is required to submit lump sum quotation and workplan that will be able to carry out the required services.

#### BACKGROUND

The Government of Namibia (through NamWater and Lüderitz Town Council) is planning the development of a Seawater Reverse Osmosis (SWRO) desalination plant in Lüderitz to enhance water security. Since 2022, NamWater, the national bulk water supplier and Lüderitz Town Council (LTC) are collaborating to establish a modularised Reverse Osmosis (RO) Desalination Plant in response to the upcoming water demands from fishing, mariculture, mining/mineral processing, tourism industries and the envisaged booming green hydrogen industries. Recent developments, also include culturing of kelp for exports. Farm 132, with a size of  $\pm 46$  Ha, has been made available to NamWater as the desalination plant site the LTC (**Figure 1**).

These impeding water demands will surpass the existing NamWater Koichab Pan groundwater supply system with the capacity of  $\pm 1.46$  Mm<sup>3</sup>/a. The upcoming water demands are in the order of  $\pm 3.5$  to 5 Mm<sup>3</sup>/a without the green hydrogen industries, and surge to  $\pm 10$  to 25 Mm<sup>3</sup>/a, when including the green hydrogen industries requiring projected water demands of between 6 Mm<sup>3</sup>/a to 18 Mm<sup>3</sup>/a.

#### LOCATION OF THE STUDY AREA

To ensure the environmental sustainability of the Desalination Plant project, a detailed bathymetric survey and salinity dispersion modelling are required to assess the suitability of the proposed site (Farm 132) or suitable sites between Farm 132 and Northeast Point, particularly in relation to the placement of intake and outfall structures. Thus, this document is seeking the services of a bathymetric survey and related services from a renowned service provider. The bathymetric survey and associated activities are to be undertaken at Lüderitz Bay, offshore of Farm 132 covering a stretch of up to a maximum of  $\pm 2$  km into the sea, past Seal Island to the Northeast Point. The bathymetric survey area is  $\pm 20$  km<sup>2</sup> (Figure 1 and Figure 2). (NB: Please note that your bids are free to propose to reduce the footprint survey area to have an appropriate trimmed budget befitting the scope)

Please note that there are a number of fishing factories within the harbour, from Robert Harbour northwards. **Figure 3** shows the map of Lüderitz Bay showing the project area in relation to the distribution of intertidal rocky and sandy shores, the extent of Gracilaria beds (Marvin Environmental Project Consultants, 2020), salt marshes, Important Bird Aras (IBAs), the rock lobster sanctuary and occurrence of seals, waders and seabirds.

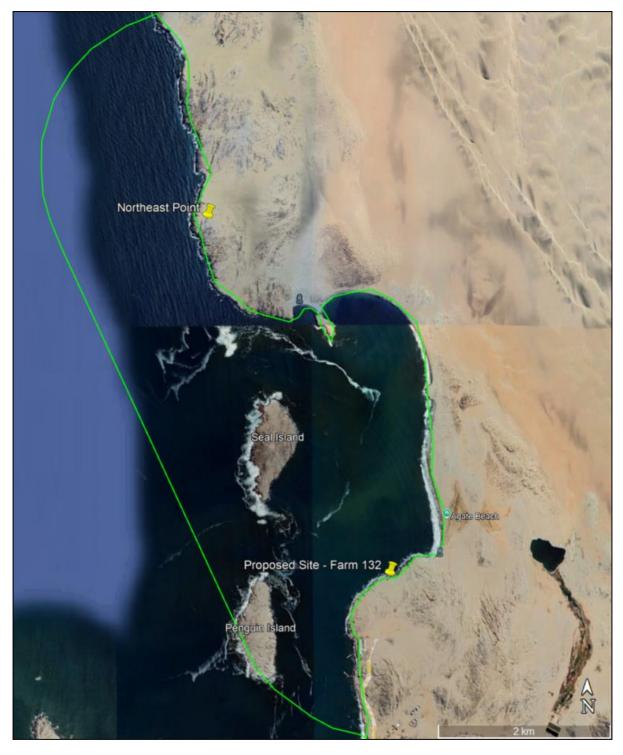


Figure 1: Lüderitz proposed bathymetric survey area ( $20~km^2$ ). See Annexure 2 for KMZ file attached.



Figure 2: Desalination Site Farm 132.

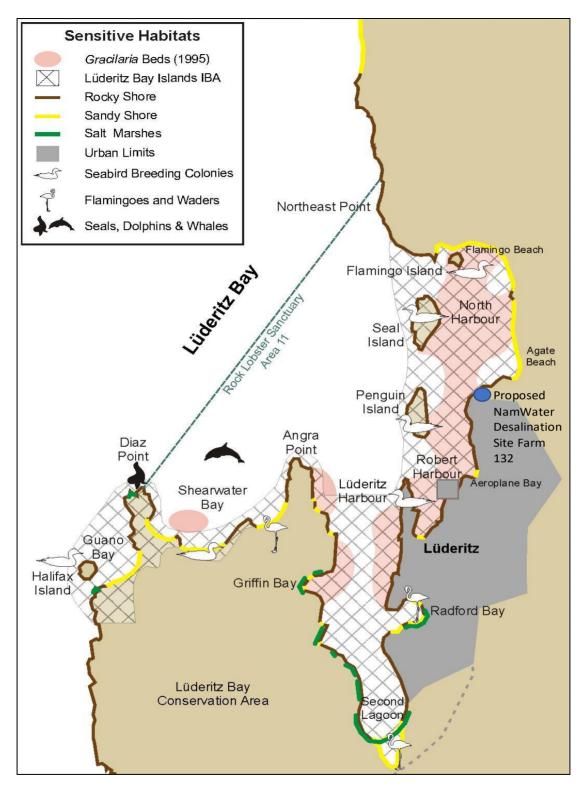


Figure 3: Map of Sensitive Habitat at Lüderitz Bay (Marvin Environmental Project Consultants, 2020).

## **Objectives**

The bathymetric survey and associated activities are required to ascertain the suitability of Farm 132 as a RO open-intake and outflows desalination plant site and establish its interactions and impacts on the Lüderitz Port/Bay, and fishing industries activities as well as sediment accumulation on the seabed.

The primary objectives of this assignment are to:

- Conduct a high-resolution bathymetric survey, determining the seabed topographic contours and features of the proposed site (farm 132 or suitable sites between farm 132 and Northeast Point), and surrounding marine area.
- Model salinity dispersion and thresholds based on projected brine discharge volumes. Please
  indicate the threshold desalination capacities that are suited to some of the sites within the
  study area estimated ±20 km<sup>2</sup>.
- Identify suitable locations and guiding lengths for off shore intake and outfall pipelines in view of the site/s.
- Minimize environmental impacts, particularly on marine ecosystems and sediment transport and fishing industries.

#### SCOPE OF WORKS

The Consultant shall:

- Conduct a detailed bathymetric survey of the designated marine area (coordinates and contours to be provided).
- Map seabed features, including depth contours, slopes, sediments, and potential obstructions and interactions.
- Identify areas of ecological sensitivity (e.g., coral reefs, seagrass beds) and potential impacts on marine ecosystem.
- Model salinity dispersion using hydrodynamic simulation tools, incorporating potential brine
  discharge volumes, ocean currents, temperature, and bathymetric data. If salinity dispersion
  modelling is not possible then the consultant/service provider should provide adequate data to
  enable modelling experts to model the acceptable desalination salinity dispersion for farm 132
  and/or preferred sites.
- Assess potential impacts on marine life and habitats due to salinity changes that will have minimal acceptable environmental impacts on the Lüderitz Port/Bay, fishing activities and marine ecology.
- Provide georeferenced digital data and charts and contours.
- Recommend optimal locations for intake and outfall structures (lengths, depths and potential routes in the sea) based on bathymetric and environmental considerations.

- Propose intake and outfall options that correspond to the desalination plant capacity generated sediment/salinity loads. Taking cognisance that the anticipated intake volumes is in the range of 1 375 m³/h to 9 418 m³/h from the proposed modularized desalination plant. Similarly, the anticipated RO outfall volumes in the range of 825 m³/h to 5 651m³/h (assuming 20-hour-day production).
- Collaborate with NamWater environmental specialists to enable intergration of the findings into the Environmental Impact Assessment (EIA).
- Provide insights into wind plumes and sulphur upwells effects on the site/s

#### BASIC SEAWATER CONDITION AND DESIGN SPECIFICATIONS

#### LÜDERITZ RAW SEAWATER SALINITY

The basic seawater conditions (Lüderitz raw seawater salinity, Table 1 and Table 3 and water quality at Lüderitz have been collated from literature and should the Consultant want to confirm or augment this data by additional monitoring the Consultant, is free to solicit additional existing data where available. However, for additional sampling and monitoring if required, a separate quotation should be given as part of the total cost of the assignment.

Table 1: Lüderitz Raw Sea Water Salinity- (Excerpt from experiment on the use of Lüderitz seawater in road Construction Netterberg, 2023)

| Component                      | Units | Seawater        | Freshwater  |
|--------------------------------|-------|-----------------|-------------|
|                                |       |                 |             |
| Na⁺                            | % m/v | 1,00 - 1,06     | 0,010       |
| C6.                            | % m/v | 1,88 - 1,95     | 0,011       |
| SO <sub>4</sub> <sup>2</sup> - | % m/v | 0,21 - 0,25     | 0,006       |
| TDS at 180°C                   | % m/v | 3,39 - 3,53     | 0,041       |
| EC at 25°C                     | S/m   | 5,25 - 5,50     | 0,069       |
| Salinity from EC [1]           | %     | 3,5 - 3,6 (m/m) | 0,045 (m/v) |
| pH                             | -     | 7,8 - 7,9       | 8,2         |

Notes:

[1] By NITRR Method CA21-74 (1980)

[2] 1 S/m = 1 000 mS/m = 10 mS/cm; 1% = 10 000 mg/l

#### **RAW SEAWATER TEMPERATURE**

Based on daily averages, the adapted design temperatures for RO membrane projections and plant design are as follows:

**Table 2: Lüderitz Daily Temperatures** 

| Monthly climate statistics for | Temperature (°C)      | Rainfall |
|--------------------------------|-----------------------|----------|
| Lüderitz). Month               | Average Daily Max/Min | (in mm)  |

| January   | 21.4 / 14.1 | 0.8 |
|-----------|-------------|-----|
| February  | 25.0 / 14.3 | 1.8 |
| March     | 20.9 / 13.7 | 2.4 |
| April     | 19.8 / 12.6 | 3.7 |
| May       | 19.5 / 11.8 | 2.4 |
| June      | 18.9 / 11.3 | 3.0 |
| July      | 18.1 / 10.6 | 2.1 |
| August    | 17.2 / 10.3 | 2.1 |
| September | 17.3 / 10.6 | 1.6 |
| October   | 18.0 / 11.4 | 0.5 |
| November  | 19.2 / 12.4 | 0.5 |
| December  | 20.5 / 13.5 | 1.1 |

- Minimum 10.3 Degrees Celsius
- Average 18.1 Degrees Celsius
- Maximum 25.0 Degrees Celsius

#### TECHNICAL SPECIFICATIONS

#### PROPOSED MODULARIZED DESALINATION PLANT

Proposed Phased Modular Production Capacities are given as (ramping up): 10 ML/day; 30 ML/day; 60 ML/day and 68.5 ML/day. The corresponding flow volumes on the desalination intake and outfalls are indicated in **Table 3.** 

Table 3: Modularized Desalation Plant intake, Production and outfalls flow volumes.

| Modular Phases | Production water | Production water          | Desalination<br>Production<br>water | Desalination Intake<br>capacity (with 1,1<br>Peak factor, 40%<br>recovery) | Desalination outfalls capacity (with 1,1 Peak factor, 40% recovery) |
|----------------|------------------|---------------------------|-------------------------------------|--|---|
| units          | Megalitres/day   | Million m <sup>3</sup> /a | m <sup>3</sup> /day                 | Maximum flow (m <sup>3</sup> /h)   | Maximum flow (m <sup>3</sup> /h)                                    |
| 1              | 10ML             | 3.65                      | 10000                               | 1375   | 825   |
| 2              | 30 ML            | 10.95                     | 30000                               | 4125   | 2475  |
| 3              | 60 ML            | 21.9                      | 60000                               | 8250   | 4950  |
| 4              | 68.5ML           | 25                        | 68493                               | 9418   | 5651  |

# QUALITY OF RAW SEAWATER AT LÜDERITZ (SEE TABLE 3)

A snap shot water results for various parameters is given in **Table 4**. The site-specific raw seawater quality and final product water quality (**Annexure 1**) can have a major impact on pre-treatment selection and RO configuration required for the desalination plant. It is important to determine the specifications of the desalination system based on the ranges of the raw water quality feed in order to achieve the optimal potable water requirements. The seawater analysis is critical to determining the usage of technology and operating conditions. The raw water quality data given on **Table 4** is not

complete and neither does the data depicts the seasonal variations. However, given these data gaps and based on the same coastal waters quality results obtained near Swakopmund, the following desalination design specifications were adopted (**Table 5, ILF, 2021**).

#### ADAPTED DESIGN SEAWATER SPECIFICATIONS

Table 4 shows an overview of the typical characteristics of the sea water which is abstracted from the Atlantic coastline of Namibia from an intake system located underwater. Thus, without adequate data at Lüderitz, this TOR utilized the seawater quality required for desalination plant design that was derived from the Desalination Plant feasibility report conducted by ILF (2021).

Pending on the outcome and recommendations of this TOR assigned work, the Lüderitz desalination plant will allow for flexibility of the intake system, by incorporating a dual pipeline for both intake (preferably <1 km in length; Ø 1400 mm, diameter) and brine / wastewater outfalls (preferably <700 m in length, Ø1100 mm, diameter) and provide the requisite redundancy in the system.

Table 4: Lüderitz Seawater Quality (NamWater Water Quality Division).

| Sample Nr              | DS62842    | DS61658    | DS61308    | DS58214    | DS55194    | DS55195    | DS49651    | DS49650    |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Location               | Seawater   |
| Description            | Ocawaici   | Point 1    | Point 1    | Point 4    | Point 1    | Point K    | Point 4    | Point 2    |
| Date sample taken      | 02/07/2022 | 26/01/2022 | 29/11/2021 | 18/01/2021 | 11/12/2019 | 11/12/2019 | 30/01/2018 | 30/01/2018 |
| Time                   | -          | 16:15      | 04:02      | 15:20      | -          | -          | 14:46      | 14:35      |
| Date sample received   | 04/07/2022 | 27/01/2022 | 01/12/2021 | 19/01/2021 | 12/12/2019 | 12/12/2019 | 31/01/2018 | 31/01/2018 |
| Date sample analysed   | 12/07/2022 | 02/02/2022 | 01/12/2021 | 25/01/2021 | 13/12/2019 | 13/12/2019 | 06/02/2018 | 06/02/2018 |
| рН                     | 6.9        | -          | -          | -          | 7          | -          | -          | -          |
| Colour                 | -          | -          | -          | -          | -          | -          | -          | -          |
| Turbidity in NTU       | -          | -          | -          | -          | 141        | -          | -          | -          |
| Conductivity mS/m      | -          | -          | -          | -          | 4470       | -          | -          | -          |
| TDS<br>Calculated      | -          | -          | -          | -          | 29949      | -          | -          | -          |
| Na in mg/l             | 6200       | -          | -          | -          | -          | -          | -          | -          |
| K in mg/l              | 320        | -          | -          | -          | -          | -          | -          | -          |
| Ca as CaCO3            | 662.5      | -          | -          | -          | 850        | -          | -          | -          |
| Mg as CaCO3            | 3958.3333  | -          | -          | -          | 4000       | -          | -          | -          |
| SO4 in mg/l            | 440        | -          | -          | -          | -          | -          | -          | -          |
| NO3 as N in<br>mg/l    | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | 1.1        | 6.8        |
| NO2 as N in mg/l       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| SiO2 in mg/l           | 5          | -          | -          | -          | -          | -          | -          | -          |
| F in mg/l              | 0.7        | 0.8        | 0.9        | 0.9        | -          | 1.4        | 0.9        | 0.9        |
| Cl in mg/l             | 16200      | 15200      | 15500      | 1900       | -          | 17900      | 16100      | 15400      |
| Alcalinity as CaCO3    | -          | -          | -          | -          | -          | -          | -          | -          |
| Phenolftalein as CaCO3 | -          | -          | 1          | -          | -          | -          | -          | -          |
| Fe in mg/l             | <0.01      | -          | -          | -          | -          | -          | -          | -          |
| Mn in mg/l             | -          | -          | -          | -          | -          | -          | -          | -          |
| Cu in mg/l             | <0.01      | <0.01      | <0.01      | 0.02       | -          | 0.03       | <0.01      | <0.01      |
| Zn in mg/l             | -          | -          | -          | -          | -          | -          | -          | -          |
| Cd in mg/l             | <0.01      | <0.01      | <0.01      | 0.01       | -          | <0.01      | 0.14       | 0.19       |
| Pb in mg/l             | <0.02      | <0.02      | <0.02      | <0.02      | -          | 0.14       | 0.08       | 0.1        |
| As in mg/l             | 0.01       | <0.01      | <0.01      | <0.01      | -          | <0.01      | 0.02       | 0.02       |

Table 5: Typical Seawater Design Specification - Atlantic Ocean (Swakopmund Area).

| Parameter Units | Design Feed Water Quality |
|-----------------|---------------------------|
|-----------------|---------------------------|

|                  |            | Minimum | Maximum |
|------------------|------------|---------|---------|
| рН               | [-]        | 7.8     | 8.4     |
| TDS              | mg/L       | 34000   | 38,000  |
| Conductivity     | μS / cm    | 52000   | 58000   |
| Turbidity        | NTU        | 5       | 15      |
| Sodium, Na       | mg/L       | 11077   | 15052   |
| Calcium, Ca      | mg/L       | 418     | 467     |
| Magnesium, Mg    | mg/L       | 1370    | 1531    |
| Potassium, K     | mg/L       | 482     | 538     |
| Chloride, Cl     | mg/L       | 20426   | 23200   |
| Total Alkalinity | mg/L CaCO3 | 230     | 257     |
| Nitrate, NO3     | mg/L N     | 0.4     | 0.45    |
| Sulfate, SO4     | mg/L       | 2663    | 2,976   |
| Boron, B         | mg/L       | 3       | 5       |
| Fluoride, F      | mg/L       | 1       | 2       |
| Silica           | mg/l SiO2  | 1       | 2       |
| Suspended Solids | mg/l       | 5       | 15      |

#### HYDROGEN SULPHIDE (H2S), TIDAL AND SAND WINDY CONDITIONS

The Consultant should note that periodically, there are episodes of hydrogen sulphide upwelling events across the Namibian Atlantic Ocean Coastline. These events will prevent the desalination pretreatment processes to be ineffective and as experienced at the existing Orano Desalination plant, the plant operation has to shutdown based on  $H_2S$  level, when the level is exceeding  $40~\mu g/l$ . This trigger value to be adapted has been defined by the Orano Plant operations team based on their experience with seawater.

The maximum tidal variation is approximately 2 m, with a typical tidal variation of ~1 m. Equally, the Consultant should take note that Lüderitz periodically experiences sand windy conditions with aerosol plumes of sand and dust due to a 'berg' wind events that should be considered when analysing the suitability of the desalination plant sites.

# **ROCK TOPOGRAPGHY**

The underlying coastal geological formations in the vicinity of Lüderitz are composed primarily of gneisses and schists of the Namaqua Metamorphic complex. Where not covered by Quaternary, wind-blown sands, crop out to form an extensive harsh and rugged rocky coastline.

The coastline of Lüderitz Bay, between Northeast Point and Angra Point, alternates between rocky headlands and shallow to deep embayments backed by sandy beaches. The coastline in the immediate vicinity of the study site is predominantly rocky. Small isolated sandy beaches occur to the south and north of the project area, in Robert Harbour and at Aeroplane Bay, respectively.

A chain of four rocky islands run from north to south across the mouth of Lüderitz Bay, sheltering North Harbour and Robert Harbour from the open waters of the bay. These are Flamingo, Seal, Penguin and Shark Islands, although the latter has been joined to the mainland by a causeway and harbour quayside. The bedrock levels within Robert Harbour rise towards the south and east (Van Wieringen 1996; Vonk & Brabers 2010). The bedrock consists primarily of hard granite gneiss banded on micro- and macro- scales, interspersed with bands and lenses of softer (micaceous and amphibolitic) rock (Van Wieringen 1996).

The western and eastern shorelines of Robert Harbour have a relatively steep slope (~1:10), and an irregular alignment, thus forming a submerged rocky valley which runs northward to North Harbour between the eastern shores of Lüderitz Bay and the chain of islands. The desalination sites to be considered should take into consideration of the rock geology in the vicinity.

#### PROPOSED DESALINATION PLANT PROCESSES

- a) Intake screens and pumps
- b) Pre-treatment will involve the following:
  - Disinfection system before the initial pump.
  - Pump system.
  - Disc filtration system.
  - Dual Media filtration system
  - Reducing agent dosing system
- c) The Reverse Osmosis System (both single and dual feed considerations) will involve the following:
  - Low-pressure pumping station.
  - Microfiltration system.
  - Antifouling dosing system.
  - Reverse osmosis at appropriate capacity
  - Integrated CIP and flushing system.
- d) Storage and disinfection
  - Chlorine dosing station; storage
  - Mineralisation and pH control system.
  - Transfer pump system.

e) Post transfer disinfection, storage and distribution.

## POTABLE WATER QUALITY STANDARDS AND PARAMETERS

The required quality of potable water delivered from the proposed desalination plant at the delivery point must follow the parameters indicated in **Annexure 1**. according to Namibia Water Resource Management Act.

#### **Deliverables**

- i. Inception Report detailing methodology, equipment, and schedule.
- ii. Bathymetric survey data in GIS-compatible formats (e.g., shapefiles, GeoTIFF).
- iii. High-resolution bathymetric maps and cross-sections.
- iv. Salinity dispersion model outputs and interpretation.
- v. Technical Report with analysis, findings, and recommendations.
- vi. Presentation of findings to NamWater Management, Lüderitz Town Council and stakeholders.

#### Duration

The assignment is expected to be completed within **eight (8) weeks** from the date of contract signing.

## QUALIFICATIONS OF THE CONSULTANT / SERVICE PROVIDER

- Proven minimum experience of 5 years in marine bathymetric surveys and at least three completed similar assignments (scope, size, complexity, experience of manpower and firm)
- Proven hydrodynamic modelling specialist including salinity dispersion modelling within the team and at least three completed similar assignments (scope, size, complexity, experience of manpower and firm/consultant).
- Proficiency in modeling tools such as MIKE by DHI, Delft3D, or equivalent.
- Access to appropriate survey vessels and equipment (e.g., multibeam echo sounders, GPS).
- Knowledge of Namibian marine regulations and environmental standards.
- Experience in working on desalination or marine infrastructure projects is an advantage.
- Provide only necessary team of experts that will execute the work and avoid unnecessary bureaucratic overheads, time and costs.

#### REPORTING AND SUPERVISION

The consultant will report to the NamWater Manager: Infrastructure Planning or Project Manager and work closely with the Environmental Services team and other relevant stakeholders.

Reports will be formatted into a Word document or PDF and relevant software for submission in electronic form and two hard copies.

#### **REFERENCES**

- 1. GEO Pollution Technologies, 2022. Update of the Environmental Impact Assessment for the Capital and Maintenance Dredging of Lüderitz Harbour.
- 2. ILF Consulting Engineers. (2021). Feasibility Study for Desalination Plant and Water Carriage System to secure Water Supply to Central Coast, Windhoek and en-route Users, Chapter: Water Resources and Water Demand Projections (O992-ILF-OD-0012/REV. 4).
- 3. Marvin Environmental Project Consultants, 2020. Final Scoping Report (Assessment) and EMP: Proposed Upgrade of the Existing Sea Water Treatment Activities for Cleaning Purposes at the Novanam Fish Factory in Lüderitz (KARAS Region).
- 4. Netterberg, 2023. The Use of Seawater in Road Construction: Part 2 The Lüderitz Experiment.

## ANNEXURE 1: NAMIBIA POTABLE WATER QUALITY GUIDELINES, WATER RESOURCES MANAGEMENT ACT, 2013

#### WATER QUALITY GUIDELINES AND STANDARDS FOR POTABLE WATER

Table 1.1: Chemical and Biological Requirements

| Specification                                     | is for water<br>from the so |                          |         | numan consun           | nption           |  |
|---|-----------------------------|--------------------------|---------|------------------------|------------------|--|
| Status  |                             |                          |         | Ranges a               | nd upper limits  |  |
| Interpretation                                    | (Ideal<br>guideline)        | (Acceptable<br>Standard) |         |                        |                  |  |
| DETERMINANTS                                      | Unit                        | Format                   | Concern | 95 Percen              | tile Requirement |  |
| PHYSICAL AND ORGA                                 | NOLEPTIC                    | REQUIRE                  | MENTS   |                        |                  |  |
| Temperature                                       | ° C                         |                          | E       | Ambient temperature    |                  |  |
| Colour  | PTU                         | or mg/<br>litre          | E       | 10                     | <15              |  |
| Taste   |                             |                          | O,E     | No obje                | ctionable taste  |  |
| Odour   |                             |                          | O,E     | No objectionable odour |                  |  |
| Turbidity<br>(treated surface water)              | NTU                         | or TU                    | H,I     | < 0.3                  | < 0.5            |  |
| Turbidity (groundwater)                           | NTU                         | or TU                    | H,I     | < 0,5                  | <2               |  |
| рН @ 20 °C  | pН                          |                          | I       | 6.0 to 8.5             | 6 to 9           |  |
| Electric Conductivity<br>@ 25 °C                  | mS/m***                     | E.C.                     | H,I     | < 80                   | < 300            |  |
| Total Dissolved Solids<br>(treated surface water) | mg/litre                    |                          | H,I     | < 500                  | < 2 000          |  |
| Total Dissolved Solids (groundwater)              | mg/litre                    |                          | H,I     | < 1000                 | < 2 000          |  |

**MANAGEMENT ACT, 2013** 

| Specifications for water quality intended for human consumption from the source and piped water supply |              |              |         |                   |                          |  |
|--|--------------|--------------|---------|-------------------|--------------------------|--|
| Status   | Ranges and t | ıpper limits |         |                   |                          |  |
| Interpretation   |              |              |         | (Ideal guideline) | (Acceptable<br>Standard) |  |
| DETERMINANTS   | Unit         | Format       | Concern | 95 Percentile 1   | Requirement              |  |
| BIOLOGICAL REQUI   | REMENT       | S            |         |                   |                          |  |
| Algae  |              |              |         |                   |                          |  |
| Chlorophyll α  | μg/litre     |              | E,O     | < 1               | < 2                      |  |
| Total algae cell count   |              | /ml          | н,о     | < 200             | <5 000                   |  |
| Blue-green algae   | Cells        | /ml          | н,о     | < 200             | <2 000                   |  |
| Mycrocystin  | μg/litre     |              | Н       | < 0.1             | < 1                      |  |

| Specification           | ns for water<br>from the so |                 |         | numan consun         | nption                   |
|-------------------------|-----------------------------|-----------------|---------|----------------------|--------------------------|
| Status                  | Ranges a                    | nd upper limits |         |                      |                          |
| Interpretation          |                             |                 |         | (Ideal<br>guideline) | (Acceptable<br>Standard) |
| DETERMINANTS            | Unit                        | Format          | Concern | 95 Percen            | tile Requirement         |
| INORGANIC MACRO I       | DETERMIN                    | ANTS            |         |                      |                          |
| Ammonia                 | mg/litre                    | N               | Н       | < 0.2                | < 0.5                    |
| Barium                  | mg/litre                    | Ba              | Н       | 0.5                  | < 2                      |
| Calcium                 | mg/litre                    | Ca              | I       | < 80                 | < 150                    |
| Chloride                | mg/litre                    | Cl              | H,I     | < 100                | < 300                    |
| Fluoride                | mg/litre                    | F               | Н       | < 0.7                | < 1.5                    |
| Magnesium               | mg/litre                    | Mg              | Н       | < 30                 | < 70                     |
| Nitrate                 | mg/litre                    | N               | Н       | < 6                  | < 11                     |
| Nitrite                 | mg/litre                    | N               | Н       | < 0.1                | < 0.15                   |
| Potassium               | mg/litre                    | K               | Н       | < 25                 | < 100                    |
| Sodium                  | mg/litre                    | Na              | H.I     | < 100                | < 300                    |
| Sulphate                | mg/litre                    | SO <sub>4</sub> | н,о     | 100                  | < 300                    |
| Asbestos (fibres longer | Fibres/                     |                 | Н       | <500 000             | < 1000 000               |
| than 10 mm)             | litre                       |                 |         |                      |                          |
| INORGANIC MICRO D       | ETERMINA                    | ANTS            |         |                      |                          |
| Aluminium               | μg/litre                    | Al              | Н       | < 25                 | < 100                    |
| Antimony                | μg/litre                    | Sb              | Н       | < 5                  | < 50                     |
| Arsenic                 | μg/litre                    | As              | Н       | <10                  | < 50                     |
| Beryllium               | μg/litre                    | Be              | Н       | < 2                  | < 5                      |
| Bismuth                 | μg/litre                    | Bi              | Н       | < 250                | < 500                    |
| Boron                   | μg/litre                    | В               | Н       | <300                 | < 500                    |
| Bromide                 | μg/litre                    | Br              | Н       | < 500                | < 1 000                  |
| Cadmium                 | μg/litre                    | Cd              | Н       | < 5                  | < 10                     |
| Cerium                  | μg/litre                    | Ce              | Н       | <1 000               | <2 000                   |
| Cesium                  | μg/litre                    | Cs              | Н       | < 1 000              | < 2 000                  |
| Chromium Total          | μg/litre                    | Cr              | Н       | < 50                 | < 100                    |
| Cobalt                  | μg/litre                    | Co              | Н       | < 250                | < 500                    |
| Copper                  | μg/litre                    | Cu              | Н       | < 500                | < 2 000                  |
| Radon                   | Bq/litre                    | Ra              |         | < 200                | < 1 000                  |

|          | Format<br>NANTS   | Concern  | Ranges and t   | (Acceptable<br>Standard)  |
|----------|---|--|--|---|
| ETERMI   |   | Concern  | , ,  |   |
| ETERMI   |   | Concern  | 5000000 - 00000 - 00000 - 00   | Standard)   |
|          | NANTS   |  | 95 Percentile l  | Requirement   |
|          |   |  |  |   |
| μg/Ittre | CN-   | Н  | < 20   | < 50  |
| μg/litre | CN-   | Н  | < 70   | < 200   |
| μg/litre | Fe  | н,Е  | < 200  | < 300   |
| μg/litre | Pb  | Н  | <10  | < 50  |
| μg/litre | Mn  | Н  | < 50   | < 100   |
| μg/litre | Hg  | Н  | < 1  | <2  |
| μg/litre | Ni  | Н  | < 50   | < 150   |
| μg/litre | Se  | Н  | < 10   | < 50  |
| μg/litre | Ti  | Н  | < 5  | < 10  |
| μg/litre | Sn  | Н  | <100   | <200  |
| μg/litre | Ti  | Н  | < 100  | < 300   |
| μg/litre | U   | Н  | < 3  | < 15  |
| μg/litre | V   | Н  | < 100  | < 500   |
| μg/litre | Zn  | Н  | < 1 000  | < 5 000   |
| μg/litre | Polymer   | Н  | below detection  | below   |
|          |   |  | limit  | detection limit   |
|          |   |  | (in accordance   | (in accordance  |
|          |   |  |  | with WHO  |
|          |   |  |  | and EPA<br>requirements)  |
|          | μg/litre | μg/litre CN· μg/litre Fe μg/litre Pb μg/litre Mn μg/litre Hg μg/litre Ni μg/litre Se μg/litre Sn μg/litre Ti μg/litre Ti μg/litre U μg/litre V μg/litre Zn | μg/litre CN- H μg/litre Fe H,E μg/litre Pb H μg/litre Mn H μg/litre Hg H μg/litre Ni H μg/litre Se H μg/litre Ti H μg/litre Sn H μg/litre Ti H | μg/litre   CN   H   < 20     μg/litre   CN   H   < 70     μg/litre   Fe   H,E   < 200     μg/litre   Pb   H   <10     μg/litre   Mn   H   < 50     μg/litre   Hg   H   <1     μg/litre   Ni   H   < 50     μg/litre   Se   H   <10     μg/litre   Sn   H   <100     μg/litre   Ti   H   < 3     μg/litre   U   H   < 3     μg/litre   V   H   <100     μg/litre   Zn   H   <1000     μg/litre   Zn   H   <1000     μg/litre   Dolymer   H   below detection |

| ORGANIC DETERMI                                | NANTS    |                 |   |       |       |  |  |
|--|----------|-----------------|---|-------|-------|--|--|
| Dissolved<br>Organic Carbon                    | mg/litre | DOC-C           | Н | < 5   | <10   |  |  |
| Phenol compounds                               | μg/litre | Phenol          | Н | < 5   | < 10  |  |  |
| DISINFECTION AND DISINFECTION BY-PRODUCTS      |          |                 |   |       |       |  |  |
| Bromodichloro-<br>methane<br>(Part of THM)     | µg/litre |                 | Н | < 20  | < 50  |  |  |
| Bromoform<br>(Part of THM)                     | μg/litre |                 | Н | < 40  | < 40  |  |  |
| Chloroform<br>(Part of THM)                    | μg/litre |                 | Н | < 20  | < 100 |  |  |
| Dibromomonochloro-<br>methane<br>(Part of THM) | μg/litre |                 | Н | < 20  | < 100 |  |  |
| Trihalomethanes<br>(Total)                     | μg/litre | THM             | Н | < 100 | < 150 |  |  |
| Bromate  | μg/litre |                 | Н | < 5   | < 10  |  |  |
| Chloramines                                    | μg/litre | Cl <sub>2</sub> | Н | < 2   | < 4   |  |  |

| Specificati                                  |                         | ter quality in           |                                 | human consumpti<br>er supply | on          |
|--|-------------------------|--------------------------|---------------------------------|------------------------------|-------------|
| Status                                       | Ranges and upper limits |                          |                                 |                              |             |
| Interpretation                               | (Ideal guideline)       | (Acceptable<br>Standard) |                                 |                              |             |
| DETERMINANTS                                 | Unit                    | Format                   | Concern                         | 95 Percentile 1              | Requirement |
| INORGANIC MICRO                              | DETERM                  | INANTS                   |                                 |                              |             |
| Cyanide (free)                               | μg/litre                | CN-                      | Н                               | < 20                         | < 50        |
| Cyanide (recoverable)                        | μg/litre                | CN-                      | H                               | < 70                         | < 200       |
| Iron   | μg/litre                | Fe                       | н,Е                             | < 200                        | < 300       |
| Chlorine dioxide after<br>30 min; GENERAL    | μg/litre                |                          | Н                               | 200 - 500                    | < 800       |
| Chlorine dioxide after<br>30 min; SPECIFIC   | µg/litre                |                          | Turbid-<br>ity> 0.3<br>NTU      | 200                          | 200 - 400   |
| Chlorine dioxide after<br>60 min; SPECIFIC   | μg/litre                |                          | Turbid-<br>ity> 1.0<br>NTU      | < 200                        | 200 - 500   |
| Chlorite                                     | μg/litre                |                          | Н                               | < 400                        | < 800       |
| Chlorate                                     | μg/litre                |                          | Н                               | < 200                        | < 700       |
| Haloacetic acids                             | μg/litre                |                          | H                               | not detected                 | < 60        |
| Chlorine, free,<br>after 30 min;<br>GENERAL  | mg/litre                | Cl <sub>2</sub>          | H,I                             | 0.3 – 0.5                    | 0.1 – 1.5   |
| Chlorine, free,<br>after 30 min;<br>SPECIFIC | mg/litre                | Cl <sub>2</sub>          | Turbid-<br>ity:<br>< 0.3<br>NTU | 0.3                          | 0.1 – 1.5   |
| Chlorine, free,<br>after 30 min;<br>SPECIFIC | mg/litre                | Cl <sub>2</sub>          | Turbid-<br>ity:<br>> 0.3<br>NTU | 0.5                          | 0.1 – 1.5   |
| Chlorine, free,<br>after 60 min;<br>SPECIFIC | mg/litre                | Cl <sub>2</sub>          | Turbid-<br>ity:<br>>1.0<br>NTU  | 1.0                          | 0.1 – 1.5   |

| Specificat             |              | ter quality in<br>e source and |         | human consumpti<br>r supply | on                       |  |
|------------------------|--------------|--------------------------------|---------|-----------------------------|--------------------------|--|
| Status                 | Ranges and t | ıpper limits                   |         |                             |                          |  |
| Interpretation         |              |                                |         | (Ideal guideline)           | (Acceptable<br>Standard) |  |
| DETERMINANTS           | Unit         | Format                         | Concern | 95 Percentile Requirement   |                          |  |
| BIOLOGICAL REQU        | REMENT       | S                              |         |                             |                          |  |
| Algae                  |              |                                |         |                             |                          |  |
| Chlorophyll α          | μg/litre     |                                | E,O     | < 1                         | < 2                      |  |
| Total algae cell count |              | /ml                            | н,о     | < 200                       | <5 000                   |  |
| Blue-green algae       | Cells        | /ml                            | н,о     | < 200                       | <2 000                   |  |
| Mycrocystin            | μg/litre     |                                | Н       | < 0.1                       | < 1                      |  |

| Specificati   |                   | ter quality is           |         | human consumpti   | on          |  |
|---|-------------------|--------------------------|---------|---|-------------|--|
| Status  | Ranges and        | upper limits             |         |   |             |  |
| Interpretation  | (Ideal guideline) | (Acceptable<br>Standard) |         |   |             |  |
| DETERMINANTS  | Unit              | Format                   | Concern | 95 Percentile   | Requirement |  |
| INORGANIC MICRO   | DETERM            | INANTS                   |         |   |             |  |
| Cyanide (free)  | μg/litre          | CN-                      | H       | < 20  | < 50        |  |
| Cyanide (recoverable)   | μg/litre          | CN-                      | Н       | < 70  | < 200       |  |
| Iron  | μg/litre          | Fe                       | H,E     | < 200   | < 300       |  |
| Geosmin   | ηg/litre          |                          | E, H    | < 15  | < 30        |  |
| 2-Methyl Iso<br>Borneal (2 MIB)   | ηg/litre          |                          | E, H    | < 15  | < 30        |  |
| OTHER DETERMINA   | NTS               |                          |         |   |             |  |
| Agricultural chemical compounds  Industrial chemical compounds  |                   |                          | Н       | Any organic compound recognized as an agro-chemical must be in accordance with the WHO and EPA requirements.  Any organic compound recognized as an industrial chemical must be in accordance |             |  |
| Endocrine disruptive chemicals  |                   |                          | Н       | with the WHO and EPA requirements.  Any chemical compound that is suspected of having endocrine disruptive effects must be in accordance with the WHO and EPA requirements.                   |             |  |
| RADIOACTIVITY   |                   |                          |         | 95 Percentile   | -           |  |
| Gross alpha activity  | Bq/litre          |                          | н       | < 0.2   | < 0.5       |  |
| Gross beta activity   | Bq/litre          |                          | Н       | < 0.4   | < 1.0       |  |
| If Gross alpha and beta is above specification calculate Dose based on individual radionuclide concentrations | mSv/a             |                          | Н       | ≤ 0.04  | ≤ 0.1       |  |

"Concern" refers to impact if the limit is transgressed: H = health concern; O = organoleptic effect;

I = effect on infrastructure, structural; E = aesthetic effect

- \* Based on a viral cell culture-dependent method and not on cell culture-independent methods (e.g. PCR)
- \*\* Indicative of faecal pollution having occurred, even when the residual disinfectant levels are safe.
- \*\*\* Comply with SANAS Guidelines

Table 1.2: Standards for Microbiological and Biological Requirements

| MICROBIOLOGICAL REQUIR                                  | EMENTS              | APPLICAB           | LE TO A | LL POTABLE    | WATER                      |
|---|---------------------|--------------------|---------|---------------|----------------------------|
| Microbiology  | Cfu                 |                    |         | 95 percentile | 1 of<br>samples<br>maximum |
| Heterotrophic bacteria HPC or TCC                       | Counts              | /ml                |         | 100           | 1 000                      |
| Total Coliform  | Counts              | /100 ml            | H       | 0             | 5                          |
| E.Coli  | Counts              | /100 ml            | Н       | 0             | 1                          |
| Entrerococci  | Counts              | /100 ml            | Н       | 0             | 1                          |
| Somatic Coliphage                                       | Counts              | /100 ml            | Н       | 0             | 1                          |
| Clostridium perfrigens inclusive spores                 | Counts              | /100 ml            | Н       | 0             | 1                          |
| Enteric viruses   | viral<br>count*     | /10 L              | Н       | 0             | 1                          |
| Parasites (Protozoa) applicable to                      | 95 percentile       | 99 percen-<br>tile |         |               |                            |
| Giardia lamblia   | Cysts               | /100 litre         | Н       | 0             | 1                          |
| Cryptosporidium   | Oocysts             | /100 litre         | Н       | 0             | 1                          |
| Giardia lamblia and<br>Giardia lamblia<br>(Grab sample) | cysts or<br>oocysts | /10 L              | Н       | 0             | 0                          |

Table 1.3: Special Requirements for the Protection of Infrastructure

|  |             |                           |                          | an consumption froi<br>frastructure against   |              |
|--|-------------|---------------------------|--------------------------|---|--------------|
| Status   | ****        |                           |                          | Ranges and t  | ipper limits |
| Interpretation                                     |             | (Ideal<br>guideline)      | (Acceptable<br>Standard) |   |              |
| DETERMI-<br>NANTS                                  | Unit        | Format                    | Concern                  | 95 Percentile   | requirement  |
| CORROSIVE A  | ND SCALING  | PROPERT                   | IES (treated             | l surface water)  |              |
| Calcium<br>Carbonate<br>Precipitation<br>Potential | mg/litre    | ССРР                      | I                        | 4 - 5   | 1 - 6        |
| Alkalinity/<br>Sulphate/<br>Chloride Ratio         | Equivalents | Corros-<br>ivety<br>Ratio | I                        | With SO <sub>4</sub> and Cl above 50 mg/li<br>Ratio=(Alk/50)/(SO <sub>4</sub> /48+Cl/35.5<br>5.0 Water is Stable<br>Ratio=(SO <sub>4</sub> /48+Cl/35.5)/(Alk/50<br>0.2 Water is Corrosive |              |
| Total Hardness<br>(Ca & Mg)                        | mg/litre    | CaCO <sub>3</sub>         | I                        | <200  | < 400        |

| Status   |             |                           |                          | Ranges and up   | per limits |
|--|-------------|---------------------------|--------------------------|---|------------|
| Interpretation                                     | 20          | (Ideal<br>guideline)      | (Acceptable<br>Standard) |   |            |
| DETERMI-<br>NANTS                                  | Unit        | Format                    | Concern                  | 95 Percentile rec   | quirement  |
| CORROSIVE A  | ND SCALING  | PROPERT                   | IES (ground              | l water)  |            |
| Calcium<br>Carbonate<br>Precipitation<br>Potential | mg/litre    | ССРР                      | I                        | 4 - 5   | 3 - 15     |
| Alkalinity/<br>Sulphate/<br>Chloride Ratio         | Equivalents | Corro-<br>sivety<br>Ratio | I                        | With SO <sub>4</sub> and Cl<br>above 50 mg/litre<br>Ratio=(Alk/50)/<br>(SO <sub>4</sub> /48+Cl/35.5) ><br>5.0 Water is Stable<br>Ratio=<br>(SO <sub>4</sub> /48+Cl/35.5)/<br>(Alk/50) > 0.2<br>Water is Corrosive |            |
| Total Hardness<br>(Ca & Mg)                        | mg/litre    | CaCO <sub>3</sub>         | I                        | <400  | < 1000     |

ANNEXURE 2: KMZ FILE FOR LÜDERITZ PROPOSED BATHYMETRIC SURVEY AREA (20 KM2).

# Section 6. Sample Contract for Consulting Services - Small Assignment – Lump sum

# SAMPLE CONTRACT FOR CONSULTING SERVICES SMALL ASSIGNMENTS LUMP-SUM PAYMENTS

#### **CONTRACT No. [insert]**

THIS CONTRACT ("Contract") is entered into this [insert starting date of assignment], by and between [insert Client's name] ("the Client") having its principal place of business at [insert Client's address], and [insert Consultant's name] ("the Consultant") having its principal office located at [insert Consultant's address].

WHEREAS, the Client wishes to have the Consultant perform the services hereinafter referred to, and

WHEREAS, the Consultant is willing to perform these services,

NOW THEREFORE THE PARTIES hereby agree as follows:

#### 1. Services

- (i) The Consultant shall perform the services specified in Annex A, "Terms of Reference and Scope of Services," which is made an integral part of this Contract ("the Services").
- (ii) The Consultant shall provide the personnel listed in Annex B, "Consultant's Personnel," to perform the Services.
- (iii) The Consultant shall submit to the Client the reports in the form and within the time periods specified in Annex C, "Consultant's Reporting Obligations."

#### 2. Term

The Consultant shall perform the Services during the period commencing [insert starting date] and continuing through [insert completion date], or any other period as may be subsequently agreed by the parties in writing.

#### 3. Payment

#### A. Ceiling

For Services rendered pursuant to Annex A, the Client shall pay the Consultant an amount not to exceed [insert amount]. This amount has been established based on the understanding that it includes all of the Consultant's costs and profits as well as any tax obligation that may be imposed on the Consultant.

<sup>&</sup>lt;sup>1</sup> Avoid use of "P.O. Box" address

#### B. <u>Schedule of Payments</u>

The schedule of payments is specified below<sup>2</sup>:

[insert detailed list of payments specifying amount of each installment, deliverable/output for which the installment is paid and currency]

#### C. Payment Conditions

Payment shall be made in *Namibia Dollars*, no later than 30 days following submission by the Consultant of invoices in duplicate to the Coordinator designated in paragraph 4.

Payments shall be made to Consultant's bank account [insert banking details.]

### 4. Project Administration

#### A. <u>Coordinator</u>.

The Client designates Mr./Ms. [insert name and job title] as Client's Coordinator; the Coordinator will be responsible for the coordination of activities under this Contract, for acceptance and approval of the reports and of other deliverables by the Client and for receiving and approving invoices for the payment.

#### B. Reports.

The reports listed in Annex C, "Consultant's Reporting Obligations," shall be submitted in the course of the assignment, and will constitute the basis for the payments to be made under paragraph 3.

### 5. Performance Standards

The Consultant undertakes to perform the Services with the highest standards of professional and ethical competence and integrity. The Consultant shall promptly replace any employees assigned under this Contract that the Client considers unsatisfactory.

### 6. Inspections and Auditing

The Consultant shall permit, and shall cause its Sub-Consultants to permit, the Client and/or persons or auditors appointed by the Client to inspect and/or audit its accounts and records and other documents relating to the submission of the Proposal to provide the Services and performance of the Contract. Any failure to comply with this obligation may constitute a prohibited practice subject to contract termination and/or the imposition of sanctions by the Client (including without limitation s determination of ineligibility) in accordance with prevailing sanctions procedures.

<sup>&</sup>lt;sup>2</sup> Fill in based on required outputs as described in Annex A (Terms of Reference) and Annex C (Reporting Requirements). Avoid front-loaded payments. Advance payments in contracts with firms require a bank guarantee for the same amount.

#### 7. Confidentiality

The Consultants shall not, during the term of this Contract and within two years after its expiration, disclose any proprietary or confidential information relating to the Services, this Contract or the Client's business or operations without the prior written consent of the Client.

### 8. Ownership of Material

of Any studies reports or other material, graphic, software or otherwise, prepared by the Consultant for the Client under the Contract shall belong to and remain the property of the Client. The Consultant may retain a copy of such documents and software<sup>3</sup>.

#### 9. Consultant Not to be Engaged in Certain Activities

The Consultant agrees that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultant, shall be disqualified from providing goods, works or services (other than consulting services that would not give rise to a conflict of interest) resulting from or closely related to the Consulting Services for the preparation or implementation of the Project

#### 10. Insurance

The Consultant will be responsible for taking out any appropriate insurance coverage.

#### 11. Assignment

The Consultant shall not assign this Contract or sub-contract any portion of it without the Client's prior written consent.

# 12. Law Governing Contract and Language

The Contract shall be governed by the laws of Namibia, and the language of the Contract shall be *English*.

### 13. Dispute Resolution<sup>4</sup>

Any dispute arising out of the Contract, which cannot be amicably settled between the parties, shall be referred to adjudication/arbitration in accordance with the laws of Namibia.

#### 14. Termination

The Client may terminate this Contract with at least ten (10) working days prior written notice to the Consultant after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause:

- (a) If the Consultant does not remedy a failure in the performance of its obligations under the Contract within seven (7) working days after being notified, or within any further period as the Client may have subsequently approved in writing;
- (b) If the Consultant becomes insolvent or bankrupt;

SC RP NW 011 2026

<sup>&</sup>lt;sup>3</sup> Restrictions about the future use of these documents and software, if any, shall be specified at the end of paragraph 8.

<sup>&</sup>lt;sup>4</sup> In case of a Contract entered into with a foreign Consultant, the following provision may be substituted for paragraph 13: "Any dispute, controversy or claim arising out of or relating to this Contract or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force."

- (c) If the Consultant, in the judgment of the Client or the Bank, has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices (as defined in the prevailing Bank's sanctions procedures) in competing for or in performing the Contract.
- (d) If the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

| FOR THE CLIENT | FOR THE CONSULTANT |
|----------------|--------------------|
| Signed by      | Signed by          |
| Title:         | Title:             |

#### LIST OF ANNEXES

Annex A: Terms of Reference and Scope of Services

Annex B: Consultant's Personnel and corresponding unit rates

Annex C: Consultant's Reporting Obligations