

CEYLON ELECTRICITY BOARD

(Established by Act of Parliament No. 17 of 1969)

Bidding Document for

Supply, delivery, installation, testing, commissioning and maintenance of one number Passenger Elevator with 600kg, 09 Passenger, 04 stops, 1.0 m/s speed for Area Office, Ceylon Electricity Board, Gampaha

Bid No: CEB/657.00/B/2021/01

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Office of D.G.M. (Workshop and Ancillary Services)

Ceylon Electricity Board

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Sri Lanka

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SECTION I

CEYLON ELECTRICITY BOARD Bid Data Sheet

BIDS ARE INVITED FOR

Supply, delivery, installation, testing, commissioning and maintenance of the items stated in the Section IV of Specific Requirements together with the General Specifications given in Section III of the Bidding Document.

THE NAME OF THE BID & THE BID NUMBER

Supply, delivery, installation, testing, commissioning and maintenance of one number Passenger Elevator with 600kg, 09 Passenger, 04 stops, 1.0 m/s speed for Area Office, Ceylon Electricity Board, Gampaha Bid No: CEB/657.00/B/2021/01

BIDS SHALL BE ADDRESSED TO

The Chairman, Provincial Procurement Committee (W & AS), Ceylon Electricity Board, Meethotamulla Road, Kolonnawa.

PLACE OF ACCEPTANCE OF BIDS

Office of the Deputy General Manager (Workshop & Ancillary Services), Ceylon Electricity Board, Meethotamulla Road, Kolonnawa.

TIME & DATE OF THE CLOSING OF BIDDING

At 1000 hrs on 12/08/2021

PLACE OF OPENING OF BIDS

Office of the Deputy General Manager (Workshop & Ancillary Services), Ceylon Electricity Board, Meethotamulla Road, Kolonnawa.

PLACE & TIME OF PRE-BID MEETING AND SITE VISIT

Prospective bidders shall be present the pre-bid meeting on 05/08/2021 at 10.00 hrs at the office of Lifts unit, Ceylon Electricity Board, Meethotamulla Road, Kolonnawa,

Bidder shall visit the site before participating the pre-bid meeting.

BID SECURITY

Value of the Bid Security is Sri Lanka Rupees One hundred thousand only (LKR 100,000/=). The Bid Security shall be valid for 120 days from the date of the Closing of Bidding.

IN - CHARGE OF THE PROCUREMENT UNIT

Chief Engineer (Lifts)

APPLICABLE PROCUREMENT COMMITTEE

Provincial Procurement Committee (Workshop & Ancillary Services)

PLACE/S OF DELIVERY OF GOODS

Area Office, Ceylon Electricity Board, Gampaha

DELIVERY SCHEDULE FOR IMPORTED GOODS (Not Applicable)

OVERALL DELIVERY SCHEDULE FOR TOTAL GOODS & ASSOCIATED SERVICES

Supply, delivery, installation, testing & commissioning of Lift shall be completed on or before One hundred and fifty (150) days from the date of awarding of the contract.

TIME & DATE OF SUBMISSION OF SAMPLES - Not Applicable

VAT REGISTRATION NUMBER OF THE CEYLON ELECTRICITY BOARD

409000010-7000

SECTION II

CEYLON ELECTRICITY BOARD

General Conditions of Contract (ICB) For Goods & Associated Services

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SECTION II

CEYLON ELECTRICITY BOARD General

Conditions of Contract (ICB) for Goods & Associated Services

1. SCOPE:

The document covers the General Conditions applicable for procurement of goods and associated services, using CEB funds through International Competitive Bidding (ICB).

2. LANGUAGE OF THE BID & ELEGIBLE BIDDERS:

The language of the Bid and all documents related to the bid shall be in English language. All Foreign & Local prospective suppliers/manufacturers are eligible to bid.

3. SUBMISSION OF BIDS:

The bids submitted shall be for all the items specified in the Clause 2 of Specific Requirements in Section IV Bids submitted for partial quantities will be rejected.

Bids shall be submitted in duplicate using the Schedules of Prices (Appendix VI-A/VI-B/VI-C) attached to this document. The Original and Duplicate copy of the Bid shall be placed in two separate envelopes marked "Original" and "Duplicate". Both envelopes shall be enclosed in one securely sealed envelope. Name and number of the Bid shall be marked on the top left hand corner of the envelope as indicated in the Bid Data Sheet (Section I) of this document. The Name and Address of the Bidder shall also be clearly marked on the envelope. The Bids shall be addressed as stated in the Bid Data Sheet (Section I).

Bids sealed, marked and addressed as aforesaid could be deposited in the Box provided for this purpose at the Place of Acceptance of Bids, stated in the Bid Data Sheet (Section I).

The Bidders shall bear all costs associated with the preparation and submission of the Bid and Ceylon Electricity Board will in no way be responsible or liable for any of those costs.

4. CLOSING OF ACCEPTANCE OF BIDS & OPENING OF BIDS:

The bids shall be accepted only till the Closing Time of the bidding specified in the Bid Data Sheet (Section I of the bidding document). Any Bid received after the Bid closing time will be rejected and returned unopened to the Bidder or to the duly authorized Agent.

Bids will be opened immediately after the closing time of bidding, at the Place of Opening of Bids stated in the Bid Data Sheet (Section I). Bidders or their duly authorized representative/s may be present at the time of opening of Bids.

The Chairman of Bid Opening Committee (BOC) will open the Bids and read out or cause to be read out the Prices offered, Name and Address of each Bidder, whether Samples (if applicable) and a Bid Security are submitted, the amount of Bid Security and the amount of discount declared if any, as

indicated in the original Schedule of Prices (Appendix VI-A/VI-B/VI-C). Detailed Prices, Technical Data, Specifications or other particulars of the Bid will not be divulged.

5. LOCAL AGENTS:

Foreign Principals, who have a Local Agent in respect of the Bid, shall furnish a Letter of Authorization along with the offer. If they do not have a Local Agent, they shall specifically declare that they are not represented by any Local Agent and no Local Agent's Commission is payable in respect of the Bid. Nomination of Agent's after the submission of the Bid will not be valid. The Agent nominated at the time of Bidding shall not be changed within the period of contract.

Bids received from Local Agents representing Principals abroad **shall not be considered** for evaluation of the Bid unless they hold a duly executed Power of Attorney from the Principal empowering the Agent to make an offer, enter into a valid agreement on behalf of the Principal, to fulfill all the terms and conditions of the contract. Such a power of attorney shall be signed by an authorized signatory of the principal company in front of two witnesses and certified by a notary public. Under any circumstances a letter of authorization from the principals **will not be** accepted instead of a duly executed Power of Attorney when the Local Agent makes an offer.

6. BID SECURITY:

Each Bid shall be accompanied with a Bid Security to the value as indicated in the Data Sheet (Section I), undertaking that the Bid will be held valid for the period specified in Clause (8) of this document and that the Bid shall not be withdrawn during that period. Bid Security shall be in the form of a Bank Draft or a Bank Guarantee issued by a commercial Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka or a Bank based outside Sri Lanka but "confirmed" by a commercial Bank operating in Sri Lanka and payable to the Ceylon Electricity Board. The Bid Security shall be substantially in accordance with the specimen at Appendix III. Failure to submit the Bid Security at the time or before the closing of the bidding and in accordance with above requirements will result in the Bid being rejected. Bid Securities from unsuccessful Bidders will be returned after the award is made to the successful Bidder. The Bid Securities of the successful Bidders will be returned only after the receipt of their Performance Securities as stipulated in the Clause (12) of this document.

The Bid Security shall be unconditionally encashable on the receipt of first written demand of the Ceylon Electricity Board. No alternate offers will be accepted under one Bid Security.

7. SCHEDULE OF PRICES:

The bids shall be submitted using the Schedule of Prices furnished in Appendix VI - A/VI - B/VI - C. The Schedule of Prices must be completed without any alterations to its format and no substitute shall be accepted. All blank spaces shall be filled with the information required. If any space is not applicable it shall be stated so.

Bids not in the prescribed form will be rejected.

The prices quoted shall be written clearly in indelible ink or type written. The total amount of each item of the offer shall be given in words (in English) as well as in figures. The amounts written in words will be taken as correct in case of a discrepancy in the amounts written in words and in figures. The Bidder shall authenticate any alterations in the bids.

Failure to do so will result in the offer being rejected.

Only the Prices indicated in the Schedule of Prices (VI-A /VI-B/VI-C) shall be taken for evaluation.

7.1 Goods to be offered from outside Sri Lanka

- (a) Bidder shall fill in and sign the prescribed form of the schedule of prices for goods to be offered from outside Sri Lanka given in Appendix (VI-A) as per the instruction given below in (b) &(c).
- (b) Customs Duty, Value Added Tax (VAT), & Other applicable Levies such as Stamp Duty, Cess, Excise Duty, Surcharge on Customs Duty payable to the Sri Lanka Customs will be paid by the Ceylon Electricity Board at the prevailing rates at the time of clearing of goods and the same shall not be included in the column provided for "Total cost of clearing Handling & Delivery charges".
- (c) The Bidders are allowed to quote in Sri Lankan currency or/and maximum of three (03) foreign currencies that are freely convertible in Sri Lanka. The total cost of clearing, handling and delivery charges requested in the schedule of prices shall be quoted only in Sri Lankan Currency.

7.2 Goods to be offered from within Sri Lanka

- (a) Bidder shall fill and sign the prescribed form of the schedule of prices for goods to be offered from within Sri Lanka given in the Appendix (VI-B) and as per the instructions given below in (b).
- (b) The prices quoted shall be either in local currency or in foreign currencies subject to a maximum of three (03) Foreign Currencies that are freely convertible in Sri Lanka and the Payments will be made in Sri Lankan Currency or/and foreign currency as per the Clause 15.2. The total cost of delivery requested in the Schedule of Prices shall be quoted only in Sri Lankan currency.

7.3 Associated Services to be offered

- (a) Bidder shall fill and sign the prescribed form of the Schedule of Prices for Associated Services to be offered within Sri Lanka, given in the Appendix (VI-C) and as per the instructions given below in (b) and (c).
- (b) The associated services include the erection of goods offered from outside Sri Lanka and the goods offered within Sri Lanka, testing and commissioning the entire job of work and any comprehensive maintenance as applicable.
- (c) The price quoted shall only be in Sri Lankan currency.

8. MINIMUM VALIDITY PERIOD OF BIDS:

All bids shall be held good for acceptance for a minimum period of Ninety days (90 days) from the date of the closing the Bidding specified in the Bid Data Sheet (Section I). Prices indicated in the Schedule of Prices shall be firm and shall not be subject to any variation within the validity period of the Bid specified above.

9. DOCUMENTS AND DETAILS TO ACCOMPANY THE BID:

9.1 Mandatory Documents

The following documents shall be submitted with the Bid. Failure to furnish the following documents and details along with the offer will result in the offer being rejected.

- (a) Duly signed "Certificate of Purchase of Bidding Document" (Appendix I) of this document. (b)
- Duly signed "Form of Bid" (Appendix II) of this document.
- (c) **Bid Security** vide Clause (6) substantially in accordance with the given format (Appendix III).
- (d) Duly completed and signed "Schedule of Prices" (Appendix VI-A / Appendix VI-B) Appendix VI-C) of the bidding document.
- (e) Duly completed and signed "Schedule of Guaranteed Technical Particulars" attached to the CEB Specification (Appendix V).
- (f) Certified copies of relevant Test Certificates, Mill certificates etc. including Type Tests in English language as per the CEB Specification.
- (g) Name and Address of Manufacturer and Certificate of Country of Origin.
- (h) If the Bidder is not the Manufacturer, the Bidder shall furnish documentary evidence of arrangements with the Manufacturer for the supply of goods offered.
- (i) Power of Attorney vide Clause 5 (**If applicable**).
- (j) Documents of proof of ability referred to in Clause (23).
- (k) A letter from the Commissioner of Inland Revenue Department, vide Clause 35 certifying that his/her company has not been registered for VAT (if applicable)
- (l) Any other document stated in the CEB specification given in Appendix (V), as required to be submitted.
- (m) Certification by the Bidder that the goods shall be delivered according to the Delivery Schedule stated in the Bid Data Sheet.
- (n) Certification of registration under Public Contracts Act No 3 of 1987 (For the contract cost exceeding Rs.5.0 Million).
- (o) Duly completed and signed "Form of Domestic Preference" (Appendix VII) and all the documents refer to Clause (11.1) of Domestic Preference. (If applicable).
- (p) Packing details referred to in Clause (12.2) / 16.
- (q) Signed pro forma invoices indicating the full description of items offered and prices and the description of the principals supplying the goods offered from outside Sri Lanka.

9.2 Other Documents

The following documents will also be submitted with the Bid.

- (a) Manufacturer's Guarantees, Illustrations, Catalogues and full particulars of the items offered in English language.
- (b) Details of variations and/or deviations from the Technical Specifications if any. If there are no variations / deviations a Certificate of compliance should be furnished with the offer.
- (c) Freight Certificate obtained from a shipping line or their agents and a certificate indicating approximate weight, measurement of the consignment and the number of Containers etc. as described in Clause 18 (Applicable only for goods to be offered from outside Sri Lanka).
- (d) Lists of Directors vide Clause (33).
- (e) Documentary evidence to show any preferential Customs Duty applicable in Sri Lanka under the International Trade Agreements. Failure to furnish necessary documents will result in the applicable preferential Customs Duty not being considered for the evaluation.

10. POWER TO ACCEPT OR REJECT BIDS AND INTIMATION OF ACCEPTANCE:

CEB reserves the right to reject any or all bids, without adducing any reasons. CEB may accept any or all items of the bids and reserves the right to increase or decrease the quantity of goods and services, provided this does not exceed 25% of the total quantity, at prices indicated in the Schedule of Prices.

The decision of the Procurement Committee on the award of the contract to the **Lowest Evaluated Substantially Responsive Bid** will be final.

The letter of award will be sent by registered post to the successful Bidder as soon as possible, after the decision of the Procurement Committee is made. Intimation of the acceptance of bid may alternatively be made by Facsimile if circumstances so require, and such intimation should be considered as sufficient notice for acceptance.

CEB will reserve to reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the contract.

11. METHOD OF EVALUATION OF BIDS:

Ceylon Electricity Board may seek in writing clarifications or additional information on any bid. In the absence of any response from the Bidder within the specified period, Ceylon Electricity Board reserves the right to make its own decision.

All responses to requests for clarifications or additional information shall be in writing and no change in the bid price shall be sought, offered or permitted.

The offers received shall be evaluated item wise and for the purpose of the determination of lowest evaluated substantially responsive bid out of the bids received, the bid evaluation process would be carried out in two stages: i.e. (i) **Bid Examination**, (ii) **Bid Evaluation**.

(i) Bid Examination

- (a) All bids opened by the Bid Opening Committee will be examined to determine the eligibility of bidders responded and to determine the substantial responsiveness of the bids received commercially.
- (b) During the bid examination process in respect of commercial aspect, the bids will be checked to see whether they are complete, any computational errors have been made, required Bid Securities have been furnished, all the documents have been properly signed, the bids are generally in compliance with the requirements stipulated in the Bidding document and bids are generally in order. All deviations observed during the bid examination would be noted. Bids with deviations such as incomplete bids, noncompliance with the specified delivery schedule, inclusion of price escalation when fixed priced bids are called, proposal of subcontracting when subcontracting is not allowed, absence of bid security, lack of proper signature on the form of bid, lack of critically important supporting documents, shall be rejected and shall not be taken for further evaluation as those bids are considered to be substantially non responsive.

(ii) Bid Evaluation

(a) General Principle

All the bids determined as substantially commercially responsive during the bid examination stage shall be evaluated for technical compliance and ranked in the lowest cost basis. The lowest ranking bid shall then be selected as the lowest evaluated substantially responsive bid.

(b) Correction of Errors

During detailed bid evaluation, if there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate will govern. However, if the total bid price increases due to this correction, the unit rate will be adjusted within the total bid price. If the bidder does not agree for such adjustment, his bid will be rejected without affecting his bid security.

(c) Currency Conversion

All prices quoted in foreign currencies by suppliers will be converted to Sri Lanka Rupees at the Official Indicative Exchange Selling Rate obtained from the Central Bank of Sri Lanka, prevailing on the day of opening of Bids.

11.1 Domestic Preference

When locally manufactured Goods are offered in competition with Imported Goods, a 20% preference will be granted for Local Bids subject to following.

Application of the margin of preference stated above would apply only to locally manufactured goods, if the bidder establishes to the satisfaction of the Procurement Committee that, the input of local labour, local raw material and local components in any locally manufactured article accounting for at least 30% of the exfactory price.

The Production facility in which those goods would be manufactured or assembled has been engaged in manufacturing/assembling such goods at least since the time of Bid Submission.

In addition to the above, the Bidder should satisfy one of the followings, (i)

For an Sole Proprietorship, the bidder shall be a Sri Lankan

- (ii) For Partnership, 50% of the members of the Partnership shall be Sri Lankan.
- (iii) For an Individual Firm, shall be registered in Sri Lanka and should have more than 50% ownership by Sri Lankan.
- (iv) For a Joint Venture, each firm shall be registered in Sri Lanka and should have more than 50% ownership by Sri Lankan.

It is the responsibility of the Bidder to provide acceptable evidence along with his bid in addition to completion of Appendix VII that shall be certified by independent auditors registered with the Institution of Chartered Accountants, Sri Lanka, to the satisfaction of the Procurement Committee. Bidders who fail to comply with this condition will not be considered for domestic preference.

To grant the domestic preference in the evaluation of Bidders, the following method shall be adopted. In the

first instance all the Bidders who become entitled for application of domestic preference shall be grouped into a separate group.

At the next step, all other bids will be loaded by, in the case of goods offered from outside Sri Lanka, an amount equal to 20% of CIF price and In the case of locally manufactured goods, which are not entitled for domestic preference, 20% of the ex-factory price for comparison purpose.

Successful bidder shall be decided according to the re-ranking order. However, the award price shall not be the evaluated bid price computed for determination of domestic preference.

11.2 Evaluation Criteria

- (a) For comparison, responsive bids shall be classified in one of the following 3 groups.
- (i) Group A: Bids offering goods manufactured abroad that will be directly imported and offering goods and associated services locally, through the local agent representing the goods manufactured abroad.
- (ii) Group B: Bids offering goods manufactured in Sri Lanka which establishes to the satisfaction of the procurement committee that they qualify for domestic preference as per the clauses 11.1 and supplying associated services locally.
- (iii) Group C: All the other bids offering goods manufactured in Sri Lanka or goods already imported and supplying associated services locally.
- (b) The total evaluated cost of good in bids belonging to group A shall be
 - · Offered FOB Cost
 - Offered Freight Cost
 - 1.5% of the FOB Cost. (hypothetical value for cost of Insurance)
 - Offered Clearing Handling & Delivery Charges from Port of Colombo to CEB Stores / specified delivery point (excluding VAT)

- · Local Agent's Commission (excluding VAT)
- Duty, Levy, Tax and other charges payable at Sri Lanka Customs (excluding VAT) this component will be calculated based on the current rates.
- · Cost of supply of all the other materials locally
- · Cost of installation of all the imported and local goods
- · Cost of testing & commissioning the works
- · Cost of comprehensive maintenance (if included)
- (c) Total evaluated cost of goods in group B & C should be
 - Total Ex-Works Cost (excluding VAT) or Total ex-Show Room price (excluding VAT)
 - · Cost of delivery to the CEB Stores / specified delivery point (excluding VAT)
 - · Cost of supply of all the other materials locally
 - · Cost of installation of all the imported and local goods
 - · Cost of testing & commissioning the works
 - · Cost of comprehensive maintenance (if included)
- (d) In the first step, all evaluated bids in each group shall be compared to determine the lowest bid in each group. Such lowest evaluated bid shall be compared with each other and if, as a result of this comparison, a bid from group B is the lowest, it shall be selected.
- (e) If as a result of comparison under paragraph (d) above, the lowest evaluated bid is a bid from group A or C, such lowest evaluated bid shall be further compared with the lowest evaluated bid from group B after adding to the evaluated price of goods offered in the bid from group A or C, for the purpose of this further comparison only, an amount equal to 20% of the CIF bid price in the case of goods offered outside Sri Lanka and 20% of ex-factory price in case of goods offered within Sri Lanka. The lowest evaluated bid determined from this last comparison shall be selected.

12. PERFORMANCE SECURITY, PRO FORMA INVOICE & CONTRACT OF SUPPLY:

Within (14) days of receipt of the Letter of Award the Successful Bidder (Henceforth known as the Supplier) shall furnish a Performance Security, Pro forma Invoice and duly completed and signed Contract of Supply.

If any of the documents mentioned above is submitted after 14 days as stated above the date of completion of the order will be brought forward by the number of days delayed in submitting it and if they are not submitted within 30 days Ceylon Electricity Board has the right to forfeit the Bid Security of the Bidder and cancel the award.

12.1 Performance Security

The Supplier shall furnish a Performance Security approximately equal to Ten Percent (10%) of the total contract sum as indicated in the Letter of Award. The Performance Security shall be in the form of a Bank Draft or a Bank Guarantee, substantially in accordance with the specimen at Appendix IV and issued by a commercial Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka or a Bank Based outside Sri Lanka but "confirmed" by a commercial Bank operating in Sri Lanka. The Performance Security shall be in favour of the General Manager, Ceylon Electricity Board, Colombo, and shall be valid for a period not less than sixty (60) days from the date of the anticipated final delivery.

In the event of default on the part of the Supplier resulting from breach of conditions hereto, the General Manager, or any person purporting to act under the authority of General Manager may by a written notice terminate the right of the Supplier to proceed with any or all remaining deliveries and forfeit the Performance Security without recourse to legal action.

Performance security will be released after 60 days of satisfactory completion of final delivery **of goods** and associated services.

12.2 Pro forma Invoice

The Supplier shall furnish a Pro forma invoice indicating separately the FOB / Ex Works / Ex Show Room Price, freight Cost, HS Code, catalogue or Model Number of each item, and packing details.

Packing details shall include the number of containers, sizes (40/20 feet) and CBM or weight.

12.3 Contract of Supply

After the Letter of Award is received the Supplier shall enter into an agreement with CEB to execute the order under the terms and conditions stated in the Letter of Award. Specimen Contract Form that shall be provided for the purpose is given in Appendix VIII.

13. CLEARING TRANSPORTATION OF GOODS, ERECTION, COMMISSIONING & MAINTENANCE:

13.1 For goods offered from outside Sri Lanka

- (a) The Supplier shall be responsible for the expeditious clearing of goods from the Port and handing over the same to the CEB Stores or to any other destination specified in the Bid Data Sheet. If the Supplier is not agreeable for clearing of goods from the Port, delivery and unloading at the delivery point indicated in the Bid Data Sheet the offer will be rejected. In the event of the goods are required to be diverted to destinations other than the specified delivery point, the Supplier shall undertake such deliveries and payment will be made at prevailing transport rates.
- (b) The Supplier shall, within **Forty Eight (48) hours** of shipment, dispatch or send through a Courier Service / Facsimile duplicate sets of shipping documents to the DGM –in-Charge of the Procurement Unit. If the original shipping documents are not available at the time of receipt of goods at the port, goods shall be cleared on a Shipping Guarantee, at a written request made by the supplier guaranteeing that in the event the items supplied are found to be non-compliance with the CEB specification, he will take full responsibility of replacing the items with items which conform to the CEB specification. The cost of the Shipping Guarantee (SG) including applicable interest shall be borne by the Supplier.
- (c) The Ceylon Electricity Board will furnish a Cheque in favour of the Director General of Customs to cover Customs Duty, Value Added Tax (VAT), other applicable Taxes & Levies payable to Sri Lanka Customs such as Stamp Duty, Cess, Excise Duty, Surcharge on Customs Duty within Twenty Four (24) hours of presentation of necessary documents to the DGM-in-Charge of the Procurement Unit. The Supplier, through his Agent or Representative shall be responsible for the payment of all other charges to the Sri Lanka Port Authority, Container deposits and charges to Shipping Agents in connection with the clearance of goods and also the cost of transport to the

- places of delivery indicated in the Bid Data Sheet or any other location and offloading by providing necessary labour.
- (d) The total of all Clearing Handling and Delivery charges other than Taxes, Duties and Levies paid by the CEB referred to in (c) above shall be shown in the Column provided for, in the Schedule of Prices (Appendix VI-A). The CEB will not accept any responsibility for any additional expenses the Supplier may incur by way of double handling Rent, Crane hire charges etc, at the Port.
- (e) If the supplier fails to clear the goods expeditiously after discharge of Goods at the Port, the CEB reserves the right to make its own arrangements for clearance of the cargo and recover all charges incurred from any one or all proceeds of Supplier's Performance Security, Clearing Charges, Local Agent's Commission or the balance contract payment.
- (f) The Supplier or the Agent shall notify the Engineer or officer-in-charge of CEB Stores /specified delivery point in writing at least 24 hours ahead of delivery of goods of his intention to do so to enable the CEB to make the necessary arrangements.
- (g) The supplier shall be responsible for attending to all customs requirement and hand over Customs Entries/ Declarations to the DGM -in-charge of the procurement unit (as stated in the Bid Data Sheet).

13.2 For goods to be offered within Sri Lanka

- (a) The successful Bidders shall be responsible for the transport of Goods from the manufacturer's works or warehouse and handing over same to the CEB Stores/specified delivery point as specified in the Bid Data Sheet (Section1). If the Bidder is not agreeable for the delivery of goods to the CEB Stores/specified delivery point, the offer will be rejected. In the event of the goods being diverted to any other destinations other than the place specified, the Bidder shall undertake such transport and payment will be made at prevailing transport rates.
- (b) The total delivery charges to CEB Stores/specified delivery point shall be shown in column provided for, in the Schedule of Prices.
- (c) The Supplier or the Agent shall notify the Engineer or Officer-in-charge of CEB Stores/ specified delivery point in writing at least 24 hours ahead of delivery of goods of his intention to do so to enable the CEB to make the necessary arrangements.

13.3 For Associated Services to be offered

- (a) Supplier shall be responsible for storing and erecting of all the imported and locally offered goods, testing and commissioning to ensure complete delivery of goods and associated services meeting the specifications given in the bidding document or as accepted and indicated in the letter of award.
- (b) Supplier or the agent shall notify the officer in charge of the CEB as indicated in the letter of award all important stages of erection, testing and commissioning for joint inspections and performance verification.

(c) The supplier shall be responsible for all the relevant goods and associated services until final handing over to the CEB.

14. DELIVERY OF GOODS & ASSOCIATED SERVICES

14.1 Delivery of Imported Goods

The delivery of imported items awarded shall be in accordance with the delivery schedule indicated in the Bid Data Sheet.

14.2 Overall Delivery of Total Goods & Associated Services

The overall delivery of total goods & associated services shall be in accordance with the delivery schedule indicated in the Bid Data Sheet.

15. MODE OF PAYMENT:

15.1 For Goods to be offered from outside Sri Lanka

(a) Foreign Cost

Payment will be made by means of an **Unconfirmed, Irrevocable Letter of Credit** opened in favour of the Supplier, through the correspondent of the People's Bank of Sri Lanka, operating in the Country of Supplier. Letter of Credit will provide for payment to be made as indicated below against shipping documents, which will include clean on-board freight prepaid Marine Bills of Lading, signed invoices, certificate of origin, certificate of inspection, warranty and a certificate of quality and quantity from the inspector as per Clause (17).

The First Installment of 85% of the FOB/C&F price of each shipment on presentation of the shipping documents, etc

The Second Installment of 10% of FOB/C&F price will be paid at the end of the contract on issue of a certificate by the General Manager, Ceylon Electricity Board or his authorized officer to the correspondent of the People's Bank, Foreign Branch after the goods have been satisfactorily delivered, erected and commissioned.

The Balance Installment of **05% of FOB/C&F** price will be paid at the end of the completion of Defect Liability Period. This 05% of FOB/C&F can be released on submission of On-Demand Bank Guarantee issued in favour of the General Manger of CEB if so requested.

If the beneficiary requires a confirmed Letter of Credit the confirmation charges have to be borne by the beneficiary.

All foreign Bank charges have to be borne by the beneficiary.

(b) Local Cost (Local Agent's Commission and Clearing Charges):

The Local Agent's Commission and Clearing, Handling & Delivery Charges will be paid on satisfactory completion of the contract.

The Local Agent's Commission will be paid in Sri Lankan Currency based on the Foreign Exchange selling rate published by the Central Bank of Sri Lanka on the day of bid closing.

The Value Added Tax (VAT) payable on Local Agent's Commission and Clearing, Handling & Delivery Charges will be paid by the Ceylon Electricity Board at prevailing rates, if claimed by the Local Agent or Clearing Agent with the VAT Registration Number.

15.2 For goods to be offered from within Sri Lanka

Payment will be made after the satisfactory delivery of goods as stipulated under "Delivery Schedule" in the Bid Data Sheet. Payment will be made only after the total quantity is delivered.

If any foreign currency payments are envisaged under the bid, the Bidder shall be eligible to quote in the Foreign Currency. Suppliers shall be paid in Foreign Currency subject to the following conditions for the components for which, Foreign Currency is utilized, only if

- (a) The supplier is authorized by the Central Bank of Sri Lanka, to receive Foreign Currency payments and
- (b) The Supplier submits proof documents showing the Foreign Currency payments made with regard to this contract which shall be certified by Independent Auditors registered with the Institution of Chartered Accountants, Sri Lanka, for the satisfaction of the purchaser.

In the event the supplier is not eligible for foreign currency payment, the total ex-works price quoted in any currency or currencies will be converted to Sri Lankan rupees for the purpose of payment, based on the **Foreign Exchange selling rate**, obtained from Central Bank of Sri Lanka on the date of **closing the Bid**.

Payments to suppliers will be made on receipt of signed invoices together with the certificate to the effect that goods have been delivered to the CEB Stores/specified delivery point in terms of the Letter of Award.

The payments will be made in the following installments.

- (a) The First Installment of **85% of the total cost of supply** on completion of delivery.
- (b) The Second Installment of 10% of the total cost of supply on completion of erection and commissioning.
- (c) The Balance Installment of 05% of the total cost of supply at the end of the completion of Defect Liability Period. This 05% of the total cost of supply can be released on submission of On-Demand Bank Guarantee issued in favour of the General Manger of CEB if so requested.

Any applicable VAT will be paid by CEB at prevailing rates in addition to Total Ex-Work Price / Total Ex-Show Room Price, if claimed by the local manufacturer / supplier with the VAT Registration Number.

15.3 For associated services to be offered

The payment for associated services will be made only after satisfactory completion of the erection and commissioning in the following installments.

(a) First Installment of 95% of associated services on satisfactory completion of the erection and commissioning.

(b) Balance 05% of the associated services on satisfactory completion of defect liability Period.

Any applicable VAT will be paid by CEB at prevailing rates, if claimed with the VAT Registration Number.

16. PACKING, IDENTIFICATION AND MARKINGS FOR IMPORTED GOODS:

- (a) In addition to specific packing required as per Technical Specification, the Bid price shall include the cost of all necessary packing including cases, packing materials and labour. Export packing should be done in the best possible manner to withstand rough handling in transit. Packages should be suitable for export and to storage in the tropics. The Supplier is responsible for the adequate packing and handing over of Goods to the CEB Stores/ specified delivery point in good condition.
- (b) All packages should be marked and addressed legibly fairly in large characters in indelible ink as follows:

17. INSPECTION OF IMPORTED GOODS:

- (a) Prior to shipment/delivery, the goods shall be inspected by an Engineer appointed by the CEB for the purpose of obtaining the certificate of quantity and quality.
- (b) Within 30 days of the receipt of the firm order, the Supplier shall give notice of the tentative date on which any particular item/items will be ready for test and inspection at works to enable the Ceylon Electricity Board to appoint the Inspector/s deemed necessary for tests. Items shall not be packed for dispatch until inspected, tested and approved by the Engineer. In the event, the CEB inspection is waived off, goods will be accepted with the Suppliers' Test certificate certifying that the product has passed the Acceptance Test satisfactorily. The Test Reports issued by the Supplier shall clearly identify Tender / Award No., Make / Model of the equipment, the detail results including test values of the Acceptance Tests carried out as per the CEB Specification and name and the designation of the Testing Personnel. The original Test Reports shall be made available to the Purchaser (CEB) at least 10 working days prior to the shipment.

CEB shall inform the Supplier whether the Acceptance Test Report is acceptable and the goods shall not be shipped in the event Acceptance Test Report furnished by the Supplier is not acceptable to the CEB"

(c) The Supplier shall afford the Inspector all proper and reasonable facilities for examining, inspecting, testing or gauging of item/s ordered and shall also supply free of charge such apparatus, materials, tools, gauges, labour and assistance as may be required from time to time for the purpose of such examinations, inspections, tests or gauging. Goods will be subject for inspection both in the course of manufacture and at the time of acceptance.

- (d) The inspection carried out by the Engineer appointed by the CEB and the certification issued by the Engineer shall not relieve the Supplier from the liabilities to supply the goods in correct quantities and in accordance with the specifications stipulated.
- (e) The Purchaser's rights during the period of warranty to inspect, test and where necessary, reject the Goods after the arrival in the Purchaser's country shall in no way be limited or waived by reason of Goods having previously been inspected, tested and passed by the Purchaser or its representatives prior to shipment/delivery of Goods.
- (f) Nothing in this Clause (17) shall in any way release the Supplier from any warranty or other obligations under the Contract.

18. SHIPMENT: (APPLICABLE ONLY FOR GOOD TO BE OFFERED FROM OUTSIDE SRI LANKA)

The Suppliers are allowed to quote freight charges on Vessels owned by any shipping line. This quoted freight charges will be considered to calculate CIF price for the purpose of evaluation. However before opening of Letter of Credit, the CEB will get a freight rate from the Ceylon Shipping Corporation Ltd (CSCL) Sri Lanka.

Freight Submission:

The Supplier shall furnish the following details along with their Bid:

- (a) Documents from Shipping Line confirming Ocean Freight indicated in the Schedule of Prices
- (b) No. of Containers and Packages.
- (c) Number of Packages per Container, approximate weight and dimensions of Packages. (d) Description of the packing.
- (e) The Port/Ports of shipment.

Shipping Advice:

When the Goods are ready for shipment, the Supplier shall send the following details by Fax to the DGM –in-charge of the Procurement Unit

- (a) Name of the Ship
- (b) Number of Packages
- (c) Name and Address of the Shipping Agent in Sri Lanka

Within Two (2) days after issue of Bill of Lading and following documents shall be sent by Air Mail or preferably by courier.

- (a) Two copies of invoice.
- (b) Two copies of Freight Prepaid/Freight to pay Clean On-Board Marine Bill of Lading.
- (c) Two copies of packing particulars including the list of items, weight and measurement of each package.
- (d) One certificate of Country of Origin of Goods.
- (e) Certificate of quantity and quality; as per clause 17 (a).

Advance copies of above documents may be sent by Fax to expedite clearing of goods.

Delay in Shipping Documents, Discrepancies in Marking and Short Packing:

In case of delay in receipt of copies of Shipping Documents namely Invoice, Packing List, Bill of Lading etc. or if these Shipping Documents as well as Markings etc. on packages are not strictly in accordance with contract consequently causing undue delay in clearing from Port, the Supplier shall bear all extra charges and rent payable to the Port Authority. In case of short packing or short shipment, less than the quantities in the Invoice, the supplier shall make good all items short packed or shipped and also bear all duplicate payments of Customs Duty and other charges resulting thereof.

19. INSURANCE:

If considered necessary, the supplier will be called upon to insure the goods from the Manufacturer's work to the CEB stores/ specified delivery point and until the completion of work inclusive of local goods and associated services. Such Insurance should be effected with a Government approved Insurance Company in Sri Lanka and should be in the name of the General Manager, CEB. The cost of such Insurance will be paid in Sri Lanka Rupees by the CEB to the Insurance Corporation/Company on production of their invoices.

20. DELIVERY WITHIN AGREED PERIOD AND DAMAGES FOR DELAY:

For goods and associated services to be offered, should the supplier anticipate any delay at any time during the execution of the contract of overall delivery of total goods and associated services that the supplier will be unable to complete the works entrusted within the time specified in the letter of award, the supplier shall at once give notice accordingly in writing to the General Manager, CEB explaining the cause for the delay. In the case of delay the General Manager or the Officer authorized by him, shall have the option of either granting an extension or terminating the award ruling the case as default of contract. If the extension is granted, the supplier shall complete the works entrusted to him within the intended period but will in addition to any other liabilities incurred under the contract, be subject to a deduction from the contract sum and/or the amount covered by the performance security, for liquidated damages (and not as a penalty) of point one per cent (0.1%) of the total contract sum for each and every complete day that may lapse between the contracted date of completion and the actual date of completion subject to a maximum of 10% of the total contract value unless the liquidated damages is waived or reduced by the General Manager, CEB in view of any special circumstances. If the extension is granted the supplier shall extend the period of validity of performance security in accordance with clause 12.

21. CONTRACT NOT TO BE SUBLET:

The Supplier shall not assign or sublet the Contract without a written authority from the General Manager, CEB. Even if any part of his obligation has been assigned or sublet by the Supplier with written authority from the General Manager, CEB, the Supplier will not be relieved from the responsibilities for the due performance of the part assigned or sublet.

22. FORCE MAJEURE:

The Supplier shall not be held responsible for any delay or non-performance of contractual obligations to sell, and the Ceylon Electricity Board shall not be held responsible for any delay or non-performance of its contractual obligations to purchase, all or any part of the supplies caused by Force Majeure, including war, civil insurrection, fires, flood, epidemics, earthquakes, quarantine restrictions and freight embargoes, such delay may be excused and the period of such delay may be added to the time of the performance of the obligation delayed.

If a Force Majeure situation arises, the Supplier shall within ten (10) days notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

Such notification of the Supplier shall be authenticated by the Sri Lankan Embassy/Representative in the respective Country of origin in the case of Force Majeure takes place outside Sri Lanka. The purchaser shall ascertain the facts including the extent of delay and the time for completion, provided the findings justified such an action.

23. PROOF OF ABILITY:

Bidders shall submit with their offer documents and/or other evidence of their ability to carry out the contract as per the clauses indicated in the special conditions attached to the bidding document. Factors such as experience, plant facilities, nature of business, capital invested or authorized, turnover, availability of raw materials, guaranteed time of delivery and other relevant matters will be considered during evaluation of offers. Procurement Committee reserves the right to call for further documentary evidence of the ability of the Bidders to fulfill the terms and conditions of the Bid.

24. WARRANTY / DEFECT LIABILITY PERIOD:

- (a) The Supplier warrants to the purchaser that the Goods supplied under the Contract are new, unused, tested as per the standard specified in this document, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The Supplier further warrants to the purchaser that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except in so far as the design material is required by the Purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- (b) This Warranty shall remain valid for twelve (12) months after the completion of the final delivery of goods and associated services.
- (c) The Purchaser shall promptly notify the Supplier in writing of any claims arising under this Warranty. Upon receipt of such notice, the Supplier shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from the port of entry to the final destination.
- (d) If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

25. PATENT RIGHTS CLAIMS:

The Bidders shall indemnify the Ceylon Electricity Board against all claims if any, arising on account of patent rights or royalties, whether from manufacturers or others, as a consequent of the use by the Ceylon Electricity Board of royalty goods supplied.

26. ARBITRATION:

If during the continuance of this contract or within one month after the termination thereof, any differences or disputes, which may arise between the parties hereto in regard to the interpretation of any of the provisions herein contained or any other matter or thing relating to this contract (other than any difference or dispute in respect of which a decision of the General Manager, Ceylon Electricity Board is declared to be final and binding on the parties hereto) such difference or dispute shall be forthwith referred to an Arbitral Tribunal in Sri Lanka. Composition of the Arbitral Tribunal, Jurisdiction of the Arbitral Tribunal, Conduct of Arbitration Proceedings, Awards and any other matters relating to the Arbitration shall abide by Arbitration Act, No.11 of 1995 of the Democratic Socialist Republic of Sri Lanka.

27. LAW OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA:

The Bidders and any contracts resulting thereof shall be governed and abide by and construed according to the Law of the Democratic Socialist Republic of Sri Lanka.

28. BIDDER TO INFORM HIMSELF FULLY:

Bidders shall acquaint themselves fully with the conditions of bidding. No plea for lack of information or insufficient information will be entertained at any time.

29. BIDS TO BE ON OFFICIAL DOCUMENTS:

Offers will be rejected if Bidders fail to submit their bids on the official bidding documents and/or if the conditions laid down hereto have not been strictly fulfilled.

30. BIDDER'S STANDARD CONDITIONS:

Bidder's Standard Conditions of sale, usually printed on the reverse side of the Pro forma Invoice or in a separate format, will not be accepted. The Conditions of bid of the CEB shall prevail.

31. SAMPLES:

Samples offered shall be furnished as indicated in the Specific Requirements (Section IV of the bidding document), to the DGM-in charge of the Procurement Unit stated in the Bid Data Sheet (Section I) on or before the Time & Date stated in the Bid Data Sheet (Section I).

If the samples are not required to be submitted, it shall be stated in the Bid Data Sheet (Section I).

32. DEFAULTED CONTRACTORS:

A Bid is liable to be rejected forthwith if it is submitted by a Contractor who has, in the past, failed to perform contract obligation satisfactorily in accordance with the terms and conditions of this contract with the CEB.

33. DECLARATION OF DIRECTORS:

When forwarding bids, Private Companies should declare the names of the Current Directors and the Share Holders of the Company. In the case of Public Companies, the Current Directors of such Public Company should be declared.

34. TAXES AND LEVIES:

Notwithstanding anything specified in the conditions of Contract, all taxes and levies as and when imposed or imposable by the Government will be taken into account for payment purposes.

35. VALUE ADDED TAX AND NATION BUILDING TAX (IF APPLICABLE):

35.1. Value Added Tax

If the Bidders are registered for the purpose of VAT, they should indicate the amount of VAT claimed separately in the bid documents along with the VAT registration number. Declaration of VAT registration number is a mandatory requirement for determination of Bidders and any Bidder who does not declare his/her VAT registration number will be liable for rejection of the Bid. If any Bidder is not registered for VAT, he/she should obtain a letter from the Commissioner of Inland Revenue Department, certifying that the company has not been registered for VAT, which should be attached to the Bid.

35.2. Nation Building Tax

If the NBT is included in the bid price, it will be taken for bid evaluation as part of total cost. If the NBT is not charged, the bidder shall clearly indicate as "NBT is not applicable" in the price schedule.

36. FURTHER INFORMATION:

Any further information and clarifications shall be sought, two (2) weeks before the Date of the closing of bidding, in writing from the DGM-in-charge of the Procurement Unit (as stated in the Data Sheet)

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SECTION III GENERAL SPECIFICATIONS

PART A: GENERAL REQUIREMENT

1. Introduction

The lift and associated equipment proposed shall be of a reputed manufacturer/s and shall be represented locally by a well-established firm comprising qualified engineers and technical staff and capable of offering an efficient after sales service by maintaining adequate quantity of spares for the complete range of products.

The lift manufacturer and local agent/supplier shall be in capable to design and supply equipment to comply with the requirements of installation of safe, reliable and energy efficient electric passenger lift.

The agent/local supplier shall Further the offered lift shall blend aesthetically with architecture of the building, dimensions of machine room & lift shaft and the environment in which the lift works

2. Regulations & Standards

Unless otherwise specified, the whole of the work shall comply with following regulations and standards or any other equivalent standard subjected to the approval of authorized person appointed by client.

- i. The Relevant parts of latest British Standard on lifts (BS EN 81-20:2014 and EN 81-50:2014)
- ii. The Relevant parts of latest British Standard on Electrical Installation BS 7671:2018 (18th Edition).
- iii. The relevant parts of latest Regulations, Standards and Recommendations given by Sri Lanka Standards Institution, Institute of Construction Training and Development (ICTAD) Other recognized national or international organizations on mechanical fabrication and civil construction works.
- iv. Disability Legislation Act No 28 of 1996

3. Local Electrical System Parameters

i. Nominal voltage - 400/230V AC 3 phase and neutral 440V AC 3 phase and neutral

iii. System Frequency - 50 Hz.

iv. Method of earthing - Neutral solidly earthed at transformer

v. System fault Level - 25 kA

4. Climate condition of lift operating area

i. Maximum Ambient Temperature - 35°C
 ii. Annual Average ambient Temperature - 25°C

- iii. Maximum relative humidity
- iv. Environmental condition Tropical rainforest climate

80%

5. Design responsibility, Site Inspections & Prebid Meeting

The specifications mentioned in General Specifications, Section III and Specific Requirements, Section IV of this bid document shall be regarded as merely an indication of minimum specifications and requirement acceptable. The bidder shall accept full responsibility for the design of equipment and the installation of the whole of the works.

Bidders are compulsory to visit the site and measure the dimensions of major parameter of lift shaft, pit, overhead, machine room, openings etc. and satisfy themselves that they are suitable for the lift that is to be offered.

Prebid meeting & site visit will be scheduled at the site or the location indicated in the Data Sheet. Participation to the Prebid meeting is compulsory. Any quarries or deviations to be clarified during the site inspections are discussed only at the Prebid meeting. The minutes will be circulated to the email given at the Prebid meeting.

6. Drawings to be submitted

6.1 Drawings to be submitted at the bidding stage

The Bidder shall ensure that the existing hoist way is measured, and the detailed drawing with the dimensions of the lift offered shall be submitted at the bidding stage.

6.2 Drawings to be submitted after awarding of contract.

Working drawings and/or shop drawings containing complete information of the equipment to be supplied together with detailed installation drawings shall submitted for the approval of engineer appointed by procurement entity prior to commencing the manufacturing of any component of the lift.

- i. Manufacturer's working drawing which includes
 - Loading of machine room floor slab, details of holes etc.
 - Inserts and fixtures that go into the building structure for fixing of rail guides, architraves, steps etc.
 - Safe clearances between lift car/counterweight and the building structure
- ii. General arrangement drawings showing detailed layout of lift well and steel work in machine room with dead loads on beams.
- ii. Assembly drawing of door and door operating mechanism
- iv. Details of landing entrance (Front & Sectional Views)
- v. Electrical wiring layout of machine room, hoist way, car etc. indicating the electrical power requirements.
- vi. Control circuit diagrams, relays nomenclature and sequence of operations for Main controller, Automatic rescue device and door operator
- vii. Assembly drawings of car
- viii. Assembly drawing of traction machine
- ix. Assembly drawing of centrifugal governor
- x. Assembly drawing of safety mechanism

- xi. Drawings of safety buffers.
- xii. Push button, switch arrangements at car operating panel, land operating panel, car top mechanic control station, etc.

6.3 Drawings to be submitted at the time of handing over the lift.

Following documents shall be handed over at the time of handing over the lift.

- i. As built Drawing of installation
- ii. As built Electrical wiring diagrams, schematics, layouts for the entire installation and coordinated wiring/connection details between equipment and cables, showing terminal block coding, cable core size and identification
- iii. Two sets (one set original) of complete control circuit diagrams and nomenclature of components.
- iv. Car, well and machine room wiring lay-out diagrams.

7 Documents to be submitted

7.1 Documents to be submitted at the bidding stage

Manufacturer data and catalogues of equipment associated with lift offered. Data submitted shall include, but not limited to

- i. Section of Lift well and machine room with location of car and counterweight etc. and all other critical dimensions
- ii. Maximum number of passengers that can be accommodated and maximum load carrying capacity of lift.
- iii. Car and landing door opening mechanism
- iv. Contract speed of the lift.
- v. Details of control system.
- vi. Safety features.
- vii. Emergency opening
- viii. Type and size of lift rope

7.2 Documents to be submitted during the contract period

i. Type test certificates

Certified copies of type test certificates of following components obtained from an internationally recognized independent testing authority acceptable to purchaser.

- Safety mechanism
- Car & counter weight buffers consisted with compression test results.
- Over Speed Governor
- Landing Door Locks
- ii. Test certificate issued by the manufacturer for the parts mentioned bellow.
 - main suspension ropes and governor ropes
 - Test Certificate of traction unit including motor
 - Factory test report for controller.
 - Test certificate of motor driving unit (3VF)
- iii. Completed self-check list which includes all measured and test particulars by the erector and certified by the quality assurance person appoints by the contractor

7.3 Documents to be submitted at the time of handing over the lift.

Following documents shall be handed over at the time of handing over the lift.

- i. Two sets of spare parts (including part nos.) catalogues relating to controller electrical components and lift components.
- ii. Two sets of literature shall be furnished to describe the complete control sequence & operation of relays for a complete cycle of the lift movement.
- iii. Schedule of preventive maintenance schemes to be carried out regularly and troubleshooting procedures in attending to lift failures.
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 All Corrections of the Residence of the Correction Operation and maintenance manuals including fault indicators, settings and programming manual iv.

PART B: GENERAL SPECIFICATIONS OF ELECTRIC PASSENGER LIFT

1. Electric traction drive system

1.1 Traction Machine

The construction of all traction machines shall conform with relevant parts of EN 81 -20 standards.

The Traction machine shall be of gearless type and consist of a motor, traction sheave and brake drum or brake disc completely aligned on a single shaft on bed plate. The machine shall not contain any flexible couplings to avoid backlash.

gearless machine shall be ac gearless with Variable Voltage Variable Frequency (VVVF) drive with static inverter design. The lift machine shall have high efficiency and low power consumption and shall be designed to withstand peak currents in lift duties.

1.2 Motor

The drive motor shall be an induction or permanent magnet type synchronous motor (PMSM) having high starting torque and low starting current characteristics. The motor shall be specially designed to meet the severe load conditions encountered in lift service while the starting current shall not exceed 2.5 times the rated full load current of the motor.

The motor drive system shall incorporate all accessories and equipment to produce smooth starting, acceleration, running, deceleration and stopping characteristics for maximum riding comfort. The motor shall be fitted with a self-ventilated/cooled unit and thermistors shall be incorporated in the motor windings to give protection against overheating. The motor shall have a minimum of class "F" insulation. The speed of motors driving lift machines shall not exceed 200 rpm for gearless traction drive. The machines shall run at all loads without appreciable noise or hum.

1.3 Brake

In addition to the dynamic braking system provided through the static motor drives an electro-magnetic brake shall be provided. It shall be spring applied and electrically released type having noiseless operation. Springs used to apply the brake shoes shall be in compression and adequately supported.

The brake shall be capable of stopping and holding the lift car in its downward travel to rest with 125% of its rated load from the maximum governor tripping speed. In this condition the retardation of the Car shall not exceed that resulting from the operation of the Safety gear or stopping on the buffer.

The friction brake shall be minimum of two independent brake shoes or two independent disc callipers. Brake linings shall be of renewable incombustible materials and shall be secured to the brake shoes such that normal wear shall not weaken their fixings. Band brakes shall not be used.

No earth fault, short circuit or residual magnetism shall prevent the brake from being applied in the event of loss of power supply to the lift motor and control circuit.

A means of adjusting the brake plunger stroke and releasing the brake in emergency shall be provided.

The lift machine shall be fitted with a manual emergency device capable of having the brake released by hand and requiring a constant effort to keep the brake open.

The failsafe break shall incorporate an approved design of brake switch i.e. pick up, hold, discharge. Brake coil shall be wired in series & their respective switches in parallel. The operation of brake shall be thyristor controlled from solid-state drive-in order to effect minimum pick up time and synchronized start.

1.4 Sheaves

The diameter and the groove arrangement of each sheave shall be complied with given standard and they shall be manufactured in steel or SG iron and fitted with sealed for life lubricated bearings. The sheaves shall have machined rope grooves that can be reworked for future wear. Adequate provision shall be made to prevent any suspension ropes leaving groove due to rope slack or introduction of foreign objects.

Driving sheaves shall prevent slippage of wire ropes when the fully loaded car is descending at rated speed and the empty car is ascending at rated speed. The traction effect between traction sheave and ropes shall prevent the car or counterweight to be lifted when the other member strikes on the buffers

Deflector and overhead sheaves shall be provided where necessary to obtain the proper lead of the ropes to the car and counterweight, together with supporting beams for the same.

1.5 Alignment

The brake plunger, collar, sleeve, motor, sheaves and all bearings shall be mounted and assembled so that proper alignment of these parts is maintained. The assembly shall be reviewed and rectified when excessive noise is emitted during operation.

1.6 Anti-Vibration Supports

The whole traction machine shall be mounted on a fabricated steel beams that spans to the outer edge of the lift shat wall, Vibration isolation pads shall be provided in between bed plate and mounting beams to prevent the transmission of noise & vibration.

1.7 Emergency hand winding

Means for manual operation of the lift car shall be made by providing winding wheel to enable the lift car to be brought to the nearest landing.

The winding wheel shall comply with standards which is either permanently fixed or detachable painted in yellow. The brake-lifting device shall be so arranged that it is impossible for the brake to be left in the fitted position.

The direction of winding corresponding to the raising and lowering of the lift car shall be clearly indicated.

A prominent notice shall be displayed stating that hand winding shall be undertaken only by authorized persons and the notice shall detail the step-by-step procedures to be taken to move the lift in an emergency. There shall be a warning display for switching off electrical supply before the manual operations.

If special tools are required, they shall be retained in a suitable wall mounted fixture.

2. Control System

The lifts shall be of simplex or group supervisory control where applicable as specified in Specific Requirements in Section IV, full selective collective control and designed for switching between Auto and Attendant and between Normal and Independent modes of operation.

The control system shall be so designed to cause the system to "fail safe" operation in a case of electricity supply failure or a malfunction of any component. Movement of the car shall only be possible when its doors (landing & car) are properly closed and all other safety requirements ensured.

2.1 Traction motor drive

Traction motor drive shall be of Variable Voltage Variable Frequency (VVVF) static inverter design and manufactured for the type of traction motor and speed & torque shall be produced to meet the dynamic motion requirements of the lift system.

2.2 Location & Enclosure

The Controllers shall be fixed in the machine room.

The lift controller shall be of vertically mounted, totally enclosed, sheet steel cubicle type with hinged door in front and screwed panels at the rear providing easy access to all components inside the controller. The enclosure shall be well ventilated by means of louvers or other means devised by the lift manufacturer. Adequate protection shall be provided to prevent the entry of harmful insects and vermin into the cubicles.

The panels shall contain PCBs, contactors, relays, selectors, timers, transformers, fuses, rectifiers and all accessories associated with the control of the lift in the machine room. These components shall not be affected by the operating condition of the machine room.

The contactors and switches shall be mounted on panels of approved non-inflammable and non-hygroscopic insulating material supported on steel frame. All switches and contactors shall be of adequate rating of non-weldable wiping type. Heavy current relays shall be provided with arc deflectors.

Any components which emit significant heat, shall be placed outside the controller cabinet and be suitably enclosed and ventilated, with fail safe forced ventilation where necessary.

All PCBs and other components shall be adequately identified by durable affixed permanent labels or by engraved labels as per the wiring diagrams.

Internal wiring shall be properly laid and fixed with standard fasteners in accordance with the wiring diagrams. The different sections and different voltages shall be separately identified with different colours and shall be heat insulated when they are subjected to heat.

2.3 Microprocessor control PCBs

The main processor shall consist time tested and proven components and be preferably type tested in an independent laboratory. The main processor shall assure safe operation and automatic initialization in case of power failure and safe power transfer if the lift is provided with emergency rescue device. All the PCBs of the controller shall be adequately protected against high voltages.

The running programme shall not be accessed, examined or altered without the use of specified tool. The controller shall be adequately provided with status and fault indicators along with manual inspection control.

The controller shall cut-off the current automatically, apply the brake and bring the car to standstill in the event of failure of any of the electrical safety devices. The controller circuits shall be designed to prevent the lift being operated by the main motor until all car and landing doors are closed, except within the leveling zone of the floor at which the lift is stopping.

The over travel protection shall be provided with separate dedicated fail-safe circuit. Phase failure and phase reversal, line filters, overload and under & over voltage protections shall be incorporated in the controller. When the power supply is normalized after a power failure, the lifts shall resume normal operation without any manual resetting.

2.4 Protection against power fluctuation & overload

The controller shall provide protection against the following:

- (a) No-volt and sustained under voltage
- (b) Phase reversal of the power supply
- (c) Overload
- (d) Failure of any one phase

The controller shall be protected from lightning surges, other surges and the faults in the power supply system by fixing surge diverter/arrestor in between incoming power supply and main controller.

2.5 Group Controller

The group control shall allocate (or assign) the landing calls in an optimum way to minimize passenger waiting time & passenger journey time and to maximize the handling capacity.

When the group controller malfunctions, an individual controller will supervise each elevator with supplementary assignments to hall calls.

During off-time hours, after the elevator cars have been waiting with doors closed for a predetermined amount of time, the system disperses each car to a designated location, thus allowing more efficient service to future hall calls.

2.6 Supervisory control (If specified in Specific Requirements Section IV)

A supervisory control panel shall be fixed at the specified location and wired to the Lifts for

- a. Monitoring operation status
- b. Announcing the fault status
- c. Communicating with passengers
- d. Viewing cabin internal
- e. Any other functions specified in Section IV Specific of Requirements

2.7 Compatibility with Integrated Building Management System (IBMS) (If specified in Specific Requirements Section IV)

Following features must be sent to IBMS for monitoring.

- a. Emergency power failure alarm.
- b. Fire Emergency service alarm.
- c. Car emergency phone use alarm.
- d. Emergency stop alarm.
- e. System failure alarms (mechanical / electrical)
- f. Real-time car position.
- g. Real-time door position.
- h. Current travel direction.

3. Lift car and landing doors

Car shall be designed by the contractor considering the standard sizes given in BS EN-81: 20 standard and the availability of space within the lift shaft. All parts of car and landing door shall comply with fire classification requirements stipulated in EN 13501.

3.1 Car Frame

The car frame shall be constructed of steel members reinforced and braced with sufficient mechanical strength to relieve the car enclosure of undue strains in the event of the operation of the safety gear or by the lift being arrested in its travel by impact with the buffers. Also, this framework shall be sufficiently rigid to withstand being suspended by ropes or car top pulley. The frame shall not be permanently deformed by operation of the safety gear with a 125% load. Adjustable guide shoes/guide rollers shall be fixed on the top and bottom of the frame.

In case of 1:1 roping system, the steel suspension ropes shall be attached to the car frame with provision for taking up any inequalities between the ropes. Rope should be connected to the care frame by means of rope sockets/wedge clamps and shackle rods which shall conform to BS specifications and springs should be fixed between thimble rod and car frame to avoid transmission of vibrations to the car.

A heavy coat of anticorrosive primer and marine grade top coating shall be applied to all exposed frames, to reduce any corrosion to the bare minimum.

3.2 Car enclosure

Car enclosure shall be of metal construction with walls, floor, roof, false ceiling and door which meet the following requirements.

- **a.** Car walls : The car walls shall be of flush mounted panels with the finishing as specified in Specific Requirements, Section IV of the bid document.
- **b.** Car Platform: The car platform shall be of thick steel plate securely bolted to the car frame.
- **c.** Cabin floor : It shall be finished with the floor material as specified in Specific Requirements, Section IV of the bid document.
- **d. Roof** : The roof of the car shall be sufficiently reinforced to withstand the minimum distributed weight of three men. The car roof itself should also have an anti-slip working surface.
- **e. Hand rails** :The hand rails shall be of the type and finishing as specified in Specific Requirements, Section IV of the bid document. It shall be securely fitted at 875 mm height.
- **f. Kick plate** : Kik plate around the cabin at floor level shall be provided as specified in Specific Requirements, Section IV of the bid document.
- **g. Lighting**: The interior lighting shall be provided with 100 lux at controls and 1m above floor > 100mm from wall. Type of lights and fittings shall be provided as specified in Specific Page 9 of 23

- Requirements, Section IV. Power supply for the lighting circuit shall be taken from a separate circuit of the power distribution board in the lift machine room.
- **h. Ventilation**: Mechanical means of ventilation shall be provided as specified in Specific Requirements, Section IV of the bid document.
- **i. Safety Apron**: A safety apron shall be provided for full width of cabin complying with the height given in EN 81-20 standard. If deviating from the standard kkdue to the pit depth is reduced, a telescopic type apron shall be designed to comply with both existing pit depth and apron height.
- **j. Sign boards** : A data plate showing contract load, speed, and numbers of passengers and "No Smoking" sign boards shall be fixed inside the cabin.
- **k.** Car roof Toe Board & balustrades: Toe board of 100mm height on the perimeter of the car roof and a roof balustrade where the free distance in horizontal plane, beyond and perpendicular to its outer edge of the car roof to the wall of the well exceeds 300mm. Balustrade shall be complied standard strength and height requirement given bellow.
 - Where the distance between the inner edge of the balustrade handrail and the shaft wall is up to 500 mm, the balustrade must have a minimum height of 700 mm.
 - Where the distance between the inner edge of the balustrade handrail and the shaft wall exceeds 500 mm the balustrade must have a minimum height of 1100 mm.
- 1. Car Door : Type and the finishing of the car door shall be complied with the Specific Requirements, Section IV of the bid document. The strength and rigidity of the door panels shall be met by suitable steel reinforcement and the doors shall be hung on hanger rollers running on a polished steel track and guided at the bottom by non-metal shoes sliding in a smooth threshold groove. Door hanger rollers shall make non-metallic contact with the track for smooth and noiseless door operation. Suitable means shall be used to transmit motion from one door panel to the other.

3.3 Landing doors and entrances

All landing openings, complete metal entrances consisting of frames, architraves, doors, sills and toe guards shall be installed in accordance with the following requirements.

- **a.** Architraves : Architraves shall be metal frame consisting of head and jamb section with integral trim. The frame shall be carried enough from the well side to make neat appearance. It sha be secured to the sill and door hanger supports, or structure. Type and finishing of the architraves on all floors shall be complied with the requirements specified in Specific Requirements, Section IV of the bid document.
- **b. Sills**: The sills shall be of finished as indicated in Specific Requirements, Section IV of the bid document with approved non-slip wearing surface. They shall be in one piece, of sufficient length to suit the two supporting struts and grooved for the door guides. The door tracks shall be self-clearing.
- **c.** Landing Doors: Landing doors shall be of the type specified in in Specific Requirements, Section IV of the bid document. The door panels shall be formed to match the unit frames. The bottom of the doors shall be provided with guides to run in the sill slots with minimum clearance. Door hanger rollers to have non-metallic contact with the header track for smooth door operation.
- **d.** Toe Guard: All landing entrances to be provided with "Toe Guards" for the full width of the entrance opening.

3.4 Car and Landing Door Operating Mechanism

Car door and landing door shall be opened and closed automatically when the car is at a landing. Both doors shall be opened simultaneously when the car is leveled at respective landing and shall be closed again after a pre-determined time interval has lapsed. "Door open" button shall be provided within the in the car the momentary pressure on which shall reverse the motion, reopen the doors and reset the time interval

The car and landing door opening mechanism shall be driven by an adjustable VVVF type AC motor and the door movements shall be cushioned or check at both limits of travel.

The car door shall be provided with a protective device extending the full height and projecting beyond the front edge of the door. This device shall be so arranged that should it touch a person or any obstruction in its path while the door is closing, it shall automatically cause both the car door and the landing door to return to the open position. The doors shall remain open until the expiration of a time interval and then close automatically. The pressing of a car close button, once the doors are fully open shall cause the doors to close immediately.

Mechanical safety edges shall be retractable. In center opening doors, both doors shall have safety shoes. The device is to be arranged so as to ensure the doors exerting the absolute minimum force on a person obstructing the closing operation. A photoelectric detector type of door safety device shall be provided if requested in Specific Requirements, Section IV of the bid document. So that there is no need to continue to press the door opening button while boarding or alighting.

3.5 Car and Landing Door Interlocks & emergency opening

Each landing door and the car door gate shall be equipped with an electro-mechanical interlock, which shall prevent the operation of the lift unless the doors are closed and positively locked. The interlock shall also prevent the opening of any door until the car has reached the respective landing zone with the operating circuits open. A valid type test certificate shall be forwarded for the installed Make & Model/Type for landing door lock.

3.6 Emergency Opening and Devices for Car

- **a.** Emergency hatchway: The lift car roof safety hatch should be 0.4m x 0.5m, with the toe guard able to withstand 300N without permanent deformation of 1mm and elastic deformation of 35mm (minimum).
 - It shall not be able to open from inside and inward
 - It shall be clear of any apparatus mounted above the roof of lift car
 - It shall be held by suitable fasteners, which can be opened only from outside the lift car without key.
 - Be provided with a switch, which will prevent operation of the lift when the panel is open, and which will restore operation of the lift only when the fastenings have been manually restored.
- **b.** Emergency Stop: The lift car control panel shall be fitted with and emergency switch which will permit the lift to be stopped in case of emergency.
- **c. Interphone system :** Built-in intercom of hand free type shall be provided in car operating panel having a perforated speaker grill. Pressing the interphone alarm push button in the car-operating

- panel shall cause the buzzer to operate at the receiving end and phone shall be connected among the car, machine room and the location given in Specific Requirements, Section IV of the bid document.
- **d. Alarm bell:** An alarm bell including the wiring shall be provided and connected to a plainly marked Alarm bell push button in the car operating panel. The bell shall be located near the location in Specific Requirements, Section IV of the bid document. The bell shall be of battery-operated type provided with Led acid (Planet type) battery and trickle charger which are properly wired.
- **e. Emergency lighting:** A emergency lighting shall be provided within the car in minimum 5 lux at alarm button and 1m from floor at center of car in case of main power failure.
- **f.** Emergency Opening of Doors : A special key shall be provided so that an authorized person can open landing doors and/or car door from outside irrespective of the position of the car inside the hoist way. A pair of such keys shall be supplied for each lift.
- **g.** Emergency Power supply: In the event of a mains power failure the following systems within the lift car shall be powered up by emergency battery supply for minimum of 3 hours.
 - Emergency lights
 - Car Ventilation
 - Interphone system
 - Alarm Bell

The emergency battery shall be of sealed maintenance free Nickel Cadmium batteries provided with an automatic battery charger capable of fully recharging a discharged battery within 03 hours. The entire installation and wiring of this shall be carried out by the lift contractor.

3.7 Car Operating Panel (COP)

Car Operating Panel (COP) shall be of a flush-mounted stainless-steel Panels which shall be mounted in the car at not more than 400mm from entrance.

The Panel shall be hinged to the mounting panel and the following flush type micro push buttons shall be fixed at 875mm from the cabin floor.

- **a. Floor registration push buttons**: One touch micro stroke floor registration pushbutton with lighted floor designation engraved in Braille codes and floor numbers or projected on each pushbutton (tactile Buttons).
- b. Door open & Close push buttons: One touch micro stroke illuminated door open and door close push buttons with tactile standard symbols. Activated "Door open" switch shall override automatic door closing circuit immediately, opening and holding door in fully open position until pushbutton is released. Activated "Door close" switch shall override automatic door hold open timer (where applicable) circuit only and immediately start door closing operation without overriding door protection devices.
- **Emergency alarm:** One touch micro stroke illuminated Emergency alarm push buttons with tactile standard symbols.
- **d. Emergency call & Interphone**: One touch micro stroke emergency call button & built-in interphone at a suitable height from the car floor level.
- e. Floor level & direction indicator: Digital car position indicator & directional arrows with indications on arrival.
- **f.** Illuminated Door Hold button if specified in Specific Requirements, Section IV of the bid document.

- g. Voice synthesized announcer of sufficient sound to announce door actions (opening and closing) as well as the floor level and direction of travel at the lift arrives at a landing if specified in Specific Requirements, Section IV of the bid document.
- **h.** Over load indicator & Fire emergency exit indicator with audio Annunciator.
- i. Following switches to be provided inside a lockable compartment at the lower portion of the car operating panel
 - Cabin lamp switch
 - Ventilation fan switch
 - Auto-attendant switch
 - When the Auto-attendant switch is at attendant mode, the attendant buzzer shall activate for all landing calls.
 - Normal-Independent switch
 - Run-stop switch
 - Normal- Maintenance switches with up/down push buttons
- j. Car operating panel shall be provided with programmable access control system if specified in in Specific Requirements, Section IV of the bid document. This can be either key type switch or touch less electronic access control card system which ensures only the passenger holding key or pre-programmed key cards can use the lift. By operating the key or by spamming the proximity card the passenger is enabled to register the destination.
- **k. Second Car Operating Panel:** The Second flush-mounted stainless-steel COP shall be mounted in on left front return panel of the cabin if specified in in Specific Requirements, Section IV of the bid document. The Panel shall be hinged to the mounting panel and the following flush type micro push buttons shall be fixed at 875mm from the cabin floor.
 - Floor registration push buttons as defined in clause a of 3.7
 - Door open & Close push buttons as defined in clause b of 3.7
 - Emergency alarm button as defined in clause c of 3.7
 - Digital car position indicator & directional arrows with indications on arrival as defined in clause e of 3.7

3.8 Land Operating Panels (LOPs)

A flush mounted LOP with stainless steel face plate shall be provided at 900mm height from the ground level of each floor. I shall comprise the following devices.

- **a.** Floor level & direction indicator: Digital Position indicators & direction arrows which shall be bright enough and size enough to read at distance of 10m.
- **b.** Up & Down pushbuttons : One touch micro stroke illuminated up & down push buttons with engraved in Braille codes or projected on each push-button (Tactile Buttons).
- c. Arrival Gong: Arrival Gong strikes indicating arrival of the cabin at a particular floor preferably with 2 tones for ascending and descending. It shall be with separate indicator or changing the appearance of direction arrow for each lift.
- **d.** All land operating panels shall indicate when the car is full and when the car is taken for service.
- **e.** The LOP for lifts in group shall be comprised with dual Digital Position indicators & direction arrows for adjacent lifts

3.9 Car Top Control Stations

The fully enclosed Car Top Stations shall comprise the followings:

- a. Clearly identified Mush Room type Emergency Stop switch.
- b. Clearly identified Up and Down continuous pressure type push buttons with a Common button to operate the car in up and down directions at service speed.
- c. Clearly identified test switch for normal/maintenance operation. Under test operation, the car and landing push buttons shall be so isolated and the push buttons on the mechanic control station becomes operative, provided all safety devices remain in a safe position.
- d. Clearly identified door motor switch.
- e. Clearly identified push buttons to Open and Close the doors.
- f. Permanently mounted car top & bottom lights suitably protected with wire guard and complete with separate on/off switches
- g. Emergency lighting on the car top must now be sustained at 5 lux for one hour.
- h. Two numbers three pin 12A switch socket outlet to IP54 one at top and other at bottom of the lift car for maintenance.

4. Lift Shaft

4.1 Car & Counterweight Guides and Fixings

Guides for car and counterweight shall consist of steel "Tee" section machined rails or formed rails erected plumb and securely fastened to the lift well by heavy steel brackets. The ends of guides shall be tongued and grooved or forming matched joints and shall be connected with steel fish plates and bolts necessary for fixing the guide rails to the building structure.

Straightness of the guide rails shall be within 0.05mm and the deflection of guides shall not exceed 3mm under normal operation. Guide rails shall be rigidly fixed at correct spans with brackets adequately welded and anchored to the lift shaft. If the lift shaft is made with masonry bricks or cement blocks concrete pockets shall be in situ casted for anchoring.

Guide rails shall be provided with sliding guide shoes or roller guides. The guide shoes shall be of adjustable type and it shall be provided with replaceable nylon liners to absorb the shocks and to give good riding comfort.

Guide rails shall be provided with self-lubricating system such as by providing self-lubricating type shoes or by wick lubrication. Where wicks lubrication is used, a drip pan shall be provided below the guides in the pit to catch surplus oil.

4.2 Counterweight

Counterweight shall consist of cast iron or steel sections in a structural steel frame with suitable guide shoes. After balancing the counterweights should be locked in position by bolts to avoid noise and sliding. The counterweight shall be designed to balance the weight of empty lift car plus approximately 40-50% of the rated load. In heavy or large lifts, the sections shall be weighted by lead to reduce the dimension of the counterweight arrangement.

Guards of wire metal / mesh shall be provided in the lift pit to a suitable height (2400mm of minimum) above the pit floor to eliminate the possibility of injuries to the maintenance personnel.

4.3 Lift Ropes

a. Suspension rope

Round strand steel wires ropes made from steel wire ropes having a tensile strength not less than 12.5 tons/cm² and of good flexibility shall be used for lift. Lubrications between the strands shall be achieved by providing impregnated hemp core. The lift ropes shall conform to relevant BS EN 81-20 standard and the required factor of safety shall be adhered to. The minimum diameter of rope for cars and counterweight of passenger and goods lift shall be 8mm.

b. Compensation rope

Where required, compensating ropes shall be provided between the car and counterweight, passing round a tensioning pulley in the pit. The ropes shall be tensioned by gravity and a safety switch shall be provided as per standard.

c. Rope fastenings

The ends of lift ropes shall be properly secured to the car and counterweight hitch plates with adjustable rope shackles having individual tapers babbit sockets, or any other suitable arrangement. Each lift rope shackle shall be fitted with a suitable shackle spring, seat washer, shackle nut & lock & shackle nut split pin.

Care shall be taken during installation to ensure that the ropes are taut and there are no kinks due to mishandling.

d. Guards for Lift Ropes

Where lift ropes run around a sheave or sheaves on the car and/ or counterweight of geared/ gearless machine suitable guards shall be provided to prevent injury to maintenance personnel.

e. Marking and displaying number plates.

The required markings (directions, type etc.) shall be painted on ropes and on the base frame of traction machine. A name plate of the lift rope details shall be fixed adjacent to the suspension point.

f. Number & Size of Ropes

The bidder must indicate the number and size of lift ropes, governor ropes and compensation rope (if applicable) proposed to be used, their origin, type, ultimate strength and factor of safety. The contractor should furnish test certificates for all types of ropes from the rope manufacturers issued by competent authority.

4.4 Over travel Limit Switches

In addition to the mechanically operated terminal stopping switches, final limit switches of an approved type shall be installed the top and bottom clarence of the lift well so as to stop the lift in the event of the car over-travelling, beyond the terminal landings. If the lift has passed the final limit switch, it shall not be possible to close the circuit until the lift has been moved back by hand into its normal position.

4.5 Terminal slowdown switches

These shall be provided and installed to slowdown the lift car when approaching the top and bottom landings. The slowdown switches shall act independently from the normal car operating device.

4.6 Traveling Cables

PVC insulated Traveling cables confirmed to EN 50214 shall be provided between the car and the main controller located in the machine room. 15% physically available spare wires shall be provided in the travelling cable to compensate for the failure of used wires. Three screened set of coaxial cables wires shall be provided for CCTV, Speaker and Intercom.

4.7 Pit Switch

An emergency stop switch shall be located in the pit which when operated shall stop the car regardless of the position of lift way

In lifts where the access to pit is through the lowest landing lift way door a stop switch shall be located 450mm above the floor level of the landing within reach from this access door and adjacent to the pit ladder if provided. When the pit exceeds 1700mm in depth, an additional stop switch is required adjacent to the pit ladder and approximately 1200mm above the pit floor. Where more than one switch is provided, they shall be wired in series.

Pit switch shall be complied with standard and when placed in the "STOP" position, will cause the lift to stop and prevent its being started until placed in the "RUN" position.

4.8 Control station location and access to pit

Ladder shall be fixed for accessing to pit which is deeper to get in freely. Ladder shall be fixed complying with the standards.

In the event of difficulty to reach components underneath the lift car a control station (including audio communication), in case of entrapment, must now be located in the pit near the refuge spaces. A reset function must be located outside of the lift shaft.

5 Safety Devices

5.1 Over Speed Governor (OSG)

Over speed governor (OSG) shall be of centrifugal type and shall be adjustable to operate an electrical circuit to open the control circuit at approximate 120% of contract speed in either direction and shall bring the car securely to rest after tripping mechanically at 130% of car speed whilst running in the downward direction.

The OSG located in the lift machine room shall be driven by flexible wire rope driven from the car frame with following requirements

- Governor ropes have to comply with EN 12385-5
- The overspeed governor shall be sealed after setting the tripping speed.

The breaking or slackening of the governor rope shall cause the motor to stop by an electric safety device.

The name plate with detail descriptions shall be fixed on the OSG and type test certificate from an independent elevator laboratory shall be submitted for the supplied Make & Model of overspeed governor and governor ropes

5.2 Safety Gear

Lift shall be provided with a safety gear capable of operating in the downward direction and capable of stopping a car carrying the rated load, at the tripping speed of the overspeed governor, even if the suspension devices break, by gripping the guides and holding the car there. When car safety gear is engaged, it shall be given a provision to shut off the power supply to the motor and apply the brake automatically.

If accessible spaces do exist underneath the counterweight, the counterweight, as well as the car, shall be provided with safety gears.

Safety gears of car and counterweight shall be of the progressive type if the rated lift speed equals or exceeds 1m/s otherwise the safety gear may be of the instantaneous type.

The safety gear shall be coming with manufacture authentic name plate with type test Certificate. Name plate shall include make, model and type of safety gear, if adjustable, load range or adjustment parameter if the relationship with the load range is specified in instruction manual.

5.3 Buffers

The lift car and counterweight shall be fitted with suitable buffers conforming to the standards to compress and absorb shocks of fully loaded car or counterweight. Buffers shall be located suitably by mounting on a continuous channels or other structural member fastened to the guide rails to maintain the car and counterweight in equilibrium on hitting the buffer.

Oil buffers shall be provided for the passenger elevators for speed of more than 1.0 m/s and spring buffers for lower speed. Buffer top shall be covered with a suitable rubber pad.

The name plate with detail descriptions shall be fixed on the buffers and the type test certificate of buffers for the dynamic performance shall be provided by the contractor before installing them.

6. Other accessories

6.1 Fire Emergency Switch

A fire switch shall be provided in the ground floor so that when the switch is operated, all calls are cancelled and the operating lift return immediately to the ground floor and the door opens allowing the passengers to move out and the lift is parked in the ground floor. This switch should be separately mounted in an enclosure with breakable glass front and the words "FIRE MAN SWITCH" painted thereon at the wall, 1800 mm above the ground level and provisions is made to inter connect with the central smoke detector panel for automatic operation through controls.

6.2 Automatic turn off -Car Light & Fan

The light & the fan in the car are automatically switched off if there is no call for a fixed period of time.

6.3 Parking switch

A separate parking switch shall be available on Home Landing floor and it shall bring the car down after responding all registered calls and stop the door open and close again after pre-set time and the lights & fans shall turn off.

6.4 Emergency Rescue Device (if specified in Section IV – Specific Requirements)

The lifts shall be equipped with Automatic Rescue Devices for rescuing passengers automatically when power interruption or malfunction occurs. The Automatic Rescue Device shall deliver the required power to move the lift at reduce speed to nearest landing and to operate the door mechanism at least twice. The batteries shall be Ni- Cd or Lead acid sealed batteries and those shall be firmly fixed in a separate compartment. The Batteries shall be protected against overcharging and overheating.

6.5 Car Load Weighing Device & Automatic By-Pass

- (a) The lift car shall be fitted with a car-weighing device to render the lift inoperative should the contract load be exceeded by 10%. Visual and audible indication that the car is overloaded shall be fitted within the car. When the overload has been removed, the lift shall resume normal operation.
- (b) In the event of the car being loaded to its full capacity, then it will not stop to answer any hall calls and will stop only at the registered car hall. This will continue until such time the loading is reduced from its full capacity. This operation shall be in both directions of travel.

6.6 Preferable Features

- (a) Reopen the door when hall call register to the traveling direction
- (b) Reopening the door when the door load is detected abnormal.
- (c) Door Nudging

PART C: ASSOCIATED SERVICES

1. Electrical Work

1.1 General

Power Supply to the lift machine room is terminated on a Circuit breaker of the rated current given in contractor as per the requirement of the lift. The contractor shall draw the power supply for the lift installation from these breakers. This power supply shall include all required cables and wiring material. The installation shall be protected against over voltages and power surges by surge arrestors.

1.2 Cables

Cables shall be of PVC insulated 450/750 Volt grade, manufactured in accordance with BS 6004 or equivalent.

All electrical wiring shall be run in galvanized steel conduit and/or 1.5mm thick trunkings as specified in clause 1.3 & 1.5. Trunking shall be used wherever possible instead of multitude of conduits.

1.3 Conduits

- a. The conduits shall be either GI or HDPVC of sufficiently large section and so arranged with draw-in boxes to allow either and easy drawing or out of the cables which must not exceed the number set out in the appropriate table of the BS 7671- Regulations for electrical installations and no conduit bearing rust or damage shall be used.
- b. Surface runs shall be fixed by means of galvanized distance saddles at intervals not exceeding 1200 mm.
- c. Conduits shall be mechanically and electrically continuous throughout.
- d. No conduit shall be less than 20mm outside diameter.
- e. No cables shall be drawn into conduit before fixing and the conduit shall be cleaned and free from oil before erection.
- f. Flexible GI or uPVC conduits can be used with standard accessories for branch circuits from GI trunk to the extension of 500 mm maximum.

1.4 Conduit Boxes

- a. Conduit boxes shall be fixed direct to the structure apart from the support provided by the conduits.
- b. Box lids where required shall be heavy gauge secured by means of screws.
- c. Adaptable boxes and lids of the same size shall be interchangeable.

1.5 Trunkings

- a. The outer case, lid and internal partitions, if appropriate, of the trunking shall be manufactured of galvanized sheet steel enameled finished in manufacturer's standard colour.
- b. The lid of the trunking shall be formed with returned edges and shall be fixed to the cable trunking by means of screws located in bushes set in the edge trim of the trunking, or by other approved securing devices.
- c. Lengths of trunking shall be coupled together by suitable means.
- d. At each joint in the trunking, continuity shall be maintained by the installation of copper links by brass nuts, locking washers and bolts. In addition, an earth continuity conductor copper shall be run within the trunking and used to bond all items of equipment.
- e. Before cables are drawn into trunking the contractor is to ensure that all sections of trunking are free from sharp edges, burrs and weld spots which could cause damage to cable insulation.
- f. Where the trunking passes through floor slabs, fire barriers shall be fitted in the trunking
- g. All trunking required in the floor of the lift machine room shall be installed flush with the floor finish and be fitted with removable chequered plate lid.
- h. Any damage to the paint work of the trunking shall be made good by the Contractor before cables are drawn in.

1.6 Bonding

All exposed metal work liable to become electrically charged, other than current carrying conductors, shall be efficiently and systematically bonded and earthed. Tests shall be carried out to ensure that earthing has been effectively carried out and if not, satisfactory steps shall be taken to conform to this requirement according to the latest IEE regulations.

2. Civil & Mechanical Engineering Works

The building is provided with a lift pit, a lift hoist way and a machine room floor slab etc. All civil engineering works relevant to alterations & modifications if any, required to the existing lift pits, hoist ways and common machine room associated with this installation, including the work mentioned below shall be done by the contractor. The details of such works along with necessary drawings, specifications, diagrams and sketches shall be submitted for the prior approval of the Engineer appointed by the client.

- a. Any demolition, modifications & alterations to the lift pit and hoist way.
- b. Water proofing of pit to ensure the complete stoppage of water seepage after the installation
- c. Fixing of approved separate MS beams and connected demolition, modifications & alterations to the oversize hoist way.
- d. Any demolition, modifications & alterations in the machine room including the making of necessary through cuts in the floor slab for fixing traction machining, wiring, passing the wire ropes etc.
- e. Foundation/mounting pads for the hoisting machine.
- f. Any demolition, modifications, alterations & finishing work (cement, masonry, plastering & painting) at the landing entrances.
- g. Cutting away & making good wherever necessary.
- h. Cement masonry work, plastering, filing & painting wherever necessary for bringing back the alternation to the previous finish.
- i. Supply of all the materials required for all associated civil works.
- j. Providing suitable steel, I beam or hooks at the machine room top, for hoisting machines from ground to machine room for construction & maintenance works.

- k. Any modifications & alterations with regard to electrical works in the hoist way and the machine room should be done if necessary.
- 1. Any earth continuity bonding to structural works of lift.
- m. Fabricating & fixing GI sheet metal ducting & covering for over size through cuts in the floor slab above 50 mm from final floor level.

n. Structural works:

The work pertaining to structural works shall comply with the relevant codes of steel structural fabrication and welding. The guide rail supports shall meet the requirements of Standards. If specified in Section IV – Specific Requirements certification shall be obtained from a charted structural engineer.

3. Painting

All the steel works of the installation shall be properly cleaned of all scale and rust& painted with at least 2 coats (1st Zinc Phosphate Red primer and 2nd Grey enamel) of paint. The painting shall be suitable for damp tropical salt laden atmosphere. Parts not accessible after erection, shall have a final coat applied before erection.

On completion of the work on site the paintwork shall be touched up to make good any damage sustained during installation. All bright and plated parts should be greased or otherwise protected against corrosion and discoloring during erection.

4. Safety of the Personnel, Plants & Equipment

All standard safety procedures shall be taken by the Contractor to the satisfaction of the Engineer employed by client at the site from the commencement until the completion of the work.

The Contractor shall ensure the safety of the personnel, plant & equipment at the wok site. Such indemnities shall be provided in the contractor's insurance policy. The Contractor shall also ensure the safety of their own personnel and the plants & equipment belonging to him. Client will not be responsible for loss of life or limb of contractor's personnel, plants and equipment.

- a. Important During the installation of the lift, all the openings to lift well from the floors shall be properly covered and well protected temporarily by means of suitable strong covering plates and separate outer shield to prevent the spreading of debriefs and dust. The contractor shall ensure the safety measures taken to prevent any articles falling into the lift well as well as outside through these openings and causing bodily harm to the personnel working in and around the lift well & damages to the lift equipment.
- b. All rotating parts in the machine room shall be painted in Yellow colour to differentiate these items from others and should be covered with guard mesh or suitable enclosure for safety.

5. Machine Room Ventilation/ Exhaust Fan Control

The machine room would be provided with exhaust fans. The operation of the exhaust fan shall be incorporated with the normal lights inside the car by introducing and additional relay.

PART D: ANNUAL MAINTENANCES

1. Scope of comprehensive maintenance

The following work shall be included under comprehensive maintenance scheme.

- (i) Prompt action shall be taken to attend to any breakdown of the lift installation in order to put the lift back into working order using genuine parts. The service shall be provided free of charge within 24 hrs.
- (ii) Routine service shall be carried out once a month and the service report shall be sent to the procurement entity or an office nominated by procurement entity.
- (iii) Routine service shall be done by sufficient numbers of qualified lift technicians in minimum duration of four hrs. This shall be consisted of scheduled, routine, conditional and preventive maintenance.
- (iv) Operation of all modes, alarms, interphones, automatic rescuing devices and control circuits shall be checked for proper operation for specified performance settings at every monthly service.
- (v) Periodical inspection and testing shall be done by competent supervisor/engineer at regular intervals not less than six months and report shall be submitted to the procurement entity or an office nominated by procurement entity.
- (vi) Rope tensions, load weighing devices, door drives & mechanisms, levelling and all other systems shall be periodically checked and readjusted to assuring the specified performances.
- (vii) Maintaining service log at office and record date and time of each service visit, along with brief record of corrective actions undertaken during that visit. Maintenance personnel shall also record instances of call back service, including nature of problem and measures taken.
- (viii) Cleaning machine room, Cabin, lift shaft, pit and cabin top at monthly service and disposing debris and waste.
- (ix) Replenishment of lubricant and overhaul services to the traction machine, breaks, deflection sheaves, car top/bottom sheaves, compensating rope sheaves at regular intervals or at decided at inspections.

2. Replacements covered under comprehensive maintenance

Comprehensive maintenance shall cover the followings

- (a) Drive motor and control sets shall be maintained in good working order and replace parts if required.
- (b) Bearings, sheaves, Ropes, motors, breaks shall be periodically checked and Replaced if found worn and unsafe.
- (c) Replacement of defective motor drives, control PCBs, power supplies, connected switchgears, cooling fans, audio and visual signal fixtures.
- (d) Replacement of defective push buttons, switches, overload devices, shaft control elements.

- (e) Replacement of worn door locks guide shoes, door gibs, door rollers and connected door operating parts,
- (f) Replacement of burnt out car top lights and pit lights as required.
- Replacements of all lift car accessories including lights, ventilation fans, rails, switched etc (g)
- Replacement of all hoist ropes, governor ropes, as well as traveling cables and conductors when it (h)

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SECTION IV

SPECIFIC REQUIREMENTS OF THE BID

BID NO CEB/657.00/B/2021/01

PART A: AMENDMENTS TO GENERAL CONDITIONS OF CONTRACT (ICB)

Several clauses given under General Condition of Contract (ICB) in Section II have been amended in connection with this bid and those amended clauses are as follows.

1. Addendum to Clause 2 of Section II

All documents will be submitted during the contract stage including data sheets, manuals (installation, operation, maintenance etc.), drawings shall be in English. All titles, notices, name plates, instructions, indications, etc., during the installation, operation and maintenance shall be in English with a readable font and font size.

2. Clarification and addendum to Clause 7 of Section II

2.1 Clarification to Clause 7.1

Bidders who submit their bids using Price Schedule VI-A (Goods to be offered from outside Sri Lanka) shall comply with conditions applicable for Local Agents give in clause 5 of section II.

2.2 Addendum to clause 7.2

Bidders who submit their bids using Price Schedule VI-B (Goods to be offered from within Sri Lanka) shall submit valid documentary proof from the manufacturer (Agreement of agency ship or distributorship, Power of attorney, Letter of Manufacturer authorization etc.) to offer the goods manufactured by them for this bid.

3. Addendum to Clause 9 Section II

- a) In addition to mandatory and other documents mentioned in the clause 9 of Section II, following documents shall be furnished with the bid
 - i. All the drawing mentioned under clause 6 in Part A of General Specification, Section III
 - ii. All the documents mentioned under clause 7 in Part A of General Specification, Section
 - of the website and any other details such as workshop and instrumentation facility, availability of spares, records of jobs undertaken during the last three years, awards and ISO certifications achieved etc. relevant to the manufacturer of the goods mentioned the Price Schedule VI-A and/or VI-B.
 - iv. On time delivery certificate, Assurance for supplying any spare part for the goods offered and giving technical support when manufacturer concern is required for five years period from the date of complete delivery of goods and associated services.
 - v. Schedule of compliance to Commercial Conditions Appendix IX

4. Amendments to Clause 11. (ii). (b) Section II

During detailed bid evaluation, if there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate will govern. However, if the total bid price increases due to this correction, the unit rate will be adjusted within the total bid price. If the bidder does not agree for such adjustment, his bid will be rejected and **Bid Security will be forfeited.**

5. Amendments to Clause 13.2

In addition to packing, identification and marking requirement for imported goods mentioned in the above clause, following requirements shall be complied as a proof of manufacturer authentic product.

- i. Imported goods shall be packed with original packing at the factory of the manufacturer and Make, Model, Serial No, Name and Address of the Manufacturer and other relevant details shall be clearly mentioned on the packing.
- ii. Name plate of the goods shall be fixed on the housing of the goods by a permanent medium (Metal plate, embossing, Paint) and it shall include Make, Model, Serial No, General Specifications of the goods, Date of Manufacturing of the goods, Name and Address of the Manufacturer etc.
- iii. The Packing shall include an original/ certified copy of Owner Technical manuals including Operation and Maintenance (Service) Manual, Workshop Manual, Quality Assurance certificate and Manufacturer's Warranty etc. In the event of non-availability of manufacturer's warranty, warranty of local supplier shall be provided in the form of warranty card.

6. Amendments to Clause 23 Section II

Proof of ability of bidder and the manufacturer of the items offered are given below

- a. Ability of proof of the Bidder
 - i. Bidder shall have minimum of five years of experience in supplying goods and contracting associated services given under Price Schedule VI-A, VI-B and VI-C
 - ii. Makes of Major items mentioned in Schedule of Price Appendix VI-A and/or VI –B shall be used by the contractor for their previous contracts during last three years. At least 10 lifts in proposed make have been installed within 3 years. Also, there should be a reputed local agent for that make of product for giving satisfactory after sales services including of supply of spares, attending specific repairs which requires manufacturer concern. Bidder shall submit proof of manufacturer assurance to supply spare parts for the offered make of goods for a minimum period of 05 years.
 - The bidder shall be equipped with workshop facility, tools, equipment, and technical staff to carry out handling, installation, testing, commissioning and maintenance of the plant offered.
 - iv. Bidder shall have an average annual turnover of LKR. 30,000,000/= during last three years.

b. Ability of proof of the Manufacturer

Items offered in the Price Schedule VI –A and/or VI –B shall be manufactured at a factory having a specialized designing unit and the manufactures of particular items complying with standards given in Section III and Quality Assurance Certificate of ISO 9001. Bidder shall have minimum of ten years of experience in manufacturing supplying goods given under Price Schedule VI-A, VI-B and VI-C and at least having manufactured minimum of 20 numbers of same make and similar or higher capacity lifts within last two years.

7. Amendments to Clause 24(c) Section II

If major defect or frequently occurring defect is found during the defect liability period the warranty period shall be extended for another period of one year from the date of last repair of the defect.

8. Additional Requirement

In addition to General Conditions of contract in Section II following clause is added in order to select a manufacturer authentic and reliable product.

The entire item specified under Schedule of Price Appendix VI A/B shall be complied with following conditions.

- i. All the items offered shall be proven brands in Sri Lanka for last three years
- ii. Particular brand shall represent an authenticated product marketed by a manufacturer having statutory licenses to manufacture the product.
- iii. Particular product shall have a quality assurance certificate issued by an independent Certifying Agency.
- iv. Product shall have manufacturer authentic technical catalogues with all relevant data.

PART B: SPECIFIC TECHNICAL SPECIFICATIONS

1. Scope of work

The work involved within this contract shall comprise of designing, manufacturing, supplying, delivery, installation, commissioning, handing over & maintenance of lift and all connected equipment complying with the General Specifications and Specific Requirements given in the bid document.

The contractor shall also do all the civil, mechanical and electrical works identified during work in order to complete the contract in safe, reliable and aesthetically accepting condition.

2. System design

2.1 Available data

The approximate dimension of Lift shaft, machine room & lift pit are given below. Lift shaft size:

a. Shaft Size : 2105mm (w) x 1950mm (d)

b. Overhead : 4400mm c. Travel : 9000mm

d. Machine room size : 2700mm x 4060mm

e. Machine room height : 2500mm f. Pit depth : 1500mm

Other accessories are detailed in the drawing attached as Annex A.

2.2 Key Technical Specifications of Lift

The key specifications of the lift to be installed is given below and the detail specification are given in Schedule of Guaranteed Technical Particulars, Appendix V

a. Type : Electric traction passenger elevator with machine room

b. Capacity : 600 kg / 09 Persons

c. Speed : 1 m/s

d. Numbers of Stops : 04 Stops in same sidee. Machine : Permanent Magnet Gearless

3. Installation work

The Installation works of the lift shall be carried out in accordance with BS EN 81-20 and associated code of practices. Erector shall be carrying out complying with the manufacturer's guide line and the approved working drawings under the continuous and personal supervision of a manufacturer's representative or an engineer appointed by local supplier who has obtained proper training from OEM and acceptable experience in installation of similar type and capacity of lifts offered. Good workmanship is an essential prerequisite to be complied for this work.

All foreign & local materials together with the drawings mentioned under clause 6 and the documents mentioned under clause 7 in Part A of General specification, Section III shall be made available for the inspection of the officer appointed by the procurement entity.

4. Testing Commissioning

After completion of installation work, contractor shall test and commission the lift complying with the procedure specified in BS EN 81-50 standard up to the satisfaction of committee appointed by procurement entity. If any defect or shortcoming are found by committee, lift will not be taken over until necessary improvements are affected. Any time delay for this additional work will be on contractor's liability

The testing & commissioning work shall be carried out under the supervision of a manufacturer's representative or an engineer appointed by local supplier who has obtained proper training from OEM and acceptable experience in testing & commissioning of similar type and capacity of lifts offered.

All instruments, tools and equipment required for testing shall be supplied by the contractor at their cost.

5. After sales service

Warranty: One (01) year defect liability period as per the clause 24 in section II and clause 7 of Section IV-A

Maintenance within the warranty period:

After the provisional acceptance of the lift for putting into service, contactor shall carry out manufacturer recommended preventive maintenance and breakdown repairs during the warranty period.

Such maintenance shall include manufacturer recommended routine maintenance in every month including the routine checks, cleaning, adjustments, lubrications, topping ups and replacement of necessary spares free of charge. Contractor shall submit the lift service check list in every month to the owner of the lift or the officer appointed by procurement entity.

Contractor shall provide an efficient breakdown call-back service at any hour of the day or night. Any identified defective part or shortcoming at the breakdown or during the operation shall be rectified, repaired or replaced by the contractor within minimum time gap free of charge.

Maintenance after the warranty period:

The contractor shall be agreed to enter into comprehensive maintenance agreement for a period of not less than five years after completing the defect liability period. The Bidder shall give the prices in Price Schedule, Appendix VI-C for comprehensive maintenance of lift for five years period after the defect liability period. The rate shall be given as a monthly rate which includes all costs associated with comprehensive maintenance during five years period. The service to be done and items to be covered during the maintenance is given in Past D of Section III. This rate will be considered for the cost evaluation and it shall be remained fixed during the five years period.

Procurement entity has the right to decide whether the maintenance after the warranty period is given to contractor or the maintenance will be carried out by Lifts unit of CEB. The contractor shall agree to give major technical support if required when the maintenance is doing by Lifts unit of CEB.

6. Tools, equipment and spare parts to be given at the time of handing over the lift.

The bidder is expected to include rates for supplying all special tools and manufacturer's recommended spare parts for each item of equipment to provide maintenance for six years period. The contractor shall submit a schedule of manufacturer's recommended spare parts and special tools required for approval of procurement entity prior to ordering and delivery. The schedule shall indicate the number of individual spares required for each item of lift and its cost. The contractor shall handover the all agreed spares and tools to procurement entity prior to completion certificate being issued.

The following tools shall be compulsorily included in the tool list mentioned above.

- a. One number of complete sets of all hardware and software tools for service & maintenance of the lift.
- b. One number Brake release lever and one number machine hand-winding device.
- c. Two numbers of emergency door open keys
- d. Two sets of parking & panel keys

7. Training

The bidder is expected to include rates for providing the following training for team nominated by procurement entity.

- a. Lift operation
- b. All means of rescue operations
- c. Routine maintenance

The contractor shall submit the training procedure for approval of procurement entity prior to doing it. The contractor shall complete the training prior to completion certificate being issued.

8. Technical literature and drawings to be submitted

The drawing & documents mentioned under clause 6 & 7 of Part A of Section III shall be submitted

9. Conduct

The contractor shall be responsible for any damage resulting from performance of the work and procurement entity reserve the right to deduct the cost of any remedial work required in the event that the contractor is not capable of correcting any such damage.

Personnel assigned to the site shall observe and obey the policies and procedures for the place of work regarding security, safety and access.

10. Work Program

The contractor shall furnish a detailed program of lift supply & installation for the approval of the Engineer appointed by the client prior to commencement of works. This shall be provided at the time of accepting the contract.

SECTION V -A

BIDDING FORMS

1. APPENDIX I	Certificate of purchase of bidding document
2. APPENDIX II	Form of bid
3. APPENDIX III	Specimen form of bid security
4. APPENDIX V	Schedule of guaranteed technical particulars
5. APPENDIX VI	Schedule of Prices
6. APPENDIX VII	Form of domestic preferences
7. APPENDIX IX	Schedule of compliance to general and specific requirement
	A CORTAIN

Certificate of Purchase of Bid Document (To be signed and attached with the offer)

Date	:	
Issued to	:	
On behalf of	:	
Non-refundable Bid	fee receipt No	dated
Signature of docume Ceylon Electricity Bo	ent issuing offic	(sgd.) N.T. Athapattu eer D.G.M. (Workshop & Ancillary Services)
Date:		
I/We agree to abide by my/our offer in the a	by the condition	as to bid for bid no. CEB/657.00/B/2021/01 and therefore submit the of Prices.
Position and Name of	of Signatory	:
Address	>	:
Date:		
Signature of Bidder a	and Seal	

CEYLON ELECTRICITY BOARD

Form of Bid

The Chairman,

Provincial Procurement Committee (Workshop & Ancillary Services), Ceylon Electricity Board, Meethotamulla Road, Kolonnawa.

I/We having examined the Conditions of Bid, the Schedule of Prices and all other documents pertaining to this work/supply, do hereby offer and undertake to carry out the work/supply, to the satisfaction of the General Manager, Ceylon Electricity Board strictly in accordance with the conditions of Bid, at the prices and within the delivery period set forth in the accompanying Bill of Quantities/Schedule of Prices pertaining to Bid No. CEB/657.00/B/2021/01 and in consideration of the trouble and expense incurred by you in preparing the contract documents and in examining and considering the Bid, I/We further undertake that this Bid security shall not be withdrawn by me/us before the expiration of 120 days from the date of closing but shall remain binding on me/us and may be accepted at any time before such expiration.

And I/We further undertake in the event of this Bid being accepted to furnish a Performance Bond corresponding to 10% of the contract sum. Such Bond shall be on the form of a Bank Guarantee or such other form as provided in the Bid Conditions and shall be in favour of the General Manager, Ceylon Electricity Board for the due Performance of the Contract and for the payment of all claims to which the Ceylon Electricity Board may be entitled, and to execute an agreement in the prescribed form duly stamped by me/us at my/our expense in accordance with the Stamp Duty Ordinance and to complete the work to the entire satisfaction of the General Manager, Ceylon Electricity Board.

And I/We further agree that, in the event of my/our withdrawing the offer or declining or failing to execute such bond and/or agreement within two (2) weeks of my/our being called upon to execute such bond and/or such Agreement, the Ceylon Electricity Board has the right to confiscate the Bid Bond and to recover from me/us the full amount of damages sustained by the Ceylon Electricity Board as a result of my/our so declining or failing.

I/We understand that you are not bound to accept the lowest or any bid you may receive.

	•••••		
Signature	of Bi	idder	
Date	O	· · · · · · · · · · · · · · · · · · ·	
Bidder's N	ame	:	
Address	:		
Witness			
Signature	:	1	2
Name	:	1	2
Address:		1	2

<u>Specimen form of Bid Security</u> <u>Form of Bid Security</u>
General Manager, The Ceylon Electricity Board, Colombo.
Dear Sir,
At the request of our constituent
Notwithstanding anything to the contrary herein contained these presents shall be valid only up to and include the
A demand addressed to us under the hand of your General Manager or the Chief Executive Officer or other Officer of your Board acting as aforesaid shall be sufficient and conclusive proof that we are liable to pay to you the sum demanded hereunder.
Our liability hereunder shall not in any event exceed a sum of Rs
We specifically agree that you shall be at liberty either in one action to sue us and the said contractor or any other persons or persons jointly and severally or to proceed in the first instance against us only and further that we hereby expressly renounce our right to claim the said Contractor should be excused or proceeded against by action in the first instance and the right to claim that you should recover from us appropriate share of the amount claimed and all other rights, benefits and privileges to which guarantees or sureties are or may in law be entitled, it being expressly agreed and understood that we shall be liable in all respects hereunder as principal debtor to the extent aforementioned including the liability to be sued before recourse is had against the Contractor.
Yours faithfully,
Witness:
The above Guarantee is issued in respect of the Bid No. CEB/657.00/B/2021/01 Submitted by (<i>Name of the Bidder</i>) to the General Manager, Ceylon Electricity Board, (<i>Name of the Bid</i>)

FORM OF APPLICATION FOR DOMESTIC PREFERENCE

The application of domestic preference appended below shall be filled by all local bidders of locally manufactured goods. Bidders shall submit the copies of documents such as proforma invoices issued by foreign input supplies, quotations issued by local raw material suppliers, custom declaration etc. in support of the following information. Bidders who fail to furnish the supporting documents in support of the information given below will not be considered for domestic preference. All foreign costs can be quoted in foreign currencies and all local costs shall be quoted only in Local currency.

Bid for: Supply, delivery, installation, testing, commissioning and maintenance of	one number
Passenger Elevator with 600kg, 09 Passenger, four stops, 1.0 m/s speed for Area Off	ice, Ceylon
Electricity Board, Gampaha	

Bid No: CEB/657.00/B/2021/01

1.0	Total ex- works Price excluding VAT	
	(as quoted in the Price Schedule, Section IV)	

Break up of ex- works Price

1.1	Total Foreign Cost
1.1.1	Total FOB Cost of Foreign - inputs
1.1.2	Total Cost of Freight of Foreign - inputs
1.1.3	Total Cost of Insurance of Foreign - inputs
1.2	Total Local Cost (excluding VAT paid if payable)
1.2.1	Total Cost of Local Raw Materials input (excluding VAT paid if payable)
1.2.2	Total Cost of Local Labor input
1.2.3	Total Cost of any other local components input. (Please specify in detail)

(Note: The sum of 1.2.1, 1.2.2 and 1.2.3 will be taken as the locally added value component for the computation of % local value addition)

Details of Foreign cost

	Item Description & HS Code	Units	Quantity	Unit CIF Cost	Total CIF Cost	Supporting Document Reference
1.1						

Details of local Costs

	Item Description & HS Code	Units	Quantity	Unit	Total	Supporting
A				Rate/ LKR.	Cost	Document Reference
1.2.1	Local Raw Materials Input			2224		Hererenee
1.2.2	Local Labor Input					
1.2.3	Any other local Components					
	input (Please specify in detail)					

I/We certify that	the above	information	provided by	y me /	us are	true	and	correct.	I /we	authorize	the
Ceylon Electricity	Board to v	erify the acc	uracy of tha	t inforn	nation f	from o	our s	uppliers	•		

•••••	• • • • • • • • • • • • • • • • • • • •
Name & Address of the Bidder	Signature of the Bidder

Appendix V- A Schedule of Guaranteed Technical Particulars

Bid No.: CEB/657.00/B/2021/01

#	Item Description	Bid Requirement as specified	What is Offered *
GENI	ERAL		
1	Туре	Electric Traction Passenger Elevator	
2	Capacity	600 kg / 09 passengers	4(3)
3	Counterweight	Rear drop	
4	Contact speed	60 mpm	
5	No. of serving floors	04	A DY
6	Home Landing	At ground floor	Q ₁
7	Traction machine	AC VVVF PMSM Gearless	2
8	Levelling accuracy	<u>+</u> 05 mm	
9	Operation and control system	Automatic simplex full selective collective changeable from Automatic to Attendant & to independent	
10	Duty	180 Starts/ hr	
11	Safety gear & governor	Progressive safety gear & centrifugal OSG	
12	Rated power supply	400V,3-phase,4W±06%,50Hz	
13	Main standards to be followed	EN 81-20 & EN 81-50	
14	Statutory requirements to be followed	Local Disability Regulations & ICTAD specifications	
CAR		T	
15	Internal dimensions	1500mm (W) x 1100mm(D)	
16	No. of Entrances	1	
17	Entrance size x H mm	800mm (W) x 2100mm (H)	
18	Door type:	Automatic VVVF control 2- panel center opening power door with Safety Door Edge & Human Sensor	
19	Car Enclosure	Hairline finish using Stainless steel AISI 304 or higher	
20	Door finish	Hairline finish using Stainless steel AISI 304 or higher	
21	Car Ceiling	Indirect full light arched false ceiling with decorative light diffuser- (requires catalogue to select).	

#	Item Description	Bid Requirement as specified	What is Offered *
22	Car Lighting	Concealed CFL or LED lights with Diffuser to illuminate min. 100 lux at floor	
23	Car Ventilation	02 Nos. recessed line blowers with direct slit vent	
24	Car floor	Hard wearing vinyl floor	
25	Hand Rail	Stainless steel. Round/Flat bars for 3 sides	
26	Kick plate	Hair line finished Stainless Steel	()
27	Sill	Extruded hard Aluminum	
CAR	OPERATING PANEL		
28	Numbers of Panels	One (01)	
29	Location	On side or front return panel	0
30	Face Plate	Hairline finish Stainless steel	2
31	Floor Buttons, door operation Buttons and door hold button	Micro push buttons with registry lamps. Push buttons shall have Braille characters or raised numbers and symbols (Tactile)	
32	Emergency stop switch (Optional)	At top left with safety breakable glass	
33	Alarm & Interphone push Buttons	Push buttons shall have Braille characters or raised numbers and symbols (Tactile)	
34	Interphone	Build in type interphone at 1.5 m height	
35	Attendant Buzzer	This shall sound when hall button pressed in Attendant mode	
36	Auto-Attendant Switch	Labeled selector switch in the lockable compartment	
37	Normal-Independent Switch	Labeled selector switch in the Lockable compartment	
38	Run stop switch	Labeled switch in Lockable compartment	
39	Light switch	Rocker switch in Lockable compartment	
40	Fan switch	Labeled switch in Lockable compartment	
41	Auto Fan & Light off	Adjustable delay off of the cabin Light & Fan	
42	Direction & position indicator	Digital seven segment or dot matrix LED display on COP	
43	Overload Indication & Alarm	On COP or on Transom Panel	
44	Fire emergency Indicator & Alarm	On COP or on Transom Panel	
45	Capacity & No Smoking plate	On the Rear Panel at 2.15m height	

#	Item Description	Bid Requirement as specified	What is Offered *
46	Voice Guidance System	Floor Number and Direction of Travel	
47	Emergency Trap Door	350x500 mm minimum on car roof with safety interlock switch. Underneath diffuser shall be openable from the trap door	
48	Emergency lamp	This shall lit by a rechargeable Ni-Cd battery for 30 min. minimum	
49	Arrival Gong	Two tone on arrival	30
50	Car Top Controls	Emergency stop switch, Norm- Inspection selector switch, Door On-Off switch & UP-Down Push buttons	ODI
51	Car Top Facilities	Service lamp with wire guard & 230VAC socket outlet.	3
LANI	DING ENTRANCE		
52	Quantity	Three (03) inline	
53	Туре	Center opening 2 panels Power operated sliding door	
54	Size (clear entrance)	800mm (W) x 2100mm (H)	
55	Architrave	Narrow Hairline finish stainless steel AISI 304 or higher	
56	Door finish	Hairline finish using Stainless steel AISI 304 or higher	
HAL	L FIXTURES		
57	Position & direction indicators	LED seven segment or dot matrix Digital position & direction indicator with arrival sign.	
58	Face Plate	Hairline finish stainless steel AISI 304 or higher	
59	Other annunciating Displays	Passenger overloaded, Out of service or similar signs	
60	Call Buttons	Up/Down Micro touch push button with registry lamps. Braille characters or raised numbers and symbols (Tactile)	
61	Parking switch	Key selector switch incorporates with Ground floor hall fixture	
62	Parking operation	Automatic return; Automatic light & fan off and door closing	
63	Fireman's switch	At 1.8 m height at other side of ground floor Hall fixture with breakable glass	
64	Alarms	02 No DC Alarms with rechargeable Ni-Cd Battery backup	

#	Item Description	Bid Requirement as specified	What is Offered *
65	Interphones	02 Nos external interphones with Ni-Cd battery back up	
66	Main Rope Slack Switch	Manufacture designed & supplied one	
67	Pit Switch	Latching Mushroom Head Emergency stop	
68	Governor rope tension switch	Manufacture designed & supplied one	
69	Factory testing before shipping	Not Required	(3
70	Ratings of the supply Circuit Breaker	40 A	

Circuit Dicarci	Y
* Manufacturer datasheets for key co	omponents shall be submitted along with the bid
Signature and rubber stamp of bidde	r Date:
	CORTIN
RMATIO	
CO,	

<u>Appendix V-B</u> Supplementary Schedule of Particulars

#	Item Description	Specify the offer
GENI	ERAL	
1	Make	
2	Model	
3	Country of Manufacture	
4	Weight of the completed car	40
5	Weight of the completed counterweight	
6	Total weight of the lift on machine floor with rated load	
7	Roping method	Y
8	Position of counterweight	S)
9	Position of diverting pulley	2°,
10	Diameter of diverting pulley	(C)
11	Method of sound insulation	Y
TRAC	CTION MACHINE	Y
12	Make	
13	Model	
14	Country of Manufacture	
15	Rated load in kg	
16	Pitch diameter of sheaves	
17	No. of traction grooves	
18	Type of traction grooves-V or U undercut groove	
MOT		
19	Type of the motor- PMSM	
20	Rated output of the motor in kW	
21	Rated voltage of the motor	
22	Rated Starts/hr or Duty Cycle	
23	Class of insulation	
24	Type of cooling – self or electric fans	
25	Type of enclosure or IP class	
26	Rated rpm	
27	In-built thermal protection	

#	Item Description	Specify the offer
BRA	KE	1
28	Type of brake-Drum, Disc, external caliper, internal caliper	
29	Operating voltage	
30	Operating current	
31	Numbers of shoes	
32	Lining material	Ċ
33	Size of the brake lining	
CAR		
34	Type of guide shoes / rollers	
35	Quantity of guide shoes / rollers	
36	Locations of guide shoes / rollers	
37	Method of lubrication	
38	Type of door operating mechanism-rotating arm/belt driven	80
39	Make, Model & Rating of door driving motor	
40	Make & Model of VVVF door motor drive	
COU	NTERWEIGHT	ı
41	Construction of counterweight	
42	Type of guide shoes	
43	Quantity of guide shoes	
44	Location of guide shoes	
45	Material of fillers	
GUII	DE RAILS	1
46	Car Guide rails	
	Туре	
	Material	
,	Sectional dimensions	
47	Counterweight Guide rails	
	Туре	
	Material	
	Sectional dimensions	
48	Guide rails support	
	Construction	
	Size	
49	Method of fixing to the lift shaft	

#	Item Description	Specify the offer
SAFE	CTY GEAR	
50	Туре	
51	Make	
52	Model	
53	Country of Manufacture	
54	Maximum sustained load	
55	Maximum tripping speed	46
OVE	RSPEED GOVERNOR	
56	Туре	
	Make	
57	Model	S)
58	Country of Manufacture	R.
59	Electrical tripping speed	(O)
60	Mechanical tripping speed	*
61	Method of slack rope protection	Y
HOIS	TING ROPES	
62	Manufacture	
63	Construction of ropes	
64	Diameter of ropes	
65	No. of ropes uses and reeving ration	
66	Type of ropes anchorage metal of resin filled, cable	
	clamps, Wedge	
BUFF	TERS	
67	Type	
68	Make	
69	Model	
70	Quantity with locations	
	DING DOOR ASSEMBLY	
71	Method of fixing door sills	
72	Size of sill support	
73	Method of fixing door hangers	
74	Landing door locks	
	Make	
	Туре	

#	Item Description	Specify the offer
TER	MINAL STOPPING SWITCHES (UP AND DOWN)	
75	Make	
76	Model	
77	Method of operation	
CON	TROLLER	
78	Make	<u> </u>
79	Model	40
80	Country of Manufacture	
81	Microprocessor – Make	
82	VVVF Drive	
	Make	Sy.
	Model	Q Y
83	Rated Voltage	$\wedge O$
84	Method of cooling	Y
SUR	GE ARRESTORS	>
85	Туре	
86	Make	
87	Model	
88	Nominal discharge current	
AUT	OMATIC RESCUE DEVICE	
89	Make	
90	Model	
91	Battery Bank	
	Make	
	Туре	
	Quantity	
92	Ratings of the battery bank	
INTE	RPHONE	
93	Make	
	Model	
94	Rating of the rechargeable Battery	

Signature and rubber stamp of bidder Date:.....

Schedule of Price

Bid for : Supply, Delivery, installation, testing, commissioning and maintenance of one number passenger elevator with 04 stops, 600 kg, 1.0 ms⁻¹ for Area Office, Gampaha. Bid No: CEB/657.00/B/2021/01

[Bidders shall strictly comply on Clause 5, General Conditions of Contract ICB, Section II of Bid Document when submitting offer using this schedule]

1	2	3	4	5	6	,	7		8	9	1	0
Item	Description of Goods	Make & Model of	Qty	Units	Unit FOB Price,	Total FOB Pri	ce in foreign bid	Total Freight to Co	olombo in foreign bid	Local Agent's	Cost of Clearing, Ha	andling and Delivery
No		the offered item as			in foreign bid	curr	rency	cui	rrency	Commission, over and	Charges excludi	ng VAT (LKR)
		stated in the			currency	In Figure	In Word	In Figure	In Word	above FOB, excluding	In Figure	In Words
		catalogue				C				VAT as a Percentage of		
										FQB (%)		
										. 1		
										(),		
	Supply of 04 stops, 600kg, 1.0) •		
1	ms ⁻¹ , Passenger Elevator as per		1	No					On'			
	the specification given in			110								
	SECTION III & IV								ORBIT			
								_	(),			
-		T-4-1	<u> </u>	ļ	1							
		Total										
37.A.T	D		T . 1	ı	CYATE	1/70			D' (IC	4 CEODD 1	`	
VAI	Registration No :		I otal	amour	nt of VA1 claimed	1(Ks):		•	Discount (If any as a	percentage of FOB Price	e)	
							01					
	e furnished a Bid Bond No				for Rs			from		as Bid Security.	I/We agree to abide by	y the Conditions
stipul	ated in the Bid No. CEB/657.00/I	B/2021/01					• • •					
• • • • • • • • • • • • • • • • • • • •					•••••						••••	
Signa	ture of the Bidder				Signature of Wit	res. 2				Signature of Witness 2		
						\ 						
					217							
iname	and Address of the Bidder		<		Vame & Address	s of witness 2				Name & Address of Wi	uness 2	
				Y								
Date			13		Date					Date		
Date			/,		Date					Dute		
Telep	hone				Telephone					Telephone		
1					•					•		
Facsi	mile				Facsimile					Facsimile		
E	••				D. M. 11					E 14 ''		
E-Ma	il				E-Mail					E-Mail		

APPENDIX VI - A

(Applicable for Goods to be offered from outside Sri Lanka only- Import Supply)

Schedule of Price

Bid for: Supply, Delivery, installation, testing, commissioning and maintenance of one number passenger elevator with 04 stops, 600 kg, 1.0 ms⁻¹ for Area Office, Gampaha.

Bid No: CEB/657.00/B/2021/01

E-Mail

.....

1	2	3	4	5	6		7	8	9
Item No	Description of Goods	Make & Model of the offered item as stated in the catalogue	~ •	Units	**Unit Ex Works /Ex Show Room Price,		Works / Ex Show Room Price ng VAT in LKR		g and Delivery Charges excluding AT (LKR)
No		item as stated in the catalogue			excluding VAT in LKR		In Word	In Figure	In Word
					, , ,	in riguic	iii wolu	in riguic	iii wolu
1	Supply of 04 stops, 600kg, 1.0 ms ⁻¹ , Passenger Elevator as per the specification given in SECTION III & IV		1	Nos		~ \ \ \ \ \ \	FOR BIDDIN	G	
		Total			0	1-100			

Total ancust of VAT claimed(Rs):

I have furnished a Bid Bond No.

conditions stipulated in the Bid No. CEB/657.00/B/20216

Signature of the Bidder Discount ((if any as a percentage of Ex Works / Ex Show room Price)for Rs.as Bid Security. I/We agree to abide by the Signature of Witness 2 Name and Address of the Bidder Name & Address of Witness 2 Name & Address of Witness 2 Date Date Date Telephone Telephone Telephone Facsimile Facsimile Facsimile E-Mail E-Mail

Schedule of Price

Bid for : Supply, Delivery, installation, testing, commissioning and maintenance of one number passenger elevator with 04 stops, 600 kg, 1.0 ms⁻¹ for Area Office, Gampaha.

Bid N	No: CEB/657.00/B/2021/01								
1	2	3	4	5		6	7	8	
Item	Description of service	Specification	Units	Qty		ing VAT (in LKR)		ce excluding VAT (in LKR)	Amount of VAT /
No			/Lump		In Figure	In Word	In Figure	In Word	LKR
Cost of	of Work taken for contract Sum								
1	Installation of one number Passenger	As specified associated works in SECTION II	I Lump						
1	Elevator	& IV	Sum	1					
2	Civil & steel works associated with	As specified associated works in SECTION II	I Lump						
	alternation and modification works	& IV	Sum	1					
3	Testing & Commissioning of lift	as specified associated works in SECTION III & IV	Lump Sum	1			Jus . No		
4	Providing spare parts, hardware tools	As specified in Clause 6 of Part B Specific	Lump				Oll		
4	& software tools	Technical Specification in Section IV	Sum	1			$^{\prime}D^{\vee}$		
5	Duraviding the training	As specified in Clause 7 of Part B Specific	Lump	1		O O	7/		
3	Providing the training	Technical Specification in Section IV	Sum	1		2			
6	Providing all documents & drawings	As specified in Clause 8 of Part B Specific	Lump	1					
U	Floviding an documents & drawings	Technical Specification in Section IV	Sum	1		X Y -			
7	Comprehensive service during defect	As specified in Clause 5 of Part B Specific	Monthly	12					
,	liability period	Technical Specification in Section IV	Wiontiny	12		V			
8	Any other cost					1			
	This other cost				_/_				
		Total							
					\bigcirc				
		for 05 years after 1 year Defect Liability Peri							T
Item	Duration	Specific Requirement	Units	Qty		ing VAT (in LKR)		ce excluding VAT (in LKR)	Amount of VAT /
No	1 at Voor often defeat liebility manied	<u> </u>	Monthly	12	In Figure	In Word	In Figure	In Word	LKR
1	1st Year after defect liability period	_ ^	,						
2	2nd Year after defect liability period		Monthly	12					
3	3rd Year after defect liability period	As specified in Clause 5 of Part B Specific	Monthly	12					
1	4th Year after defect liability period	Technical Specification in Section IV		1 1					
			Monthly	12					
		10,	Monthly						
5	5th Year after defect liability period	14,	Monthly Monthly						
5		Total							
	5th Year after defect liability period	Total						Date:	
VAT	5th Year after defect liability period Registration No:	Total	Monthly	12		as Rid	Security I/We agree to		
VAT I	5th Year after defect liability period Registration No :	Total	Monthly	12		as Bid	Security. I/We agree to		
VAT I have stipula	Sth Year after defect liability period Registration No :	Total	Monthly	12from		as Bid	, -	abide by the Conditions	
VAT I have stipula	Sth Year after defect liability period Registration No:	Total	Monthly	12from		as Bid		abide by the Conditions	
VAT I have stipula	Sth Year after defect liability period Registration No :	Total	Monthly	12from		as Bid	, -	abide by the Conditions	
VAT I have stipula	Sth Year after defect liability period Registration No :	Total	Monthly tness 2	, 12from			Signature of Witness	abide by the Conditions2	
VAT I have stipula	Sth Year after defect liability period Registration No:	Total	Monthly tness 2	, 12from			Signature of Witness	abide by the Conditions2	
VAT I have stipula Signat	Sth Year after defect liability period Registration No:	Total	Monthly tness 2	, 12from			Signature of Witness	abide by the Conditions2	
VAT I have stipula Signat	Sth Year after defect liability period Registration No:	Total	Monthly tness 2	, 12from			Signature of Witness	abide by the Conditions2	
VAT I have stipula Signat Name	Sth Year after defect liability period Registration No:	Total	Monthly tness 2	from			Signature of Witness Name & Address of	abide by the Conditions 2 Witness 2	
VAT I have stipula Signat Name	Sth Year after defect liability period Registration No:	Total	Monthly tness 2	from			Signature of Witness	abide by the Conditions 2 Witness 2	
VAT I have stipula Signat Name	Sth Year after defect liability period Registration No:	Total Rs. Signature of Wi Name & Addre Telephone	Monthly tness 2	from			Signature of Witness Name & Address of	abide by the Conditions2 Witness 2	

(Applicable only for associated services to be offered)

SCHEDULE OF COMPLIANCE TO GENERAL AND SPECIFIC CONDITIONS

BID NO: CEB/657.00/B/2021/01

	Bid requirement	Complied/Deviated
1	Certificate of Purchase of Bidding Document with the signature of the bidder- Appendix I	
2	Duly signed Form of Bid - Appendix II	
3	Bid Security accordance with format of Appendix III	
	a. Bank Name	
	b. Bid Security No	
	c. Value of bid security	
	d. Validity Period	
	Schedule of Guaranteed Technical Particulars attached to the CEB Specification Appendix V	_
	Schedule of Price with signature and company seal of the bidder - Appendix W-A, VI-B and VI-C	
6	Certified copies of relevant Test Certificates, Mill certificates etc.	
7	Name and Address of Manufacturer and Certificate of Country Manufacturing of goods offered outside Sri Lanka	
8	If the Bidder is not the Manufacturer, the Bidder shall whish documentary evidence of arrangements with the Manufacturer for the supply of goods offered.	
9	Duly executed Power of Attorney vide Clause für General Contitions (if applicable)	
10	Documents of proof of ability of local agent and principal/manufacture	
11	VAT release letter from Inland revalue department if applicable	
12	Certification of registration under Public Contracts Act No 3 of 1987 (Applicable for contract cost exceeding Rs. 5.0 Million)	
13	Duly completed and signed "Form of Domestic Preference" (Appendix VII) and all the documents refer to Clause (11.1) of Domestic Preference. (If applicable).	
14	Package details (Weight, container size etc.)	
15	Documents to prove the eligibilities of bidder and eligibility of manufacturer given in calause 23 in Section II & clause 6 in Section IV-A	
16	Manufacturer authentic technical literature giving full particulars	
17	Factory test certificates	
18	Manufacture's quality certificate ISO 9001	
19	Complete design with detailed drawings as specifed	
20	Signed Pro forma Invoices indicating the full description of items offered and prices	

SCHEDULE OF COMPLIANCE TO GENERAL AND SPECIFIC CONDITIONS

BID NO: CEB/657.00/B/2021/01

	Bid requirement	Complied/Deviated
21	Freight certificate obtained from a shipping line (if applicable)	
22	Copy of company registration	
23	Lists of Directors	
24	Documentary evidence to show any preferential Customs Duty applicable in Sri Lanka (If applicable)	
25	Validity period of the offer	
26	Agreement to payment terms Agreement on warranty period of equipment	
27	Agreement on warranty period of equipment	
28	On time delivery certificate for goods and associated services	
29	Agreement to maintenance terms after the defect liability period	
Bio	der certifies that all the documents submitted with the bid are authentic documents receiv	ed from the respective
aut	nature and rubber stamp of Bidder	
Sig	nature and rubber stamp of Bidder	Date:

SECTION V - B

CONTRACT FORMS

WHORMATION COPY. NOT HORDING

Specimen form of Performance Bond

Performance Bond

KNOW ALL MEN BY THESE PRESENTS that by this BOND we
registered office is at(Hereinafter called "Contractor") anda body incorporated in Sri Lanka carrying on business in Colombo whose registered office is at(hereinafter called the "Surety") are hold and firmly bound into the
CEYLON ELECTRICITY BOARD having its Head Office at No. 50, Sir Chittampalam A Gardiner Mawatha, Colombo 2, its Successor and assigns for an on behalf of the CEYLON ELECTRICITY BOARD.
Hereinafter called the ("Employer") in the Sum of Rupees
WHEREAS we the said Contractor and Surety do hereby undertake and promise to pay to you on demand at Colombo such sum not exceeding Rupees
WHEREAS the Contractor and the Employer have entered into an Agreement herein after called ("the said Contract") for the Supply and delivery/executing of
NOW THEREFORE, the CONDITIONS of the above written Bond is such that if the Contractor shall duly perform and observe all the terms provisions, conditions and stipulations of the said Contract on the Contractor's part to be performed and observed, according to the true purport, intent and meaning thereof, or if on default by the Contractor the Surety shall satisfy and discharge any damage or loss and shall pay all costs or expenses, or otherwise sustained by the Employer thereby, up to the amount of the above written Security then this obligation shall be null and void, but otherwise shall be and remain in full force and effect, but no alteration in terms of the said Contract made by agreement between the Employer and the Contractor, or in the extend, or nature of the works to be executed thereunder, and no allowance of time by the Employer or the Engineer under the said Contract, nor any forbearance or forgiveness in, or in respect of any matter or thing concerning the said Contract on the part of the Employer or the said Engineer shall in any way release the surety from any liability under the above written Bond.
THIS SECURITY shall operate and take effect as from the date hereof and shall continue in force and remain valid as and from
Provided always and it is hereby declared and agreed that all the rights and remedies of the Employer under this Bond

Provided always and it is hereby declared and agreed that all the rights and remedies of the Employer under this Bond are to be cumulative and in addition to, and not in substitution for their respective rights and remedies under the said Contract and the rights of the Employer against the Contractor and Surety and either of them and their or his respective successors and assigns shall not be prejudiced or affected by any alteration which may be made by agreement between the parties to the said Contract in the terms thereof and of any such award as aforesaid or in the nature of the work to be executed and obligations to be performed thereunder or by time being granted to the Contractors.

It is hereby further declared and we specifically agree that you shall be at liberty either in one action to sue us and the said Contractor or any other person or persons jointly and severally or to proceed in the first instance against us only and further that we hereby expressly renounce our right to claim that the said Contractor should be excused or proceeded against by action in the first instance and the right to claim that you should recover from us a pro-rata share of the amount claimed and all other rights, benefits and privileges to which Guarantors or Sureties are and may in law be entitled, it being expressly agreed and understood that we shall be liable in all respects hereunder as principal debtor to the extent aforementioned including the liability to be sued before recourse is had against the Contractor. Any suit at Law or Proceedings in equity if brought against the Surety or Contractor of any other person to recover any claim hereunder the same shall be instituted in Sri Lanka.

In witness whereof the parties hereto have hereunto set their hand at Colombo on the dates herein mentioned.

Specimen form of Contract of Supply

CEYLON ELECTRICITY BOARD CONTRACT NO:

The 190 cal	IIS AGREEMENT made and entered into at Colombo on this			
WHEREAS the purchaser invited bids for				
NC	OW THIS AGREEMENT WITNESSETH AS FOLLOWS			
1.	In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.			
2.	The following Documents shall be deemed to form and be read and construed as part of this agreement viz. a) The Form of Bid and the schedule of prices submitted by the bidder, dated			
3.	In consideration of the payments to be made by the purchaser to the supplier as hereinafter mentioned, the supplier hereby covenants with the purchaser to provide the Goods and associated services and to remedy defects therein in conformity in all respects with the provisions of the contract.			
4.	The Purchaser hereby covenants to pay the supplier, in consideration of the provision of the Goods and associated services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract, at the times and in the manner prescribed by the Contract.			
to 1	WITNESS WHERE OF, the parties hereto have caused their respective hands, common Seals to this Agreement be e executed in accordance with the laws of Democratic Socialist Republic of Sri Lanka on the day and year first ove written.			
Fo	r and on behalf of the purchaser, signed sealed and delivered by the			
Ge	neral Manager (Ceylon Electricity Board)			
Wi	tnesses,			
1	2			
For	r and on behalf of the supplier, signed, sealed and delivered by the,			
	thorised Representative of the Supplier			
Wi	tnesses,			
1	2			