

### **CEYLON ELECTRICITY BOARD**

# Request for Proposals (RFP) (Quality and Cost Based Selection)

Procurement of Consultancy Service for Conducting Avifaunal Studies for the following proposed wind power projects in Mannar region

**Project 1 Mullikulam Wind Farm with Grid Connecting Transmission Line** 

Project 2 Mannar Wind Power Project - Phase I Extension in Mannar Island (Capacity enhancement to the existing Thambapavani wind farm)

Ref No: CEB/MWPP/Ph. III/2022/CPCP-02

#### **Section 1. Letter of Invitation**

RFP No : CEB/MWPP/Ph. III/2022/CPCP-02

Date : 01 February 2023

Dear Sir,

Procurement of consultancy service for conducting Avifaunal study for the following proposed wind power projects in Mannar region.:

- Project 1 Mullikulam Wind Farm with Grid Connecting Transmission Line
- Project 2 Mannar Wind Power Project Phase I Extension in Mannar Island (capacity enhancement to the existing Thambapavani wind farm)
- 1. The Project Consultant Procurement Committee (CPCP) on behalf of the Ceylon Electricity Board invites proposals to provide the above consulting service. More details on the services are provided in the Terms of Reference in Section 5 of the RFP.
- 2. CPCP has decided to directly call RFP's from prospective consultants for this consultancy. Therefore, there are no previously shortlisted consultants for this consultancy. However, the RFP document is prepared using the 'Standard Request for Proposals- Selection of Consultants' document published by National Procurement Agency in December 2007. Hence, the term "shortlisted consultants" mentioned in the RFP should be changed as "prospective consultants" in all occurrences.
- 3. A Consulting firm/ Organization will be selected under Quality and Cost Base Selection (QCBS) method and Procedures described in this RFP, in accordance with the policies described in the latest Version of the following Guidelines:
  - a) Selection and Employment of Consultants published by National Procurement Agency
- 4. This 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 Forms of Contract

Yours Sincerely,

THE CHAIRMAN

PROJECTCONSULTANTS PROCUREMENT COMMITTEE

#### Section 2. Instructions to Consultants

#### **Definitions**

- a) "Client" means the procuring entity with which the selected Consultantsigns the Contract for the Services.
- b) "Consultant" means any organization 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 attacheddocuments listed in Clause 1 of, that is the General Conditions (GC), the Special Conditions of the form of agreement.
- d) "Data Sheet" means such part of the Instructions to Consultants used toreflect specific assignment conditions.
- e) "Day" means calendar day.
- f) "Foreign Personnel" means such professionals and support staff who at thetime of being so provided had their domicile outside Sri Lanka;
- g) "Instructions to Consultants" (Section 2 of the RFP) means the documentwhich provides shortlisted Consultants with all information needed toprepare their Proposals.
- h) "Local Personnel" means such professionals and support staff who at the time of being so provided had their domicile within Sri Lanka.
- i) "LOI" (Section 1 of the RFP) means the Letter of Invitation being sent bythe Client to the shortlisted Consultants.
- j) "Party" means either or both the Client or the Consultant, as the contextrequires.
- k) "Personnel" means professionals and support staff provided by the Consultant or by any Sub-Consultant and assigned to perform the Servicesor any part thereof;
- 1) "Proposal" means the Technical Proposal and the Financial Proposal.
- m) "RFP" means the Request for Proposal prepared by the Client for theselection of Consultants.
- n) "Services" means the work to be performed by the Consultant pursuant to the Contract.
- o) "Sub-Consultant" means any person or entity with whom the Consultantsubcontracts any part of the Services.
- p) "Terms of Reference" (TOR) means the document included in the RFP asSection 5 which explains the objectives, scope of work, activities, tasks tobe 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 willselect 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, for consulting services required for theassignment named in the Data Sheet. The Proposal will be the basis forcontract negotiations and ultimately for a signed Contract with theselected Consultant.
- 1.3 Consultants should familiarize themselves with local conditions of thelocation where the assignment has to be carried out and take them intoaccount in preparing their Proposals. To obtain first-hand information onthe assignment and local conditions, Consultants are encouraged to visitthe Client before submitting a proposal and to attend a pre-proposal conference if one is specified in the Data Sheet. Attending the pre-proposal conference is optional. Consultants should contact the Client'srepresentative named in the Data Sheet to arrange for their visit or toobtain additional information on the pre-proposal conference. Consultants should ensure that these officials are advised of the visit inadequate time to allow them to make appropriate arrangements.
- 1.4 The Client will timely provide at no cost to the Consultants the inputsand facilities specified in the Data Sheet, assist the firm in obtaininglicenses 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 notbound to accept any proposal, and reserves the right to annul theselection process at any time prior to Contract award, without therebyincurring any liability to the Consultants.

# Conflict of Interest

- 1.6 The Client requires that Consultants provide professional, objective, and an 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, worksor services other than consulting services, and any of its affiliates, shall be disqualified from providing consulting services related tothose goods, works or services. Conversely, a firm hired to provideconsulting services, 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.

# Conflicting assignments

(ii) A Consultant (including its Personnel and Sub-Consultants) or any ofits 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, aConsultant hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project. Similarly, a Consultant hired toprepare Terms of Reference for an assignment should not be hired for the assignment in question.

# Conflicting relationships

- (iii) A Consultant (including its Personnel and Sub-Consultants) that has abusiness or family relationship with a member of the Client's staffwho is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection processfor such assignment, or (iii) supervision of the Contract, may not beawarded a 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 ashaving 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 Personnel under their own ministries, departments oragencies. Recruiting former government employees of the Client towork for their former ministries, departments or agencies is acceptable provided no conflict of interest exists. When the Consultant nominates any government employee as Personnel intheir technical proposal, such Personnel must have written certification from their government or employer confirming that they are 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 fromhaving provided consulting services related to the assignment inquestion, the Client shall make available to all shortlisted Consultants

together with this RFP all information that would in that respect givesuch Consultant any competitive advantage over competingConsultants.

# Only one Proposal

1.7 Shortlisted Consultants may only submit one proposal. If a Consultantsubmits 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 more than one proposal.

# Proposal Validity

The Data Sheet indicates how long Consultants' Proposals must remainvalid after the submission date. During this period, Consultants shallmaintain the availability of professional staff nominated in the Proposal. The Client will make its best effort to complete negotiations within thisperiod. Should the need arise, however, the Client may requestConsultants to extend the validity period of their proposals. Consultantswho agree to such extension shall confirm that they maintain theavailability of the professional staff nominated in the Proposal, or in theirconfirmation of extension of validity of the Proposal, Consultants couldsubmit new staff in replacement, which would be considered in the finalevaluation for contract award. Consultants who do not agree have theright to refuse to extend the validity of their Proposals.

# Eligibility of Sub-Consultants

1.9 In case a shortlisted Consultant intends to associate with Consultants whohave not been shortlisted and/or individual expert(s), such otherConsultants and/or individual expert(s) shall be subject to therequirements set forth in this RFP.

# Fraud and Corruption

- 1.10 The officials of the procuring entity, as well as Consultants participating in this consultant selection process should adhere to the highest ethical standards, both during the selection process and throughout the execution of a contract. In pursuance of this policy, the following definitions are given:
  - (i) "corrupt practice" means offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution;
  - (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;
  - (iii) "collusive practices" means a scheme or arrangement between two or more consultants with or without the knowledge of the PE, designed to establish prices at artificial, noncompetitive levels;
  - (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.

- 2. Clarification and Amendment of RFP Document
- 2.1 Consultants may request a clarification of any of the RFP documents upto the number of days indicated in the Data Sheet before the proposalsubmission date. Any request for clarification must be sent in writing, tothe Client's address indicated in the Data Sheet. The Client will respondin writing, and will send written copies of the response (including anexplanation of the query but without identifying the source of inquiry) toall Consultants, who have been invited to submit a proposal. Should the Client deem it necessary to amend the RFP as a result of a clarification, itshall do so following the procedure under para. 2.2.
- 2.2 At any time before the submission of Proposals, the Client may amend the RFP by issuing an addendum in writing. 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. Preparation of Proposals

- 3.1 The Proposal (see para. 1.2), as well as all related correspondence exchanged by the Consultants and the Client, shall be written in English Language.
- 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:
  - (a) If a shortlisted Consultant considers that it may enhance its expertise for the assignment by associating with other Consultants in a joint venture or sub-consultancy, it may associate with either (a) non-shortlisted 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 non-shortlisted 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 staff-months 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.

#### Language

(d) Documents to be issued by the Consultants as part of this assignment must be in English language.

### Technical Proposal Format and Content

- 3.4 The Technical Proposal shall provide the information indicated in thefollowing para from (a) to (g) using the attached Standard Forms(Section 3)
  - (a) a brief description of the 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.
  - (b) 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).
  - (c) 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.

- (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 foreign (if required) 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) a detailed description of the proposed methodology and staffing for training, if the Data Sheet specifies training as a specific component of the assignment.
- 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 (local and foreign (if required); and (b)other expenses indicated in the Data Sheet. If stated in the Data Sheet, these costs should be broken down by activity using FORM FIN – 5 and, ifappropriate, into foreign and local expenditures. All activities and itemsdescribed in the Technical Proposal must be priced separately; activities and items described in the Technical Proposal but not priced, shall beassumed to be included in the prices of other activities or items.

#### Taxes

- 3.7 A foreign Consultant may be subject to local taxes on amounts payable bythe Client under the Contract. 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. The tax liability of a local Consultant shall be borne by the Consultant.
- 3.8 The Consultants must price the local cost in Sri Lanka Rupees only. However, the expenditure involves in foreign currency such as foreign consultant's fees and air ticket may be price in foreign currency.
- 4. Submission, Receipt, and Opening of Proposals
- 4.1 The original Proposal (Technical Proposal and, Financial Proposal) shallcontain no interlineations or overwriting, except as necessary to correcterrors made by the Consultants themselves. The person who 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 shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been dully authorized to sign. 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 are discrepancies between the original and the copies of the Technical Proposal, the original governs.
- 4.4 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked "TECHNICAL PROPOSAL" Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the the name of the assignment, and with a warning "DO NOT OPEN WITH THE TECHNICALPROPOSAL." 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, reference number and title, and be clearly marked "DO NOT OPEN, EXCEPT IN PRESENCE OF THEOFFICIAL APPOINTED, BEFORE

**10:30 HRS OF 28<sup>th</sup> February 2023**. 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 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 the deadline for their submission. The envelopes with the Financial Proposal shall remain sealed and securely stored.
- 5. rom the time the Proposals are opened to the time the Contract is awarded, the Proposal Consultants should not contact the Client on any matter related to its Evaluation 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 mayresult 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 Client shall evaluate the Technical Proposals on the basis of theirresponsiveness to the Terms of Reference, applying the evaluationcriteria, subcriteria, 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 theminimum technical score indicated in the Data Sheet.

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

- 5.3 After the technical evaluation is completed in accordance with paragraph5.2 above, the Client shall notify those Consultants whose Proposals didnot meet the minimum qualifying mark or were considered nonresponsive to the RFP and TOR, that their Financial Proposals will bereturned unopened after completing the selection process. The Clientshall simultaneously notify in writing Consultants that have secured theminimum qualifying mark, the date, time and location for opening the Financial Proposals. The opening date should allow Consultantssufficient time to make arrangements for attending the opening. Consultants' attendance at the opening of Financial Proposals is optional
- Financial Proposals shallbe opened publicly in the presence of 5.4 theConsultants' representatives who choose to attend. The name of theConsultants and the technical scores obtained bv each qualifiedConsultant shall be read aloud. The Financial Proposal of theConsultants who met the minimum qualifying mark will then beinspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total pricesread aloud and recorded.

#### Evaluation of Financial Proposals for QBS

5.5 Following the ranking of technical Proposals as described under 5.2above, The Client will examine the Financial Proposal of the firstranked Consultant. First, the Client will examine whether FinancialProposal is complete. Then the Proposal is checked for arithmeticalerrors.

The Reasonability of the following in comparison with the supporting documents submitted by the Consultant is examined:

- a) The remuneration rates, social costs, overheads, profits; and
- b) Other costs such as out of pocket expenses, cost of surveys, equipment, office rent, supplies, travel, transport, computer rental, mobilisation, and printing.

Following the ranking of technical Proposals, when selection is based onquality only (QBS), the first ranked Consultant is invited to negotiate itsproposal and the Contract in accordance with the instructions given underpara. 6 of these Instructions.

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

5.6 The Evaluation Committee will correct any computational errors. Whencorrecting computational errors, in case of discrepancy between a partialamount and the total amount, or between word and figures the formerswill prevail. In addition to the above corrections, as indicated under para.3.6, activities and items described in the Technical Proposal but notpriced, shall be assumed to be included in the prices of other activities oritems. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, (i) if Option B isapplicable under Clause 6 of GC, the Evaluation Committee shall correctthe quantification indicated in the Financial Proposal so as to make itconsistent with that indicated in the Technical Proposal, apply therelevant unit price included in the Financial Proposal to the corrected quantity and correct the total Proposal cost, (ii) if Option A is applicable under Clause 6 of GC, no corrections are applied to the Financial Proposal in this respect. Prices shall be converted to Sri Lankan Rupees, if the consultants were allowed to indicate certain expenditure of the Financial Proposal in foreign currency, using the selling rates of exchange, source and date indicated in the Data Sheet.

Combined Evaluation Technical and Financial Proposals (only for QCBS) 5.7 In case of QCBS, the lowest evaluated Financial Proposal (F<sub>m</sub>) will begiven the maximum financial score (S<sub>f</sub>) of 100 points. The financial scores(S<sub>f</sub>) of the other Financial Proposals will be computed as indicated in theData Sheet. Proposals will be ranked according to their combined technical(St) and financial (S<sub>f</sub>) scores using the weights (T = the weight given to theTechnical Proposal; P = the weight given to the Financial Proposal; T + P =1) indicated in the Data Sheet: S = S<sub>t</sub> x T% + S<sub>f</sub> x P%. The firm achievingthe highest combined technical and financial score will be invited fornegotiations.

Evaluation of Financial Proposals ( only for FBS) 5.8 In the case of Fixed-Budget Selection, the Client will select the firm thatsubmittedthe highest ranked Technical Proposal within the budget. Proposals that exceed the indicated budget will be rejected. The evaluated proposal price according to para. 5.6 shall be considered, and the selected firm is invited for negotiations

Evaluation of Financial Proposals (only for LCS) 5.9 In the case of the Least-Cost Selection, the Client will select the lowestProposal among those that passed the minimum technical score. The evaluated proposal price according to para. 5.6 shall be considered, and the selected firm is invited for negotiations

6.

Negotiations 6.1Negotiations will be held at the date and 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 authority tonegotiate and conclude a Contract.

# Technical Negotiations

6.2 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.

Availability Of Professional Staff/experts 6.3 Having selected the Consultant on the basis of, among other things, an of evaluation of proposed Professional staff, the Client expects to negotiate a Professional Contract on the basis of the professional staff named in the Proposal. staff/experts 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 be submitted by the Consultant within the period of time specified in the letter of invitation to negotiate.

Financial Negotiations (only for QCBS,FBS and LCS)

6.4 In the cases of QCBS, FBS, and the LCS methods, unless there are exceptional reasons, the remuneration rates for staff and other proposed unit rates of the financial negotiations shall not be negotiate.

Financial Negotiations (only for QBS)Techni 6.5 For QBS method, if requested by the Client, the Consultants shall provide negotiations the information on remuneration rates described in the Appendix attached (only for to Section 4 - Financial Proposal - Standard Forms of this RFP)

# Conclusion of the negotiations

Negotiation will conclude with a review of the draft Contract to complete negotiations the Client and the Consultant will initial the agreed 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

- 7.1After completing negotiations the Client shall award the Contract to the Award of selected Consultant, and promptly notify all Consultants who haveContract submitted proposals. After Contract signature, the Client shall return theunopened Financial Proposals to the unsuccessful Consultants.
- 7.2 The Client will notify the selected Consultant the date, time and venue for the signing of the agreement following the template given in Section 6. The option selected for the method of payment, under GC Clause 6 is stated in the Data Sheet.
- 7.3 The Consultant is expected to commence the assignment on the date and at the location specified in the Data Sheet.

## 8.0 Confidentiality

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 the award of Contract. The undue use by anyConsultant of confidential information related to the process may result inthe rejection of its Proposal and may be subject to the provisions of theBank's antifraud and corruption policy.

#### **Instructions to Consultants**

CPCP has decided to directly call RFP's from prospective consultants for this consultancy. Therefore, there are no previously shortlisted consultants for this consultancy. However, the RFP document is prepared using the 'Standard Request for Proposals – Selection of Consultants' document published by National Procurement Agency in December 2007. Hence, the term "shortlisted consultants" mentioned in the RFP should be changed as "prospective consultants" in all occurrences.

#### DATA SHEET

Paragraph Reference	Descriptions
1.1	Name of the Client: CEYLON ELECTRICITY BOARD
	Method of selection:  Quality and Cost Based Selection (QCBS)
1.2	The assignment is:
	Procurement of consultancy service for conducting Avifaunal Studiesfor the following proposed wind power projects in Mannar region.
	<ul> <li>a. Mullikulam Wind Farm with Grid Connecting Transmission Line</li> <li>b. Mannar Wind Power Project - Phase I Extension in Mannar Island (Capacity enhancement to the existing Thambapavani wind farm)</li> </ul>
	Contract No: CEB/MWPP/Ph. III/2022/CPCP-02
	A pre-proposal conference will be held: Yes
1.3	Online pre-bid meeting will be held at 1000 Hrs., on 14 <sup>th</sup> February 2023. Link for the online meeting will be shared among the potential bidders.
1.4	The Client will provide the following inputs and facilities;  a) Copies of all the project related documents as available on the date of signing the Contract
	<ul><li>b) Assist in obtaining necessary permissions from the relevant authorities and organizations to access particular sites and locations necessary to perform the studies</li><li>c) Any other inputs as agreed at the time of signing the agreement</li></ul>
1.8	Proposals must remain valid until: 30 <sup>st</sup> May2023 (91 Days)

2.1	Clarifications may be requested not later than 07 days before the submission date. The address for requesting clarifications is:
	Office of the Project Director Mannar Wind Power Project – Phase I Extension & Phase III Ceylon Electricity Board No. 754, New Parliament Road, Pelawatta
	BATTARAMULLA 10120  Tel: +94 11 2889640  Fax: +94 11 2869631  E-mail: asela.jayasinghe@ceb.lk or asela115@gmail.com
3.3(a)	Prospective Consultants may associate with other Consultants:  Not allowed
3.3(b)	A: If QCBS/QBS/LCS methods are used: The available budget is: LKR Ten (10) million
3.4(g;)	Training is a specific component of this assignment: No
	a) No reimbursable payment will be made. The consultant shall include all associated costs in their Financial Proposal including;
3.6	<ol> <li>i. Staff costs, remuneration for any consultants/sub-consultants engaged by the consultant</li> <li>ii. Overheads and profits in carrying out the scope of services as per the Terms of Reference</li> <li>iii. All travel, transport, lodging &amp; boarding of Consultant's staff</li> <li>iv. Cost of Office accommodation including overheads</li> <li>v. Computing and communication facilities and software as needed</li> <li>vi. Cost of reports production (including printing) and delivering to the Client</li> <li>vii. Any other costs deemed necessary to carry out this assignment</li> </ol>
	(b) Breakdown of cost of activities required: No
3.7	The tax liability of all foreign or local Consultants shall be borne by the consultant
4.3	Consultant must submit the following; a) Original and one copy of the Technical Proposal b) Original of the Financial Proposal

	The Proposal submission address is:
4.5	Office of the Project Director Mannar Wind Power Project – Phase I Extension & Phase III Ceylon Electricity Board No. 754 New Parliament Road, Pelawatta BATTARAMULLA 10120
	Proposals must be submitted no later than the following date and time: 28 <sup>th</sup> February 2023 at 10:30 am
5.2	Criteria, sub-criteria, and point system for the evaluation of Technical Proposals are:
	Points
	(i) Specific experience of the Consultants relevant to the assignment: (refer Annex I)
	[20]
	(ii) Methodology and Work plan
	a) Technical approach and methodology[10] b) Work plan [5] c) Organization and staffing [5]
	Total points for criterion (ii): [20]
	(iii) Key professional staff qualifications and competence for the assignment:
	a) Field Specialist (Bird survey) [20] b) Field Specialist (Bat study) [20] c) Field Surveyors (at least 05 persons) [20]
	Total points for criterion (iii): [60]
	The number of points to be assigned to each of the above positions or disciplines shall be determined considering the following three sub criteria and relevant percentage weights:
	a. General qualifications [10%] b. Adequacy for the assignment [65%] c. Experience with similar studies[25%]
	Total Points for main three criteria (i, ii, and iii) :100
	The Minimum technical score (St) required to pass is <b>75 points</b> (out of 100 points allocated for the Technical Proposal)
	For the conversions to Sri Lankan Rupees:
5.6	The source of official selling rates is: Not applicable The date of exchange rates is: Not applicable

5.7	The formula for determining the financial scores is the following:
	$S_f = 100 \text{ x F}_m / \text{ F}$ , in which $S_f$ is the financial score, $F_m$ is the lowest price and F the price of the proposal under consideration.
	The weights given to the Technical and Financial Proposals are: $T=0.80$ and $P=0.20$
6.1	Expected date and address for contract negotiations:  Date: During 2 <sup>nd</sup> week of March 2023
	Office of the Project Director Mannar Wind Power Project – Phase I Extension & Phase III Ceylon Electricity Board No. 754 New Parliament Road, Pelawatta BATTARAMULLA 10120
7.2	The Option applicable is :Option A  Expected date for commencement of consulting services:
7.3	Date: During 3 <sup>rd</sup> week of March 2023 The date for the commencement of Services is the following day from the effective date

# Section 3 Technical Proposal –Standard Forms

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

TECH-1	Technical Proposal Submission Form
TECH-2	Consultant's Organization and Experience A Consultant's Organization BConsultant's Experience
TECH-3	Comments or Suggestions on the Terms of Reference and onCounterpart Staff and Facilities to be provided by the Client A On the Terms of Reference  B On the Counterpart Staff and Facilities
TECH-4	Description of the Approach, Methodology and Work Plan for Performing the Assignment
TECH-5	Team Composition and Task Assignments
TECH-6	Curriculum Vitae (CV) for Proposed Professional Staff
TECH-7	Staffing Schedule
TECH-8	Work Schedule

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

Location & Date

Chairman,
Project Consultants Procurement Committee,
Ceylon Electricity Board,
No. 754
New Parliament Road, Pelawatta
BATTARAMULLA 10120

Dear Sir;

We, the undersigned, offer to provide consulting services for conducting avifaunal studies for the following two projects;

- i) Project 1 Mullikulam Wind Farm with Grid Connecting Transmission Line
- ii) Project 2 Mannar Wind Power Project Phase I Extension in Mannar Island (Capacity enhancement to the existing Thambapavani wind farm)

in accordance with yourRequest 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.

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 1.8 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 7.3 of the Data Sheet.

### FORM TECH-2 CONSULTANT'S ORGANIZATION AND EXPERIENCE

### A - Consultant's Organization

[Provide here a brief (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 maximum of 20 pages.]

Name of the Firm <sup>34</sup>	
Name and address of Client:	
Assignment name:	
	Duration of assignment
Approx. value of the contract:	(months):
Location:	Total No of staff-months of the
2 2 1 1 20	assignment
No of professional staff-	1 01
months	Approx. value of the services
provided by you:	provided by firm: Completion date
Start date (month/year):	(month/year):
.	()
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 pro	ovided by your staff within the assignment:
1	
ı <b>l</b>	

<sup>&</sup>lt;sup>34</sup>Indicate the firms' name or associate firms' 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 activity 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. Suggested to present the Technical Proposal (maximum of 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,
- 1 <u>Technical Approach and Methodology.</u> 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. Should highlight the problems being addressed and their importance, and explain the technical approach that would adopt to address them. Should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- Work Plan. 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.
- 3 <u>Organization and Staffing.</u> Should propose the structure and composition of the team. Should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

### FORM TECH-5 TEAM COMPOSITION AND TASKASSIGNMENTS

Name of Staff	Firm	Area of Expertise	Position Assigned	Task/s Assigned

### FORM TECH-6 CURRICULUM VITAE FOR PROPOSED PROFESSIONAL STAFF (Reference: 5.2 of Data Sheet)

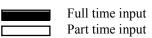
1.	Proposed Position <sup>35</sup> :
2.	Name of Firm <sup>36</sup> :
3.	Name of Staff <sup>37</sup> :
4.	Date of Birth: Nationality:
5.	Education <sup>38</sup> :
6.	Membership of Professional Associations:
7.	Other Relevant Qualifications <sup>39</sup> :
8.	Languages <sup>40</sup> :
9.	Employment Record <sup>41</sup> :
	From [Year]: to [Year]:
	Employer:
	Positions held (with brief description):
10	. Certification:
de	the undersigned, certify that to the best of my knowledge and belief, this CV correctly scribes myself, my qualifications, and my experience. I understand that any willful sstatement described herein may lead to my disqualification or dismissal, if engaged.
 [Si	Dateignature of staff member]
	Date
[Si	ignature of authorized representative of the client]
Fu	ll name of authorized representative:
	<sup>35</sup> only one candidate shall be nominated for each position

<sup>&</sup>lt;sup>36</sup>Insert name of firm proposing the staff
<sup>37</sup>Insert full name
<sup>38</sup>Indicate /university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment
<sup>39</sup>Indicate significant qualification/ training
<sup>40</sup>For each language indicates proficiency: good, fair, or poor in speaking, reading, and writing]:

<sup>&</sup>lt;sup>41</sup>Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format): dates of employment, name of employing organization, positions held

### FORM TECH-7 STAFFING SCHEDULE<sup>42</sup>

No	Name of Staff		Staff input(in the form of a bar chart) 43 Total staff-more									f-month in	put				
		1	2	3	4	5	6	7	8	9	10	11	12	n	Office	Field	Total
Natio	onal														200		
1		[Office]															
1		[Field]															
ا ا			<u>_</u>				ļ		<b></b>		ļ	ļ					•
2			<u>-</u>			<b></b>	<del> </del>			-	<b></b>	<del> </del>					
-							+			1	<del>                                     </del>						
							- <del></del> -				<del> </del>	<del> </del> -					
n							SE 18 18 19 19 19 19		***************************************								
11																	
	1.4	•	•	•	•	•	•	•	•	•	Subto	tal	•				
Fore	eign 44			20			163					_	2				
1		[Office]					<b></b>				<b>.</b>						
		[Field]						<u> </u>									
2			<u> </u>				ļ				ļ	ļ					
			<b>-</b>			<del> </del>	<del> </del> -		<del> </del>		<del></del>	<del> </del>					
n			<b>_</b>			<b> </b>	†		<del></del> -	†	†						
<u> </u>				•	•			•	•	•	Subto	tal	•				
											Total						



For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).

43 Months are counted from the start of the assignment. For each staff indicate separately staff input for office and field work

<sup>44</sup> Only if Expatriate staff is proposed

#### FORM TECH-8 WORK SCHEDULE

NIO	Activity 45/46		Months <sup>47</sup>												
N°	Activity /	1	2	3	4	5	6	7	8	9	10	11	12	n	
1															
2															
3															
4															
D															
<u> </u>															
<u> </u>															
<b> </b>															

Indicate all main activities ofthe assignment, including delivery ofreports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery ofreports, and benchmarks separately for each phase.
 In the case of Engineering/Architectural services design stage/ bidding stage/ supervision stage etc.

<sup>47</sup> Duration of activities shall be indicated in the form of a bar chart.

# Section 4 Financial Proposal - Standard Forms

### Section 4. Financial Proposal - Standard Forms

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. 3 of the Letter of Invitation.

- FIN-1 Financial Proposal Submission Form
- FIN-2 Summary of Costs
- FIN-3 Breakdown of Remuneration
- FIN-4 Reimbursable expenses
- FIN-5 Breakdown of Costs by Activity (if requested under Clause 3.6 of Data Sheet)

#### FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM

[Location, Date]

Chairman,
Project Consultants Procurement Committee,
Ceylon Electricity Board,
No. 754
New Parliament Road, Pelawatta
BATTARAMULLA 10120

Dear Sir,

We, the undersigned, offer to provide consulting services for conducting avifaunal studies for the following two projects;

- i) Project 1 Mullikulam Wind Farm with Grid Connecting Transmission Line
- ii) Project 2 Mannar Wind Power Project Phase I Extension in Mannar Island (Capacity enhancement to the existing Thambapavani wind farm)

in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures<sup>48</sup>].

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 1.8 of the Data Sheet.

We understand you are not bound to accept any Proposal you receive.
Authorized Signature [In full and initials]:
Name and Title of Signatory:
Name of Firm:
Address:

 $<sup>^{48}</sup>$  Amounts must coincide with the ones indicated under Total Cost of Financial proposal in Form FIN-2

### FORM FIN-2 SUMMARY OF COSTS

	Local cost	Foreign Cost		
	(Sri Lankan Rupees)	Currency	Amount	
Remuneration (from FIN 3)		Not Applicable	Not Applicable	
Other Expenses (From FIN 4)		Not Applicable	Not Applicable	
Total Costs of Financial Proposal carried to Financial Proposal Submission Form		Not Applicable	Not Applicable	

#### FORM FIN-3 BREAK DOWN OF REMUNERATION

		T .	Staff Month Rate		Amount			
Name <sup>49</sup>	Position <sup>50</sup>	Input (Staff- months)	Currency	Amount	Local Currency	Foreign Currency		
Ivanic						Currency	Amount	
						Not Applicable	Not Applicable	
						Not Applicable	Not Applicable	
						Not Applicable	Not Applicable	
						Not Applicable	Not Applicable	
						Not Applicable	Not Applicable	
						Not Applicable	Not Applicable	
	Total Costs carried to FIN –2					Not Applicable	Not Applicable	

<sup>&</sup>lt;sup>49</sup> Professional staff should be indicated individually; Support Staff should be indicated per category (e.g.: draftsmen, clerical staff).

<sup>&</sup>lt;sup>50</sup> Positions of professional staff shall coincide with the ones indicated in Form TECH-5.

#### FORM FIN-4 BREAKDOWN OF OTHER EXPENSES

				Unit Cost <sup>52</sup>			Amount		
No Description 51	Unit Quantity	Quantity	Local in Sri Lankan Rupees	Foreign		Local in Sri Lankan Rupees	Foreign		
				Lankan Rupees	Currency	Amount	_	Currency	Amount
		Day			Not Applicable	Not Applicable		Not Applicable	Not Applicable
	International flights <sup>53</sup>	Trip			Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Communication costs between [Insert place] and [Insert place]				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Drafting, reproduction of reports				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Equipment, instruments, materials, supplies, etc.				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Use of computers, software				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Laboratory tests.				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Subcontracts				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Local transportation costs				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Office rent, clerical assistance				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Training of the Client's personnel				Not Applicable	Not Applicable		Not Applicable	Not Applicable
	Total Costs carried to FIN - 2							Not Applicable	Not Applicable

- Delete items that are not applicable or add other items required
   Should not repeat remuneration considered under Form Fin -4
   Indicate route of each flight, and if the trip is one- or two-ways

# **Section 5**

Terms of Reference – Avifauna Study

# Section 5. Terms of Reference- Avifauna Study

#### 5.1 BACKGROUND

The Ceylon Electricity Board (CEB) is proposing to develop twowind power projects in Mannar region. To facilitate the project development, it has become necessary to conduct Avifaunal studies for the following proposed wind power projects;

- a. Mullikulam Wind Farm with Grid Connecting Transmission Line in mainland Mannar
- b. Mannar Wind Power Project Phase I Extension in Mannar Island (Capacity enhancement to the existing Thambapavani wind farm)

As part of the Environmental Impact Assessment studies for the above projects, it has been decided to conduct a one year bird survey in order to understand the potential impacts to the birds due to the projects activities and to propose mitigation measures.

#### 5.2 DESCRIPTION OF THE PROJECTS

### 5.2.1 Mullikulam Wind Farm with Grid Connecting Transmission Line in mainland Mannar

The projectscope would comprise of constructing following major components;

- i. 34 nos. of wind turbines: Typical details of a wind turbine is given in Annex II
- ii. Collector substation: New collector substation including transforms, switchgears and accessories will be constructed near Kal Aaru facing the main road
- iii. Collector cables:Network of collector cables will be established to link the individual wind turbines to the new substation near Kal Aaru
- iv. Overhead transmission line: Power generated from the wind farm will be supplied to the national grid through newly constructed 220kV, 29km long power transmission line between the new collector substation near Kal Aaru and the Mannar (Puthukamam) Grid substation. Further details of the transmission line is given in Annex III

# **5.2.2** Mannar Wind Power Project - Phase I Extension in Mannar Island (Capacity enhancement to the existing Thambapavani wind farm)

The projectscope would comprise of constructing following major components;

- i. 21 nos. of wind turbines: Typical details of a wind turbine is given in Annex II
- ii. Collector cables: Network of collector cable will be stablished to link the individual wind turbines to the to the existing collector substation at Nadukkuda village (for this project power transmission to the National Grid would be through the already constructed 220kV transmission line)

#### TERMS OF REFERENCE FOR THE PROPOSED AVIFAUNA STUDY

- 5.2.1 Terms of reference for Mullikulam Wind Farm with Grid Connecting Transmission Line in mainland Mannar: Refer Annex IV
- 5.2.2 Terms of reference for Mannar Wind Power Project Phase I Extension in Mannar Island: Refer Annex V

### 5.3 Eligibility

An organization, individuals or a team of experts who are qualified in their relevant field of expertise with adequate experience and demonstrated capability to carry out the specified scope of work are invited to bid. The consultant shall disclose fully and provide supplementary documents to support academic and professional qualifications/experience of the individuals/experts proposed in the team. The bidder shall submit all the forms given in this bid document which required to support the eligibility criteria.

### 5.4 Qualifications of the Bidder

The consultant shall have team members with specialized knowledge, experience and hold academic qualifications in the following fields, but not limited to thereof:

No.	Position	Qualification	Experience
01	Field Specialist (Bird survey)	MSc or higher qualification in Natural Sciences/Biological Sciences/Management fields	At least 10 years work experience in bird study and at least experience as a team leader for 02 similar studies.  Similar work experience related to wind farms/ transmission lines will be preferred.
02	Field Specialist (Bat study)	MSc or higher qualification in Natural Sciences/Biological Sciences/Management fields	At least 10 years work experience in bird study and at least experience as a team leader for 02 similar studies.  Similar work experience related to wind farms/ transmission lines will be preferred.
03	Field Surveyors	MSc/BSc in Zoological related subjects, Specialization in field of Ornithology	At least 7 years work experience in the related field of Bird Surveys and ornithological studies.  Similar work experience related to wind farms/ transmission lines will be preferred.

<sup>\*</sup>Note – Any one of the above Field Specialist can be proposed as a Team Leader

The bidder shall clearly indicate the qualifications and experience of the team members by duly filling the biodata according to the format given in FORM TECH-6 for each team member separately.

#### 5.5 Deliverables

No	Deliverables	Duration
1	Inception Report	Within one week from the date of signing of
		the Agreement
2	First interim report	First interim report (by May 2023) at the end
		of present migratory season
3	Second interim report	Second interim report (by September 2023) at
		the end of non-migratory season (2023)
4	Final report	Final report by March 2024

### 5.6 Assignment Period

The Assignment shallcover both migratory and non-migratory periods which may span for a period of one (01) year.

## 5.7 Other conditions/requirements

- 5.7.1 The consultant will be scrutinized for timely completion of the scope stipulated in the scope of work and subsequent submission of the Final study report to CEB.
- 5.7.2 The consultant is expected to carryout necessary works, studies, surveys, meetings, consultation with public/stakeholders etc. as relevant so that the scope of work is comprehensively addressed.
- 5.7.3 CEB will provide the following documents/information to the successful bidder which shall be referred or utilized in the process of report preparation.
  - a. Geo-referenced drone-survey maps
  - b. Project layout marked on 1: 50,000 topographic maps
  - c. Previous Avi-fauna study reports (available for Thambapavani wind farm)
- 5.7.4 The consultant with his proposed team shall have the sound capability of completing the specified scope within the specified timeline.
- 5.7.5 Within one (01) week from signing of the Contract, an inception report shall be submitted. This should comprised of an outline of the Final report which addresses key studies to be covered as per the scope of work, methodology, work plan, etc.
- 5.7.6 The Consultant shall present the findings of the study to CEBduring the submission of the draft Final report.
- 5.7.7 The Consultant, upon request by the CEB shall present the findings of the Final report to main project approving agencies if required.
- 5.7.8 The Consultant shall submit one hard copy and a soft copy of the draft Final report for CEB comments including all the relevant tables, maps, figures, annexes etc. The consultant shall address any comments/ clarifications raised by CEB after the submission of the draft Final report.

Section 6.

**Standard Forms of Contract** 

# I. Form of Contract

(Text in brackets [] is optional; all notes should be deleted in final text)

This CONTRACT (hereinafter called the "Contract") is made the [day] day of the month of [month], [year], between, on the one hand, Ceylon Electricity Board (hereinafter called the "Client") and, on the other hand, [name of Consultant] (hereinafter called the "Consultant").

[Note: If the Consultant consist of more than one entity, the above should be partially amended to read as follows: "...(hereinafter called the "Client") and, on the other hand, a joint venture/consortium/association consisting of the following entities, each of which will be jointly and severally liable to the Client for all the Consultant's obligations under this Contract, namely, [name of Consultant] and [name of Consultant] (hereinafter called the "Consultant").]

### WHEREAS

- (a) the Client has requested the Consultant to provide certain consulting services as defined in this Contract (hereinafter called the "Services");
- (b) the Consultant, having represented to the Client that it has the required professional skills, and personnel and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract;

### NOW THEREFORE the parties hereto hereby agree as follows:

- 1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
  - (a) The General Conditions of Contract;
  - (b) The Special Conditions of Contract;
  - (c) The following Appendices: [Note: If any of these Appendices are not used, the words "Not Used" should be inserted below next to the title of the Appendix]

Appendix A: Description of Services	Not used
Appendix B: Reporting Requirements	Not used
Appendix C: Personnel and Sub-Consultants	Not used
Appendix D: Breakdown of Contract Price	Not used
Appendix E: Services and Facilities Provided by the Client	Not used
Appendix G: Form of Advance Payment Guarantee	Used

2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in the Contract, in particular:

- (a) the Consultants shall carry out the Services in accordance with the provisions of the Contract; and
- (b) the Client shall make payments to the Consultants in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of [name of Client]
[Authorized Representative]
For and on behalf of [name of Consultant]
[Authorized Representative]
[Note: If the Consultant consists of more than one entity, all these entities should appear a signatories, e.g., in the following manner:]
For and on behalf of each of the Members of the Consultant
[name of member]
[Authorized Representative]
[name of member]
[Authorized Representative]

# **IIGeneral Conditions of Contract**

### . GENERAL PROVISIONS

### 1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in Democratic Socialist Republic of Sri Lanka, as they may be issued and in force from time to time.
- (b) "Consultant" means any private or public entity that will provide 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 of the form of agreement, that is these General Conditions (GC), the Special Conditions (SC), and the Appendices.
- (d) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (e) "Day" means calendar day.
- (f) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1.
- (g) "Foreign Currency" means any currency other than Sri Lankan Rupees.
- (h) "GC" means these General Conditions of Contract.
- (i) "Member" means any of the entities that make up the joint venture/consortium/association, and "Members" means all these entities.
- (j) "Party" means the Client or the Consultant, as the case may be, and "Parties" means both of them.
- (k) "Personnel" means persons hired by the Consultant or by any Sub-Consultants and assigned to the performance of the Services or any part thereof. "Foreign Personnel" means such professionals and support staff that at the time of being so provided had their domicile outside Sri Lanka; "National Staff" means such professionals and support staff who at the time of being so provided had their domicile inside Sri Lanka; and "Key Personnel" means the Personnel referred to in Clause GC 4.2
- (l) "Reimbursable expenses" means all assignment-related costs

that will be paid to the Consultant on actuals.

- (m) "SC" means the Special Conditions of Contract by which the GC may be amended or supplemented.
- (n) "Services" means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix A hereto.
- (o) "Sub-Consultants" means any person or entity to whom/which the Consultant subcontracts any part of the Services.
- (p) "Third Party" means any person or entity other than the Government, the Client, the Consultant or a Sub-Consultant.
- (q) "In writing" means communicated in written form with proof of receipt.

### 1.2 Relationship Between the Parties

Nothing contained herein shall be construed as establishing a relationship of master and servant or of principal and agent as between the Client and the Consultant. The Consultant, subject to this Contract, has complete charge of Personnel and Sub-Consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

# 1.3 Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

### 1.4 Language

This Contract has been executed in English Language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

### 1.5 Headings

The headings shall not limit, alter or affect the meaning of this Contract.

#### 1.6 Notices

1.6.1

Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SC.

1.6.2

A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.

### 1.7Location

The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not

so specified, at such locations, as the Client may approve.

## 1.8Authority of Member in Charge

In case the Consultant consists of a joint venture/ consortium/ association of more than one entity, the Members hereby authorize the entity specified in the SC to act on their behalf in exercising all the Consultant's rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client.

### 1.9 Authorized Representat ives

Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the Client or the Consultant may be taken or executed by the officials specified in the SC

### 1.10 Taxes and Duties

The Consultant, Sub-Consultants, and their Personnel shall pay such indirect taxes, duties, fees, and other impositions levied under the Applicable Law, the amount of which is deemed to have been included in the Contract Price

## 2. COMMENCEMENT, COMPLETION.MODIFICATIONANDTERMINATIONOFCONTRACT

# 2.1 Effectiveness of Contract

This Contract shall come into force and effect on the date (the "Effective Date") of the Client's notice to the Consultant instructing the Consultant to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SC have been met.

# 2.2 Commencement of Services

The Consultant shall begin carrying out the Services not later than the number of Days after the Effective Date specified in the SC.

# 2.3 Expiration of Contract

Unless terminated earlier pursuant to Clause GC 2.7 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.

# 2.4 Modifications or Variations

Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.

### 2.5 Force Majeure 2.5.1 Definition

(a) For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the

circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.

- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Sub-Consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected both to take into account at the time of the conclusion of this Contract, and avoid or overcome in the carrying out of its obligations hereunder.
- (c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

### 2.5.2 No Breach of Contract

The failure of a Party to fulfil any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

## 2.5.3 Measures to be Taken

- (a) A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of Force Majeure.
- (b) A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) Days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.
- (c) Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.
- (d) During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultant, upon instructions by the Client, shall either:

- (i) demobilize, in which case the Consultant shall be reimbursed for additional costs they reasonably and necessarily incurred, and, if required by the Client, in reactivating the Services; or
- (ii) continue with the Services to the extent possible, in which case the Consultant shall continue to be paid under the terms of this Contract and be reimbursed for additional costs reasonably and necessarily incurred.
- (e) In the case of disagreement between the Parties as to the existence or extent of Force Majeure, the matter shall be settled according to ClauseGC 8.

### 2.6 Suspension

The Client may, by written notice of suspension to the Consultant, suspend all payments to the Consultant hereunder if the Consultant fails to perform any of its obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultant to remedy such failure within a period not exceeding thirty (30) Days after receipt by the Consultant of such notice of suspension.

### 2.7 Termination

# 2.7.1 By the Client

The Client may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (f) of this Clause GC 2.7.1. In such an occurrence the Client shall give a not less than thirty (30) Days' written notice of termination to the Consultant, and sixty (60) Days' in the case of the event referred to in (e).

- (a) If the Consultant fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to Clause GC 2.6 hereinabove, within thirty (30) Days of receipt of such notice of suspension or within such further period as the Client may have subsequently approved in writing.
- (b) If the Consultant becomes (or, if the Consultant consists of more than one entity, if any of its Members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary.
- (c) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.

- (d) If the Consultant, in the judgment of the Client has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- (e) If, as the result of Force Majeure, the Consultant are unable to perform a material portion of the Services for a period of not less than sixty (60) Days.
- (f) If the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

# 2.7.2 By the Consultant

The Consultants may terminate this Contract, by not less than thirty (30) Days' written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (c) of this Clause GC 2.7.2:

- (a) If the Client fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause GC 8 hereof within sixty (60) days after receiving written notice from the Consultant that such payment is overdue
- (b) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than ninety (90) Days.
- (c) If the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof.

# 2.7.3 Cessation of Rights and Obligations

Upon termination of this Contract pursuant to Clauses GC 2.7 hereof, or upon expiration of this Contract pursuant to Clause GC 2.3 hereof, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GC 3.3 hereof, (iii) the Consultant's obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GC 3.6 hereof, and (iv) any right which a Party may have under the Applicable Law.

# 2.7.4 Cessation of Services

Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GC 2.7.1 or GC 2.7.2 hereof, the Consultant shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultant and equipment and materials furnished by the Client, the Consultant shall proceed as provided, respectively, by Clauses GC 3.7 hereof.

# 2.7.5 Payment upon Termination

Upon termination of this Contract pursuant to Clauses GC 2.7.1 or GC 2.7.2, the Client shall make the following payments to the Consultant:

- (a) payment and reimbursable expenditures pursuant to Clause GC 6 for Services satisfactorily performed prior to the effective date of termination;
- (b) except in the case of termination pursuant to paragraphs (e) and (f) of Clause GC 2.7.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel and their eligible dependents.

# 2.7.6 Disputes about Events of Termination

If either Party disputes whether an event specified in Clause GC 2.9.1 or in Clause GC 2.9.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to Clause GC 8 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

#### 3. OBLIGATIONS OF THE CONSULTANT

### 3.1 General

### 3.1.1 Standard of Performance

The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-Consultants or third Parties.

# 3.2 Conflict of Interests

The Consultant shall hold the Client's interests paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.

# 3.2.1 Consultants Not to Benefit from Commissions, Discounts.etc.

The payment of the Consultant pursuant to Clause GC 6 shall constitute the Consultant's only payment in connection with this Contract or the Services, and the Consultant shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the

Consultant shall use their best efforts to ensure that the Personnel, any Sub-Consultants, and agents of either of them similarly shall not receive any such additional payment.

# 3.2.2 Consultant and Affiliates Not to be Otherwise Interested in Project

The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub-Consultants and any entity affiliated with such Sub-Consultants, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Consultant's Services for the preparation or implementation of the project.

# 3.2.3 Prohibition of Conflicting Activities

The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultants and their Personnel not to engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract.

# 3.3 Confidentiality

Except with the prior written consent of the Client, the Consultant and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Personnel make public the recommendations formulated in the course of, or as a result of, the Services.

# 3.4 Insurance to be Taken Out by the Consultant

The Consultant (a) shall take out and maintain, and shall cause any Sub-Consultants to take out and maintain, at their (or the Sub-Consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverage, as shall be specified in the SC; and (b) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums have been paid.

# 3.5 Consultant's ActionsRequiring Client's Prior Approval

The Consultant shall obtain the Client's prior approval in writing before taking any of the following actions:

- (a) entering into a subcontract for the performance of any part of the Services,
- (b) appointing such members of the Personnel not listed by name in Appendix C, and
- (c) any other action that may be specified in the SC.

# 3.6 Reporting Obligations

(a) The Consultant shall submit to the Client the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.

- (b) Final reports shall be delivered in CD ROM in addition to the hard copies specified in said Appendix.
- 3.7
  Documents
  Prepared by
  the Consultant to be
  the Property of the
  Client
- All plans, drawings, specifications, designs, reports, other documents and software submitted by the Consultant under this Contract shall become and remain the property of the Client, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof.
- (b) The Consultant may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be specified in the SC.

# 3.8 Accounting, Inspection and Auditing

The Consultant (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with accepted accounting principles and in such form and detail as will clearly identify all relevant time changes and costs, and the bases thereof, and (ii) shall periodically permit the Client or its designated representative and/or the Bank, and up to two years from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client or the Bank, if so required by the Client or the Bank as the case may be.

### 4. CONSULTANT'S PERSONNEL

# 4.1 Description of Personnel

- (a) The Consultant shall employ and provide such qualified and experienced Personnel and Sub-Consultants as are required to carry out the Services. The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Consultant's Key Personnel are described in Appendix C.The Key Personnel and Sub-Consultants listed by title as well as by name in Appendix C are hereby approved by the Client.
- (b) If required to comply with the provisions of Clause GC 3.1.1 hereof, adjustments with respect to the estimated periods of engagement of Key Personnel set forth in Appendix C may be made by the Consultant by written notice to the Client, provided (i) that such adjustments shall not alter the originally estimated period of engagement of any individual by more than 10% or one week, whichever is larger, and (ii) that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1(b) of this Contract. Any othersuch

adjustments shall only be made with the Client's written approval.

(c) If additional work is required beyond the scope of the Services specified in Appendix A, the estimated periods of engagement of Key Personnel set forth in Appendix C may be increased by agreement in writing between the Client and the Consultant. In case where payments under this Contract exceed the ceilings set forth in Clause GC 6.2 of this Contract, this will be explicitly mentioned in the agreement.

# 4.2 Approval of Personnel

The Key Personnel and Sub-Consultants listed by title as well as by name in Appendix C are hereby approved by the Client. In respect of other Personnel which the Consultant proposes to use in the carrying out of the Services, the Consultant shall submit to the Client for review and approval a copy of their Curricula Vitae (CVs). If the Client does not object in writing (stating the reasons for the objection) within twenty-one (21) Days from the date of receipt of such CVs, such Personnel shall be deemed to have been approved by the Client.

# 4.3 Working Hours, Overtime, Leave, etc

In case where Consultant will be paid based on the time spend by any Personnel the Working hours and holidays for such Personnel are set forth in Appendix C hereto. To account for travel time, Foreign Personnel carrying out Services inside Sri Lanka shall be deemed to have commenced, or finished work in respect of the Services such number of days before their arrival in, or after their departure from Sri Lanka as is specified in Appendix C hereto. Such Key Personnel shall not be entitled to be paid for overtime nor to take paid sick leave or vacation leave except as specified in Appendix C hereto, and except as specified in such Appendix, the Consultant's remuneration shall be deemed to cover these items. All leave to be allowed to the Personnel is included in the staffmonths of service set forth in Appendix C. Any taking of leave by Personnel shall be subject to the prior approval by the Consultant who shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services.

# 4.4 Removal and/or Replacement of Personnel

- (a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultant, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Personnel, the Consultant shall provide as a replacement a person of equivalent or better qualifications.
- (b) If the Client finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the Client's written request specifying the grounds thereof,

- provide as a replacement a person with qualifications and experience acceptable to the Client.
- (c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

### 5. OBLIGATIONS OF THE CLIENT

# 5.1 Assistance and Exemptions

Unless otherwise specified in the SC, the Client shall use its best efforts to ensure that the Government of Sri Lanka shall:

- (a) Provide where applicable, the Consultant, Sub-Consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Sub-Consultants or Personnel to perform the Services.
- (b) Arrange where applicable, for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in Sri Lanka.
- (c) Facilitate where applicable, prompt clearance through customs of any property required for the Services and of the personal effects of the Personnel and their eligible dependents.
- (d) Issue to officials, agents and representatives of the Government agencies all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services.
- (e) Provide to the Consultant, Sub-Consultants and Personnel any such other assistance as may be specified in the SC.

# 5.2 Change in the Applicable Law Related to Taxes and Duties

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Consultant in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Clauses GC 6.2

# 5.3 Services and Facilities

(a) The Client shall make available free of charge to the Consultant the professional and support counterpart personnel, Services and Facilities listed under Appendix E.

(b) In case that such personnel, services, facilities and property shall not be made available to the Consultant as and when specified in Appendix E, the Parties shall agree on (i) how the affected part of the Services shall be carried out; (ii) any time extension that it may be appropriate to grant to the Consultant for the performance of the Services, (iii) the manner in which the Consultant shall procure any such personnel, services, facilities and property from other sources, and (iv) the additional payments, if any, to be made to the Consultant as a result thereof pursuant to Clause GC 6. hereinafter.

### 5.4 Counterpart Personnel

- (a) The Client shall make available to the Consultant free of charge such professional and support counterpart personnel, to be nominated by the Client with the Consultant's advice, if specified in Appendix E.
- (b) If counterpart personnel are not provided by the Client to the Consultant as and when specified in Appendix E, the Client and the Consultant shall agree on (i) how the affected part of the Services shall be carried out, and (ii) the additional payments, if any, to be made by the Client to the Consultant as a result thereof pursuant to Clause GC 6.4 for option A or 6.3 for option B.
- (c) Professional and support counterpart personnel, excluding Client's liaison personnel, shall work under the exclusive direction of the Consultant. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Consultant that is consistent with the position occupied by such member, the Consultant may request the replacement of such member, and the Client shall not unreasonably refuse to act upon such request.

#### 6. PAYMENTSTOTHE CONSULTANT

# 6.1 Option 'A' or Option 'B'is applicable

Two options, 'Option A' and 'Option B' are given below. The applicable option is stated in the SC. If no option is stated in SC, Option A is applicable.

OPTION A (Clause 6.2 to 6.6 below are applicable)

# 6.2 Lump-Sum Payment

The total payment due to the Consultant shall not exceed the Contract Price which is an all inclusive fixed lump-sum covering all costs required to carry out the Services described in Appendix A. Except as provided in Clause 5.2, the Contract Price may only be increased above the amounts stated in Clause 6.3 if the Parties have agreed to additional payments in accordance with Clause 2.4 or clause 5.4.

### **6.3 Contract Price**(a)

The price payable in Sri Lankan Rupees is set forth in the SC.

(b) The price payable in foreign currency/currencies is set forth in the SC.

# 6.4 Payment for Additional Services

For the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.4or per clause 4.1c, a breakdown of the lump-sum price is provided in Appendices D.

# 6.5 Terms and Conditions of Payment

Payments will be made according to the payment schedule stated in the SC. Unless otherwise stated in the SC, the first payment shall be made against the provision by the Consultant of an advance payment guarantee acceptable to the Client in an amount (or amounts) and in a currency (or currencies) specified in the SC. Such guarantee (i) to remain effective until the advance payment has been fully set off, and (ii) to be in the form set forth in Appendix G hereto, or in such other form as the Client shall have approved in writing. The advance payments will be set off by the Client in installments proportionate to the payments made to the Consultant. Any other payment shall be made after the conditions listed in the SC for such payment have been met, and the Consultant has submitted an invoice to the Client specifying the amount due.

## 6.6 Interest on Delayed Payments

If the Client has delayed payments beyond thirty (30) days after the due date stated in the Clause SC 6.5, interest shall be paid to the Consultant for each day of delay at the rate stated in the SC.

### OPTION B (Clause 6.2 to 6.5 below are applicable)

# 6.2 Cost Estimates; Ceiling Amount

- (a) An estimates of the cost of the Services payable in foreign currency is set forth in Appendix D.
- (b) Except as may be otherwise agreed under Clause GC 2.4 and subject to Clause GC 6.2(c), payments under this Contract shall not exceed the ceilings in Sri Lankan Rupees and foreign currency
- (c) Notwithstanding Clause GC 6.2(b) hereof, if pursuant to any of the Clauses GC 5.2, 5.3 or 5.4 hereof, the Parties shall agree that additional payments in local and/or foreign currency, as the case may be, shall be made to the Consultant in order to cover any necessary additional expenditures not envisaged in the cost estimates referred to in Clause GC 6.2(a) above, the ceiling or ceilings, as the case may be, set forth in Clause GC 6.2(b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.

# 6.3 Remuneration and

(a) Subject to the ceilings specified in Clause GC 6.2(b) hereof, the Client shall pay to the Consultant (i) remuneration as set forth in

# Reimbursable Expenses

Clause GC 6.3(b) hereunder, and (ii) reimbursable expenses as set forth in Clause GC 6.3(c) hereunder. Unless otherwise specified in the SC, said remuneration shall be fixed for the duration of the Contract.

- (b) Payment for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services after the date determined in accordance with Clause GC 2.2 and Clause SC 2.2 (or such other date as the Parties shall agree in writing), at the rates referred to in Clause SC 6.3(b), and subject to price adjustment, if any, specified in Clause SC 6.3(a).
- (c) Reimbursable expenses actually and reasonably incurred by the Consultant in the performance of the Services, as specified in Clause SC 6.3(c).
- (d) The remuneration rates referred to under paragraph (b) here above shall cover: (i) such salaries and allowances as the Consultant shall have agreed to pay to the Personnel as well as factors for social charges and overhead (bonuses or other means of profit-sharing shall not be allowed as an element of overhead), (ii) the cost of backstopping by home office staff not included in the Personnel listed in Appendix C, and (iii) the Consultant's fee.
- (e) Any rates specified for Personnel not yet appointed shall be provisional and shall be subject to revision, with the written approval of the Client, once the applicable salaries and allowances are known.
- (f) Payments for periods of less than one month shall be calculated on an hourly basis for actual time spent and directly attributable to the Services (one hour being equivalent to 1/176th of a month) and on a calendar-day basis for time spent away from home office (one day being equivalent to 1/30 of a month).

# 6.4 Currency of Payment

Foreign currency payments shall be made in the currency or currencies specified in the SC, and local currency payments shall be made in Sri Lankan Rupees.

## 6.5 Mode of Billing and Payment

Billings and payments in respect of the Services shall be made as follows:

(a) Within the number of days after the Effective Date specified in the SC, the Client shall cause to be paid to the Consultant advance payments in foreign currency and in Sri Lankan Rupees as specified in the SC. When the SC indicate advance payment, this will be due after provision by the Consultant to the Client of an advance payment guarantee acceptable to the Client in an amount (or amounts) and in a currency (or currencies) specified in the SC.

- Such guarantee (i) to remain effective until the advance payment has been fully set off, and (ii) to be in the form set forth in Appendix G hereto, or in such other form as the Client shall have approved in writing. The advance payments will be set off by the Client in equal installments against the statements for the number of months of the Services specified in the SC until said advance payments have been fully set off.
- (b) As soon as practicable and not later than fifteen (15) days after the end of each calendar month during the period of the Services, or after the end of each time intervals otherwise indicated in the SC, the Consultant shall submit to the Client, in duplicate, itemized statements, accompanied by copies of invoices, vouchers and other appropriate supporting materials, of the amounts payable pursuant to Clauses GC 6.4 and GC 6.5 for such month, or any other period indicated in the SC. Separate statements shall be submitted in respect of amounts payable in foreign currency and in local currency. Each statement shall distinguish that portion of the total eligible costs which pertains to remuneration from that portion which pertains to reimbursable expenses.
- (c) The Client shall pay the Consultant's statements within sixty (60) days after the receipt by the Client of such statements with supporting documents. Only such portion of a statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Consultant, the Client may add or subtract the difference from any subsequent payments. Interest at the annual rate specified in the SC shall become payable as from the above due date on any amount due by, but not paid on, such due date.
- (d) The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultant and approved as satisfactory by the Client. The Services shall be deemed completed and finally accepted by the Client and the final report and final statement shall be deemed approved by the Client as satisfactory ninety (90) calendar days after receipt of the final report and final statement by the Client unless the Client, within such ninety (90) day period, gives written notice to the Consultant specifying in detail deficiencies in the Services, the final report or final statement. The Consultant shall thereupon promptly make any necessary corrections, and thereafter the foregoing process shall be repeated. Any amount, which the Client has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract, shall be reimbursed by the Consultant to the Client within

thirty (30) days after receipt by the Consultant of notice thereof. Any such claim by the Client for reimbursement must be made within twelve (12) calendar months after receipt by the Client of a final report and a GC-17 ment approved by the Client in accordance with the a

- (e) Payments in respect of remuneration or reimbursable expenses, which exceed the cost estimates for these items as set forth in Appendices D and E, may be charged to the respective contingencies provided for foreign and local currencies only if such expenditures were approved by the Client prior to being incurred.
- (f) With the exception of the final payment under (d) above, payments do not constitute acceptance of the Services nor relieve the Consultant of any obligations hereunder.

### 7. GOODFAITH

#### 7.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

### 8. SETTLEMENT OF DISPUTES

### 8.1 Amicable Settlement

- (a) The Parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of the Contract and the success of the assignment. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.
- (b) If either Party objects to any action or inaction of the other Party, the objecting Party may file a written Notice of Dispute to the other Party providing in detail the basis of the dispute. The Party receiving the Notice of Dispute will consider it and respond in writing within 30 Days after receipt. If that Party fails to respond within 30 Days, or the dispute cannot be amicably settled within 30 Days following the response ofthat Party, Clause GC 8.2 shall apply

# 8.2 Dispute Resolution

Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) Days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SC and in accordance with Sri Lanka Arbitration Act No. 11 of 1995.

# **III. Special Conditions of Contract**

Number ofGC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract		
1.6	Client:	Ceylon Electricity Board	
	Attention:	Project Director Mannar Wind Power Project – Phase I Extension & Phase III Ceylon Electricity Board No. 754 New Parliament Road, Pelawatta BATTARAMULLA 10120	
	Facsimile:	+94 11 2869631	
	E-mail:	yasasvin@live.com	
	Consultant:		
	Attention:		
	Facsimile:		
	E-mail:		
{1.8}	{The Member	in Charge is [insert name of member]	
one entity, the name of the entity whose address is specified		Consultant consists of a joint venture/ consortium/ association of more name of the entity whose address is specified in Clause SC 1.8 should be consultant consists only of one entity, this Clause SC 1.8 should be SC.	ould be
1.9	The Authorized Representatives are:		
	For the Client:Project Director – Mannar Wind Power Project (Phase I Extension &Phase III)		
	For the Consultant:		

{2.1}	The effective date is the date of signing the contract by both parties		
2.2	The date for the commencement of Services is the following day from the effective date  SC-1		
2.3	The Contract will be expired after completing the one-year avifaunal survey and handing over the Final reports after incorporating any comments by CEB		
3.4	The risks and the coverage shall be as follows:  (a) Third Party motor vehicle liability insurance in respect of motor vehicles operated by the Consultant or its Personnel or any Sub Consultants or their Personnel  (b) Third Party liability insurance, with a minimum coverage of Rs. 150,000.00 per event with unlimited number of events  (c) Professional liability insurance, with a minimum coverage of the value of the Contract  (d) Any other insurance cover deemed to be necessary to mitigate risks involved with the assignment		
{ 3.5 (c)}	The other actions are: None		
{3.7 (b)}	The Consultant shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Client.		
{5.1}	As indicated in TOR		
6.1	The applicable option is : Option A		
6.3(a)	The amount in Sri Lankan Rupees is: (Total Value)		
6.3(b)	The amount in foreign currency or currencies is: Not applicable		

6.5	Payments shall be made according to the following schedule			
0.3	Ref.	Deliverables	Description	
	1	Submission of Inception Report and Advanced payment guarantee	20% of the contract value against the submission of the inception report and advanced payment guarantee which is valid for a period of one year for the same amount	
	2	Submission of the First interim report	20% of the contract value as the 2 <sup>nd</sup> payment	
	3	Submission of the Second interim report	20% of the contract value as the 3 <sup>rd</sup> payment	
	4	Submission of the Final report	40% of the contract value as the final payment	
6.6	The	The interest rate is: Not Applicable		
8.2	prov. 1.	utes shall be settled by arbitration in accordance with the following isions:  Selection of Arbitrators. Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator:  (a) The Parties may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty (30)  Days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to High Court of Sri Lanka to nominate the arbitrator for the matter in dispute.  Substitute Arbitrators. If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.		
	3.	The decision of the sole arbitrator shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.		

# IV. Appendices

#### APPENDIX A – DESCRIPTION OF SERVICES

Note: This Appendix will include the final Terms of Reference worked out by the Client and the Consultants during technical negotiations. Give detailed descriptions of the Services to be provided, dates for completion of various tasks, place of performance for different tasks, specific tasks to be approved by Client, etc.

#### APPENDIX B - REPORTING REQUIREMENTS

Note: List format, frequency, and contents of reports; persons to receive them; dates of submission; etc. If no reports are to be submitted, state here "Not applicable."

### APPENDIX C - KEY PERSONNEL AND SUB-CONSULTANTS

Note: List under:

- C-1 Titles [and names, if already available], detailed job descriptions and minimum qualifications of Key Personnel to be assigned to work, and estimated staff-months for each.
- C-2 List of approved Sub-Consultants (if already available); same information with respect to their Personnel as in C-1.

In case where Consultant will be paid based on the time spend by any Personnel, list here the hours of work for Key Personnel; travel time to and from the country of the Government for Foreign Personnel (Clause GC 4.4(a)); entitlement, if any, to overtime pay, sick leave pay, vacation leave pay, etc.

### APPENDIX D - BREAKDOWN OF CONTRACT PRICE

Note: List here the elements of cost used to arrive at the breakdown of the lump-sum price - foreign currency portion:

- 1. Monthly rates for Personnel (Key Personnel and other Personnel).
- 2. Reimbursable expenses (items that are not applicable should be deleted; others may be added):
- (a) Per diem allowances for each of the Personnel for every day in which such Personnel shall be required to work outside the Location
- (b) Air transport for Foreign Personnel:

the cost of international transportation of the foreign Personnel by the most appropriate means of transport and the most direct practicable route to and from the Consultants' home office;

- (c) International communications: the cost of communications (other than those arising in the Client's country) reasonably required by the Consultant for the purposes of the Services.
- (d) The cost of printing, reproducing and shipping of the documents, reports, drawings, etc
- (e) The cost of acquisition, shipment and handling of the following equipment, instruments, materials, and supplies required for the Services, to be imported by the Consultants and to be paid for by the Client (including transportation to the Client's country).
- (f) The cost of laboratory tests on materials, model tests and other technical services authorized or requested by the Client.
- (m) The cost of such further items not covered in the foregoing but which may be required by the Consultants for the purpose of the Services, subject to the prior authorization in writing by the Client.

### APPENDIX E - SERVICES AND FACILITIES PROVIDED BY THE CLIENT

- I. Provide available project data, information and documents required for the services.
- II. Assist in obtaining permission from the relevant authorities and organizations to access particular sites and locations necessary to perform the studies

### APPENDIX F - FORM OF ADVANCE PAYMENTS GUARANTEE

Note: See Clause GC 6.4 and Clause SC 6.4.

### **Bank Guarantee for Advance Payment**

	[Bank's Name, and Address of Issuing Branch or Office]
Beneficiary:	[Name and Address of Client]
Date:	
ADVANCE	PAYMENT GUARANTEE No.:
into Contrac	en informed that [name of Consulting Firm] (hereinafter called "the Consultants") has entered t No. [reference number of the contract] dated
[insert date] Contract").	with you, for the provision of [brief description of Services] (hereinafter called "the
	, we understand that, according to the conditions of the Contract, an advance payment in the unt in figures] ([amount in words]) is to be made against an advance payment guarantee.
sums not exc your first der of their obli	st of the Consultants, we [name of Bank] hereby irrevocably undertake to pay you any sum or ceeding in total an amount of [amount in figures] ([amount in words]) <sup>1</sup> upon receipt by us of mand in writing accompanied by a written statement stating that the Consultants are in breach igation under the Contract because the Consultants have used the advance payment for the than toward providing the Services under the Contract.
referred to a	tion for any claim and payment under this guarantee to be made that the advance payment bove must have been received by the Consultants on their account number at ddress of Bank].
payment rep presented to certificate in payment, or	am amount of this guarantee shall be progressively reduced by the amount of the advance aid by the Consultants as indicated in copies of certified monthly statements which shall be us. This guarantee shall expire, at the latest, upon our receipt of the monthly payment adicating that the Consultants have made full repayment of the amount of the advance on the day of, 2, whichever is earlier. Consequently, any demand for this guarantee must be received by us at this office on or before that date.
This guarant	ee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.
[signat	ture(s)]
	italicized text is for indicative purposes only to assist in preparing this form and shall be ted from the final product.

The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency (ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Client.

Insert the expected expiration date. In the event of an extension of the time for completion of the Contract, the Client would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to

the expiration date established in the guarantee.

# **Summary of SpecificProject Experience**

Provide information on carrying out similar assignments pertaining to wind, transmission line, and related work as per the following format.

Project	Location/	Detailed	Present stage of the	Value of the	Services provided by
Name	Country	Project	Project	contract	the Consultant
		Description			(indicate the relevant
					stage/s)

# Typical details of a Wind Turbine

Dimensions for range of wind turbines in the capacity of 3.5MW to 5 MW which can be considered as viable for the proposed wind farms are listed below.

Table A1: Estimated Dimensions and Weights of Target Wind Turbines

Component	Dimensions (m)
Blade lengths	75
Hub height	100 to 115
Maximum height with blade	175 to 190
Ground clearance up to lower tip of the blade	25 - 40

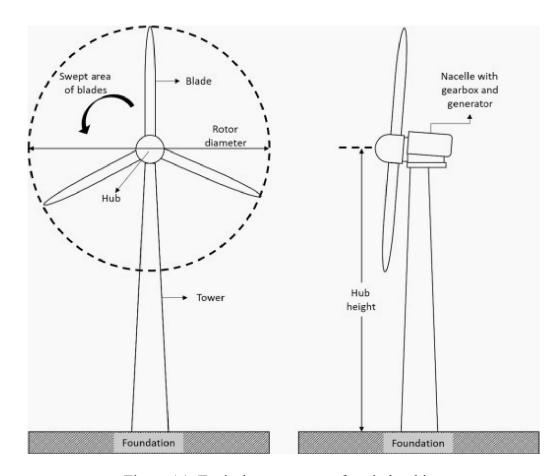


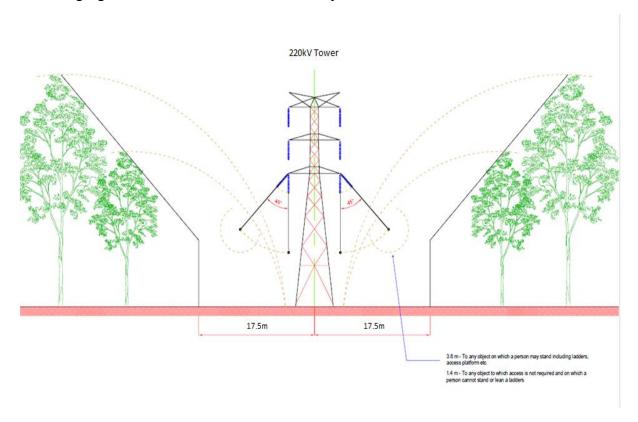
Figure A1: Typical components of a wind turbine

### **Details of Transmission Line and Collector Substation**

All wind turbines are to be connected to the proposed collector station in Kal-Aaru area in a land of 7 acres. A 220kV transmission line of about 29km is to be constructed from there to existing Mannar Grid Substation in Puthukamam. Following tables shows the land use along the line corridor and administrative areas traversed by the transmission line.

Transmission line consists of six conductors, a shield wire and an optic fiber cable mounted on steel lattice towers. Towers will be places on about 350m apart and typical height will be about 35m which can be extended by using body or leg extensions of 3m as required. CEB will maintain a wayleave corridor of 35m (17.5m to either sides from centre line).

Following figure shows a cross section of the wayleave corridor.



# Terms of Reference (TOR) for One-Year Avifaunal Survey for the Proposed Mullikulam Wind Farm with Grid Connecting Transmission Line in Mainland Mannar

### 1. Scope of the study

The focus area of the study includes following;

- a) Proposed wind farm corridor including a 500 m belt that is immediately outside the wind farm corridor (wind farm component)
- b) Proposed grid connecting transmission line (associated facility) which connects the wind farm to the Pudukamam Grid Substation

The one year study will focus on documenting the critical avifaunal habitats with the ultimate aim of identifying potential impacts that may arise due to wind farm development(wind farm component and associated facility) and identify necessary mitigation measures that are required for the negative impacts.



Figure 1.1: Wind turbine locations and transmission line – Mullikulam wind farm

### 2. Overall Approach

A literature survey will be carried out to document all available data on avifauna inhabiting the area identified for proposed development. Based on this data a preliminary assessment will be carried out to identify gaps in the available information and potential impacts of establishing a wind farm and its associated facility on the avifauna inhabiting the region. This will be followed by a detailed field investigation to identify different types of habitats present in the study area. The type of avifauna inhabiting each of these habitats, their relative abundance, their conservation status and the movement patterns of the avifauna. This information will be used to identify potential impacts of the proposed development on the avifauna and identify mitigation measures that are required for the identified significant negative impacts.

#### 3. Survey Methods

Determination of the composition, relative abundance of avifauna and their flight patterns within each of the habitat types identified.

### 3.1 Study of Birds for wind farm component

The following three (03) main survey methods shall be undertaken for bird study.

- a. Line Transect surveys (Grid Counts): These surveys cover a high proportion of the study area, to determine temporal changes in bird composition, abundance and movement patterns within the study area. The study area shall be divided into 1x1 km grids, and a line transect needs to be carried out in each square by slowly walking through the grid for a period of 20 min (the average distance that will be covered during the timed transect will be around 1 km), recording the fauna observed, together with the height of flying birds and their direction of flight.
- b. Vantage Point surveys: These surveys shall be undertaken to quantify bird flight activity through the study area and identify any important flight routes. The surveys need to be designed to primarily focus on visible migration through the survey area. Five (05) vantage points shall be established along the long axis of the study area. Each vantage point shall be sampled for a minimum of 36 hours. The vantage point surveys shall be undertaken by scanning the area from each point by eye and with binoculars, to a distance of approximately 2 km by two observers who will be standing back-to-back giving a 360° coverage. The surveys will exclude small-scale local movements within the observation area. These surveys will document flight heights of key bird species recorded and flock sizes over the wind farm sites. Flight routes of all Critical Habitat species observed flying through the survey area need to be mapped, to enable before/after comparisons to be drawn during the post-construction monitoring stage.
- c. **Block counts**: The key species within and in proximity to (within 1 km) the whole development considering each wind turbine footprint of the wind farm, shall be recorded with the survey area of approximately 500m x 500m count sectors related to each wind turbine to enable spatial analysis of the data set, and with counts made once a month during the entire study period.

### 3.2 Study of Bats for wind farm component

In addition to the above, specific study on Bats shall be undertaken and propose three (03) main data collection methods are outlined below.

- a. **Ultrasound acoustic surveys**: A standard bat acoustic (ultrasound) recorder needs to be used to sample bat calls within the study area. Based on the sounds recorded the species composition, abundance, and spatio-temporal patterns of echolocating bats that utilize the air space within the Project area will be mapped. Acoustic recordings need to be gathered at three (03) representative locations covering the study area. A minimum of 10 hours of acoustic recordings shall be gathered per location. Special attention shall be given to ponds and other freshwater sources present in the site when selecting sampling points. Acoustic data needs to be analyzed by the bat expert who has many years of experience identifying ultrasound calls of Sri Lankan bats on the basis of their spectrograms.
- b. **Mist-net surveys**: The acoustic surveys need to be complemented with mist-netting surveys to further characterize species composition, abundance, and spatio-temporal distribution patterns of bats that utilize the air space within the Project area. A minimum of 10 hours of netting needs to be gathered per site at 3 sites selected to cover the entire project area. Special attention shall be given to ponds and other freshwater sources present on the site when selecting sampling points.
- c. Megachiropteran surveys: Visual surveys need to be carried out for megachiropterans (flying foxes belonging to the family Pteropodidae), as they will not be effectively sampled with other methods. These surveys need to be conducted at dawn and dusk at 2 points opportunistically selected to represent good viewsheds for observing megachiropterans (e.g., near roosts, in open areas etc.,). Visual encounter surveys need to be conducted once per month at each of the selected observation points. The data such as numbers of megachiropterans observed, flight height and flight direction shall be recorded.

### 3.3 Study of Birds for the proposed grid connecting transmission line

The following survey method shall be undertaken for bird study in connection with proposed gird connecting transmission line.

a. Vantage Point surveys: These surveys shall be undertaken to quantify bird flight activity for the transmission line and identify any important flight routes. The surveys need to be designed to primarily focus on visible migration through the survey area. Four (04) vantage points shall be established along the transmission line. Each vantage point shall be sampled for a minimum of 36 hours. The vantage point surveys shall be undertaken by scanning the area from each point by eye and with binoculars and two observers who will be standing back-to-back giving a 360° coverage. The surveys will exclude small-scale local movements within the observation area. These surveys will document flight heights of key bird species recorded and flock sizes along the transmission line. Flight routes of all Critical Habitat species observed flying through the survey area need to be mapped, to enable before/after comparisons to be drawn during the post-construction monitoring stage.

### 4. Identification of distribution and conservation status

Once the species list is compiled, their distribution status such as indigenous, endemic, exotic, migratory etc., will be determined based on published records on distribution of avifauna. Both the global and national conservation status of the avifaunal species observed in the Study area will be defined according to the IUCN list of Globally Threatened fauna and floraand Sri Lanka list of Nationally Threatened fauna and flora.

#### 5. Data to be recorded during the field survey

- a. The identity and the number of avian species encountered in and around the study sites (for this purpose direct observations and indirect observations such as calls will also be considered and if the birds are identified based on call the number will not be taken).
- b. The occurrence of the species relative to the project sites such as found only outside the site, stopping inside the site or flying through it.
- c. If they are only flying through, then the direction from which the flight originated and the direction towards they are flying as well as the height at which they are flying.
- d. Habitat types present and the species assemblage that occur in each habitat type
- e. Habitat usage patterns of birds

### 6. Expected outcomes of the study

- a. Documenting the baseline conditions that exist at the site including habitat types present and species assemblages that occur in each habitat type.
- b. Baseline assessment documenting the faunal species assemblage present in each habitat type using standard data collection methods in connection with wind farm component.
- c. Identifying the potential impacts that may arise due to the proposed wind farm development and actions that can be taken to minimize the potential harmful impacts including additional avian mitigatory measures necessary for operation of wind turbines
- d. Identifying the critical movement corridors and breeding sites that can be affected due to the proposed development and make recommendations about areas that needs to be set aside to prevent adverse impacts on avifauna.
- e. An inventory of birds that inhabit the wind farm development area. This list will also identify their conservation status as well as geographic attributes such as restricted distribution, endemicity etc.,
- f. A review of all the available results on the birds and bats in the proposed development area and identify direct and indirect effects on avifauna, potential loss of habitat, disturbances, and critical areas that should be left undisturbed.

g. Propose an Ornithological Monitoring Programme for the construction and post construction monitoring phases of the project to determine the actual impacts that can be used to make adaptive changes to minimize the impacts on avifauna further.

### 7. Project Deliverables

- i. First interim report (by May 2023) at the end of present migratory season
- ii. Second interim report (by September 2023) at the end of non-migratory season (2023)
- iii. Final report (by March 2024)

In addition to the submission of the above-mentioned reports, the consultant shall conduct presentations on findings to the CEB.

# Terms of Reference (TOR) for the One-Year Avifaunal Survey for the Mannar Wind Power Project - Phase I Extension in Mannar Island

### 1. Scope of the study

The focus area of the study includes following;

a) Proposed wind farm corridor including a 500 m belt that is immediately outside the wind farm corridor (wind farm component – refer Figure 2.1)

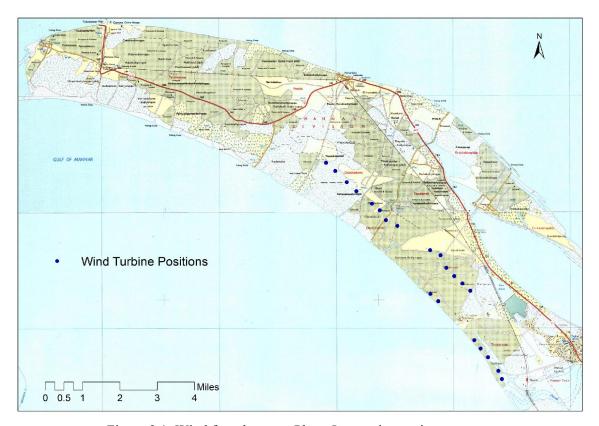


Figure 2.1: Wind farm layout – Phase I extension project

The one year study will focus on documenting the critical avifaunal habitats with the ultimate aim of identifying potential impacts that may arise due to wind farm development and identify necessary mitigation measures that are required for the negative impacts.

#### 2. Overall Approach

A literature survey will be carried out to document all available data on avifauna inhabiting the area identified for proposed development. Based on this data a preliminary assessment will be carried out to identify gaps in the available information and potential impacts of establishing a wind farm on the avifauna inhabiting the region. This will be followed by a detailed field investigation to identify different types of habitats present in the study area. The type of avifauna inhabiting each of these habitats, their

relative abundance, their conservation status and the movement patterns of the avifauna. This information will be used to identify potential impacts of the proposed development on the avifauna and identify mitigation measures that are required for the identified significant negative impacts.

### 3. Survey Methods

Determination of the composition, relative abundance of avifauna and their flight patterns within each of the habitat types identified.

### 3.1 Study of Birds

The following three (03) main survey methods shall be undertaken for bird study.

- a. Line Transect surveys (Grid Counts): These surveys cover a high proportion of the study area, to determine temporal changes in bird composition, abundance and movement patterns within the study area. The study area shall be divided into 1x1 km grids, and a line transect needs to be carried out in each square by slowly walking through the grid for a period of 20 min (the average distance that will be covered during the timed transect will be around 1 km), recording the fauna observed, together with the height of flying birds and their direction of flight.
- b. Vantage Point surveys: These surveys shall be undertaken to quantify bird flight activity through the study area and identify any important flight routes. The surveys need to be designed to primarily focus on visible migration through the survey area. Four (04) vantage points shall be established along the long axis of the study area. Each vantage point shall be sampled for a minimum of 36 hours. The vantage point surveys shall be undertaken by scanning the area from each point by eye and with binoculars, to a distance of approximately 2 km by two observers who will be standing back-to-back giving a 360° coverage. The surveys will exclude small-scale local movements within the observation area. These surveys will document flight heights of key bird species recorded and flock sizes over the wind farm sites. Flight routes of all Critical Habitat species observed flying through the survey area need to be mapped, to enable before/after comparisons to be drawn during the post-construction monitoring stage.
- c. **Block counts**: The key species within and in proximity to (within 1 km) the whole development considering each wind turbine footprint of the wind farm, shall be recorded with the survey area of approximately 500m x 500m count sectors related to each wind turbine to enable spatial analysis of the data set, and with counts made once a month during the entire study period.

### 3.2 Study of Bats

In addition to the above, specific study on Bats shall be undertaken and propose three (03) main data collection methods are outlined below.

a. **Ultrasound acoustic surveys**: A standard bat acoustic (ultrasound) recorder needs to be used to sample bat calls within the study area. Based on the sounds recorded the species composition, abundance, and spatio-temporal patterns of echolocating bats that utilize the air space within the Project area will be mapped. Acoustic recordings need to be gathered at three (03) representative locations covering the study area. A minimum of 10 hours of acoustic recordings shall be

gathered per location. Special attention shall be given to ponds and other freshwater sources present in the site when selecting sampling points. Acoustic data needs to be analyzed by the bat expert who has many years of experience identifying ultrasound calls of Sri Lankan bats on the basis of their spectrograms.

- b. **Mist-net surveys**: The acoustic surveys need to be complemented with mist-netting surveys to further characterize species composition, abundance, and spatio-temporal distribution patterns of bats that utilize the air space within the Project area. A minimum of 10 hours of netting needs to be gathered per site at 3 sites selected to cover the entire project area. Special attention shall be given to ponds and other freshwater sources present on the site when selecting sampling points.
- c. Megachiropteran surveys: Visual surveys need to be carried out for megachiropterans (flying foxes belonging to the family Pteropodidae), as they will not be effectively sampled with other methods. These surveys need to be conducted at dawn and dusk at 2 points opportunistically selected to represent good viewsheds for observing megachiropterans (e.g., near roosts, in open areas etc.,). Visual encounter surveys need to be conducted once per month at each of the selected observation points. The data such as numbers of megachiropterans observed, flight height and flight direction shall be recorded.

#### 4. Identification of distribution and conservation status

Once the species list is compiled, their distribution status such as indigenous, endemic, exotic, migratory etc., will be determined based on published records on distribution of avifauna. Both the global and national conservation status of the avifaunal species observed in the Study area will be defined according to the IUCN list of Globally Threatened fauna and floraand Sri Lanka list of Nationally Threatened fauna and flora.

### 5. Data to be recorded during the field survey

- a. The identity and the number of avian species encountered in and around the study sites (for this purpose direct observations and indirect observations such as calls will also be considered and if the birds are identified based on call the number will not be taken).
- b. The occurrence of the species relative to the project sites such as found only outside the site, stopping inside the site or flying through it.
- c. If they are only flying through, then the direction from which the flight originated and the direction towards they are flying as well as the height at which they are flying.
- d. Habitat types present and the species assemblage that occur in each habitat type
- e. Habitat usage patterns of birds

#### 6. The expected outcomes of the study

a. Documenting the baseline conditions that exist at the site including habitat types present and species assemblages that occur in each habitat type.

- b. Baseline assessment documenting the faunal species assemblage present in each habitat type using standard data collection methods in connection with wind farm component.
- c. Identifying the potential impacts that may arise due to the proposed wind farm development and actions that can be taken to minimize the potential harmful impacts including additional avian mitigatory measures necessary for operation of wind turbines
- d. Identifying the critical movement corridors and breeding sites that can be affected due to the proposed development and make recommendations about areas that needs to be set aside to prevent adverse impacts on avifauna.
- e. An inventory of birds that inhabit the wind farm development area. This list will also identify their conservation status as well as geographic attributes such as restricted distribution, endemicity etc.,
- f. A review of all the available results on the birds and bats in the proposed development area and identify direct and indirect effects on avifauna, potential loss of habitat, disturbances, and critical areas that should be left undisturbed.
- g. Propose an Ornithological Monitoring Programme for the construction and post construction monitoring phases of the project to determine the actual impacts that can be used to make adaptive changes to minimize the impacts on avifauna further.

### 7. Project Deliverables

- i. First interim report (by May 2023) at the end of present migratory season
- ii. Second interim report (by September 2023) at the end of non-migratory season (2023)
- iii. Final report (by March 2024)

In addition to the submission of the above-mentioned reports, the consultant shall conduct presentations on findings to the CEB.