



**INTERGOVERNMENTAL AUTHORITY ON DEVELOPMENT
HORN OF AFRICA DIGITAL MARKET INTEGRATION
(HDMI) PROJECT, PHASE 1**

PROJECT ID: P-Z1-GB0-036

GRANTS No.: 2100155042222 / 5900155017803

Invitation for Bids [IFB]

For

Supply, training, installation, testing and operation of Information Technology (IT) and power equipment for a regional computing centre (RCC) and an e-learning and collaboration platform, and refurbishment of premises for the sub-regional universities' network (Djibouti, Ethiopia and Somalia)

Ref No: IGAD-HDMI/A5/Gds/2024/02

Date: 10/25/2024

Country: Republic of Djibouti



African Development Bank

Standard Bidding Document

Goods

(One-Envelope Bidding Process)

Bidding Document

(One-Envelope Bidding Process)

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Project: Horn of Africa Digital Market Integration (HDMI) Project, Phase 1

Purchaser: Intergovernmental Authority on Development

Country: Republic of Djibouti

Issued on: 25 October 2024

Standard Bidding Document

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Part 1: Bidding Procedures

Section I - Instructions to Bidders

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Section I. Instructions to Bidders

General

1. Scope of Bid

- 1.1 In connection with the Specific Procurement Notice, Invitation for Bids (IFB), specified in the **Bid Data Sheet (BDS)**, the Purchaser, as **specified in the BDS**, issues this bidding document for the supply of Goods and, if applicable, any Related Services incidental thereto, as specified in Section VII, Schedule of Requirements. The name, identification and number of items, lots or combination of lots (packages) of this IFB are **specified in the BDS**.
- 1.2 Throughout this bidding document:
- (a) the term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, including if **specified in the BDS**, distributed or received through the electronic-procurement system used by the Purchaser) with proof of receipt;
 - (b) if the context so requires, “singular” means “plural” and vice versa; and
 - (c) “Day” means calendar day, unless otherwise specified as “Business Day”. A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower’s official public holidays.

2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called “Borrower”) **specified in the BDS** has applied for or received financing (hereinafter called “funds”) from the Specific Financing Institution named in the BDS (hereinafter called “the Bank”) in an amount **specified in the BDS**, toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which this bidding document is issued.
- 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the Loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import is prohibited by decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Fraud and Corruption

- 3.1 The Bank requires compliance with the Bank’s Integrity Framework comprising the African Development Bank Group’s Sanctions Procedures, the Bank’s Whistleblowing and Complaints Policy, the Bank’s Procurement Policy under the Procurement Framework and any other applicable Policies and Procedures

including their updates regarding corrupt and fraudulent practices as set forth in Section VI, Fraud and Corruption.

- 3.2 In further pursuance of this policy, Bidders shall permit and shall cause their agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and their personnel, to permit the Bank to inspect all accounts, records and other documents relating to any, prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

- 4.1 A Bidder may be a firm that is a private entity, a state-owned enterprise or institution subject to ITB 4.6, or any combination of such entities in the form of a joint venture, consortium, or association (JVCA) hereinafter called JV, under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, consortium, or association (JV):
- a) Unless otherwise **specified in the BDS**, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms;
 - b) The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution;
 - c) The maximum number of members proposed in a JV shall not exceed the number **specified in the BDS**, or the number derived from the percentage specified under ITB 4.1 (d), whichever is smaller unless both are equal, in which case anyone shall apply; and
 - d) Participation by value of the contract as share of each of the JV partner (member) shall not be less than the percentage **specified in the BDS**. In case of any inconsistency between ITB 4.1 c) and ITB 4.1 d) that both cannot be applied simultaneously, the latter shall prevail.
- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:
- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
 - (b) receives or has received any direct or indirect subsidy from another Bidder; or
 - (c) has the same legal representative as another Bidder; or
 - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Purchaser regarding this Bidding process; or
 - (e) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods, or works if any, that are the subject of the Bid; or
 - (f) or any of its affiliates has been hired (or is proposed to be hired) by the Purchaser or Borrower for the Contract implementation; or

- (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project **specified in the BDS** ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
 - (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the Contract, and/or the Bid evaluation process of such Contract; or (ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the Bidding process and execution of the Contract.
- 4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a subcontractor. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member, may participate as a subcontractor in more than one Bid.
- 4.4 A Bidder and all parties constituting the Bidder including any subcontractors or suppliers shall have the nationality of an eligible country of the Bank in accordance with the Bank's Procurement Policy for the Bank Group Funded Operation described under the Bank's Procurement Framework, and as listed in Section V, Eligible Countries subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including related Services.
- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Integrity Framework and in accordance with its prevailing sanctions policies and procedures as set forth in the Bank's Integrity Framework as described in Section VI paragraph 2.2 d, shall be ineligible to be prequalified for, bid for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address **specified in the BDS**.
- 4.6 Bidders that are state-owned enterprises or institutions in the Purchaser's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they: (i) are legally and financially autonomous; (ii) operate under commercial law; and (iii) are not under supervision of the Purchaser.

- 4.7 A Bidder shall not be under suspension from Bidding by the Purchaser as the result of the operation of a Bid–Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower’s country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower’s country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.9 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.
- 4.10 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
- 4.11 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower’s request, is satisfied that the debarment;
- (a) relates to fraud or corruption; and
 - (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.

5. Eligible Goods and Related Services

- 5.1 All the Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their country of origin in an eligible country of the Bank in accordance with the Bank’s Procurement Policy for Bank Group Funded Operations described under the Bank’s Procurement Framework, and as listed in Section V, Eligible Countries.
- 5.2 For purposes of this ITB, the term “goods” includes commodities, raw material, machinery, equipment, and industrial plants; and “related services” includes services such as insurance, installation, training, and initial maintenance.
- 5.3 The term “origin” means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.
- 5.4 The nationality of the firm that produces, assembles, distributes, or sells the Goods shall not determine their origin.

Contents of the Bidding Document

6. Sections of Bidding Document

6.1 The bidding document consist of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I - Instructions to Bidders (ITB)
- Section II - Bidding Data Sheet (BDS)
- Section III - Evaluation and Qualification Criteria
- Section IV - Bidding Forms
- Section V - Eligible Countries
- Section VI - Fraud and Corruption

PART 2 Supply Requirements

- Section VII - Schedule of Requirements

PART 3 Contract

- Section VIII - General Conditions of Contract (GCC)
- Section IX - Special Conditions of Contract (SCC)
- Section X - Contract Forms

6.2 The Specific Procurement Notice, Invitation for Bids (IFB), issued by the Purchaser is not part of this bidding document.

6.3 Unless obtained directly from the Purchaser, the Purchaser is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information or documentation as is required by the bidding document.

7. Clarification of Bidding Document

7.1 A Bidder requiring any clarification of the bidding document shall contact the Purchaser in writing at the Purchaser's address **specified in the BDS**. The Purchaser will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period **specified in the BDS**. The Purchaser shall forward copies of its response to all Bidders who have acquired the bidding document in accordance

with ITB 6.3, including a description of the inquiry but without identifying its source. If so **specified in the BDS**, the Purchaser shall also promptly publish its response at the web page identified **in the BDS**. Should the clarification result in changes to the essential elements of the bidding document, the Purchaser shall amend the bidding document following the procedure under ITB 8 and ITB 22.2.

8. Amendment of Bidding Document

- 8.1 At any time prior to the deadline for submission of Bids, the Purchaser may amend the bidding document by issuing addenda.
- 8.2 Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Purchaser in accordance with ITB 6.3. The Purchaser shall also promptly publish the addendum on the Purchaser's web page in accordance with ITB 7.1.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

Preparation of Bids

9. Cost of Bidding

- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

10. Language of Bid

- 10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language **specified in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

- 11.1 The Bid shall comprise the following including all forms specified under Section IV, duly completed by the Bidder:
 - (a) **Letter of Bid** prepared in accordance with ITB 12;
 - (b) **Price Schedules**: completed in accordance with ITB 12 and ITB 14;
 - (c) **Bid Security** or **Bid-Securing Declaration**, in accordance with ITB 19.1;
 - (d) **Technical Bid-Base Bid**;
 - (e) **Commercial Terms and Conditions**

- (f) **Alternative Technical Bid:** if permissible, in accordance with ITB 13;
- (g) **Authorization:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.3;
- (h) **Qualifications:** documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the Contract if its Bid is accepted;
- (i) **Bidder's Eligibility:** documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to bid;
- (j) **Eligibility of Goods and Related Services:** documentary evidence in accordance with ITB 16, establishing the eligibility of the Goods and Related Services to be supplied by the Bidder;
- (k) **Conformity:** documentary evidence in accordance with ITB 16 and ITB 31, and in support of above sub-paragraphs (d) and (e) of ITB 11.1 as necessary to establish that the Goods and Related Services, and Terms and Conditions of the Bid conform to requirements and provisions of the bidding document;
- (l) **Manufacture's Authorization** in accordance with ITB 17.2 (a); and
- (m) any other document required **in the BDS.**

11.2 In addition to the requirements under ITB 11.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.

11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

12. Letter of Bid and Price Schedules

12.1. The Letter of Bid and Price Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

13.1. Unless otherwise **specified in the BDS**, alternative Bids shall not be considered.

14. Bid Prices and Discounts

14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Price Schedules shall conform to the requirements specified below.

14.2 All lots (contracts) and items must be listed and priced separately in the Price Schedules.

- 14.3 The price to be quoted in the Letter of Bid in accordance with ITB 12.1 shall be the total price of the Bid, excluding any discounts offered.
- 14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid, in accordance with ITB 12.1, ITB 14.6 and 14.7.
- 14.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise **specified in the BDS**. A Bid submitted with an adjustable price basis shall be treated as nonresponsive and shall be rejected, pursuant to ITB 30. However, if in accordance with **the BDS**, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a Bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.
- 14.6 In accordance with ITB 1.1, Bids are being invited for individual items, individual lots (contracts) or for any combination of lots (packages) as specified in **BDS**. Unless otherwise **specified in the BDS**, prices quoted shall correspond to 100% of the quantity for each individual item (of bids invited for individual items), 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot (of bids invited for individual lots and combination of lots). Bidders wishing to offer discounts for the award of more than one individual item (of bids invited for individual items), for award of more than one lot (of bids invited for individual lots or combination of lots) shall specify in their Bid the price reductions, as applicable, to each item, to each individual lot, and to the combination of lots (package), as applicable or alternatively, to individual Contracts within the package provided in all cases how discounts will be applied to individual items is made clear. Discounts shall be submitted in accordance with ITB 14.4 and 14.6 with due regards to consequences of unclear or ambiguous discounts as per ITB 14.7 provided the Bids for all lots (contracts) are opened at the same time.
- 14.7 Discounts offered shall be clear and without any vagueness or ambiguity as no clarification shall be requested or permitted on this account after Bid submission. The Purchaser's decision on discounts will be based on the contents of the Bid itself, without recourse to any extrinsic evidence. If in the Purchaser's opinion, which will be final, a discount offered in the bid: (i) is seriously unclear, ambiguous or vaguely presented to such extent that it cannot be either interpreted or applied with reasonable accuracy, the Bid shall be rejected; (ii) has a minor discrepancy or unclarity which could be interpreted reasonably, the Purchaser in this case may decide to apply the discount as it deems reasonable and appropriate resulting in the lowest evaluated cost to the Purchaser. If the Bidder does not accept the Purchaser's decision based on any of the above, the Bid shall be rejected.
- 14.8 The terms EXW, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce, as **specified in the BDS**.
- 14.9 Prices shall be quoted as specified in each Price Schedule included in Section IV, Bidding Forms as mentioned under (a), (b), (c) and (d) below. For a specific item of Goods only one Price Schedule shall be used as per applicable classification of that item i.e. whether the item is manufactured and offered within the Purchaser's country or to be imported pursuant to the award of contract or

previously imported. No changes in the offered Price Schedule or classification shall be permitted after bid opening. Failure to follow these instructions may result in rejection of bids. The disaggregation of price components is required solely for the purpose of facilitating the comparison of Bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered e.g. instead of taking delivery at the final destination, the delivery may be taken at ex-works or at the destination. Similarly, if bids have been invited on CIP destination price in addition to other terms e.g. FOB or FCA, etc. then at the Purchaser's option, the award may be made on such other terms instead of CIP Price although comparison and evaluation of bids shall still be based on CIP final destination prices. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Bank's Procurement Framework and as listed in Section V, Eligible Countries. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Bank Procurement Framework and as listed in Section V, Eligible Countries. BDS indicates if the "Final Destination" (project site) is different from the "Destination" and their addresses. Prices shall be entered in Price Schedules accordingly and in the following manner:

- (a) For Goods manufactured in the Purchaser's Country:
 - (i) the price of the Goods quoted EXW (ex-works, ex-factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the Goods;
 - (ii) any Purchaser's Country sales tax and other taxes which will be payable on the Goods if the Contract is awarded to the Bidder; and
 - (iii) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) **specified in the BDS.**
- (b) For Goods manufactured outside the Purchaser's Country, to be imported:
 - (i) the price of the Goods, quoted CIP named place of destination, in the Purchaser's Country, as **specified in the BDS.** If "final destination" is the same as "destination" then CIP price under columns 6 and 7 of the Price Schedule form applicable for Goods to be imported shall be quoted for named place of final destination;
 - (ii) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) **specified in the BDS.** If named place of "final destination" is the same as "destination" then cost under (b) (ii) shall not be indicated under column 8 of the Price Schedule form applicable for Goods to be imported and will state "Not Applicable". But instead, CIP final destination price quoted as per (b) (i) above shall include such costs;

- (c) For Goods manufactured outside the Purchaser's Country, already imported:
- (i) the price of the Goods, including the original import value of the Goods; plus any mark-up (or rebate); plus any other related local cost, and custom duties and other import taxes already paid or to be paid on the Goods already imported;
 - (ii) the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported;
 - (iii) the price of the Goods, obtained as the difference between (i) and (ii) above;
 - (iv) any Purchaser's Country sales and other taxes which will be payable on the Goods if the Contract is awarded to the Bidder; and
 - (v) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) **specified in the BDS.**
- (d) For Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements, the price of each item comprising the Related Services (inclusive of any applicable taxes).

15. Currencies of Bid and Payment

- 15.1 The currency(ies) of the Bid and the currency(ies) of payments shall be the same. The Bidder shall quote in the currency of the Purchaser's Country the portion of the Bid price that corresponds to expenditures incurred in the currency of the Purchaser's Country, unless otherwise **specified in the BDS.**
- 15.2 The Bidder may express the Bid price in any currency. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three foreign currencies in addition to the currency of the Purchaser's Country.

16. Documents Establishing the Eligibility and Conformity of the Goods and Related Services

- 16.1 To establish the eligibility of the Goods and Related Services in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.
- 16.2 To establish the conformity of the Goods and Related Services to the bidding document, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section VII, Schedule of Requirements.
- 16.3 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential

technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII, Schedule of Requirements.

- 16.4 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period **specified in the BDS** following commencement of the use of the goods by the Purchaser.
- 16.5 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Schedule of Requirements.

17. Documents Establishing the Eligibility and Qualifications of the Bidder

- 17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.
- 17.2 The documentary evidence of the Bidder's qualifications to perform the Contract if its Bid is accepted shall establish to the Purchaser's satisfaction:
- (a) that, if required **in the BDS**, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Purchaser's Country;
 - (b) that, if required **in the BDS**, in case of a Bidder not doing business within the Purchaser's Country, the Bidder is or will be (if awarded the Contract) represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
 - (c) that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

18. Period of Validity of Bids

- 18.1. Bids shall remain valid for the Bid Validity period **specified in the BDS**. The Bid Validity period starts from the date fixed for the Bid submission deadline (as prescribed by the Purchaser in accordance with ITB 22.1). A Bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.
- 18.2. In exceptional circumstances, prior to the expiration of the Bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is

requested in accordance with ITB 19, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.

- 18.3. If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity period, the Contract price shall be determined as follows:
- (a) in the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor **specified in the BDS** to reflect any increase in the cost of inputs over the period starting from the date immediately after expiry of 56 days until the date of award;
 - (b) in the case of adjustable price contracts, no adjustment shall be made;
 - (c) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.

19. Bid Security

- 19.1. The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration or a Bid Security amount, as **specified in the BDS**, in original form and, in the case of a Bid Security amount, in the amount and currency **specified in the BDS**.
- 19.2. A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.
- 19.3. If a Bid Security amount is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option:
- (a) an unconditional guarantee issued by a bank or non-bank financial institution (such as an insurance, bonding or surety company);
 - (b) an irrevocable letter of credit;
 - (c) a cashier's or certified check; or
 - (d) another security **specified in the BDS**,

from a reputable source, and an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Purchaser's Country, the issuing non-bank financial institution shall have a correspondent financial institution located in the Purchaser's Country to make it enforceable unless the Purchaser has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Purchaser prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 18.2.

- 19.4. If a Bid Security in amount or Bid-Securing Declaration is specified pursuant to ITB 19.1, any Bid not accompanied by a substantially responsive Bid Security in amount or Bid-Securing Declaration, whichever is required shall be rejected by the Purchaser as non-responsive.
- 19.5. If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the Performance Security pursuant to ITB 46.
- 19.6. The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.
- 19.7. The Bid Security amount may be forfeited:
- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder in the Letter of Bid, or any extension thereto provided by the Bidder; or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 45; or
 - (ii) furnish a Performance Security in accordance with ITB 46.
- 19.8. The Bid Security amount or Bid- Securing Declaration of a JV must be in the name of the JV that submits the Bid. If the JV has not been legally constituted into a legally enforceable JV at the time of Bidding, the Bid Security amount or Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.
- 19.9. If a Bid Securing Declaration is required **in the BDS**, pursuant to ITB 19.1, and
- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereto provided by the Bidder; or
 - (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 45; or furnish a performance security in accordance with ITB 46;
- the Borrower may execute the Bid-Securing Declaration, as provided for **in the BDS**, and declare the Bidder ineligible to be awarded a contract by the Purchaser for a period of time as stated **in the BDS**.

20. Format and Signing of Bid

- 20.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 11 and clearly mark it "ORIGINAL." Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE." In addition, the Bidder shall submit copies of the Bid, in the number **specified in the BDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

- 20.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 20.3 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as **specified in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.
- 20.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 20.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

Submission and Opening of Bids

21. Sealing and Marking of Bids

- 21.1. The Bidder shall deliver the Bid in a single, sealed envelope (one-envelope Bidding process). Within the single envelope the Bidder shall place the following separate, sealed envelopes:
- (a) in an envelope marked “ORIGINAL”, all documents comprising the Bid, as described in ITB 11; and
 - (b) in an envelope marked “COPIES”, all required copies of the Bid; and,
 - (c) if alternative Bids are permitted in accordance with ITB 13, and if relevant:
 - i. in an envelope marked “ORIGINAL -ALTERNATIVE”, the alternative Bid; and
 - ii. in the envelope marked “COPIES – ALTERNATIVE BID” all required copies of the alternative Bid.
- 21.2. The inner and outer envelopes, shall:
- (a) bear the name and address of the Bidder;
 - (b) be addressed to the Purchaser in accordance with ITB 22.1;
 - (c) bear the specific identification of this Bidding process indicated in ITB 1.1; and
 - (d) bear a warning not to open before the time and date for Bid opening.
- 21.3 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the Bid.

22. Deadline for Submission of Bids

- 22.1. Bids must be received by the Purchaser at the address and no later than the date and time **specified in the BDS**. When so **specified in the BDS**, Bidders shall have the option of submitting their Bids electronically. Bidders submitting Bids electronically shall follow the electronic Bid submission procedures **specified in the BDS**.
- 22.2. The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with ITB 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

- 23.1. The Purchaser shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 22. Any Bid received by the Purchaser after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

24. Withdrawal, Substitution, and Modification of Bids

- 24.1. A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
- (a) prepared and submitted in accordance with ITB 20 and 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” or “MODIFICATION;” and
 - (b) received by the Purchaser prior to the deadline prescribed for submission of Bids, in accordance with ITB 22.
- 24.2. Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.
- 24.3. No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

25. Bid Opening

- 25.1. Except as in the cases specified in ITB 23 and ITB 24.2, the Purchaser shall, at the Bid opening, publicly open and read out all Bids received by the deadline at the date, time and place **specified in the BDS** in the presence of Bidders’ designated representatives and anyone who chooses to attend Any specific electronic Bid opening procedures required if electronic bidding is permitted in accordance with ITB 22.1, shall be as **specified in the BDS**.

- 25.2. First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. If the withdrawal envelope does not contain a copy of the “power of attorney” confirming the signature as a person duly authorized to sign on behalf of the Bidder, the corresponding Bid will be opened. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid opening.
- 25.3. Next, envelopes marked “SUBSTITUTION” shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid opening.
- 25.4. Next, envelopes marked “MODIFICATION” shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening.
- 25.5. Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Prices, per item, and/or per lot (contract) as applicable, including any discounts and alternative Bids; the presence or absence of a Bid Security, if required; and any other details as the Purchaser may consider appropriate.
- 25.6. Only Bids, alternative Bids and discounts that are opened and read out at Bid opening shall be considered further in the evaluation. The Letter of Bid and the Price Schedules are to be initialed by representatives of the Purchaser attending Bid opening in the manner **specified in the BDS**.
- 25.7. The Purchaser shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 23.1).
- 25.8. The Purchaser shall prepare a record of the Bid opening that shall include, as a minimum:
- (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
 - (b) the Bid Price, per item, and/or per lot (contract) as applicable, including any discounts;
 - (c) any alternative Bids;
 - (d) the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required.
- 25.9. The Bidders’ representatives who are present shall be requested to sign the record. The omission of a Bidder’s signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

Evaluation and Comparison of Bids

26. Confidentiality

- 26.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until the information on Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 40.
- 26.2 Any effort by a Bidder to influence the Purchaser in the evaluation or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the Bidding process, it should do so in writing.

27. Preliminary Examination of Bids

- 27.1 Prior to the detailed evaluation, pursuant to ITB 35, the Purchaser will conduct preliminary examination of all bids that have been received by the deadline for bid submission and opened at public bid opening as the first step towards determination of their substantial responsiveness to the bidding document. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB 11 without recourse to extrinsic evidence.
- 27.2 The Purchaser will verify and examine bids to determine whether they are complete, properly signed to bind the bidder, meet eligibility requirements of bidders, goods and services, bidders have no conflict of interest and have provided required bid validity, bid security or bid securing declaration, as required and other essential documents to complete the evaluation, and whether the bids are generally in order. Subject to ITB 28, Bids failing to meet the above requirements shall be rejected and not retained for further review.

28. Clarification of Bids

- 28.1 To assist in the examination, evaluation, comparison of the Bids, and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the Evaluation of the Bids, in accordance with ITB 32
- 28.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Purchaser's request for clarification, its Bid may be rejected.

29. Deviations, Reservations, and Omissions

- 29.1 During the evaluation of Bids, the following definitions apply:

- (a) “Deviation” is a departure from the requirements specified in the bidding document;
- (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
- (c) “Omission” is the failure to submit part or all of the information or documentation required in the bidding document.

30. Determination of Responsiveness

- 30.1 Following rejection of Bids if any, pursuant to ITB 27 and ITB 28, as the next step, the remaining Bids will be further reviewed in detail to determine their substantial responsiveness. The Purchaser’s determination of a Bid’s responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.
- 30.2 A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
- (a) if accepted, would:
 - (i) affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
 - (ii) limit in any substantial way, inconsistent with the bidding document, the Purchaser’s rights or the Bidder’s obligations under the Contract; or
 - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
- 30.3 The Purchaser shall examine the technical aspects of the Bid in accordance with ITB 16 and ITB 17, ITB 30, ITB 31, the BDS if applicable, and Section III Evaluation and Qualification Criteria in particular, to confirm that all requirements of Section VII, Schedule of Requirements and technical specifications have been met without any material deviation or reservation, or omission. To this end, in consideration of materiality of any deviations, reservations or omissions, Bids failing to meet the mandatory technical requirements or minimum pass-fail technical criteria or failing to substantially meet any other technical requirements of the bidding document will be rejected.
- 30.4 The Purchaser shall similarly examine the commercial aspects of the bids including any deviations, other than technical specifications, submitted in response to the provisions of the bidding document, to determine if they conform to the terms and conditions of the draft contract and other documents included in the bidding document without any material deviation, reservation or omission, and establishment of materiality in such aspects will similarly risk rejection of the Bids.
- 30.5 If a Bid is not substantially responsive to the requirements of the bidding document, it shall be rejected by the Purchaser and not subsequently be made

responsive by correction of the material deviation, reservation, or omission. All other bids determined substantially responsive will be retained for further evaluation.

31. Nonconformities, Errors and Omissions

- 31.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonconformities in the Bid.
- 31.2 Provided that a Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 31.3 Provided that a Bid is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component, and costs associated, if any, with non-material deviations, reservations and omissions to the requirements of the bidding documents in the manner **specified in the BDS**.

32. Correction of Arithmetical Errors

- 32.1 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:
- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
 - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 32.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 32.1, shall result in the rejection of the Bid.

33. Conversion to Single Currency

- 33.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted in a single currency as **specified in the BDS**.

34. Margin of Preference

34.1 Unless otherwise **specified in the BDS**, no margin of domestic or regional preference shall apply. If a margin of preference applies, the application methodology shall be as specified in Section III, Evaluation and Qualification Criteria, and in accordance with the provisions stipulated in the Bank's Procurement Framework.

35. Evaluation of Bids

35.1 The Purchaser shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies, the Purchaser shall determine the successful Bid or Bids which has/have been determined to:

- (a) be substantially responsive to the bidding document;
- (b) offer the lowest evaluated total cost to the Purchaser for all items to be procured based on either a single Contract or all multiple Contracts combined, as the case may be, in accordance with the ITB 14.6 inviting bid prices and discounts, and provisions made in the Bidding Document for evaluation of bids and award of contract (s); and
- (c) be offered by Bidder or Bidders that substantially meet the qualification criteria applicable for Contract or Contracts for which they are selected.

35.2 To evaluate a Bid, the Purchaser shall consider the following factors with respect to the Base Bid and Alternative Bid (s) (if the latter is permitted in the BDS), in accordance with the criteria and methodology described in Section III—Evaluation and Qualification Criteria:

- (a) evaluation will be done for Items or Lots (contracts) or combination of Lots (Packages), as **specified in the BDS**; and the Bid Price as quoted in accordance with ITB 14;
- (b) price adjustment for correction of arithmetic errors in accordance with ITB 32.1;
- (c) price adjustment due to discounts offered in accordance with ITB 12.1, ITB 14.4, ITB 14.6 and ITB 14.7;
- (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 33;
- (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 31.3;
- (f) the additional evaluation factors **specified in the BDS** if any, and Section III, Evaluation and Qualification Criteria; and
- (g) price adjustment due to application of Margin of Preference, if applicable, as per ITB 34, BDS and Section III, Evaluation and Qualification Criteria.

- 35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 35.4. If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the Letter of Bid, is specified in Section III, Evaluation and Qualification Criteria.
- 35.5 The Purchaser's evaluation of a Bid will exclude and not take into account:
- (a) in the case of Goods manufactured in the Purchaser's Country, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder; and
 - (b) in the case of Goods manufactured outside the Purchaser's Country, already imported or to be imported, customs duties and other import taxes levied on the imported Good, sales and other similar taxes, which will be payable on the Goods if the contract is awarded to the Bidder.
- 35.6 The Purchaser's evaluation of a Bid may require the consideration of other factors, in addition to the Bid Price quoted in accordance with ITB 14. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids, unless otherwise **specified in the BDS** from amongst those set out in Section III, Evaluation and Qualification Criteria. The criteria and methodologies to be used shall be as specified in ITB 35.2(f).

36. Comparison of Bids

- 36.1 The Purchaser shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 35.2 to determine the Bid that has the lowest evaluated cost. The comparison shall be on the basis of CIP (place of final destination) prices for goods to be imported and prices for delivery to final destination for goods already imported less the custom duties and other import taxes already paid or to be paid on such goods (need to be supported with documentary evidence) and EXW prices, plus cost of inland transportation and insurance to place of final destination, for goods manufactured within the Borrower's country, together with prices for any required installation, training, commissioning and other services as per price schedules included in Section IV. The evaluation of prices shall not take into account custom duties and other taxes levied on imported goods (to be imported or already imported) and sales and similar taxes levied in connection with the sale or delivery of goods.

37. Qualification of the Bidder

- 37.1 The Purchaser shall determine, to its satisfaction, whether the eligible Bidder or Bidders that is/are selected for Items, Lots, Packages and/or their combinations as having submitted the lowest evaluated cost and substantially

responsive Bid (s) substantially meet the respective minimum qualifying criteria specified in Section III, Evaluation and Qualification Criteria. To this end, the Purchaser will determine for which Items, Lots and Packages, and their combinations, as the case may be, for which Bidder submitted bid, it substantially meets the respective minimum qualification criteria.

- 37.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than specialized subcontractors if permitted in the bidding document), or any other firm(s) different from the Bidder.
- 37.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Purchaser shall proceed to the Bidder or Bidders who offered the substantially responsive Bid (s) with the next lowest evaluated cost to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 37.4 The Purchaser reserves the right to waive minor deviations from the qualification criteria if they do not materially affect the technical capability and financial resources of the Bidder to perform the Contract or combination of Contracts.

38. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids

- 38.1 The Purchaser reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

39. Standstill Period

- 39.1 The Contract shall not be awarded earlier than the expiry of the Standstill Period. The Standstill Period shall be ten (10) Business Days unless extended in accordance with ITB 44. The Standstill Period starts the day after the date the Purchaser has transmitted to each Bidder the Notification of Intention to Award the Contract. Where only one Bid is submitted, or if this contract is in response to an emergency situation recognized by the Bank, the Standstill Period shall not apply.

40. Notification of Intention to Award

- 40.1 The Purchaser shall send to each Bidder the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:
- (a) the name and address of the Bidder submitting the successful Bid;
 - (b) the Contract price of the successful Bid;
 - (c) the names of all Bidders who submitted Bids, and their Bid prices as readout, and as evaluated;
 - (d) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notification is addressed) was unsuccessful, unless the price information in c) above already reveals the reason;

- (e) the expiry date of the Standstill Period;
- (f) instructions on how to request a debriefing and/or submit a complaint during the standstill period.

Award of Contract

41. Award Criteria

41.1 Subject to ITB 38 and consistent with determination of successful Bid or Bids as per ITB 35, and unless otherwise **specified in the BDS**:

- i) For evaluation based on individual items as per ITB 1.1, 14.6 and 35.2 (a)

The Purchaser shall award the Contract or Contracts to the Selected Bidder or Bidders that have offered bids substantially responsive to the Bidding Document and have been determined successful for one or more items, evaluated bid prices of which shall result in the lowest evaluated cost to the Purchaser for all items combined provided further that the selected Bidder or Bidders substantially meet the required qualifying criteria for item or items for which they are successful.

- ii) For evaluation based on Lots or Packages as per ITB 1.1, 14.6 and 35.2 (a)

Same as i) above except replace “item” or “items” wherever appearing with “Lot” and “Lots”, or “Package” and “Packages” as the case may be.

42. Purchaser’s Right to Vary Quantities at Time of Award

42.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VII, Schedule of Requirements, provided this does not exceed the percentages **specified in the BDS**, and without any change in the unit prices or other terms and conditions of the Bid and the bidding document.

43. Notification of Award

43.1 Prior to the expiration of the Bid Validity Period and upon expiry of the Standstill Period, specified in ITB 39.1 or any extension thereof, and upon satisfactorily addressing any complaint that has been filed within the Standstill Period, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification of award (hereinafter and in the Contract Forms called the “Letter of Acceptance”) shall specify the sum that the Purchaser will pay the Supplier in consideration of the execution of the Contract (hereinafter and in the Conditions of Contract and Contract Forms called “the Contract Price”).

43.2 Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Purchaser shall publish the Contract Award Notice which shall contain, at a minimum, the following information:

- (a) name and address of the Purchaser;

- (b) name and reference number of the contract being awarded, and the selection method used;
- (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;
- (d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefor;
- (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope; and
- (f) successful Bidder's Beneficial Ownership Disclosure Form, if specified in BDS ITB 45.1.

43.3 The Contract Award Notice shall be published on the Purchaser's website with free access if available, or in at least one newspaper of national circulation in the Purchaser's Country, or in the official gazette. The Purchaser shall also publish the contract award notice on the Bank's website and in UNDB online.

43.4 Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.

44. Debriefing by the Purchaser

44.1 On receipt of the Purchaser's Notification of Intention to Award referred to in ITB 40.1, an unsuccessful Bidder has three (3) Business Days to make a written request to the Purchaser for a debriefing. The Purchaser shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.

44.2 Where a request for debriefing is received within the deadline, the Purchaser shall provide a debriefing within five (5) Business Days, unless the Purchaser decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so delayed, the standstill period shall not end earlier than five (5) Business Days after the last debriefing takes place. The Purchaser shall promptly inform, by the quickest means available, all Bidders of the extended standstill period

44.3 Where a request for debriefing is received by the Purchaser later than the three (3)-Business Day deadline, the Purchaser should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.

44.4 Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidders shall bear their own costs of attending such a debriefing meeting.

45. Signing of Contract

- 45.1 The Purchaser shall send to the successful Bidder the Letter of Acceptance including the Contract Agreement, and, if **specified in the BDS**, a request to submit the Beneficial Ownership Disclosure Form providing additional information on its beneficial ownership. The Beneficial Ownership Disclosure Form, if so requested, shall be submitted within eight (8) Business Days of receiving this request.
- 45.2 The successful Bidder shall sign, date and return to the Purchaser, the Contract Agreement within twenty-eight (28) days of its receipt.
- 45.3 Notwithstanding ITB 45.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or services, the Bidder shall not be bound by its Bid, always provided however, that the Bidder can demonstrate to the satisfaction of the Purchaser and of the Bank that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract.

46. Performance Security

- 46.1 Within twenty-eight (28) days of the receipt of Letter of Acceptance from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC 18, using for that purpose the Performance Security Form included in Section X, Contract Forms, or another Form acceptable to the Purchaser. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Purchaser. A foreign institution providing a bond shall have a correspondent financial institution located in the Purchaser's Country, unless the Purchaser has agreed in writing that a correspondent financial institution is not required.
- 46.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the Bidder or Bidders offering the next Lowest Evaluated Cost to the Purchaser as per the bid Evaluation and award criteria.

47. Procurement Related Complaint

- 47.1 The procedures for making a Procurement-related Complaint are as **specified in the BDS**.

Section II - Bid Data Sheet (BDS)

| ITB Reference | A. General |
|---------------|---|
| ITB 1.1 | <p>The reference number of the Invitation for Bids (IFB) is: IGAD-HDMI/A5/Gds/2024/02.</p> <p>The Purchaser is: <i>Intergovernmental Authority on Development (IGAD)</i></p> <p>The name of the IFB is: <i>Open Competitive Bidding (International) (OCBI)</i></p> <p>Requested to offer for the Supply, training, installation, testing and operation of Information Technology (IT) and power equipment for a regional computing centre (RCC) and an e-learning and collaboration platform, and refurbishment of premises for the subregional universities' network (Djibouti, Ethiopia and Somalia) as per provided specification of Requirements.</p> |
| ITB 1.2(a) | <p>Electronic –Procurement System</p> <p>The Purchaser shall use the following electronic-procurement system to manage this Bidding process: NOT APPLICABLE</p> |
| ITB 2.1 | <p>The Borrower is: <i>Intergovernmental Authority on Development - (IGAD)</i></p> <p>Financing Agreement Numbers: 2100155042222/5900155017803</p> <p>The Specific Bank financing institution is: ADF</p> <p>The name of the Project is: Horn of Africa Digital Market Integration (HDMI) Project, Phase 1</p> |
| ITB 4.1 (a) | <p>i) The firms in a Joint Venture, Consortium or Association (JV) “shall be jointly and severally liable.</p> |
| ITB 4.1 (c) | <p>Maximum number of members in the Joint Venture, Consortium or Association (JV) shall be: Two (2)</p> |
| ITB 4.1 (d) | <p>Minimum share of a member of Joint Venture, Consortium or Association (JV) in the contract shall not be less than 20% percent of the total value of the contract.</p> |
| ITB 4.5 | <p>A list of debarred firms and individuals is available on the Bank’s external website: https://www.afdb.org/en/projects-operations/debarment-and-sanctions-procedures</p> |

| B. Contents of Bidding Document | |
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| ITB 7.1 | <p>For <u>Clarification of Bid purposes</u> only, the Purchaser’s address is:</p> <p style="text-align: center;">Attention: Project Coordinator, Intergovernmental Authority on Development (IGAD) Horn of Africa Digital Market Integration (HDMI) Project, Phase 1 Ave Georges Clemenceau, Djibouti, P. O. Box 2653 Republic of Djibouti, Attn: Procurement Expert IGAD</p> <p>Email: HDMI-procurement@igad.int; joshua.turinawe@igad.int</p> <p>PRE-BID MEETING for clarification of bid purposes only</p> <p>Pre bid meeting/site visit (non-mandatory) date: Thursday, 13 November 2024 at 10:00am GMT+3</p> <p>Venue: Physically at the address above, and virtually via a <i>Zoom</i> link to be shared on request via the email above at least one day before the meeting date.</p> <p>Requests for clarification should be received by the Purchaser no later than: the date of the pre bid meeting</p> <p>Web page: The website with free access where Bidding process information is published is www.igad.int ->> work with us->>procurement</p> |
| C. Preparation of Bids | |
| ITB 10.1 | <p>The language of the Bid is: <i>“English”</i>.</p> <p>All correspondence exchange shall be in English language.</p> |
| ITB 11.1 (m) | <p>The Bidder shall submit the following additional documents in its Bid: <i>Certificate of dealership, origin of products, Registration certificates, Trading licenses, etc.</i></p> |
| ITB 13.1 | <p>Alternative Bids <i>“shall not be”</i> considered.</p> |
| ITB 14.5 | <p>The prices quoted by the Bidder <i>“shall not”</i> be subject to adjustment during the performance of the Contract.</p> |
| ITB 14.6 | <p>Consistent with ITB 1.1 select one of the following options and delete others:</p> <p>If items required are divided into packages, each package comprising of one lot, comprising of one or more items, such that the contract must be awarded for all package and only to any one Bidder.</p> |

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| | Bids are invited for Packages (combination of lots): Bids shall be evaluated, and contract awarded package-wise taking into account discounts offered for combination of packages. |
| ITB 14.8 | The Incoterms edition is: <i>Incoterms 2020</i> . |
| ITB 14.9 (b)(i) | Place of destination: <i>University of Djibouti</i> |
| ITB 14.9 (a)(iii), (b)(ii) and (c)(v) | Final Destination (Project Site): <i>University of Djibouti- Republic of Djibouti</i> . |
| ITB 15.1 | The Bidder “ <i>is</i> ” required to quote in the currency of the Purchaser’s Country the portion of the Bid price that corresponds to expenditures incurred in that currency. |
| ITB 16.4 | Period of time the Goods are expected to be functioning (for the purpose of spare parts): Minimum of <i>One Year/Manufacturer’s warranty</i> , |
| ITB 17.2 (a) | Manufacturer’s authorization is <i>required</i> . |
| ITB 17.2 (b) | Representation by an Agent for after sales service is <i>required</i> . |
| ITB 18.1 | The Bid validity period shall be <i>120 days after the deadline of bid submission (Wednesday, 18 December 2024)</i> . |
| ITB 18.3 (a) | The Bid price shall be adjusted by the following factor(s):05% |
| ITB 19.1 | A Bid-Securing Declaration <i>SHALL NOT</i> be required. A Bid Security amount of <i>USD 35,750 shall be required</i> . |
| ITB 19.3 (d) | Other types of acceptable securities: N/A. |
| ITB 20.1 | In addition to the original of the Bid, the number of copies is: <i>Two (2) copies</i> |
| ITB 20.3 | The written confirmation of authorization to sign on behalf of the Bidder shall consist of: <i>Any official/director with powers of Attorney</i> . |

| D. Submission and Opening of Bids | |
|---|---|
| ITB 22.1 | <p>For <u>Bid submission purposes</u> only, the Purchaser’s address is:</p> <p style="text-align: center;">Intergovernmental Authority on Development (IGAD) Horn of Africa Digital Market Integration (HDMI) Project, Phase 1 Ave Georges Clemenceau, Djibouti P. O. Box 2653, Republic of Djibouti Attention: Project Procurement Expert Floor/ Room number: IGAD - Procurement Unit, Ground Floor City: Djibouti Country: Djibouti</p> <p>The deadline for Bid submission is: Wednesday, 18 December 2024 at 12:00 GMT+3</p> <p>Bidders shall not have the option of submitting their Bids electronically.</p> |
| ITB 25.1 | <p>The Bid opening shall take place at:</p> <p style="text-align: center;">Intergovernmental Authority on Development (IGAD) Horn of Africa Digital Market Integration (HDMI) Project, Phase 1 Meeting/Conference Room at Ave Georges Clemenceau, Djibouti P. O. Box 2653, Republic of Djibouti,</p> <p>Date: Wednesday, 18 December 2024 at 12:30 GMT+3</p> |
| ITB 25.6 | <p>The Letter of Bid and Price Schedules shall be initialed by Authorised Person with powers of Attorney.</p> |
| E. Evaluation and Comparison of Bids | |
| ITB 31.3 | <p>The adjustments with respect to a missing or non-conforming item or component, and costs associated, if any, with non-material deviations, reservations or omissions to the requirements of the bidding document shall be based on the “highest” in consistent with the selection made under ITB 35.2 (a) price of the item or component and cost, if any, of non-material deviations, reservations or omissions as quoted in or derived from other substantially responsive Bids unless any other specific evaluation criteria has been provided elsewhere in the bidding document for such adjustments in which case the latter shall be applied. If the price or cost of any of the above cannot be derived from the price</p> |

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| | <p>or cost of other substantially responsive Bids, the Purchaser shall use its best estimate based on its own judgment, past experience or market search, as considered appropriate.</p> |
| ITB 33.1 | <p>The currency that shall be used for Bid evaluation and comparison purposes to convert at the selling exchange rate all Bid prices expressed in various currencies into a single currency is: United States of American Dollars (USD)</p> <p>The source of exchange rate shall be: <i>the Central Bank in the Purchaser's Country</i>.</p> <p>The date for the exchange rate shall be: <i>"The deadline for submission of bids"</i>.</p> |
| ITB 34.1 | <p>A margin of domestic preference; <i>"shall not"</i> apply.</p> <p>A margin of regional preference <i>"shall not"</i> apply</p> |
| ITB 35.2(a) | <p>Evaluation shall be done for <i>combination of lots (Packages) consistent with ITB 1.1 and ITB14.6]</i></p> <p>Note:</p> <p><i>Bids will be evaluated, and Contracts awarded Package by Package, taking into account all unconditional discounts including discounts offered for combination of Packages, if any. Contract or Contracts will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Purchaser for all Packages combined.</i></p> <p><i>In cases of Lots and Packages, if a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. An item not listed in the Price Schedule shall be assumed to be not included in the Bid, and provided that the Bid is substantially responsive, the average or highest price (select one of the two options consistent with selection made under ITB 31.3)) of the item quoted by substantially responsive Bidders will be added to the Bid price and the equivalent total cost of the Bid so determined will be used for price comparison.</i></p> |

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| ITB 35.6 | <p>The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria:</p> <p>(a) Deviation in Delivery schedule: No.</p> <p>(b) Deviation in payment schedule: No.</p> <p>(c) The cost of major replacement component, mandatory spare parts, and service: Yes .</p> <p>(d) The availability in the Purchaser's Country of spare parts and after-sales services for the equipment offered in the Bid Yes.</p> <p>(e) Life cycle costs: the costs during the life of the goods or equipment. No.</p> <p>(f) The performance and productivity of the equipment offered; No</p> |
| F. Award of Contract | |
| ITB 42 | <p>The maximum percentage by which quantities may be increased is: 2%</p> <p>The maximum percentage by which quantities may be decreased is: 1%</p> |
| ITB 45. 1 | <p>The successful Bidder shall submit the Beneficial Ownership Disclosure Form.</p> |
| ITB 47.1 | <p>The procedures for making a Procurement-related Complaint are detailed in the Part B of the Operations Procurement Manual under the Procurement Framework of the African Development Bank. If a Bidder wishes to make a Procurement-related Complaint, the Bidder shall submit its complaint following these procedures to the Purchaser, in writing (by the quickest means available, such as by email in accordance with the following:</p> <p style="text-align: center;">For the attention: Mohyeldeen Eltohami Hamed (PhD) Ag. Director of Economic Cooperation and Regional Integration Division (ECRID) HQ: IGAD Secretariat-Djibouti T + 253 21 33 56 50 M + 253 77 374 001 F + 253 21 356 994 Ave Georges Clemenceau, Djibouti P.O. Box 2653, Republic of Djibouti E: Mohy.Tohami@igad.int</p> |

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| | <p>In summary, a Procurement-related Complaint may challenge any of the following:</p> <ol style="list-style-type: none">1. the terms of the Bidding Documents;2. the purchaser’s decision to exclude a bidder from the procurement process prior to the award of contract; and3. the Purchaser’s decision to award the contract. <p>The Bank’s Procurement Framework stipulates that bidders may send copies of their communications with the Borrowers to the Bank or write to the Bank directly when, Borrowers do not respond promptly, any questions on any issues regarding the implementation of Bank funded projects, or when the communication is a complaint against the Borrower. In this regard, if a bidder wishes to protest against a decision made by a Borrower or the Bank with regards to the procurement process or wishes to inform the Bank that the Bank’s procurement rules and/or provisions of the bidding documents have not been complied with, an email can be sent to the following address:</p> <p>Email: procurementcomplaints@afdb.org</p> |
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Section III - Evaluation and Qualification Criteria

This Section contains the criteria that the Purchaser shall use to evaluate a Bid and qualify the Bidders. No other factors, methods or criteria shall be used other than specified in this bidding document. Wherever a Bidder is required to state a monetary amount, Bidders should indicate the USD equivalent using the rate of exchange determined as follows:

- For annual turnover or financial data required for each year - Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
- Value of single contract - Exchange rate prevailing on the date of the contract.

Exchange rates shall be taken from the publicly available source identified in the ITB 33.1. Any error in determining the exchange rates in the Bid may be corrected by the Purchaser.

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I. Margin of Preference (ITB 34)

Preference for Domestically Manufactured Goods

If the Bid Data Sheet (BDS) so specifies, the Purchaser will grant a margin of preference to goods manufactured in the Purchaser's country for the purpose of bid comparison, in accordance with the procedures outlined in subsequent paragraphs.

Bids will be classified as follows: Bids offering Goods manufactured outside the Purchaser's Country that have been already imported or that will be imported.

To facilitate this classification by the Purchaser, the Bidder shall complete whichever version of the Price Schedule furnished in the Bidding Documents is appropriate. Incorrect classification may render the bid non-responsive as no reclassification will be permitted after bid opening. Bidders shall provide correct information especially with respect to duties, taxes etc. paid on previously imported Goods and percentage of local labor, materials and components for Goods manufactured in the Purchaser's country as any false information which cannot be supported by documentation may render the bid non-responsive besides other sanctions for providing falsified information as per provisions under Section VI.

The Purchaser will first review the bids (where appropriate/applicable) to confirm the appropriateness of the bid group classification to which bidders assigned their bids in preparing their Bid Forms and Price Schedules.

Preference for Regionally Manufactured Goods

If the Bid Data Sheet (BDS) so specifies, the Purchaser, for the purpose of bid comparison, will grant a regional preference to goods manufactured in RMCs that have joined the Borrower's country in a regional preferential tariff arrangement, designed to foster economic integration, by a customs union, or a free trade area, in accordance with the procedures outlined in subsequent paragraphs.

All responsive bids will be classified in one of the following two groups:

Group A, which includes bids offering goods, which the respective bidders must have established, to the satisfaction of the Borrower and the Bank, to be eligible for regional preference; and

Group B, which includes all other bids.

- i) In order to determine the Lowest Evaluated Bid of each group, all evaluated bids in each group shall first be compared among themselves. Such Lowest Evaluated Bids shall then be compared with each other, and if, as a result of this comparison, a bid from Group A is the lowest, it shall be selected for the award.

- ii) If, as a result of the comparison under Paragraph i) above, the Lowest Evaluated Bid is a bid from Group B, all Group B bids shall be further compared with the Lowest Evaluated Bid from Group A, after adding to the evaluated bid price of the imported goods offered in each Group B bid, for the purpose of this further comparison only, an amount equal to:
- (a) the difference between the import duty applicable to such goods, when they originate in countries not parties to the preferential tariff arrangement, and that which is applicable to those goods when they originate from countries that are parties to the agreement; or
 - (b) 10% of the CIF or CIP bid price of such goods, if the difference indicated under a) above exceeds 10% of such price.

If the Lowest Evaluated Bid from Group A, in such further comparison is the lowest, it shall be selected for the award. If not, the Lowest Evaluated Bid from Group B, as determined from the comparison under Paragraph i) above, shall be selected.

II. Successful Bid or Bids

The Purchaser shall apply the criteria and methodologies listed in this Section to evaluate Bids and determine the successful Bid or Bids which has/have been determined to:

- (a) be substantially responsive to the bidding document;
- (b) offer the lowest evaluated total cost to the Purchaser for all items to be procured based on either a single Contract or all multiple Contracts combined, as the case may be, in accordance with the ITB 14.6 inviting bid prices and discounts, and provisions made in the Bidding Document for evaluation of bids and award of contract (s); and
- (c) be offered by Bidder or Bidders that substantially meet the qualification criteria applicable for Contract or Contracts for which they are selected.

1. Evaluation: Technical Bid and Commercial Conditions (ITB 30.3 and ITB 30.4)

1.1 Evaluation of Technical Bid (Reference ITB 16 and ITB 30.3): The Purchaser shall evaluate the Technical Bid to determine compliance with the Purchaser's requirements under Section VII 'Schedule of Requirement' and whether the Bids are substantially responsive to the Technical Specifications and other Requirements. **[Bidder shall provide form (s) titled "Technical Bid-Base Bid"**

1.2 Evaluation of Commercial Terms and Conditions of the Bid (Reference ITB 30.4): The Purchaser shall determine whether the Bids are substantially responsive to the Commercial and Contractual Terms and Conditions. **[Bidder shall provide form titled "Commercial Terms and Conditions" as per Section IV]**

2. Evaluation (ITB 35.6)

2.1. Evaluation Criteria (Other Factors) (ITB 35.6)

The Purchaser's evaluation of a Bid may take into account, in addition to the Bid Price quoted in accordance with ITB 14.9, one or more of the following factors as specified in ITB 35.2(f) and in BDS referring to ITB 35.6, using the following criteria and methodologies.

- (a) Delivery schedule. (As per Incoterms **specified in the BDS**)
- (b) Deviation in payment schedule.
 - (i) *Bidders shall state their Bid price for the payment schedule outlined in the Special Conditions of Contract (SCC). Bids shall be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in Bid price they wish to offer for such alternative payment schedule. The Purchaser may consider the alternative payment schedule and the reduced Bid price offered by the Bidder selected on the basis of the base price for the payment schedule outlined in the SCC.*
- (c) Cost of major replacement components, mandatory spare parts, and service.
 - (i) *Bidder shall provide along with its Bid, the list of recommended spare parts for Goods offered indicating for each item of spare part the recommended quantity and unit, and total CIP final destination prices required during the initial period of operation **specified in the BDS** 16.4. The prices offered shall not exceed the prevailing prices charged to other parties by the Bidder. The cost of such spare parts will not be taken into account for bid evaluation. The Purchaser may award the contract for spare parts to the Bidder that is successful for the supply of Goods, by selecting at its option, from the Bidder's list of recommended spare parts, such items and quantities against each as the Purchaser may deem appropriate at the unit prices indicated by the Bidder but not exceeding more than 10%.*
- (d) Availability in the Purchaser's Country of spare parts and after sales services for equipment offered in the Bid.

An adjustment equal to the cost to the Purchaser of establishing the minimum service facilities and parts inventories if quoted separately, shall be added to the Bid price, for evaluation purposes only.

2.2. Evaluation of Multiple Contracts (ITB 35.4)

- a) Determination of substantial responsiveness of Bids and Qualifications of Bidders shall strictly follow the criteria and procedures described in Sections of the ITB, Bid data Sheet and this Section III, 'Evaluation and Qualification Criteria'.
- b) Bids invited based on an item-wise approach, lot or package-wise shall be evaluated and the relevant contract shall be awarded based on each item, each lot or each package, as applicable. Contract(s) shall be awarded to the bidder or bidders offering substantially responsive Bid(s) and the lowest evaluated cost to the Purchaser for combined Items, lots, or packages, as the case may be, after considering all possible combinations, and discounts offered subject to the selected bidder(s) substantially meeting the required Qualification Criteria for which they are selected (Ref: Section III, Qualification Requirements, including ITB 33, ITB 35 to ITB 40 and ITB 44). For each of the above approaches, a contract may contain more than one item, lot, or package, if a Bidder is determined successful accordingly.
- c) For each of the above approaches the determination of the lowest cost to the Purchaser will be based on the following:
 - (i) Each and every item quoted in a bid for any approach of bidding and award of contract (Item, or lot or package-wise). shall be classified in one of the three Groups, namely, A, B and C as quoted in the bid;
 - (ii) The lowest evaluated cost of an item shall be determined by application of all criteria specified under sections, ITB, BDS and Section III as mentioned above in para (a) taking into account discounts offered for combined items (provided the Bidder (s) selected substantially meet the qualification criteria for combined items), and application of margin of domestic preference, if applicable. If an item in a bid qualifies for a margin of domestic preference, the evaluated price of such item in Group C will account for the applicable margin of preference over the CIP price for comparison with other bids in Group A; and
 - (iii) The lowest evaluated cost of a lot or a package as the case may be will be the sum of the evaluated cost of all Individual items in the lot or package, as applicable, determined as per para (c) (ii) above, taking into account discounts offered for combined lots or package, as applicable (provided that the Bidder (s) selected substantially meet the qualification criteria for combined lots or packages, as applicable).

2.3. Alternative Bids (ITB 13.1) NOT PERMITTED

3. Qualification of Bidders (ITB 37)

3.1 Qualification Criteria (ITB 37.1)

After determining the substantially responsive Bid which offers the lowest-evaluated cost in accordance with ITB 35, the Purchaser shall carry out the post-qualification of the Bidder in accordance with ITB 37, using only the requirements

specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications. The minimum qualification requirements for multiple contracts will be the sum of the minimum requirements for respective individual contracts, unless otherwise specified.

(I) If the Bidder is a manufacturer:

(i) Financial Capability:

The Bidder shall furnish documentary evidence that it meets the following financial requirement(s): *(i) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial or Bank statements acceptable to the Purchaser, for the last 2 years, namely years 2022, 2023 shall be submitted demonstrating the current soundness of the Bidder's financial position and availability of adequate financial resources to perform the contract. In case of JV, each member of the JV shall furnish its own financial statement as required above. Refer to Form FIN – 3.1 to provide the required information.*

(ii) Experience and Technical Capacity

The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s). In case the Bidder is a JV, experience and demonstrated technical capacity of only the JV shall be taken into account and not of individual members nor their individual experience/capacity will be aggregated. Wherever the words "Similar Goods" have been used it includes upgrades, latest and improved versions or models of similar specifications and technology. Refer to Form Exp-1 to provide the required information.

a) The Bidder shall be manufacturing similar IT equipment since January 1, 2020, at the minimum.

b) The Bidder shall furnish documentary evidence to demonstrate successful completion of at least 3 contracts of similar IT equipment from January 1, 2020, each involving supply of at least servers mounted on racks.

(iii) Documentary Evidence of Usage of Goods (When appropriate)

The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement: *The Bidder shall furnish documentary evidence satisfactory to the Purchaser to demonstrate that similar Goods as offered in the Bid have been in successful use or operation since Jan. 1, 2022. If the Bidder is a JV, the evidence of demonstrated usage of Goods supplied in the past shall be in the name of the JV.]* Refer to Form Exp-1 to provide the required information.

(II) If the Bidder is not a manufacturer:

If a Bidder is not a manufacturer, but is offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form (Section IV,

Bidding Forms), the Manufacturer shall demonstrate the above qualifications (i), (ii), (iii) and the Bidder shall demonstrate that it has successfully completed at least 03 contracts of similar goods in the past since January 1, 2020, each involving supply of at least servers mounted on racks. *If the Bidder is a JV, past performance contracts shall be in the name of the JV.* Refer to Form Exp-1 to provide the required information.

(III) History of non-performing contracts:

Bidder including manufacturer, if the Bidder is not a manufacturer, and each members of JV in case the Bidder is a JV, shall demonstrate that Non-performance of a contract did not occur as a result of the default of the Bidder, manufacturer or the member of JV as the case may be, since 1st January 2022. The required information shall be furnished as per form CON-2.

(IV) Pending Litigation:

Financial position and prospective long-term profitability of the Single Bidder, and in the case the Bidder is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under paragraph I (i) above assuming that all pending litigation will be resolved against the Bidder. Bidder shall provide information on pending litigations as per Form CON-2.

(V) Litigation History:

There shall be no consistent history of court/arbitral award decisions against the Bidder¹ since 1st January 2022. All parties to the contract shall furnish the information as per Form CON-2.

¹ The Bidder shall provide accurate information on the related Form (CON-2) about any litigation or arbitration resulting from contracts completed or ongoing under its execution since Jan. 1----(year). A consistent history of awards against the Bidder or any member of a JV may result in rejection of the bid.

Section IV - Bidding Forms

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Letter of Bid

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

OCBI / LCB No.: *[insert number of bidding process as per procurement plan]*

Invitation for Bid No.: *[insert same IFB No. as advertised]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: ***[insert complete name of Purchaser]***

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with Instructions to Bidders (ITB 8);
- (b) **Eligibility-of Bidder:** We including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries and meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Eligibility of Goods and Related Services:** We meet the eligibility requirements for Goods and Related Services in accordance with ITB 5;
- (d) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid-Securing Declaration in the Purchaser's Country in accordance with ITB 4.7;
- (e) **Conformity:** We offer to supply in conformity with the bidding document and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: *[insert a brief description of the Goods and Related Services]*;
- (f) **Bid Price:** The total price of our Bid, excluding any discounts offered in paragraph (g) below is:

Option 1: Procurement of one or several Items--Item-wise:

- (a) Total bid price of each item in words and figures, indicating item number and total amounts of respective currencies in which bid prices for that item have been submitted and payment requested;

- (b) Grand Total Bid Price of all Bid items in respective currencies. Use the following format.

| Item No. | Total Price of each item in quoted currency (ies) in words and figure |
|------------|---|
| 1; 2; etc. | |

Grand Total Bid Price of all Bid Items: Currency A-----; Currency B-----, etc. in words and figures

Or

Option 2: Procurement of items in one or several Lots---Lot-wise- each lot containing one or more items:

- (a) Total bid price of each lot in words and figures, indicating lot number and total amounts of respective currencies in which bid prices for that lot have been submitted and payment requested:

- (b) Grand Total Bid Price of all Bid lots in respective currencies. Use the following format.

| Lot No. | Total Price of each lot in quoted currency (ies) in words and figure |
|------------|--|
| 1; 2; etc. | |

Grand Total Bid Price of all Bid lots: Currency A-----; Currency B-----, etc. in words and figures

Or

Option 3: Procurement of items in one or several Packages—each package containing one more lots:

- (a) Total bid price of each lot of the package and total bid price of each package in words and figures, indicating lot numbers and corresponding package number and total amounts of respective currencies in which bid prices for each package have been submitted and payment requested:

- (b) Grand Total Bid Price of all Bid packages in respective currencies. Use the following format.

| Package No | Lot No | Total Price of each lot in quoted currency(ies) in words and figures |
|------------|--------|--|
| 1 | Lot 1 | |

| | | |
|--|----------------|--|
| | Lot 2, etc. | |
| Total Price of Package 1=Total Price of Lots 1, 2, etc.= | | |
| Package No | Lot No | Total Price of each lot in quoted currency(ies) in words and figures |
| 2 | 1 | |
| | Lot 2, etc. | |
| Total Price of Package 2=Total Price of Lots 1, 2, etc.= | | |

Grand Total Bid Price of all Bid packages: Currency A-----; Currency B-----etc.-in words and figures.

- (g) **Discounts:** The discounts offered and the methodology for their application are:
- (i) The discounts offered are: [*Specify in detail each discount offered.*]
 - (ii) The exact method of calculations to determine the net price of each item, and in case of multiple lots or multiple packages, net price of each item, each lot and each package as applicable, after application of discounts is shown below: [*Specify in detail the method that shall be used to apply the discounts and ensure clarity, unambiguity, etc. in accordance with ITB 14.7*];
- (h) **Bid Validity Period:** Our Bid shall be valid for the period specified in BDS 18.1 (as amended, if applicable) from the date fixed for the Bid submission deadline specified in BDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (i) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;
- (j) **One Bid per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other Bid(s) as a Joint Venture member, or as a subcontractor, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 13;
- (k) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Bank or a debarment imposed by the Bank in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the Bank and other development banks. Further, we are not ineligible under the Purchaser's Country laws or

official regulations or pursuant to a decision of the United Nations Security Council;

- (l) **State-owned enterprise or institution:** *[select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITB 4.6];*
- (m) **Commissions, gratuities, fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity];*

| Name of Recipient | Address | Reason | Amount |
|-------------------|---------|--------|--------|
| | | | |
| | | | |
| | | | |
| | | | |

(If none has been paid or is to be paid, indicate "none.")

- (n) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (o) **Purchaser Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, or any other Bid that you may receive; and
- (p) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption.

Name of the Bidder: **[insert complete name of the Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder:
***[insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing] day of [insert month], [insert year]*

- * In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture (JV) as Bidder or names of all members (partners) of JV and sign on behalf of the JV and not on behalf of only one member that has been given power of attorney.
- ** Person signing the Bid shall have the power of attorney given by the Bidder. If the Bidder is a JV the power of attorney shall be given by the JV or by all members of the JV. The power of attorney shall be attached with the Bid Schedules.

Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms for the Base-Bid in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements. For Alternative Bid, if permitted, use same set of Price Schedules by identifying and differentiating them as Alternative Price Schedule from the Base-Bid]*

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported

| | | | | (Group C Bids, goods to be imported) | | Date: _____ | | |
|---|------------------------------|---|---------------------------------------|--|---|---|--|--|
| | | | | Currencies in accordance with ITB 15 | | OCBI / LCB No: _____ | | |
| | | | | | | Alternative No: _____ | | |
| | | | | | | Page N° _____ of _____ | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Line Item N° | Description of Goods | Country of Origin | Delivery Date as defined by Incoterms | Quantity and physical unit | Unit price CIP <i>[insert place of destination] as specified in BDS</i> in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"] | CIP Price per line item (Col. 5x6) | Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same] | Total Price per Line item (Col. 7+8) |
| <i>[insert number of the item]</i> | <i>[insert name of Good]</i> | <i>[insert country of origin of the Good]</i> | <i>[insert quoted Delivery Date]</i> | <i>[insert number of units to be supplied and name of the physical unit]</i> | <i>[insert unit price CIP per unit]</i> | <i>[insert total CIP price per line item]</i> | <i>[insert the corresponding price per line item]</i> | <i>[insert total price of the line item]</i> |
| | | | | | | | Total Price | |
| Name of Bidder <i>[insert complete name of Bidder]</i> Signature of Bidder <i>[signature of person signing the Bid]</i> Date <i>[Insert Date]</i> | | | | | | | | |

| <p align="center">Price Schedule: Goods Manufactured Outside the Purchaser’s Country, already imported*</p> | | | | | | | | | | | |
|--|-------------------------------|---|---|--|---|--|--|--|---|---|---|
| | | | <p>(Group C Bids, Goods already imported)</p> <p>Currencies in accordance with ITB 15</p> | | | | | <p>Date: _____</p> <p>OCBI / LCB No: _____</p> <p>Alternative No: _____</p> <p>Page N° _____ of _____</p> | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 *** |
| Line Item N° | Description of Goods | Country of Origin | Delivery Date as defined by Incoterms | Quantity and physical unit | Unit price including Custom Duties and Import Taxes paid, in accordance with ITB 14.9(c)(i) | Custom Duties and Import Taxes paid per unit in accordance with ITB 14.9(c)(ii), [to be supported by documents] ** | Unit Price net of custom duties and import taxes, in accordance with ITB 14.9 (c) (iii) (Col. 6 minus Col.7) | Price per line item net of Custom Duties and Import Taxes paid, in accordance with ITB 14.9(c)(i) (Col. 5×8) | Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the goods to their final destination, as specified in BDS in accordance with ITB 14.9 (c)(v) | Sales and other taxes paid or payable per item if Contract is awarded (in accordance with ITB 14.9(c)(iv) | Total Price per line item (Col. 9+10) |
| <i>[insert number of the item]</i> | <i>[insert name of Goods]</i> | <i>[insert country of origin of the Good]</i> | <i>[insert quoted Delivery Date]</i> | <i>[insert number of units to be supplied and name of the physical unit]</i> | <i>[insert unit price per unit]</i> | <i>[insert custom duties and taxes paid per unit]</i> | <i>[insert unit price net of custom duties and import taxes]</i> | <i>[insert price per line item net of custom duties and import taxes]</i> | <i>[insert price per line item for inland transportation and other services required in the Purchaser’s Country]</i> | <i>[insert sales and other taxes payable per item if Contract is awarded]</i> | <i>[insert total price per line item]</i> |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | Total Bid Price | |

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[insert date]*

- * *[For previously imported Goods, the quoted price shall be distinguishable from the original import value of these Goods declared to customs and shall include any rebate or mark-up of the local agent or representative and all local costs except import duties and taxes, which have been and/or have to be paid by the Purchaser. For clarity the Bidders are asked to quote the price including import duties, and additionally to provide the import duties and the price net of import duties which is the difference of those values.]*
- ** i) *No Supporting documents for customs duties and import taxes already paid or to be paid shall be accepted unless such documents establish beyond any reasonable doubt the actual amounts of customs duties and import taxes actually paid by the Bidder for each item for which the Bid is submitted and amount shown in the documents tally with the amounts indicated in the price schedule under column 7 of the Bid. Similarly, for amount yet to be paid, the Bidder shall provide documents from concerned governmental authorities indicating amounts of such duties and taxes to be paid for each item of the Bid. A Bid submitted with supporting documents not in conformance with the above requirement shall be rejected. To this end any falsified information on payment of such duties and taxes or falsification of document in support to derive unjustified benefit shall be treated seriously in accordance with Bank's Integrity Framework and as per Section VI -Fraud and Corruption;*
- ii) If the Bidder is unable to submit supporting evidence for past or future payment of customs duties and import taxes in accordance with requirements under i) above, for justified reasons, such Bid may not be rejected unless the Bidder does not accept the following procedure for the purpose of comparison and evaluation of its bid which disallows the benefit that would have otherwise accrued to the Bidder for payment of customs duties and taxes in comparison of bids had it not failed to submit the supporting documents. Accordingly, for the purpose of evaluation, the amount of customs duties and import taxes whether indicated under column 7 of the price schedule or not will be treated as "0" "Zero" and the price per line item under column 9 will be calculated as: $[5 \times 6]$ and total price per line item under column 12 will be calculated as: $[5 \times 6 + 10]$. If the Bidder is successful on this basis it will be selected for award and contract amount will be $= [5 \times 6 + 10 + 11]$. If the Bidder does not accept the above approach for evaluation, the Bid shall be rejected.*
- *** *[Total contract amount will be $[7 + 11 + 12]$ [In case of Bid at (ii) above all calculations shall be based on value of 7 as "0" "Zero"]*

Price Schedule: Goods Manufactured in the Purchaser’s Country

| Purchaser’s Country _____ | | | | (Group A and B Bids) Currencies in accordance with ITB 15 | | | | Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____ | |
|---|------------------------------|---------------------------------------|--|--|---|---|---|---|--------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Line Item N° | Description of Goods | Delivery Date as defined by Incoterms | Quantity and physical unit | Unit price EXW | Total EXW price per line item (Col. 4x5) | Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination | Cost of local labor, raw materials and components from with origin in the Purchaser’s Country % of Col. 5 | Sales and other taxes payable per line item if Contract is awarded (in accordance with ITB 14.9(a)(ii)) | Total Price per line item (Col. 6+7) |
| <i>[insert number of the item]</i> | <i>[insert name of Good]</i> | <i>[insert quoted Delivery Date]</i> | <i>[insert number of units to be supplied and name of the physical unit]</i> | <i>[insert EXW unit price]</i> | <i>[insert total EXW price per line item]</i> | <i>[insert the corresponding price per line item]</i> | <i>[Insert cost of local labor, raw material and components from within the Purchase’s country as a % of the EXW price per line item]</i> | <i>[insert sales and other taxes payable per line item if Contract is awarded]</i> | <i>[insert total price per item]</i> |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Total Price | | | | | | | | | |
| Name of Bidder <i>[insert complete name of Bidder]</i> Signature of Bidder <i>[signature of person signing the Bid]</i> Date <i>[insert date]</i> | | | | | | | | | |

Price and Completion Schedule - Related Services

| | Currencies in accordance with ITB 15 | | | | Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____ | |
|---|--|---|---|--|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Service N° | Description of Services (excludes inland transportation and other services required in the Purchaser's Country to convey the goods to their final destination) | Country of Origin | Delivery Date at place of Final destination | Quantity and physical unit | Unit price | Total Price per Service (Col. 5*6 or estimate) |
| <i>[insert number of the Service]</i> | <i>[insert name of Services]</i> | <i>[insert country of origin of the Services]</i> | <i>[insert delivery date at place of final destination per Service]</i> | <i>[insert number of units to be supplied and name of the physical unit]</i> | <i>[insert unit price per item]</i> | <i>[insert total price per item]</i> |
| | | | | | | |
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| | | | | | | |
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| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | Total Bid Price | | |
| Name of Bidder <i>[insert complete name of Bidder]</i> Signature of Bidder <i>[signature of person signing the Bid]</i> Date <i>[insert date]</i> | | | | | | |

Bidder Information Form -Form ELI-1.1

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid submission]*

OCBI / LCB No.: *[insert number of bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

| |
|---|
| 1. Bidder's Name <i>[insert Bidder's legal name]</i> |
| 2. In case of JV, legal name of each member: <i>[insert legal name of each member in JV]</i> |
| 3. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i> |
| 4. Bidder's year of registration: <i>[insert Bidder's year of registration]</i> |
| 5. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i> |
| 6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i> |
| 7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Purchaser |
| 8. Included are the organizational chart, a list of Board of Directors, and the beneficial |

ownership. *[If required under BDS ITB 45.1, the successful Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.]*

Bidder's JV Members Information Form-Form ELI-1.2

[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture].

Date: *[insert date (as day, month and year) of Bid submission]*

OCBI / LCB No.: *[insert number of Bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

| |
|--|
| 1. Bidder's Name: <i>[insert Bidder's legal name]</i> |
| 2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i> |
| 3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i> |
| 4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i> |
| 5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i> |
| 6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i> |
| 7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Purchaser, in accordance with ITB 4.6. |
| 8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 45.1, the successful Bidder shall provide additional information on beneficial ownership for each JV member using the Beneficial Ownership Disclosure Form.]</i> |

Technical Bid-Base Bid

[Note for information of Bidder: Bidder shall demonstrate compliance with the Purchaser's requirements and Technical Specifications as described in Section VII of the Bidding Documents. Any departures or deviations from the required Technical Specifications shall be highlighted and if there are none, full compliance shall be confirmed.

The Bidder shall provide complete information and documentation of technical standards, codes, designs and specifications, of Goods and Related Services offered along with Model number or any other identification number of the manufacturer wherever applicable and in accordance with all requirements mentioned in ITB 16. Bidding document may stipulate a Table, Form, or Template to present Technical designs, specification, characteristics, functional or other guaranteed parameters, the Bidder shall invariably use the same without any changes and ensure that all requested details and supporting documents are provided. Lack or omission or non-confirmation of substantial details, information and documentation for major or essential technical requirements/features may result in rejection of the Bid.

If the details of specifications for the offered Goods in the written text of the Bid differ from the details provided in the supporting literature, drawings or other parts of the document, all such discrepancies shall be explained to the satisfaction of the Purchaser failing which the Purchaser, may reject the Bid, or if deemed appropriate, may consider the information in the written text of the Bid to be valid ignoring details in other parts of the Bid. Failure of the Bidder to confirm this will result in rejection of the Bid.

Bid shall establish conformity with the Purchaser's Specifications and requirements as specified in the Bidding Document along with all supporting documents mentioned in ITB 16. The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII, Schedule of Requirements.

Any deviations in the technical standards, codes, designs or specifications or other requirements from those stated in the Bidding Documents shall be explained indicating their impact on the performance requirements, characteristics or parameters of the Goods and Related Services required. To this end, for any such deviations to be acceptable, Bid shall establish substantial responsiveness to the required technical specifications by explaining and documenting for the offered Goods, and Related Services equivalency with or improvement to the required technical standards, codes, designs and Specifications.

Any Major deviation from the Purchaser's requirements shall be the cause for rejection of the Bid. Any deviation which in the Bidder's opinion is considered minor, the Bidder shall provide evidence to this effect including evidence of any monetary implications caused by such deviation. The Purchaser's evaluation shall be independent of Bidder's opinion on such matters and shall be final]

Commercial Terms and Conditions

[Bidder shall specify any deviations to the provisions of the Bidding Document (other than Technical Specifications) in particular those specified in Part 3 of the Bidding document including General and Special Conditions of Contract. If "None" it shall be confirmed accordingly]

Historical Contract Non-Performance--Pending Litigation-- Litigation History Form CON-2

Bidder's Legal Name: _____

Date: _____

JV Member's Legal Name: _____

OCBI / LCB No.: _____

Page _____ of _____ pages

Non-Performing Contracts in accordance with Section III, Evaluation Criteria

- Contract non-performance did not occur during the stipulated period, in accordance with Section III, Evaluation Criteria
- Contract non-performance during the stipulated period, in accordance with Section III, Evaluation Criteria. List all Non-performed contracts since date specified in the Section III.

| Year | Non-performed portion of contract | Contract Identification | Total Contract Amount (current value, currency, exchange rate and US\$ equivalent) |
|----------------------|---------------------------------------|--|--|
| <i>[insert year]</i> | <i>[insert amount and percentage]</i> | Contract Identification: <i>[indicate complete contract name/number, and any other identification]</i> Name of Purchaser: <i>[insert full name]</i> Address of Purchaser: <i>[insert street/city/country]</i> Reason(s) for non-performance: <i>[indicate main reason(s)]</i> | <i>[insert amount]</i> |

Pending Litigation, in accordance with Section III, Evaluation Criteria

- No pending litigation in accordance Section III, Evaluation Criteria
- Pending litigation in accordance with Section III, Evaluation Criteria, as indicated below. List all pending litigation contracts.

| Year | Brief reasons for litigation | Contract Identification | Total Contract Amount (current value, US\$ equivalent) |
|------|------------------------------|-------------------------|--|
| | | | |

| | | Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute: Amount in dispute | |
|--|------------------------------|--|---|
| | | Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute: Amount in dispute: | |
| Form CON-2 Continued | | | |
| Litigation History in accordance with Section III—List all contracts since the date specified in Section III indicating: | | | |
| Year | Brief reasons for litigation | Contract Identification Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute: Amount in dispute Court or Arbitral award decision: | Total Contract Amount (current value, US\$ equivalent) |

Financial Situation

Form FIN – 3.1

Historical Financial Performance

Bidder's Legal Name: _____ Date: _____

JV Member's Legal Name: _____ OCBI / LCB No.: _____

Page _____ of _____ pages

To be completed by the Bidder and, if JV, by each member

| Financial information in US\$ equivalent | Historic information for previous _____ (___) years (US\$ equivalent in 000s) | | | | | | |
|--|--|--------|--------|----------|--------|------|------------|
| | Year 1 | Year 2 | Year 3 | Year ... | Year n | Avg. | Avg. Ratio |
| Information from Balance Sheet | | | | | | | |
| Total Assets (TA) | | | | | | | |
| Total Liabilities (TL) | | | | | | | |
| Net Worth (NW) | | | | | | | |
| Current Assets (CA) | | | | | | | |
| Current Liabilities (CL) | | | | | | | |
| Information from Income Statement | | | | | | | |
| Total Revenue (TR) | | | | | | | |
| Profits Before Taxes (PBT) | | | | | | | |

Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

- (a) Must reflect the financial situation of the Bidder or partner to a JVCA, and not sister or parent companies;
- (b) Historic financial statements must be audited by a certified accountant;

- (c) Historic financial statements must be complete, including all notes to the financial statements;
- (d) Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

Average Annual Turnover

Form FIN – 3.2

Bidder's Legal Name: _____ Date: _____
 JV Member Legal Name: _____ OCBI / LCB No.: _____

Page _____ of _____ pages
 To be completed by the Bidder and, if JV, by each member

| Annual turnover data | | |
|---------------------------------|---------------------|-----------------|
| Year | Amount and Currency | US\$ equivalent |
| | _____ _____ | _____ _____ |
| | _____ _____ | _____ _____ |
| | _____ _____ | _____ _____ |
| | _____ _____ | _____ _____ |
| | _____ _____ | _____ _____ |
| | _____ _____ | _____ _____ |
| *Average Annual Turnover | _____ _____ | _____ _____ |

*Average annual turnover calculated as total certified payments received for supply in progress or completed, divided by the number of years as per Section III, Evaluation Criteria.

Experience—Form Exp-1

Bidder's Legal Name: _____
 Manufacturer's Legal name: _____ Date: _____
 JV 's Legal Name: _____ OCBI / LCB No.: _____
 Page _____ of _____ pages

If Bidder is JV specify only those contracts that were performed by the same JV
 Complete all information requested below that are required to assess Bidder's qualifications as per post qualification criteria specified under Section III
 To be completed by Bidder, Bidder and Manufacturer if Bidder is not the Manufacturer, and by JV if JV is the Bidder

| Similar Contract Number: ___ of ___ required. | Information | |
|---|--------------------|------------|
| Contract Identification | _____ | |
| Award date Completion date | _____ | |
| Role in Contract | _____ | |
| Total contract amount | _____ | US\$ _____ |
| Purchaser's Name: | _____ | |
| Address: | _____ | |
| Telephone/fax number: E-mail: | _____ | |
| Description of Goods | _____ | |
| Quantity of Goods supplied under this contract | _____ | |
| Quantity of Goods supplied under all other contracts since the date indicated in Section III-Provide similar separate details as for this contract for all such other contracts | _____ | |

Form Exp-1 continued

| Similar Contract Number: ___ of ___ required. | Information |
|---|--------------------|
| First date of manufacturing similar goods as offered in the bid | |
| Period of Successful use/operation –Number of Years | |
| Installed manufacturing capacity— Number of units per month of item (s) specified in section III | |
| Demonstrated proven capacity to supply since the date and for Item (s) specified in Section III | |

Form of Bid Security

(Bank Guarantee)

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Purchaser to insert its name and address]*

IFB No.: *[Purchaser to insert same IFB No as advertised]*

Alternative No.: *[Insert identification No if this is a Bid for an alternative]*

OCBI / LCB No.: *[Purchaser to insert same OCBI number as in procurement plan]*

Date: *[Insert date of issue]*

Bid Guarantee No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _____ *[insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of _____ under Invitation for Bids No. _____ ("the IFB") and Open Competitive Bidding (International) No. _____ ("the OCBI").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

At the request of the Applicant to issue this guarantee, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- (a) has withdrawn its Bid during the period of Bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the Contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract

agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[Signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

Form of Bid Security (Bid Bond)

Date: *[date (as day, month and year)]*

IFB No.

OCBI / LCB No.: *[number as in procurement plan].*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

[The Surety shall fill in this Bid Bond Form in accordance with the instructions indicated.]

BOND NO. _____

BY THIS BOND *[name of Bidder]* as Principal (hereinafter called “the Principal”), and *[name, legal title, and address of surety]*, **authorized to transact business in *[name of country of Purchaser]***, as Surety (hereinafter called “the Surety”), are held and firmly bound unto *[name of Purchaser]* as Oblige (hereinafter called “the Purchaser”) in the sum of *[amount of Bond]² [amount in words]*, for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted or will submit a written Bid to the Purchaser dated the ___ day of _____, 20___, for the supply of *[name of Contract]* (hereinafter called the “Bid”).

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal:

- (a) has withdrawn its Bid during the period of Bid validity set forth in the Principal’s Letter of Bid (“the Bid Validity Period”), or any extension thereto provided by the Principal; or
- (b) having been notified of the acceptance of its Bid by the Purchaser during the Bid Validity Period or any extension thereto provided by the Principal; (i) failed to execute the Contract agreement; or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to Bidders (“ITB”) of the Purchaser’s bidding document.

then the Surety undertakes to immediately pay to the Purchaser up to the above amount upon receipt of the Purchaser’s first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

The Surety hereby agrees that its obligation will remain in full force and effect up to and including the date 28 days after the date of expiration of the Bid Validity Period set forth in the Principal’s Letter of Bid or any extension thereto provided by the Principal.

² The amount of the Bond shall be denominated in the currency of the Purchaser’s Country or the equivalent amount in a freely convertible currency.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this ____ day of _____ 20__.

Principal: _____ Surety:

Corporate Seal (where appropriate)

(Signature)
(Printed name and title)

(Signature)
(Printed name and title)

Form of Bid-Securing Declaration

[The Bidder shall fill in this Form in accordance with the instructions indicated.]

Date: *[date (as day, month and year)]*
 OCBI / LCB No.: *[number as in procurement plan]*
 Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[complete name of Purchaser]*

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Purchaser for the period of time of *[insert number of months or years consistent with BDS 19.9]*, if we are in breach of our obligation(s) under the Bid conditions, because we:

- (a) have withdrawn our Bid during the period of Bid validity specified in the Letter of Bid or any extension thereto provided by us; or
- (b) having been notified of the acceptance of our Bid by the Purchaser during the period of Bid validity, (i) fail or refuse to sign the Contract; or (ii) fail or refuse to furnish the Performance Security, if required, in accordance with the ITB.

The start date of suspension shall be the first date we perform any of the actions mentioned in paragraphs (a) and (b) above. We understand this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.

Name of the Bidder* _____

Name of the person duly authorized to sign the Bid on behalf of the Bidder** _____

Title of the person signing the Bid _____

Signature of the person named above _____

Date signed _____ day of _____, _____

*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

** : Person signing the Bid shall have the power of attorney given by the Bidder attached to the Bid

[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all members to the Joint Venture that submits the Bid.]

Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its Bid, if so indicated in the **BDS**.]*

Date: *[insert date (as day, month and year) of Bid submission]*
OCBI / LCB No.: *[insert number as in procurement plan]*
Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a Bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Section V - Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank Group Financed Procurement

A. Provisions under Section 5 “Eligibility” of the Procurement Policy for Bank Group Funded Operations and Chapter A2 of the Operations Procurement Manual under Procurement Framework of the African Development Bank

1. The African Development Fund (ADF) permits firms and individuals from all countries to offer goods, works and services for ADF funded projects.

However, the proceeds of any Financing undertaken in the operations of the African Development Bank (ADB) and the Nigeria Trust Fund (NTF) shall be used for procurement of goods and works, including the related services, provided by bidders from Eligible³ Countries.⁴ Any conditions for participation shall be limited to those that are essential to ensure the firm’s capability to fulfill the contract in question. In the case of ADB and NTF, bidders from non-Member Countries offering goods, works and related services (including transportation and insurance) are not eligible even if they offer these from Eligible Member Countries. Any waiver to this rule will be in accordance with the Articles 17(1) (d) of the Agreement Establishing the African Development Bank and 4.1 of the Agreement Establishing the Nigeria Trust Fund.

B. Rules and Procedures for Procurement of Goods and Works

Overview

1. The eligibility criteria for participation in the supply of goods, works and related services, to be procured through the ADB and NTF Financing, derive from the requirements of the Agreement Establishing the African Development Bank, Article 17.1.d, and the Agreement Establishing the Nigeria Trust Fund, Article 4.1. The foregoing requirements basically prescribe two types of eligibility criteria:
 - (a) The eligibility of the bidder;
 - (b) The eligibility of the goods, works and related services.

Eligibility of the Bidder Under the ADB & NTF Financing

2. The eligibility of the bidder shall be based on nationality, in accordance with the following rules:

³ Refer to Bank Framework for additional information on Eligibility.

⁴ “Eligible Countries” shall mean: (a) in the case of the African Development Bank (ADB) and the Nigeria Trust Fund, the Member Countries of the ADB; and (b) in the case of the African Development Fund (ADF), any country.

- (a) Natural Persons: A natural person is eligible if he or she is a national of a Member Country of the ADB. Where a person has more than one nationality, such a person shall be eligible if the nationality indicated in his or her bid is that of a Member Country of the ADB.
- (b) Corporations: A corporation is eligible if it satisfies the following criteria:
 - i) it is incorporated in a country that is a Member of the ADB;
 - ii) it is a national of a country that is a Member of the ADB, as determined by the law of its place of incorporation;
 - iii) it has its principal place of business in a country that is a Member of the ADB.
- (c) Joint Ventures and Associations: An unincorporated joint venture, partnership, or association, shall be eligible if more than 50% of the value of its works and/or services is executed by its members satisfying the eligibility requirements for individuals or corporations.

Eligibility of the Goods, Works and Related Services

- 3. In order to be eligible, the goods to be procured must have been mined, grown, or produced, in the form in which they are purchased, in an Eligible Member Country.
- 4. For works contracts, which may include civil works, plant construction, or turnkey contracts, the contractor must satisfy the nationality criteria of eligibility, either as a natural person, or corporation, or joint venture and association. Labour, equipment, and materials needed for carrying out the works contract, shall be supplied from Eligible Member Countries.
- 5. For contracts, which have been awarded on the basis of Cost, Insurance and Freight (CIF), or Carriage and Insurance Paid (CIP), bidders shall be free to arrange for ocean and other transportation, and the related insurance, from any Eligible Member Country. On the other hand, where goods are shipped on FOB basis, and the Bank has agreed to finance transportation and insurance separately, which are arranged by the purchaser, under a separate contract, the Bank shall be satisfied that the services are supplied from Eligible Member Countries.

List of Eligible Countries

- 6. List of Eligible countries can be found in African Development Bank's website:

[Eligible Countries](#)

Ineligible Countries in reference to ITB 4.8 and ITB 5.1

- 7. In reference to ITB 4.8 and ITB 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8(a) and ITB 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state "none"]*.

Under ITB 4.8(b) and ITB 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state "none"]*

Section VI - Fraud and Corruption (Section VI shall not be modified)

1. Purpose

1.1 The Bank's Integrity Framework and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption¹.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party²;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party³ to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations

¹ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

² For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution, including Bank staff and employees of other organizations taking or reviewing procurement decisions.

³ For the purpose of this sub-paragraph, "party" refers to a public official, including Bank staff and employees of other organizations taking or reviewing procurement decisions.; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution."

of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Integrity Framework, and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;⁴ (ii) to be a nominated⁵ sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants),

⁴ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

⁵ A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect⁶ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

⁶ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

Part 2 – Supply Requirements

Section VII - Schedule of Requirements

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| 4. Drawings | Error! Bookmark not defined. |
| 5. Inspections and Tests | Error! Bookmark not defined. |

2. List of Related Services and Completion Schedule

[This table shall be filled in by the Purchaser. The Required Completion Dates should be realistic, and consistent with the required Goods Delivery Dates (as per Incoterms)]

| Service | Description of Service | Quantity ¹ | Physical Unit | Place where Services shall be performed | Final Completion Date(s) of Services |
|----------------------------|---|--|---|---|---|
| <i>[insert Service No]</i> | <i>[insert description of Related Services]</i> | <i>[insert quantity of items to be supplied]</i> | <i>[insert physical unit for the items]</i> | <i>[insert name of the Place]</i> | <i>[insert required Completion Date(s)]</i> |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

1. If applicable

3. Technical Specifications

Supply, training, installation, testing and operation of Information Technology (IT) and power equipment for a regional computing centre (RCC) and an e-learning and collaboration platform, and refurbishment of premises for the sub-regional universities' network (Djibouti, Ethiopia and Somalia)

I. BACKGROUND

In the digital age, more and more data are available in real time. This data is being produced all over the planet by digital devices such as computers, smartphones, weather satellites, drones and cameras and, above all, by Internet of Things (IoT) terminals equipped with digitally connected sensors that are becoming more accessible as selling prices fall. This exponentially growing mass of data includes.

- (i) Social data from social media: comments, publications, images and, increasingly, videos, etc.
- (ii) Transactional data generated by financial markets and banks; and
- (iii) Machine data generated by IoT sensor terminals.

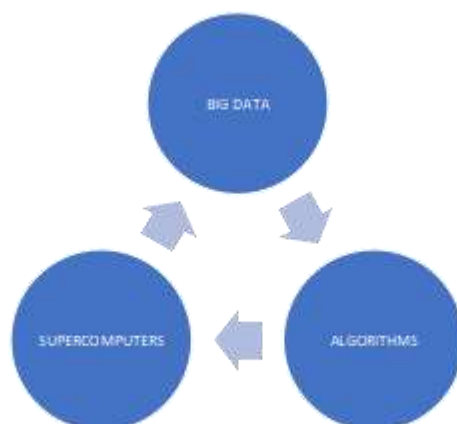
The growing democratization of connected objects and their integration into our daily lives are creating a constant and exponential flow of data. These sensors collect a significant amount of data at any given time. To add value, the unintelligible raw data collected by connected objects must be processed to make it usable and understandable. Data needs to be transformed into information that can be used for decision making. Processing and analysing this data provide reliable figures for a range of decision-making actions. In the short term, data analysis helps to take remedial or optimization actions, while in the long term it facilitates the design of prediction models that are essential for the development of strategic plans. The processing of these large amounts of data by algorithms is helping to solve problems in various sectors, such as:

- ✓ **Risk and resilience management** by analysing historical data on natural disasters such as droughts, floods, earthquakes and storms to develop prediction models to anticipate risks and prepare for contingencies.
- ✓ **Health** by making more accurate diagnoses based on proven data.
- ✓ **Finance** by analysing transactions in real time and detecting fraud, for example.
- ✓ **Transport and logistics** by optimising route planning.
- ✓ **Water and energy** by improving load and energy efficiency measures.
- ✓ **Education** by assessing student performance and analysing the overall effectiveness of teaching methods.
- ✓ **Agriculture** by analysing weather, soil and crop data to optimize farming practices.

- ✓ **Climate change** by helping scientists to develop more accurate climate models through the collection and processing of meteorological and greenhouse gas emissions data.
- ✓ **Etc.**

To this end, once collected, this data requires the computing power known as **high-performance computing (HPC)** to process it and perform computations at extremely high speeds that exceed the capacity of standard computers. These data volumes are so large that traditional servers simply cannot handle them due to their limited capacity. This means that a dedicated **high-performance computing** infrastructure must be built.

This infrastructure is especially designed to run at high speed. It enables scientists and engineers in research institutions to develop complex models and solve otherwise intractable problems. **High-performance computing** refers to the use of supercomputers and clusters to perform a series of complex computations at very high speeds to enable activities such as solving very complex mathematical problems, processing data using artificial intelligence algorithms, and modelling and simulating physical models, such as digital climate simulation. At present, with the availability of big data, entire fields of scientific research such as genetics, environment, medicine, artificial intelligence and industry have advanced through the effective and efficient use of **high-performance computing**.



By virtually simulating experiments, modelling natural phenomena or studying materials, **HPC enables the scientific community to take a multidisciplinary approach to understanding complex problems at multiple levels without necessarily having to resort to very expensive, excessively risky or irretrievable experimental protocols.**

The lack of financial or material resources often forces African scientists to abandon or not to validate some research hypotheses, despite the availability of data, for want of often expensive experimental equipment. Today, with the availability of data from low-cost sensors and the development of sophisticated algorithms and mathematical models, HPC offers African scientists the opportunity to conduct advanced research on issues specific to the continent, or to fine-tune some global models by taking into consideration the specificities of their regions, such as climate change, engineering, epidemiology, agriculture in arid environments, or artificial intelligence applied to health and environment.

In recent years, there has been a growing demand from the various African scientific communities, which have become aware of the real contribution that computing centres can

make to their research work. Three African countries have already established computing centres. These are:

- ✓ **Côte d'Ivoire:** the Centre National de Calcul de Côte d'Ivoire (Côte d'Ivoire National Computing Centre) which provides the national and regional scientific community with a supercomputer of more than 300 trillion floating-point operations per second (TFlops) and more than 300 nodes. It enables researchers to work in fields such as chemistry, agronomy, mining, health and climate, among others.
- ✓ **Morocco:** the Mohammed VI Polytechnic University inaugurated a computing centre with a 3.15 petaflops supercomputer in 2021. Among other things, the centre will help to model the genomes of African plants to be protected and use satellite data to improve agricultural land management.
- ✓ **South Africa:** the country's 1.3 petaflop Centre for High Performance Computing (CHPC) has been in operation for more than 10 years, providing computing services to the country's researchers. It has been particularly instrumental in the country's response to the COVID-19 pandemic, enabling researchers to gain a better understanding of how the virus spreads.

II. OBJECTIVES

With eight submarine cables, including the Djibouti Africa Regional Express 1 (DARE 1) serving Tanzania (Dar es Salaam), Kenya (Mombasa), Somalia (Bossaso and Berbera) and Yemen (Mocha), the Republic of Djibouti has indeed established itself as a connectivity hub for the East Africa region. In addition, terrestrial optical fibre links connect Djibouti to Ethiopia. The landing of these cables makes Djibouti sub-Saharan Africa's most connected country. With the creation of the Ministry of Digital Affairs in 2021, Djibouti is committed to its digital transformation and aims to become a regional hub. A Level 3 neutral data centre is currently under construction.

Building on the country's potential, since 2012, the University of Djibouti has had a computer equipped with **four Dell PowerEdge R910 servers, each with two eight-core Intel® Xeon® processors for a total of 64 cores. This infrastructure makes the university the only academic institution in the region with this level of computing power. Six theses in physics and energy modelling have been completed using the computer. These are:**

- (i) Studies on the Improvement of Energy Performance and Bioclimatic Architectural Design Strategies in Hot and Humid Climates.
- (ii) Mode-shifting Reverberation Chambers, Electromagnetic Compatibility Measuring Equipment.
- (iii) Metallic Nanostructures for Photovoltaic Applications on Silicon Substrates.
- (iv) Development of a Sizing Tool for a Solar Thermal Power Plant with Cylindrical Parabolic Collectors.
- (v) Study of Optical Forces in Photonic Nanostructures: Photonic Crystals, Nano-antennas and Photon Sieves.
- (vi) Bio-inspired Artificial Ion Channels and Development of New Desalination Tools.

Energy researchers are currently the most active users of this computer for research purposes, with around ten articles published in high-impact factor international journals. They are:

| Article Title | Journal (DOI Link + Impact Factor) + Issue | Scopus & Year | Related Sector/Academic Partners |
|---|--|----------------------|---|
| Potentialities of Using Linear Fresnel Technology for Solar Energy Development in Djibouti | IEEE Xplore 10.1109/IRSEC.2014.7059895 Impact Factor: X IEEE | Indexed, 2017 | Sector partner: CNRST-Morocco Universities: Mohammed V University, Faculty of Engineering (Djibouti) and University Institute of Industrial Technology (Djibouti) |
| Optical Manipulation of Nanoparticles by Simultaneous Electric and Magnetic Field Enhancement within Diabolo Nanoantenna | IEEE Xplore 10.1109/IRSEC.2014.7059895 Impact Factor: X IEEE | Indexed, 2017 | Universities: Université Bourgogne Franche-Comté (France) and Faculty of Science (Djibouti) |
| Computational Fluid Dynamics Modelling of a Natural Ventilated Building | J. Electrical Systems https://journal.esrgroups.org/jes/article/view/229 Impact Factor: 0.7 | Indexed, 2018 | Sector partner: Électricité de Djibouti Universities: Faculty of Engineering (Djibouti), Faculty of Science (Djibouti) and Djibouti Studies and Research Centre (CERD) |
| Wind Energy Potential and Micro-turbine Performance Analysis in Djibouti-city, Djibouti | Engineering Science and Technology, an International Journal https://doi.org/10.1016/j.ijestch.2019.06.004 Impact Factor: 5.1 Elsevier | Indexed, 2019 | Sector partner: Électricité de Djibouti Universities: Istanbul Technical University (Turkey), Faculty of Engineering (Djibouti) and Faculty of Science (Djibouti) |
| Accuracy of Eight Probability Distribution Functions for Modelling Wind Speed Data in Djibouti | International Journal of Renewable Energy Research https://doi.org/10.20508/ijrer.v10i2.10719.g7948 Impact Factor: 1.2 Elsevier | Indexed, 2019 | Sector partner: Électricité de Djibouti Universities: Istanbul Technical University (Turkey), Faculty of Engineering (Djibouti) and Faculty of Science (Djibouti) |
| Suitability and Evaluating Wind Speed Probability Distribution Models in a Hot Climate: Djibouti case study | International Journal of Renewable Energy Research https://doi.org/10.20508/ijrer.v9i3.9749.g7749 Impact Factor: 1.2 Elsevier | Indexed, 2019 | Sector partner: Électricité de Djibouti Universities: Istanbul Technical University (Turkey), Faculty of Engineering (Djibouti) and Faculty of Science (Djibouti) |

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| Techno-Economic Potential of Wind-Based Green Hydrogen Production in Djibouti: Literature Review and Case Studies | Energies https://doi.org/10.3390/en16166055 Impact Factor: 3.2 MDPI | Indexed, 2023 | Sector partners: INSTAD (Djibouti), ISTHY (France) Universities: Zagazig University (Egypt), Faculty of Engineering (Djibouti) and University Institute of Industrial Technology (Djibouti) |
| Wind and Solar Energy Potential in Herkalou and Lake Assal Locations, Djibouti | International Journal of Power Electronics and Drive Systems http://doi.org/10.11591/ijped.v14.i1.pp461-470 Impact Factor: 1.825 IAES | Indexed, 2023 | Sector partners: Électricité de Djibouti and INSTAD (Djibouti) Universities: Istanbul Technical University (Turkey), Faculty of Engineering (Djibouti) and University Institute of Industrial Technology (Djibouti) |
| Annular Hole Array Design as a High Efficiency Absorber for Photovoltaic Applications | Optik https://doi.org/10.1016/j.ijleo.2022.169735 Impact Factor: 3.1 Elsevier | Indexed, 2023 | Universities: Université Bourgogne Franche-Comté (France), Université Ibn Zohr (Morocco), Université Moulay Ismail (Morocco) and Faculty of Engineering (Djibouti) |
| CFD Modelling and Thermal Performance Analysis of Ventilated Double Skin Roof Structure | Lecture Notes in Networks and Systems https://doi.org/10.1007/978-3-031-35245-4_8 Impact Factor: 0.54 Springer | Indexed, 2023 | Sector partners: INSTAD (Djibouti), ARULOS (Djibouti) University: Faculty of Engineering (Djibouti) |
| Techno-economic Assessment and Wind Energy Potential of Nagad in Djibouti | International Journal of Applied Power Engineering (IJAPE) | Indexed, 2024 | Sector partners: Electricité de Djibouti (Djibouti), ODDEG (Djibouti), ISTHY (France) and INSTAD (Djibouti) |

The University of Djibouti has also begun to build its computing capacity by training systems and network engineers to work on complex infrastructure with the help of partner universities. It now has a team of computer engineers and technicians capable of managing and maintaining a computing centre.

Building on more than a decade of experience, the University of Djibouti is now seeking to establish a Regional Computing Centre (RCC) by transforming its current computer into a supercomputer for use by other research institutions and universities in the region.

Thanks to a high-speed network connecting the towns of the region (Hargeisa, Borama, Dire Dawa, Jijiga and Samara) to the Djibouti hub, the transformation of the current computer into a supercomputer represents an opportunity for regional universities. These universities belong to a regional association and work together to develop research and teaching practices. These

universities are currently involved in joint research projects in the fields of transport, environment, energy, agriculture and artificial intelligence applied to languages.

The establishment of the RCC will enable these regional institutions, as well as local institutions such as the Regional Research Observatory on the Environment and Climate (ORREC), the Djibouti Studies and Research Centre (CERD) and the Environment and Energy Research Centre of the University of Djibouti, to benefit from computing power and pool data to model and simulate regional climate phenomena. In addition, the RCC will contribute to artificial intelligence research by using natural language processing (NLP) algorithms to translate and preserve the region's languages.

Regarding the environment, the University of Djibouti is currently collaborating with the Swiss Federal Institute of Technology in Lausanne on research into the impact of climate change on coral reefs in the Red Sea. This research project, which brings together universities in the region (Sudan, Eritrea and Yemen), aims to understand the resilience of coral reefs to climate change by using artificial intelligence to model the variations observed in coral reefs. This modelling is currently being carried out in Switzerland, but, thanks to the RCC, Djiboutian colleagues trained in these techniques could eventually continue their work using the supercomputer and apply it to other ecosystems such as mangroves, sharing their expertise with colleagues in Somali universities who are grappling with the gradual disappearance of coastal ecosystems.

In the field of applied mathematics, epidemiological models are currently being developed to better understand the spread of certain epidemics such as malaria in the region. The computing power of the Regional Computing Centre will ultimately enable researchers to simulate the spread of epidemics. In this regard, a regional workshop on digital simulation will be held in October 2024 to enable researchers from the region to discuss these issues.

In civil engineering, the RCC will contribute to the modelling of materials to study, for example, the energy efficiency of buildings, and to the simulation of the structure of buildings to develop earthquake-resistant methods adapted to the region. In the area of structures, the team of the Advanced Research in Construction Laboratory (ArcLab) of the University of Djibouti is currently working on these issues in collaboration with the Istanbul Technical University (ITU).

In agriculture, the University of Djibouti is conducting research on the development of agro-pastoral systems, in collaboration with other universities in the region, including the University of Jijiga. The main objective of the researchers involved in this research project is to study and model water tables to estimate the water potential of regional aquifers. These modelling techniques are currently being developed in collaboration with the Tokyo University of Agriculture. Ultimately, the RCC will enable researchers in the region to share hydrogeological methods and data, and to simulate water tables. In addition, a project to sequence the region's plant and animal species is being developed in collaboration with regional universities. This research project could benefit from the computing power of the RCC.

With more than 120 researchers in various fields of research and a dynamic regional university partnership, the University of Djibouti hopes to strengthen regional integration at the university level by establishing the Regional Computing Centre and providing researchers with an advanced technological tool. The RCC will contribute to development

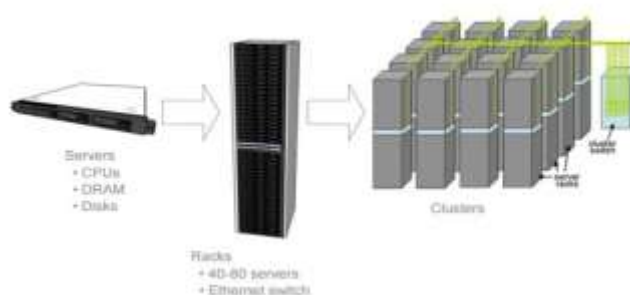
efforts in priority areas of the countries in the region, such as health, environment, energy and materials, in order to understand the underlying phenomena.

The RCC will also help to explore new approaches to develop new methods and tools adapted to regional issues. The centre will provide new opportunities for the regional scientific community to bridge the gap between theory and data, enriching and contributing to global scientific knowledge.

In addition, the e-learning and collaboration platform will be hosted on the University of Djibouti's existing computer servers. The contract includes the supply, training, installation, testing and development of the required software.

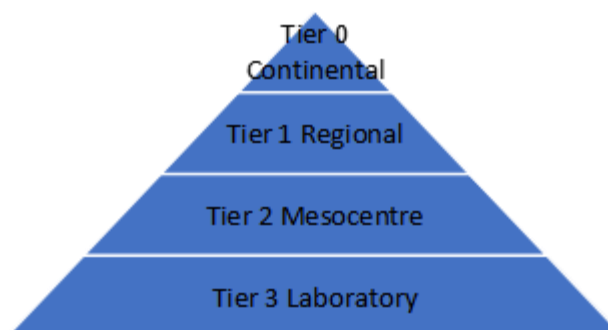
III. TARGETED GENERAL ARCHITECTURE

As part of the establishment of the Regional Computing Centre, it is necessary to upgrade and strengthen the existing computing infrastructure at the University of Djibouti. To this end, the RCC should conform to the overall architecture of computing centres organized into clusters. This architectural approach, known as cluster computing, allows a series of servers, called nodes, to be interconnected. Physically, these nodes, or servers, are grouped in racks (8 to 64 servers per rack), which are interconnected by optical fibre links.



The coordination of these nodes is managed by a software layer that allows the end-user to see the cluster as a single machine. This distributed architecture allows for parallel computing and hence provides a **high level of accessibility**. The failure of one node does not affect the entire system. The system also offers greater **horizontal scalability**. An additional node can be added to the system at any time to increase its power.

The cumulative computing power of the nodes makes cluster computing the appropriate architecture for high-performance computing. This computing architecture has been chosen for the RCC. In terms of performance, the RCC initially aims to achieve 1.2 floating point operations per second (PFLOPS) with a hybrid cluster based on the central processing unit (CPU) and the graphics processing unit (GPU) which is more suitable for graphic simulations. The RCC must meet the requirements of a Tier-1 computing architecture for use at the regional level.



IV. INFORMATION TECHNOLOGY (IT) EQUIPMENT

4.1. General Framework

4.1.1. *Contract Purpose*

The University of Djibouti plans to establish a computing cluster at the Faculty of Engineering in Djibouti. This section focuses on:

- ✓ Advent of optical fibre.
- ✓ Pre-wiring of virtual device interface (VDI).
- ✓ Integrated security system.
- ✓ Video surveillance system.
- ✓ Access control system.
- ✓ Technical alarm system.
- ✓ Installation and commissioning of a scientific computing infrastructure.

4.1.2. *Contract Consistency*

The services to be provided by the Contractor will include:

- ✓ Supply, transportation to the site, installation and adjustment of all equipment and components (even if not expressly mentioned in this document) required to complete the installation in accordance with good practice and in such a way that no omissions occur.
- ✓ Programming, testing and fine-tuning to ensure that the installation is working properly and to specification.
- ✓ Supply of a problem file corresponding to the systems and software installed and all hardware.
- ✓ Maintenance of equipment and testing during the period corresponding to the warranty period and any warranties.
- ✓ Training and all other skills transfer tools.

4.1.3. *Applicable Standards and Regulations*

The installations will be carried out in keeping with trade practice using approved quality equipment. All fittings and equipment must be approved by the Beneficiary or its Technical Controller prior to installation or delivery.

Otherwise, the Contractor shall provide all technical information (catalogues, photographs and plans) necessary for thorough understanding of the characteristics of equipment and its compliance with the regulations.

All services shall be provided in accordance with:

- ✓ These specifications.
- ✓ All applicable decrees, orders, regulations and standards in force in the Republic of Djibouti at the time of submission of bids.
- ✓ General International Electrotechnical Commission (IEC) and Union technique de l'électricité (UTE) standards and regulations.
- ✓ C 12.100 standard and add-on cards relating to the protection of workers in establishments where electrical currents are installed.
- ✓ NFC 12.200 standard relating to protection against fire hazards.
- ✓ C 15.100 standard, 2003 edition, and add-on cards, laying down conditions for the installation of first category electrical equipment.
- ✓ Decrees and orders relating to establishments subject to the labour legislation of the Republic of Djibouti.
- ✓ Unified technical documents – UTDs (operating provisions).
- ✓ European Commission Directive on Electromagnetic Compatibility (EMC) 89/336/EEC, amended by 91/263/EEC; 92/31/EEC and 93/68/EEC and EN 55022, EN 55024, EN 50081-1 and EN 50082 standards.
- ✓ Current CE marking standards and regulations for electromagnetic compatibility of electronic equipment regarding immunity and radiation.
- ✓ Generic Cabling for Customer Premises ISO 11801-1:2017, EN-50173 and EN 50174 standards.
- ✓ EN 50310 standard for earthing in VDI premises.
- ✓ IEC 61-156, EN 50283, EN 50288, EN 50289 and EN 61935 standards on the characteristics, validation rules and performance of symmetrical paired cables.
- ✓ EN 60793, EN 60794, NFC 93859, NFC 93880 and NFC 93881 standards for optical links and cables.
- ✓ 61300-35-2 ed2 Connector cleanliness certification.
- ✓ Cabling infrastructure design and installation regulations.
- ✓ National waste disposal regulations within the context of environmental protection and sustainable development.
- ✓ Standard and non-standard functional capability and characteristics required later in this document.

This list is not exhaustive, particularly regarding equipment and equipment manufacturing standards.

4.1.4. Special Limitations

The Contractor shall ensure compliance with the shapes and sizes of structural elements with respect to finishings He/she shall attend all meetings to be held with the relevant services and representatives of the Beneficiary and its Technical Controller, other contractors and, more generally, with all stakeholders.

The Contractor shall take all the necessary steps to:

-
- ✓ Protect premises, equipment and furniture from soiling and the risk of deterioration.
 - ✓ Ensure the protection of workers and other staff on the sites under his/her responsibility.

The Contractor shall be responsible for implementing all protective and safety measures, including work area signage, crosswalks for the movement of workers, etc.

Before carrying out any project works or installing any equipment, the Beneficiary shall inform the Contractor of any other special provisions to be taken into account in the provision of services. The Contractor shall be responsible for the cost of repairing any damage, theft or breakage up to the time of acceptance of works.

The Contractor shall be responsible for remedying any damage to any works or the environment caused by his/her agents, workers, equipment or machinery. He/she shall be responsible for any incident or accident resulting from failure to comply with the regulations in force or recommendations relating to the protection and safety of works and third parties.

In the event of any incident or accident, the Contractor shall immediately inform the Beneficiary or its Technical Controller. He/she shall provide his/her workers with all the protective and safety equipment required by labour legislation for each type of work. He/she shall use the premises provided by the Beneficiary for his/her workers and for the storage of his/her tools, equipment and materials.

4.1.5. Control of Design Studies Prior to Construction

Within two weeks of notification of the award of contract, the Contractor shall submit to the Beneficiary or its Technical Controller comprehensive work specifications. Where the specifications are declared invalid, the Contractor shall immediately incorporate the changes requested by the Beneficiary and submit the revised specifications for validation. The work specifications shall include, inter alia, the works schedule, diagrams, sketches and plans for the installation of equipment on the premises, as well as the locations and types of routes and supporting materials envisaged.

4.1.6. Quality of Equipment, Materials and Services

The expected performance will depend on component quality, adherence to accepted installation practices, and proper implementation of engineering rules. Prior to installation, the Contractor shall submit all equipment and materials to the Beneficiary or its Technical Controller for validation, together with relevant data sheets. Any equipment or material installed by the Contractor without validation by the Beneficiary or its Technical Controller shall be replaced by fully validated equipment at the Contractor's expense, together with any necessary repairs.

All components proposed and installed should be of the highest quality and should comply with existing standards and the technical specifications set out in this document. Installations shall be carried out by highly qualified staff specialized in the implementation of each of the different networks. Any subsequent malfunction due to poor quality components or faulty installation shall result, at the simple request of the Beneficiary or its Technical Controller, in the complete upgrading of the facilities at the Contractor's expense and without further procedure.

Guarantees

The Contractor shall guarantee the works executed and the performance of the equipment and systems described in this document. He/she shall guarantee the proper functioning of all equipment installed by him/her or his/her subcontractors for at least a year. The guarantee shall cover all equipment installed and works executed. He/she shall bear the cost of technical assistance for the duration of the service, technicians specialized in the equipment installed and the control of the installation.

4.1.7. Service Delivery

Service delivery shall begin with VDI cabling, followed by the installation of the operator and lessees. The Contractor shall install all equipment in perfect working order and in full compliance with operational requirements.

Consequently, under no circumstances may he/she later mention omissions, errors or misinterpretations of the work specifications to avoid the supply or installation of a part of the equipment, whose absence would jeopardize the functioning of the entire facility or justify a request for a price supplement.

Adherence to the covenants contained in the documents prepared by the Beneficiary or its Technical Controller by the Contractor shall in no way relieve him/her of his/her full responsibility as a Contractor. He/she shall notify the Beneficiary or its Technical Controller in writing (by registered letter with acknowledgement of receipt) of any reservations regarding non-conformity of equipment or installations, whether or not under his/her responsibility, identified during the execution of works, whether or not the defects relate to his/her works.

Work site meetings

The Contractor shall attend work site meetings on specific days and times as agreed with the Beneficiary's representatives or its Technical Controller.

Work planning

The works shall be executed as directed by the Beneficiary and its Technical Controller. Within three weeks from the date of notification of the contract, the Contractor shall submit to the Beneficiary or its Technical Controller a provisional work schedule covering all the works to be executed. Failure by the Contractor to comply with the provisional schedule may result in the imposition of the penalties provided for in this document.

4.1.8. Construction Records

The Contractor shall submit to the Beneficiary or its Technical Controller the first version of the as-built records before they are received on site, in order to verify their conformity with the works executed.

The Contractor shall modify the first version of his/her as-built records based on any comments made by the Beneficiary or its Technical Controller after the verification of documents. He/she

shall submit the problem file to the Beneficiary or its Technical Controller in the form of computer files no later than two weeks after the acceptance of facilities.

Where the Contractor fails to submit construction records, or submits incorrect or incomplete records, the guarantee shall be withheld, and a reservation expressed as to the satisfactory completion of the works.

4.1.9. Acceptance - Testing

Once the Contractor notifies the Beneficiary or its Technical Controller in writing that the works have been completed, they shall be accepted in the presence of the Contractor, who shall be invited in writing. The Contractor shall test the equipment in accordance with the quality assurance procedures and site rules in force, as well as the procedures set forth in this document.

The conduct of the tests and verifications specified in the documents does not release the Contractor from the obligation to perform other tests in accordance with the applicable regulations and contract covenants. The Contractor shall bear the costs of the various validations and compile a report on the various tests performed and their results.

Where there are no reservations regarding the acceptance, both parties shall sign a report certifying that all the facilities comply with the specifications and standards, and that the as-built records are consistent with the specifications and facilities installed. Where there are any reservations, they shall be reported, and the Contractor will be required to immediately replace any facility that does not comply with the specifications or applicable standards at its own expense.

4.2. Description of Infrastructure

4.2.1. Source and Input of Telecommunications

Optical fibre cables should be used to connect the telecommunications network from the concession holder's pull pit at the site boundary. Trenches and nozzles should be installed under the electricity component.

4.2.2. Voice Data Image (VDI) Pre-cabling

The VDI cabling system should be installed using the ISO 11801 cabling infrastructure. It should be the backbone of VDI system telecommunications networks and meet the following criteria:

- ✓ Be standardized:
 - Provide performance equivalent to that required by Ethernet LAN protocols, including 10 Gigabit Ethernet over the primary optical fibre infrastructure.
 - Provide performance equivalent to that required by low-speed protocols such as xDSL and ISDN, as well as links.
- ✓ Be systematic:
 - All premises should have one or more ports, depending on their use and size, as well as the system terminals to be connected.

- ✓ Be uniform:
 - All twisted pair ports distributed must be identical and have the same number of pairs.
 - Any computer or video application may be distributed through any outlet or cable.

The cabling required should support the following systems:

- ✓ Access control,
- ✓ Security integration system,
- ✓ User terminals,
- ✓ TV sets and broadcast screens,
- ✓ Surveillance cameras,
- ✓ Computing cluster.

The server room should include the operator's work area.

4.2.3. *Video Surveillance System*

Cameras should be installed, equipped and connected to the monitor and, where appropriate, to the storage system in such a way that the images displayed, whether in real time or delayed, are consistent with the purposes for which the video surveillance system was authorized.

Camera layout and position

See the camera position plan.

The Contractor may propose changes while ensuring the required coverage, which should be validated by the Beneficiary or its Technical Controller.

Closed-circuit television (CCTV) system components

Cameras should be installed throughout the building, mainly at the entrance, server room, inverter room and supervision room, in accordance with the following technical specifications:

- ✓ Sensor 1 / 2.8' progressive scan CMOS resolution.
- ✓ Full HD up to 2.0 megapixel / 30 fps.
- ✓ Video compression H264/H264+/H265/H265+/MJPEG Dual streams, up to 6 simultaneous live view.
- ✓ Day/Night with ICR filter Digital.
- ✓ WDR, 3D DNR.
- ✓ Built-in micro-SD/SDHC/SDXC card slot, up to 128 GB Minimum.
- ✓ Illumination: 0.01 lux@F1.2 AGC on, 0 lux with IR Shutter 1/3s -1/10000 s.
- ✓ IR distance up to 30 m.
- ✓ Lens 2.8 ~ 12mm @F1.6, angle of view: 98° ~ 34° Auto
- ✓ Iris: DC Drive.
- ✓ ONVIF (Profile S, Profile G), ISAPI.
- ✓ Working temperature/humidity: -30°C to +50°C, < 95% IP67.
- ✓ IK10.
- ✓ Power supply: 12 VDC ± 25%, PoE (802.3af) max 8W.

The Contractor shall provide a server with sufficient storage capacity to allow for video recording from all cameras for at least 30 days. The same server may host the integrated security system and access control.

4.2.4. *Monitors*

The monitors are installed in the control room. A screen wall should be installed and customized to suit:

- ✓ The size of the control room.
- ✓ The total number of cameras.
- ✓ The number of operator stations for monitoring and control.

The monitors should comply with the following technical specifications:

- ✓ Screen size 42.5".
- ✓ Physical resolution FULL HD 1 920 x 1 080 pixels, brightness 360 cd/m² (in pixels);
- ✓ Contrast 1200:1.
- ✓ Viewing angles 178° / 178°, response time 8 ms HDMI, VGA, Audio inputs.
- ✓ Supply voltage 100-240V Max. Power consumption 75W.

4.2.5. *Access Control*

Access will be controlled by a contactless badge with a proximity reader and keypad, the badge identifying the user. Controlled doors should be fitted with an electric strike and operated by an electric shutter.

The server database will contain the individual records of all staff with a badge (permanent or temporary).

The system will:

- ✓ manage and record, or not, depending on the type of access, the accesses (granted, denied, etc.) of the staff.
- ✓ process and format information for immediate and subsequent use.
- ✓ manage local alarms and malfunctions of badge readers and their immediate environment (door strike, door position, reader malfunction, etc.).

Access points can be configured in a variety of ways based on operational requirements:

- ✓ Entrance control: reader at the entrance, pushbutton at exit.
- ✓ Entrance/exit control: reader at the entrance, another at the exit, and possibly a remote push button.

4.2.6. *Technical Alarms and Integrated Security System*

A technical alarm system should be installed to monitor the Computing Centre's technical installations (transmission of information from the main low-voltage board (LVB), control cabinets, HVAC equipment, computer racks, etc.). In the control room, a technical alarm panel should be installed powered by both mains and batteries, with a twelve-hour autonomy.

The security system control is a software application that manages all the devices used to secure the Computing Centre.

Its main purpose is to:

- ✓ Control access.
- ✓ Combine video surveillance.
- ✓ Monitor systems.

The applications and database should set up in a virtualized environment.

Some features are considered critical to the conformity of the proposed technical solution. When designing and preparing his/her bid, the bidder should ensure that:

- ✓ Monitoring is based on existing and certified products.
- ✓ The monitoring software is open to communication, and as such should include various tools for interfacing with other databases, system integration (alarm panels, fire panels, generators, air conditioning, etc.) and dialogue with a hypervisor.

4.3. **Computer Cluster**

This section focuses on the installation and operation of scientific computing infrastructure and related storage:

- ✓ Eight computer cabinets equipped with:
 - a computer cluster with a minimum of 800 cores.
 - input/output and management servers needed to run it.
 - a front-end server.
 - an Intel Omnipath high-speed network of 400 nodes.
 - network equipment.
 - a high-performance disk rack with 500TB of usable capacity.
 - a shared file system and administration tools.
 - integration and skills transfer services.

4.3.1. *Infrastructure*

The floor plan of the room is attached as an annex.

- ✓ Room dimensions - entrance door:
 - Surface area: 113 m² and volume 315 m³.
 - Entrance door size: 215 x 150 cm.
 - Ceiling height (cable grilles): 280 cm.

- ✓ Floor:
 - 600 x 600 heavy duty panels.
 - 30.5 laminated wood with 'OR' crossbar.
 - 455 daN point load.
- ✓ Inverter:
 - Two 60 kVA inverters.
- ✓ Electrical installations:
 - Electrical installations backed up by a 300 kVA generator.
 - 32 three-phase 32A outlets (+ neutral + earth) for the cluster and future extension.
 - 16 three-phase 16A outlets (+ neutral + earth) for the cluster and future extension.
- ✓ Air conditioning:
 - Average temperature required: 22°C (+/- 2°C).
 - Cooling capacity: 72kw.
 - Maximum airflow: 28 800 m³/h.

4.3.2. Technical Specifications

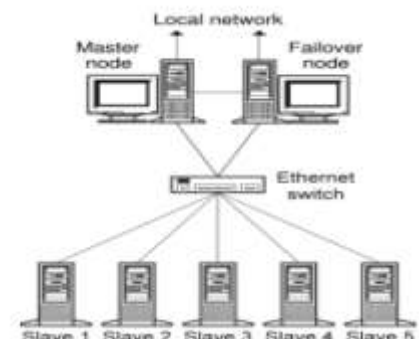
(a) Hardware specifications

General restrictions

- ✓ All computing processors must be Intel Xeon or AMD EPYC HPC processors for CPUs and NVIDIA for GPUs.
- ✓ The cluster must have a minimum of 800 computing cores with at least 4GB of ECC memory per core (the number of cores per node helps to reduce the total number of nodes).
- ✓ The ratio of processing power per processor to (power consumption * price) should be as high as possible.
- ✓ Bidders should use the benchmarks as a basis for proposing a solution for the file system to be used.
- ✓ The proposed hardware should consider the technical constraints of the machine room described above.
- ✓ The full load power consumption of the entire solution should not exceed 60 kW. The heat generated by the solution should not exceed 200 kBTU/h.
- ✓ Bidders should indicate all solutions implemented to reduce power consumption (e.g. putting nodes on standby or switching them off when not in use).
- ✓ The bidder should indicate all environmental constraints that need to be overcome in order for the proposed solution to work properly. Specifically, he/she should specify the type of power supply (voltage, amperage, etc.), upstream protection (inverter, circuit breaker, etc.) and connection (plug format) required.

Computer cabinets

Bidders shall supply all the hardware (separate from the operating system and peripherals if possible) needed to power and manage the cluster:



-
- ✓ Ten computer cabinets (the distribution of hardware in the cabinets shall be left to the bidder's discretion, depending on the density of the solution).
 - ✓ The servers and disc bays should be distributed in the cabinets to allow for better air circulation and cooling.
 - ✓ A monitor, keyboard and retractable mouse in a rack format that allows control of all active elements.
 - ✓ Power strips to measure power consumption in real time.

Compute nodes

The proposed format should be in the form of a rack. All compute nodes should be homogeneous (hardware and system). The minimum configuration of a compute node should be:

- ✓ High performance computing (HPC) processors with the best performance/(power consumption* price) ratio;
- ✓ At least 4GB of error correction code (ECC) memory per core on all nodes (array sizes should be selected to optimize performance);
- ✓ A data access interface.
- ✓ An administration interface; and
- ✓ A remote console access method.

'Master' server administration

This machine will host several critical services, in particular the batch manager, authentication directory, system deployment, administration and node monitoring tools. Two machines should be installed to operate in failover mode.

The minimum master server configuration should be:

- ✓ the number of processors and memory capacity required to ensure that the various services listed above run smoothly.
- ✓ two redundant power supplies.
- ✓ two 16TB SAS disks in RAID 1.
- ✓ one network access interface.
- ✓ one administration interface.
- ✓ one remote console access method.

Development server

This machine will be used to develop programs and to compile and submit tasks via the cluster. The minimum configuration of the development server should be:

- ✓ two 64-bit quad-core processors.
- ✓ a 32GB ECC memory.
- ✓ same processor architecture as compute nodes.
- ✓ two redundant power supplies.
- ✓ two 16TB SAS disks in RAID 1.
- ✓ one data access interface.
- ✓ one network access interface.

-
- ✓ one administration interface.
 - ✓ one remote console access method.

Networks

Bidders will supply various hardware and software components needed to set up the various networks, especially:

- ✓ An InfiniBand network switch connecting all compute nodes and the development server to input/output servers for data access.
- ✓ A Gigabit Ethernet (GbE) network switch that connects all the servers deployed through the solution for administration.
- ✓ A remote console access solution for all servers deployed with the solution.

Storage

Storage space will be used to keep each user's computing data. The minimum storage configuration should be as follows:

- ✓ 350TB of usable serial advanced technology attachment (SATA) disks.
- ✓ 150TB of solid-state drive (SSD) disks.
- ✓ Ability to expand bays to 200TB.
- ✓ Fault tolerant system combining a redundant array of independent disks (RAID) and spare disks.
- ✓ Redundant power supplies and controllers.

Inputs / outputs

Depending on the proposed architecture and the level of performance required, one or more input/output nodes can be provided. These data servers will power the computers and the development server and will be connected to the high-speed storage bay.

The technical specifications of these servers (processors, memory and disks) are at the bidder's discretion.

The total read/write performance of all computing nodes must be at least 600 MB/s.

(b) Software description

Operating system

The preferred operating system will be GNU/Linux 64 bits, but this is up to the bidder based on the cluster solution chosen. If the use of a paid software license is required (for certification purposes), this must be clearly stated. Similarly, any use of proprietary drivers must be stated and substantiated.

Shared file system

The file system should be installed on the development server and all compute nodes. It will support concurrent read/write access and allow the partitions created to be exported through the

network file system (NFS) to other servers on the platform. The file system should support a quota management system. The bidder will propose a data backup solution.

Authentication / batch manager

The bidder must propose a satisfactory solution for authentication and batch manager. Users will not have direct access to cluster nodes but will instead use the batch manager tool to submit their tasks through the cluster.

Control system

The control system helps to:

- ✓ Remotely shut down all components.
- ✓ Remotely shut down / restart all components.
- ✓ Control system consoles from the basic input/output system (BIOS) to system prompt.

Management tool

The software should be adapted to cluster management and help to:

- ✓ deploy and update system distribution images on nodes.
- ✓ install and configure additional software on the nodes.
- ✓ generate a system image from an existing node.
- ✓ add or remove nodes from the existing configuration.

Monitoring tool

The monitoring solution will present a summary of information about the cluster with the following features:

- ✓ Monitoring of temperature, fan operation, power supplies, system load, disk usage, memory, network traffic, etc.
- ✓ Email alerts for failures.
- ✓ Triggering of scripts such as automatically shutting down the cluster when temperature rises.

Programming tools

The bidder should propose a more robust compilation tool adapted to processors for the development server. He/she should provide a five-year D+1 warranty for all proposed equipment. The cost should be clearly and separately identified in the bid.

4.3.3. Assembly, Testing, Delivery and On-site Integration

(a) Assembly

The solution should be assembled, cabled and installed **within eight months of notification of award of contract. Any delay will result in penalties.**

(b) Public domain benchmark

Bidders must indicate the input/output levels in both sequential and random read/write modes, together with the measurement protocol for the disc volumes provided by the solution.

The results will be presented graphically and should highlight the ideal block size for a compromise between performance and disk usage.

The measurements will be given in MB/s and should relate to:

- ✓ Individual access to the volume by one compute node.
- ✓ Simultaneous access to the volume by all compute nodes.

4.3.4. Site Delivery and Integration

The cluster will be installed, tested and commissioned on a dedicated site within the Faculty of Engineering of the University of Djibouti.

The services provided will include:

- ✓ Connection of new equipment to the utilities needed for its functioning.
- ✓ Configuration of network elements and labelling of all cables to both.
- ✓ Termination.
- ✓ Provision of documents, preparation of the integration report.
- ✓ Integration of the software solution, in particular.
- ✓ Creation of logical disk volumes, data partitions, etc.

4.3.5. Provision of Documents

The service provider will be expected to provide documents in French or English, in PDF format, on the following points:

- ✓ Hardware/software configurations: characteristics of servers, disk bays, network equipment, schematics, and software architecture.
- ✓ Cluster administration procedures: system shutdown/restart, system and software deployment, update procedures, disk space management, operational monitoring, support contact, etc.
- ✓ Integration report including network configuration (MAC addresses, IP addresses), disk volume configuration and various configuration or optimization elements developed.

4.3.6. Solution Acceptance

The solution will be accepted within two months of completing the integration report. Acceptance is subject to a decision made by the University of Djibouti and communicated to the Beneficiary. The equipment will be accepted only after the successful conduct of the tests listed below.

The acceptance process shall validate the functionality of the solution, especially:

- ✓ Physical hardware characteristics (processors, memory, etc.).

-
- ✓ Access to newly created data partitions.
 - ✓ Verification of the authentication of registered users.
 - ✓ Verification of the proper functioning of the batch manager tool.
 - ✓ Testing of the control system (remote reboot, shutdown and console offset).
 - ✓ Design and deployment of a new system image from scratch, installation of software on all cluster nodes.
 - ✓ Removal and addition of a hot-swap node without disrupting the rest of the system.
 - ✓ Testing of monitoring and compilation tools; and
 - ✓ Checking of documents.

4.3.7. *Skills Transfer*

The bidder will propose a training plan on the use of the cluster and file system. Skills transfer will take place after acceptance of the solution.

The following items will be described in detail (not an exhaustive list): control system, administration tool, batch manager tool and monitoring tool.

Bidders will be expected to cost and provide the following services:

- ✓ 20 days of on-site training in the management and operation of the solution (schedule and content to be agreed upon between the University of Djibouti and the Beneficiary).
- ✓ 10 days of consultancy and optimization of the solution, to be distributed at the request of the University of Djibouti during the first year.

4.3.8. *Warranty and Maintenance*

Basic warranty

Hardware and software are covered by a basic warranty described below:

- ✓ Equipment warranty: at least three years from the date of delivery (D+1) on all equipment supplied. Warranty covers parts, labour and travel.
- ✓ Software support: at least three years (D+1) on all software supplied.

Software support includes the provision of updates, peripheral drivers and telephone support.

Bidders shall propose a hardware and software maintenance manual (specifying the contacts and logistical resources to be used for the warranty – maintenance of each piece of hardware and software: list of hardware and software, company name, and contact details).

4.4. Bill of Quantities

| No. | Description | Unit | Quantity | Delivery and Installation Price (USD) | Total Price Net of Taxes (USD) |
|------------------------------------|---|------|----------|---------------------------------------|--------------------------------|
| 1. Optical fibre (FO) inlet | | | | | |
| 1.1 | FO inlet including accessories | ml | 200 | | |
| 2. VDI pre-cabling | | | | | |
| 2.1 | Operator's bay 19 42u 800 x 800 | U | 1 | | |
| 2.2 | Rockade 56 p | U | 3 | | |
| 2.3 | RJ45 socket | U | 4 | | |
| 2.4 | Cable trays (width: 300, flange height: 50), including all installation accessories | ml | 150 | | |
| 2.5 | Brazing cable | Set | 1 | | |
| 2.6 | CCTV cabling | Set | 1 | | |
| 2.7 | Access control wiring | Set | 1 | | |
| 2.8 | Technical alarm cabling | Set | 1 | | |
| 2.9 | Integrated safety system cabling | Set | 1 | | |
| 2.10 | Control and receipt | Set | 1 | | |
| Sub-total | | | | | |
| 3. CCTV/monitoring | | | | | |
| 3.1 | Specification compliant indoor IP camera | U | 12 | | |
| 3.2 | CCTV, access control and security system hosting server | Set | 1 | | |

| | | | | | |
|---------------------------|--|-----|----|--|--|
| 3.3 | 42.5' monitors | U | 2 | | |
| 3.4 | i7.12 gram monitoring PC with Windows 10 or equivalent | U | 4 | | |
| 3.5 | Control and receipt | Set | 1 | | |
| Sub-total | | | | | |
| 4. Access control | | | | | |
| 4.1 | Access control centre | U | 1 | | |
| 4.2 | Badge readers + keypad | U | 6 | | |
| 4.3 | Electromagnetic lock | U | 6 | | |
| 4.4 | Badge (pack of 50) | U | 1 | | |
| 4.5 | Badge printer | U | 1 | | |
| 4.6 | Control and receipt | Set | 1 | | |
| Sub-total | | | | | |
| 5. Technical alarm | | | | | |
| 5.1 | Technical alarm centre | U | 1 | | |
| 5.2 | Humidity detector | U | 3 | | |
| 5.3 | Temperature detector | U | 18 | | |
| 5.4 | Electricity detector | U | 18 | | |
| 5.5 | Fault detection sensor | U | 6 | | |
| 5.6 | Water detector | U | 4 | | |

| | | | | | |
|-----------------------------|--|-----|---|--|--|
| 5.7 | Integrated safety and environmental control system, including management software | Set | 1 | | |
| 5.8 | Control and receipt | Set | 1 | | |
| Sub-total | | | | | |
| 6. Computing cluster | | | | | |
| 6.1 | <p>Turnkey solution package for the installation of equipment for a computer cluster in rack or blast format with a minimum of 40 nodes for a total of at least 800 cores with two master servers; development servers; and a minimum of 500TB of storage cabinet. The price includes the network architecture with InfiniBand switches connecting the compute nodes to the servers and a GbE switch connecting all the servers. Interfaces, access method, remote console and minimum 600MB/s read/write performance on all nodes. The solution must therefore include at least the following equipment:</p> <ul style="list-style-type: none"> ✓ 2 x 800x800 42u IT racks + 2 power bars ✓ Inter-bay cabling + equipment ✓ Standard OM3/OM4 optics and accessories ✓ Structured network cabling ✓ 2 redundant master servers: 2 processors with a minimum of 20 cores ✓ 1 Development server: 2 processors with a minimum of 20 cores ✓ 40 servers for rack or blast computing nodes with 2 processors for a total of 20 cores per processor ✓ 7 storage bays with a minimum of 60 TB expandable to 100 ✓ Storage drive to be estimated depending on the solution ✓ NVIDIA GPU graphics cards to be estimated based on the solution ✓ QNAP to be estimated based on the solution ✓ InfiniBand network switch ✓ Intel Omnipath high-speed network ✓ Professional firewall designed for cluster protection | Set | 1 | | |

| | | | | | |
|------------------|---|-----|----|--|--|
| | ✓ Set of useful accessories for the solution | | | | |
| 6.2 | A set of software solutions for running the cluster. A shared file system mounted on all nodes and the development server. Cluster management software. | Set | 1 | | |
| 6.3 | Start-up tests and training in cluster use | Set | 1 | | |
| Sub-Total | | | | | |
| 7. Studio | | | | | |
| 7.1 | Ellipsoidal Reflector Spotlight | U | 5 | | |
| 7.2 | LED Spot Moving Head | U | 5 | | |
| 7.3 | DMX-Master I Controller | U | 2 | | |
| 7.4 | Lighting Control 20 Bundles | U | 2 | | |
| 7.5 | Daylight LED | U | 5 | | |
| 7.6 | Professional TV Studio Tripods | U | 5 | | |
| 7.7 | TV Audio Processors | U | 2 | | |
| 7.8 | TV Audio Equipment | U | 10 | | |
| 7.9 | Video Router- Matrix SDI output 12*12 | U | 2 | | |
| 7.10 | Studio Prompter/Teleprompter | U | 2 | | |
| 7.11 | Video Studio Cameras Sony Camcorder HXR-NX200 | U | 5 | | |
| 7.12 | Professional PTZ cameras | U | 3 | | |
| 7.13 | FHD Live Streaming shoulder camcorder | U | 5 | | |
| 7.14 | Video Recorder | U | 3 | | |

| | | | | | |
|---|---|---|----|--|--|
| 7.15 | Video Mixer/Switcher | U | 3 | | |
| 7.16 | Video Transmitter | U | 3 | | |
| 7.17 | Studio Clocks | U | 2 | | |
| 7.18 | Dynamic microphone | U | 10 | | |
| 7.19 | Super cardioid microphone | U | 10 | | |
| 7.20 | Radio Mixer | U | 3 | | |
| 7.21 | Headphones | U | 10 | | |
| 7.22 | Light Video Light Panel Kit | U | 10 | | |
| 7.23 | Storage System 48 TB | U | 3 | | |
| 7.24 | Green Backdrop Stand Kit | U | 3 | | |
| 7.25 | NewTek 3Play 3P1 | U | 2 | | |
| 7.26 | Interactive smart Board | U | 2 | | |
| 7.27 | Mac Studio | U | 3 | | |
| Sub-total | | | | | |
| 8. Collaborative e-Learning Platform | | | | | |
| 8.1 | Supply, installation (on the servers of the current computer of the University of Djibouti) and configuration of an open-source e-learning application based on the studio described above. | U | 1 | | |
| 8.2 | Supply, installation (on the servers of the current computer of the University of Djibouti) and configuration of a collaborative open-source application for the university network. | U | 1 | | |

| | |
|--|------------------|
| | Sub-total |
| | TOTAL |

4.5. Technical Glossary

| | |
|--------------------|---|
| ATA: | Advanced Technology Attachment |
| Batch: | batch processing |
| Benchmark: | test bench for measuring system performance |
| BIOS: | Basic Input Output System |
| Blade: | refers to a server format (blade type) |
| BTU: | British Thermal Unit |
| Core: | Refers to the heart of a system |
| DAE: | Disk Array Enclosure |
| CPU: | Central Processing Unit |
| ECC: | Error Correction Code |
| FC: | Fibre Channel |
| GbE: | Giga bit Ethernet |
| Gbps: | Gigabytes per second |
| Go: | Giga octets |
| GPU: | Graphics Processing Unit |
| HPC: | High performance computing |
| I/O: | Input/Output |
| Infiniband: | High-speed computer network |
| IPMI: | Intelligent Platform Management Interface |
| LAN: | Local Area Network |
| KVM: | Keyboard, Video, Mouse |
| Kw: | Kilowatts |
| LDAP: | Lightweight Directory Access Protocol |
| NFS: | Network File System |
| Prompt: | Command prompt |
| PFLOPS: | Floating Point Operations Per Second |
| Rack: | a server format (standard) |
| RAID: | Redundant Array of Inexpensive Disks |
| RAM: | Random Access Memory |
| SAN: | Storage Area Network |
| SAS: | Serial Attached SCSI |
| SATA: | Serial Advanced Technology Attachment |
| SGE: | Sun Grid Engine |
| SMP: | Symmetric multiprocessing |
| To: | Tera Octets |

4.6. Specifications Summary

The table below summarizes all the requirements and specifications set out in this document. Please read this document carefully before submitting your bid.

| Overview of General Requirements | |
|---|--|
| Provide the characteristics of the proposed equipment | |
| Provide an electrical connection plan | |
| Provide a network interconnection plan | |
| Provide a bid summary table | |
| Provide an environmental assessment of the solution | |
| Provide test results | |
| Provide a planned activity schedule | |

| Bid Summary | |
|--|--|
| Computer Cabinets | |
| Weight of each cabinet | |
| Height, width and depth of each cabinet | |
| Total power consumption (kW) | |
| Type of electrical connection | |
| Heating capacity (BTU/h) | |
| Type of retractable screen, keyboard and mouse | |
| Type of screen, keyboard and mouse switch | |
| Type of outlet strips | |
| Compute Nodes | |
| Number of nodes | |
| Number of processors per node | |
| Number of cores per processor | |
| Operating system | |
| Type of power supply | |

| | |
|--|--|
| Type of remote administration interface | |
| Type of processors | |
| Processor frequency | |
| Bus frequency | |
| Memory type | |
| Total number of memory bays | |
| Number of free memory bays | |
| Rack format | |
| Disk type | |
| Disk capacity | |
| Master Server (2 redundant servers) | |
| Number of processors | |
| Number of cores per processor | |
| Type of operating system | |
| Type of remote management interface | |
| Type of processors | |
| Processor frequency | |
| Bus frequency | |
| Memory size | |
| Memory type | |
| Total number of memory bays | |
| Number of free memory bays | |
| Rack/blade format | |
| Development Server | |
| Type of operating system | |
| Type of remote management interface | |
| Type of processors | |
| Processor frequency | |

| | |
|-------------------------------------|--|
| Bus frequency | |
| Memory size | |
| Type of memory | |
| Total number of memory bays | |
| Number of free memory bays | |
| Rack format | |
| Networks | |
| Type of management network hardware | |
| Number of switches | |
| Type of power supply | |
| Type of network control hardware | |
| Number of switches | |
| Type of power supply | |
| Type of data network hardware | |
| Number of switches | |
| Type of power supply | |
| Storage | |
| Disk bay make / model | |
| Proposed RAID system | |
| Theoretical bandwidth | |
| Type of high-performance disks | |
| Number of high-performance disks | |
| Type of standard disks | |
| Number of standard disks | |
| Input/Output (IO) Nodes | |
| Number of IO nodes | |
| Number of processors per node | |
| Number of cores per processor | |

| | |
|--|--|
| Operating system | |
| Type of power supply | |
| Type of remote management interface | |
| Type of processors | |
| Processor frequency | |
| Bus frequency | |
| Memory size | |
| Memory type | |
| Total number of memory bays | |
| Number of free memory bays | |
| Rack format | |
| Disk type | |
| Disk volume | |
| Redundant servers | |
| Software | |
| Type of shared file system | |
| Control tool | |
| Management tool | |
| Monitoring tool | |
| Compilation tool | |
| Services | |
| Hardware procurement and delivery | |
| Hardware testing and operation | |
| Software integration, installation and operation | |
| Skills transfer | |
| Consulting services for one year | |
| Documents on configurations and procedures | |
| Three-year D+1 on-site hardware warranty | |

| | |
|---------------------------------|--|
| Three-year D+1 software support | |
|---------------------------------|--|

V. POWER EQUIPMENT

5.1. Background

The purpose of these technical and functional specifications is to define, together with plans, all the works and supplies required to complete the electrical works involved in the establishment and operation of the RCC at the Faculty of Engineering of the University of Djibouti.

5.2. Scope of Services

5.2.1. *Definition of Works Envisaged*

The works covered by this component of the contract include:

- ✓ Supply, installation and commissioning of a standby generator.
- ✓ Supply and installation of distribution equipment including:
 - Cabinets
 - LV cables
- ✓ All cable trays and casings in accordance with plans and these specifications, including nozzles, caulking, protective conduits, etc.
- ✓ The internal electrical installations of various premises, in accordance with plans and these specifications.
- ✓ Lighting installations for various premises, in keeping with plans and these specifications.
- ✓ Provision of emergency lighting in accordance with these specifications.
- ✓ Earthing of all electrical installations and equipotential bonding networks; and
- ✓ All telephone, computer, Wi-Fi, fire alarm and video surveillance cabling, ducts and equipment.

5.2.2. *Scope of Services*

- ✓ Protection of existing structures, restoration of structures damaged during the execution of works and clean-up upon completion of works.
- ✓ All tests, installation and operational documents.
- ✓ Preparation of work plans and training of maintenance staff.
- ✓ Protection of all electrical equipment supports against corrosion.
- ✓ The drilling, filling, and sealing of recesses and grooves, as well as all sealing and fitting accessories for equipment installed under this component must be carried out under the component; and
- ✓ All works, supplies and miscellaneous services required for the smooth and complete execution of works, in accordance with the applicable regulations and contract documents, as well as the protection and preservation of supplies and works during the construction period until acceptance of works.

5.3. Miscellaneous Obligations

Prior to the award of the contract, the Contractor shall provide feedback on this study regarding the operation of the facility, the method of execution as described, the nature of the equipment and materials used, etc.

After this period, the Contractor shall be responsible for any modifications required to comply with standards, to enable the facility to function or to enable equipment to be installed.

The Contractor shall familiarize himself/herself with all relevant information, especially:

- ✓ building plans (type of premises, wall and floor structure, etc.)
- ✓ plans for the conveyance and location of technical equipment (air conditioning, appliances, etc.); and
- ✓ shutters requiring power supply to know the type, power and location of cables to be provided for the shutters.

The Contractor shall not order any equipment without the prior approval of the Beneficiary, that is the University of Djibouti, or its Technical Controller regarding the make and references of proposed equipment. He/she shall ensure the proper conservation and protection of his/her equipment until the provisional acceptance of works.

The Contractor may not begin work without first submitting plans and construction drawings to the Consulting Engineer. These plans shall be drawn to a scale of 1/100 and 1/50 in accordance with the development and construction plans.

Acceptance of these documents shall, in no way, reduce the Contractor's full liability.

5.4. Regulations

The entire centre shall comply with the requirements and specifications of the following statutory instruments:

- ✓ IEC standards and recommendations.
- ✓ Unified technical documents (UTD).
- ✓ Standards and recommendations published by the Union Technique de l'Electricité (UTE), especially NFC 11-200, NFC 15-100, NFC 13-100 - NFC 13-200 - NFC 14.100.
- ✓ Power supply authority's specifications.
- ✓ Safety regulations against the risks of fire and panic in public buildings, as last amended by the Orders of 25 June 1980 and 12 November 1984.
- ✓ Decree of 14 November 1988 and its addendum on the protection of workers (C12100).

5.5. Generator

5.5.1. Background

Scope of works

The following services will be provided under this component:

-
- ✓ Supply and installation of a standby generator.
 - ✓ Supply and installation of exhaust fume evacuation systems.
 - ✓ Supply and installation of complete engine cooling systems.
 - ✓ Supply and installation of complete ventilation systems.
 - ✓ Supply and installation of charger-rectifiers and sealed lead-acid batteries.
 - ✓ Supply and installation of automatic generator control cabinets.
 - ✓ Supply and installation of power connection, remote control and signal cables.
 - ✓ Supply and installation of circuit breakers.
 - ✓ Supply and installation of normal/emergency two-way switch.
 - ✓ Sealing and assembly of generator equipment.
 - ✓ Testing and operation of generating sets; and
 - ✓ Training of the Beneficiary's operation and maintenance staff.

Testing

All on-site generator tests shall be carried out in the presence of the Beneficiary's representatives or Technical Controller.

Factory test

Programme

The minimum programme will include the following checks on each generator

- ✓ Checking electrolyte levels and the capacity of each component.
- ✓ 1/2 charge for 1/4 hour.
- ✓ 3/4 charge for 1/4 hour.
- ✓ 4/4 charge for 1/2 hour.
- ✓ 10% overload for 5 minutes.
- ✓ Safety tests.
- ✓ Number of starts attempts test.
- ✓ Information feedback (faults, remote control, etc.).

However, the Beneficiary or its Technical Controller shall reserve the right to request any additional tests they deem necessary.

Measurements carried out

The following measurements shall be made for the different load conditions:

- ✓ Power.
- ✓ Speed.
- ✓ Exhaust fume temperature and appearance.
- ✓ Voltage regulation control.
- ✓ Frequency control.
- ✓ Noise levels in accordance with current standards and in strict compliance with the project acoustic file.

Voltage, amperage and frequency shall be recorded on recorders during tests and load changes. After the tests, all test documents (reports, certificates, etc.) shall be handed over to the Beneficiary.

Electromagnetic emission and immunity tests including:

- ✓ Measurement of radiated electromagnetic emission.
- ✓ Measurement of electromagnetic emissions.
- ✓ Electromagnetic discharge immunity test.
- ✓ Fast transient (BURST) immunity test.
- ✓ Radiated electromagnetic immunity test.

These tests shall be carried out in accordance with the reference standards in force, especially EN55011 - EN55022 - EN50082.1 - EN50082.2 - EN50081.1 - EN50081.2 - IEC 1000.4.1 - IEC1000.4.2 - CEI ENV 50140 - IEC1000.4.4 - CEI 110.24.

5.5.2. *Generator Characteristics and Installation*

Alternators

- ✓ Three-phase voltage: 380/220V \pm 5%, regulated by a suitable device.
- ✓ Frequency: 50 Hz \pm 1 Hz static.
- ✓ Speed: 1 500 rpm.
- ✓ Coupling: star, neutral and distributed.
- ✓ Type: Tropicalized.
- ✓ Insulation class: F.
- ✓ Temperature rise class: H.
- ✓ Unit power under COS ϕ 0.8:
 - Continuous: 200 KVA.
 - Back-up: 220 KVA.

The alternator should operate on the self-executed principle. The voltage will be rectified by a rotating diode device (or similar), filtered and regulated by a thyristor device (or similar). The fuel reserve should be sufficient for 36 hours of operation. A remote measuring device should enable safety services to check the reserve status and activate a signal as soon as it is depleted.

The safety equipment should be switched on within 15 seconds. Provision shall be made for six start attempts.

Diesel engines

Characteristics

- ✓ Use: backup.
- ✓ Speed: 1 500 rpm.
- ✓ Fuel: liquified petroleum gas.
- ✓ Cylinders corresponding to power ratings.
- ✓ Electric start for the standby generator.
- ✓ Electric and pneumatic start for the standby generator.

-
- ✓ The engines are supplied in working order, with oil topped up at the Contractor's expense, and with all the necessary accessories, including:
 - Electric starters
 - Exhaust system
 - Exhaust silencer allowing a noise level of 65 dBA outdoors at 5 m from the exhaust pipe
 - Oil, water and fuel filters
 - Fuel injection pump with solenoid valve
 - Fuel injectors
 - Crankcase oil preheating resistor
 - Oil pumps
 - Engine speed governor
 - Automatic control panel
 - Automatic engine shaft turning device
 - Guards on rotating parts
 - Manual drain pump

 - ✓ Spares and tools:
 - The generator is supplied with a set of spare parts and a toolbox for 1 000 hours of operation as detailed below.

Cooling

The engine is water-cooled in a closed circuit. The system will mainly consist of:

- ✓ A motor-driven circulating pump.
- ✓ A radiator with large bundles, mounted at the front of the unit, with a fan driven directly by the engine. The dimensions of the fan are designed to produce as little noise as possible.
- ✓ An oil temperature exchanger.
- ✓ A thermostat in the circuit that regulates the flow of circulating water to maintain a relatively constant temperature regardless of load.

Hot air is expelled through a galvanized steel duct that surrounds the unit's radiator and is connected to a duct that expels air from the room.

Coupling

The engine and alternator should be mounted on a chassis consisting of a solidly braced metal frame made of sectional steel. The engine and alternator should be directly connected through flexible coupling.

Mounting

The unit is fixed to its base using anti-vibration mounts to prevent vibration being transmitted to the structure. The minimum anti-vibration efficiency should be 90%. The base itself should be fixed to the slab by means of an elastic material.

5.5.3. *Starting*

Electric starting

The generator should be started by means of a 24V starter with a centrifugal circuit breaker, supplied by an automatic power supply unit in a cabinet comprising:

- ✓ Sealed lead-acid batteries of appropriate capacity operating in floating mode.
- ✓ A 220V 50Hz charger provided to ensure rapid recharging in the event of a large accidental discharge of batteries; and
- ✓ Overcharge in 5 hours at normal operating speed at 0.2 x load as follows:
 - Every month if the operating voltage is between 1.4V and 1.45V per element.
 - Every three months if the operating voltage is between 1.45 and 1.50V per element.
 - Every six months if the operating voltage is between 1.50 and 1.55V per element.
- ✓ Allow for a generation process comprising discharge to exhaustion, followed by a double charge, to be carried out once a year.
- ✓ Monitoring devices (charger current ammeter and battery voltage voltmeter); and
- ✓ HPC fuse for the 24V supply.

5.5.4. *Evacuation of Combustion Gases*

The exhaust pipes should be made of 20/10 black steel and have special high temperature insulation along their entire length. The pipes should be connected to the engine exhaust hoses, avoiding small radius bends. They should be fixed to the walls with elastic hangers.

5.5.5. *Fire Protection*

The generator should be supplied and installed with two 9-litre fire extinguishers for electrical fires, as well as a 50-litre sandbox with shovel.

5.5.6. *Conventional Paintwork and Posters*

All equipment and piping (engines, alternators, cabinets, fuel and water pipes, etc.) should be completely painted:

- ✓ The colours of the cabinet and generator should be determined in consultation with the main Contractor.
- ✓ All statutory plates should also be affixed.

5.5.7. *Control Cabinet*

An automatic generator control cabinet is built primarily to house all the electrical command and control equipment for the generator, namely:

- ✓ One voltmeter and one seven-position voltmeter switch.
- ✓ Three ammeters.
- ✓ A single tuning fork frequency meter.
- ✓ The following indicators:
 - Availability of mains voltage.
 - Availability of alternator voltage.

-
- Generator circuit breaker position.
 - Generator circuit breaker alarm.
 - Water temperature alarm.
 - Oil temperature alarm.
 - Oil pressure alarm.
 - Overspeed alarm.
 - Too slow or no start alarm.
 - Low fuel alarm.
 - Battery alarm.
 - Pre-heating alarm.

As well as any other signal deemed useful for the smooth functioning of the generator.

- ✓ 1 reset fault push-button
- ✓ 1 Lamp test push button
- ✓ 1 horn stop push button
- ✓ 1 automatic on/off switch test
- ✓ 1 automatic emergency stop switch test
- ✓ 1 override 'off' position switch with battery charger
- ✓ Controls for various motors and auxiliary circuits
- ✓ Relays and control chains
- ✓ One horn
- ✓ Protection against LV overvoltage (50 Hz surge arrester with shock wave absorption capacity for an 8/20 wave).

5.5.8. *Normal Emergency Transfer Switch*

The standard emergency transfer switch consists of two 4 x 320A contactors which are electrically and mechanically interlocked.

5.5.9. *Protective Circuit Breakers*

- ✓ 320 calibres.
- ✓ 4 x 320A.

5.5.10. *Generator Control*

The selector switch should have:

- ✓ Position I: Off. The generator is not operational, but the 'mains' and 'load' bus bars remain active.
- ✓ Position II: Automatic. Start-up delay of 5 seconds to eliminate transient faults. Start up as soon as there is a power failure or loss of one or more phases and delivers power to the backed-up circuit in less than 10 seconds (three start attempts provided). Switching of contactors with a 60-second delay after the mains supply is restored and the generator shut down two minutes after restoration of power. An additional delay will be provided for the safety unit to make an effective request after the three attempts to start the standby generator.
- ✓ Position III: Manual. The generator is turned on and stopped directly from the control console.
- ✓ Position IV: Testing

5.5.11. *Electrical Works*

Power and control pipework

- ✓ All the power and control connections necessary for the functioning of generators will be provided, especially:
- ✓ Between the generator and cabinet.
- ✓ Between the rectifier, battery and starter.
- ✓ Etc.

5.5.12. *Earthing*

The earthing of the electrical installations is carried out in accordance with the TT direct earthed neutral system, except for the standby generator where earthing should be carried out using the IT isolated neutral system.

There should be two earthing points, one for the alternator neutral and the other for the generator.

Earth electrode

Each earth electrode should consist of three copper-steel rods installed in a 0.8 x 0.8 x 0.8 cubic metre masonry shaft with a reinforced concrete cover and angle iron pre-frame. The length of the rods should be such that the resistance does not exceed 03 ohms at a minimum of 2.00 metres.

Ground connection

Alternator neutral

A 1 x 6 mm² insulated copper cable should be used to connect each generator's neutral earthing point to the alternator. The alternator neutral connection from the terminal strip should also be made with an insulated copper cable of the same cross section.

Metal masses of generators

Each of the generator earth terminals should be connected to the generator by a 1 x 35 mm² insulated copper cable. The metal masses of the generator should be linked without a measuring bar using a 60/10 copper trolley. Precautions must be taken to ensure that if one mass is disconnected from the earthing network, all other masses connected to it remain secure.

These connections concern:

- ✓ Diesel generator frame
- ✓ Battery charger frame
- ✓ Control cabinet
- ✓ Fuel tank

- ✓ Etc.

5.5.13. Servicing During the Warranty Period

The servicing of the generator, including parts and labour, will be covered during the warranty period which is one year from provisional to final acceptance.

5.5.14. Spare Parts and Toolbox

List of spare parts for the generator key:

Engine

- ✓ 6 oil filters.
- ✓ 4 fuel filters.
- ✓ 1 A-belt.
- ✓ 3 B-belts.
- ✓ 2-cylinder head cover gaskets; and
- ✓ 1 air filter cartridge.

Generator

- ✓ 1 24V solenoid power supply relay.
- ✓ 1 pressure switch (low oil pressure).
- ✓ 1 thermostat (high water temperature).

Control cabinet

- ✓ 1 10A - 24V automatic battery charger.
- ✓ 1 main board (wiring).
- ✓ 1 expansion card.
- ✓ 1 24 V DC electronic card.
- ✓ 1 220 V AC FINDER relay.
- ✓ 1 indicator; and
- ✓ 1 set of fuses.

Alternator

- ✓ 1 voltage regulator.
- ✓ 1 set of diodes + suppressor.

Toolbox including

- ✓ 1 set of hex wrenches.
- ✓ 1 set of French screwdrivers.
- ✓ 1 set of American screwdrivers.
- ✓ 1 set of pipes wrenches.
- ✓ 1 set of open-end wrenches.
- ✓ Universal Pliers.
- ✓ Gas operated pliers.
- ✓ 1 adjustable wrench; and
- ✓ 1 small hammer.

5.6. Control and Protection Cabinets

5.6.1. Presentation

IP 55 waterproof cabinets should be used in damp places and outdoors and comprise:

- ✓ a self-extinguishing moulded insulation (glass-fibre reinforced polyester) box and door, resistant to chemical agents and with high mechanical resistance; or
- ✓ a 12/10 steel sheet metal body and lockable door, adequately treated against corrosion and sea air with textured epoxy-polyester.

The cabinets should be made of 12/10 electro-galvanized sheet metal, treated inside and outside with an anticorrosive coating of oven-baked polyester-epoxy powder in RAL grey or beige.

The door should be solid and lockable with invisible hinges. Each cabinet should have a basket to hold documents specific to its equipment. The degree of protection of the cabinets will depend on the external conditions in which they are installed. The minimum degree of protection should be IP 41-7.

5.6.2. Design

The design and construction of cabinets must comply with NFC 63-421 (EN 60 - 439.1). All internal equipment should be mounted either on DIN rails or on a universal cadmium-plated steel grid. The sizing will be as shown in the diagram, leaving room for reserves. Signal lamps and any control and measuring devices should be located at the front. Allow sufficient space around all equipment for wiring and servicing. All live parts must be protected and made inaccessible by removable insulation with screws to prevent accidental contact (faceplates).

Cabinets will also be produced to the following specifications:

- ✓ Fittings mounted on DIN rails or on a metal frame.
- ✓ Wiring in U 500 SV stranded wire or in PVC trunking of sufficient size and ventilation, less than 75% filled.
- ✓ Front panel switchgear protected against direct contact.
- ✓ Remote control and signalling must be connected to terminals; and
- ✓ Cable entry and exit via cable glands of suitable diameter.

5.6.3. Equipment

Each cabinet will include:

- ✓ An input device consisting of a circuit-breaker or a switch-disconnector.
- ✓ General differential or non-differential circuit-breakers for the protection of lighting and motive power circuits.
- ✓ One or more busbars or distributors with a cross-section equivalent to that of power cable conductors with a transparent protective cover.
- ✓ A set of all-pole circuit-breakers with PDC ratings compatible with the short-circuit current in the busbar.
- ✓ Modular remote-control devices such as remote switches, timers, dimmers, time switches, etc.

-
- ✓ A suitably labelled feeder terminal block, distinguishing between power and control terminals; and
 - ✓ An earth terminal block.

5.6.4. *Connection and Registration*

Power cables entering a cabinet or box should terminate in loops on each phase to enable balance to be checked. Control and signalling cables or conductors and power cables or conductors up to 10 mm² should be connected to terminal blocks. Cables larger than 10 mm² should be connected directly to outgoing feeders. The connection of wires to the switchgear must be made by crimping ferrules onto conductors with marked insulation sleeves. Indicator lights and front panel controls should be connected inside the cabinet using removable terminal blocks. All cabinets and boxes should be identified by engraved dilophane labels. All feeders should be identified through engraved dilophane labels. All terminals should be individually identified. All cables should be identified through equipotential marking with numbers identical to those on the terminals.

5.7. **Distribution Network**

5.7.1. *Main Cables*

The power cables to be used are U1000 R2V cables. The cable network should terminate either:

- ✓ on cabinets and boxes under this component, providing the distribution of terminal equipment or supply to section cabinets; or
- ✓ on boxes or switches awaiting connection in premises near equipment not covered by this component.

All cables should be individually identified through engraved Dilophane plates secured using Colson collars and fitted with the necessary lugs for their upstream and downstream connections. These terminals should be crimping terminals with insulating sleeves and marker holders.

5.7.2. *Secondary Cables*

These are all the cables from some main cabinets that supply power to other cabinets, section boxes, and FM equipment. They are either NYY or U1000 RO2V cables.

5.7.3. *Terminals*

These are all the cables supplying power to the following terminals:

- ✓ Fire alarm control unit.
- ✓ FM extractors.
- ✓ Ventilators – splits.
- ✓ FM equipment.
- ✓ Etc.

These are U500 VGV or U1000 RO2V cables, with sections specified on the drawings.

5.7.4. Trenches

Regardless of the terrain and obstacles, the trench dimensions should be as follows:

- ✓ Depth: 0.8 m or 1 m.
- ✓ Width: at least 0.4 m and 0.5 m.

Each trench should have:

- ✓ An initial 10 cm thick sand bed.
- ✓ One or more PVC nozzles.
- ✓ A second 10 cm thick sand bed.
- ✓ Or a 30 cm layer of concrete instead of sand, if in the event of a road crossing.
- ✓ A 30 cm thick compacted backfill.
- ✓ An approved warning mesh; and
- ✓ A final backfills up to the finished surface.

5.7.5. Manholes

The shafts should have the dimensions specified in the plans. They should be constructed using reinforced concrete with concrete slab covers. They should be installed at intervals of no more than 30 metres and at major changes in direction. Where there is a change of direction, the duct penetrations must be located such that the cables have the maximum bending radii.

5.7.6. Nozzles

The nozzles are made of PVC in accordance with NFC 150 161 standards and assembled with interlocks and adhesive. The number and diameter of nozzles to be used in these paths will be specified in the design. Nozzles must be installed in a trench using the manufacturer's bend radii on a 0.7 m bed of sand on a finished surface that is level and free of protruding objects. A warning grid should be installed at a distance of 0.30 m to indicate the presence of these new networks during excavation. Concrete rings spaced approximately 6 metres apart should be used to make the ducts robust. The nozzles should be installed in such a way as to ensure correct alignment. They must be spaced at least 5 cm apart and placed on successive 10 cm thick concrete layers. Nozzles installed across the road must be embedded in concrete.

5.8. Cable Trays

All distribution cables are laid on flush edge wire cable trays with wire diameters optimized for the load and fitted with an IEC 61537-compliant UNIFIL sliding pre-splice.

Welded mesh cable trays should be manufactured using hot-dip galvanized steel and sized according to the attached bill of quantities. They should be mounted on brackets with appropriate slots for inserting and securely fixing the cable tray without using screws or tools.

All screws, fasteners and supports used to secure and maintain cable trays must be galvanized or properly rust proofed and painted. The anchors used to fix supports to the concrete slabs must be made of metal suitable for such supports.

Equipotentiality of cable trays: cable trays should be connected to the earth circuit at each end by copper braids of the appropriate cross-section and equipotential connections should be made between various slabs using shunts produced using 6 mm² green-yellow flexible conductors. The cable trays must be cut by shearing; no disk grinder may be used. Any element cut with a grinder should be removed and discarded, even after the cable has been installed and laid.

5.9. Lighting Installations and Sockets

5.9.1. Nature of Circuits

The Contractor shall install all the branch circuits shown on the drawings. Each circuit shall be identified at its start and end points (junction and branch boxes) through the corresponding number.

The neutral, phase and protective conductors should conform to the following colour code:

- ✓ Light blue for neutral.
- ✓ Brown for phase 1.
- ✓ Black for phase 2.
- ✓ Red for phase 3; and
- ✓ Yellowish green for PE conductor.

In general, lighting circuits must be installed using U500 V conductors laid in:

- ✓ ICD 6 or ICT P.E. No. > 20 sheaths for recessed installation in masonry, suspended ceilings and solid slabs.

Power supply cables for lighting circuits must be installed using U500 VGV cables laid on cable trays between the cabinet and the first device, and U500V conductors in ICD6-PE conduits of No. ≥ 25 between lighting devices.

The PC circuits should be installed using:

- ✓ U 500 V conductors in ICD6 P.E. ducts No. > 25 laid on the screed and protected with cement against any deterioration: or
- ✓ HO7 V cables laid in cable trays.

5.9.2. Method of Installation

The Contractor shall carry out all the necessary installation works, including the making and filling of recesses and the brackets and clips for fixing the ducts and cables in the suspended ceiling or surface.

Cables laid on the floor must be protected from damage with concrete mortar.

Ducts laid in suspended ceilings should be fixed to solid ceilings using CLIPSOTUBE or ATLAS clamps at a rate of one fixing point every 1.50 metres and to roughcast using galvanized iron

wire. Circuits and conductor cross-sections should be aligned as shown on the drawings. Recessed conduits should be aligned routed using galvanized iron wire.

The conductors should be installed after the ducts have been laid and should be easy to remove.

All luminaire power supplies should be terminated in junction boxes for each supply located in the wall or ceiling. Suspended ceiling supplies should be brought down to the bare suspended ceiling surface before connecting them to connectors or terminal blocks. The Contractor shall be responsible for locating the termination points of circuits in the suspended ceiling and for making cuts in the suspended ceiling.

5.9.3. *Junction and Flush-mounted Boxes*

They are made of moulded material with threaded flanges. They should all have impermeable screw covers.

Derivations

All connections should be made to terminals in junction boxes which can also be used to displace fireplaces. The terminals must pass the 850° C glow wire test. The junction boxes should be sealed with stainless steel plugs. No splicing will be tolerated in the installation between two successive boxes; cables or conductors should have the same length.

5.9.4. *Circuit Layout*

Lighting fixtures and sockets should be powered from individual lighting cabinets with the distribution of power depending on the area of influence of each cabinet. Power supply should be either U500 V conductors or U500 V.G.V cables, as shown on the drawings. Each conduit should have its own supply circuit. As a result, no conduit may be used to carry more than one supply circuit.

It will be the responsibility of the Contractor to balance the load on the different network phases:

- ✓ At the level of each circuit, in the case of a three-phase + neutral circuit; or
- ✓ On the switchboard, in the case of a single-phase circuit (P/P or P/N).

The balancing process should be about 10% of the theoretical intensity for an installed power of 100% for lighting and 40% for sockets.

Lighting in each compartment should be provided by at least two terminal circuits selectively protected from indirect contacts.

5.9.5. *Small Appliances*

Overview

Under this component, the bidder must supply, install and connect all small appliances including:

- ✓ Switches.
- ✓ Push buttons.
- ✓ Power outlets.

Characteristics and References

Switches and pushbuttons should have silver contacts, and the type of ignition should be as shown on the drawings. All sockets should be equipped with a 250 V rated earth pin.

The waterproof sockets should be fitted with a self-folding cover and seal and should be of the industrial type, visible on worktops.

The flush-mounted boxes for switches and sockets should be made of fire-resistant insulating material for flush-mounting in the brickwork and metal frames.

N.B: The Contractor shall indicate in his/her bid the brands and references of the proposed equipment and provide a sample of each type to be selected by the Beneficiary prior to installation.

Installation heights

The installation heights from the finished floor should be as follows, unless otherwise indicated on the construction plans:

- ✓ Switches and pushbuttons = 1.20 metres unless otherwise specified on the construction plans.
- ✓ Sockets = 0.30 metre, unless otherwise indicated on the plan.
- ✓ Telephone sockets – INF = 0.30 metre, unless otherwise indicated on the plan; and
- ✓ Waterproof socket = 1.20 metres for the plant room.

5.9.6. Light Controls

The Contractor shall provide the various control equipment (cables, switches, pushbuttons and boxes). This equipment should be installed in all rooms, except the plant rooms. The control of the lighting circuits is normally carried out locally by means of conventional control devices, the type of ignition of which is indicated on the construction plans.

5.10. Chandeliers

5.10.1. Lighting

Chandeliers shall be installed in accordance with the plans. Their number, type and wattage shall be specified in the plans. The chandeliers should be Class 1 LEDs with an IP rating compatible with that of the premises.

Lighting should be mainly provided by the following chandeliers:

- ✓ LED panel 120x20 or 60x20 or 60 x 60 cm 22W.
- ✓ 12W LED window.
- ✓ 12W LED waterproof porthole.

-
- ✓ 12W LED wall light.
 - ✓ 12W waterproof LED wall light.
 - ✓ 12W LED wall light.
 - ✓ 12W waterproof LED wall light.
 - ✓ 6W LED spotlight; and
 - ✓ 50W LED spotlight.

5.10.2. Ventilation

The air circulation fan should be used in the rooms as indicated on the plans to reduce air stratification. The fan should be installed in the ceiling and have the following main characteristics:

- ✓ Blades in sheet steel with surface protection or in aluminium.
- ✓ Silent electric motor, single-phase 230 V, 50 Hz, aluminium body.
- ✓ White finish or as chosen by the architect/decorator.
- ✓ Noise level of less than 52 dBA; and
- ✓ At least 3 blades with a diameter of 1 200 and/or 1 600 mm.

The blades should be statically and dynamically balanced. They should be fitted with a vertical suspension arm with a system for fixing to the original ceiling and any levelling rod depending on the height of the room.

5.10.3. Security Lighting

Type C security lighting should be used.

Guidance lighting:

- ✓ It should be provided by stand-alone emergency lighting units (SECUs) of 60 lumens, generally a filament lamp with an autonomy of one hour and bearing an exit sign.

N.B: These emergency lighting units must contain:

- ✓ Incandescent, fluorescent or LED lamps.
- ✓ A waterproof nickel-cadmium battery with a one-hour autonomy.
- ✓ A constant current charger.
- ✓ A discharge limiter and a quiescent switching device.
- ✓ The connection of the stand-alone security lighting units shall comply with the requirements and standards for normal lighting installations.

5.11. Earthing Circuit

Buildings and electrical equipment should be earthed by belting below the trench and cabinets should be connected to the trench via earthing points equipped with three stakes housed in manholes.

5.11.1. Earth Electrode

It should consist of one or more interconnected posts, each at least 2 metres long, driven vertically below the permanent moisture level. These stakes should be made of copper.

In some cases (very high ground resistivity), earthing systems should be installed at the bottom of building excavations (drought and snow).

5.11.2. Earthing

Earthing is the process of connecting metal masses that may become energized by an insulation fault in electrical equipment to an earthing point via a conducting wire.

Masses

- ✓ Metal body of household electrical appliance.
- ✓ Exposed electrical wiring in metal conduit, metal frame.

Conducting elements

These are elements most likely to propagate a potential, such as:

- ✓ Metal gas, water and heating piping, metal frames, etc.

5.11.3. Main Equipotential Bonding

It connects the following conducting elements to the main protective conductor:

- ✓ Metal water, gas, sewage piping, metal sheathing for electrical and telecommunications cables, etc.
- ✓ Accessible metal elements of buildings: central heating column, steel frame, etc.

5.12. Fire Detection

The RCC will be equipped with a fully automatic fire detection system whose function will be to:

- ✓ signal a fire.
- ✓ localize the fire by zone to enable emergency services to intervene quickly.
- ✓ signal any fault in the installation.

5.12.1. Type of detection

Fire detection will be optical in nature (photoelectric smoke detection and light scattering), responding primarily to light white smoke. The detectors will be both point and plug-in, with adjustable sensitivity.

5.12.2. Installation Structure

The installation will comprise:

-
- ✓ Detection devices (detectors) that respond to phenomena associated with fires or their origin. The detectors in each area are linked by the same electrical circuit (loop) connected to a monitoring and transmission unit in the report centre.
 - ✓ Monitoring and transmission units that receive information from each area and control the quality of the electrical circuits; these units are grouped together in a cabinet that makes up the report centre.
 - ✓ Control devices.
 - ✓ Audible alarm devices; and
 - ✓ Various 'main source' and 'emergency source' power sources.

5.12.3. Loop Delimitation

The establishment will be divided into intervention loops to facilitate rescue and firefighting operations and to improve the functioning of the automatic detection and fire alarm systems.

5.12.4. Panic Buttons

They should be of the "glass breaking" type and should consist of a red painted box with a glass to be broken which opens a current, and a weight attached to the box by a chain.

The arrangement is shown on the plans.

5.12.5. Audible Warning Devices

The warning horns must be 24V sirens. The power of these horns should be sufficient to cover the entire area to which they are assigned.

The audible warning devices should be of Class B, with a power of 90 dB at approximately two metres.

They must consist of a high-power loudspeaker combined with an electronic modulation circuit and housed in boxes.

5.12.6. Detectors

They must be:

- ✓ Punctual.
- ✓ Plug-in.
- ✓ Factory-set sensitivity.

The optical smoke detector operates based on the light scattering principle. The photoelectric cell of a light barrier is placed in a labyrinth chamber allowing only light scattered by smoke particles to reach the electronic detection device. When the smoke concentration exceeds a predetermined light intensity threshold, the detector sends an alarm signal to the control unit. The electronic mechanism of the detector will maintain this alarm condition until the control unit returns the detector to normal operation.

Alarm signals are emitted by the photoelectric sensor in the form of pulses. Combined with the downstream integration stage, this system provides excellent protection against external interference.

In the event of an alarm, a warning light on the detector (action indicator) makes it easier to locate the source of the alarm. At the same time, this indicator allows rational control of the detector's operation.

The detector should not contain any moving parts or components subject to wear. It should be ready for use after each alarm. Its sensitivity should be adjustable and electrically controllable.

The detector can be used in a temperature range of 0°C to +50°C with a minimum humidity of 80%.

5.12.7. Cables

The cables used should be multipair cables with a shield to prevent the induction of parasitic currents, with a suitable cross-section (9/10 mm²), except for alarm siren power supply cables with a type CR1 1.5 mm² cross-section.

5.12.8. NOVEC1230 Fire Extinction System

The fire suppression system used should be NOVEC1230 gas based. The successful bidder shall prepare detailed working drawings and co-ordinate with other agencies on site. The critical area shall be divided into several zones and each time a fire is detected in any of the zones, an announcement shall be made at the forward air control post (FACP) and the extinguishing system in that particular zone shall be automatically activated. Gas flooding will be considered throughout the server room area of the data centre, above the suspended ceiling, rack area and access floor.

The clean agent fire suppression system should consist of two 80-litre seamless cylinders, a discharge hose, a flexible discharge hose, electric, pneumatic and manual actuators, panels, a set of valves, a manifold with all standard fittings and all other mounting accessories necessary to provide a complete operating system that meets the applicable requirements of NFPA 2001 Clean Agent Fire Suppression Systems, NFPA 70 National Electric Code, NFPA 72 National Fire Alarm Code or ISO standards. A microprocessor-based gas release panel with two release circuits, battery and charger should be provided. The system should operate in accordance with UL/FM approvals and be installed in accordance with all applicable local codes and standards.

The design of the system shall be based on the specifications contained in this NFPA 2001 Standard and in accordance with the requirements specified in the agent's design manual.

The bidder shall confirm compliance with the above in his/her bid. The gas storage cylinder shall be a high pressure, flat type, concave bottom, seamless steel gas cylinder that complies with IS 7285 with a neck ring. Welded cylinders not approved by CCE will not be accepted.

Documentation

The bidder shall prepare and submit, together with bidding documents, the isometric drawing of piping, backed by a hydraulic flow calculation prepared using the agent's design software. The calculations shall validate the filling density chosen by the bidder. The bidder shall also provide calculations to substantiate the amount of agent considered for the system. The successful bidder shall submit along with the supply invoice a certificate of authenticity of the agent from the engineering system company, duly verified by the manufacturer. The bidder shall supply all drawings and the operation and maintenance manual within the framework of management. The as-built drawing shall be exactly the same as the isometric drawing submitted with the flow calculation prior to the commencement of the work.

5.13. Inverters

Besides the generator, two high-capacity double conversion inverters should be installed to provide continuous power to the RCC. The inverters, batteries and corrugated cardboard should be in the inverter room of the RCC. The batteries should be installed on an open rack next to the inverter and must have a minimum autonomy of one hour. The inverter will be of the Green Range type with rack-mounted batteries.

Each inverter will have the following characteristics:

- ✓ 60kVA power with an autonomy of 30 minutes.
- ✓ 400V voltage on mains 1 and 400V + neutral on mains 2 three-phase rectifier/charger.
- ✓ TNS neutral system.
- ✓ Static contactor.
- ✓ Manual maintenance by-pass.
- ✓ Communication card to the BMS and Ethernet communication card to services; and
- ✓ 20 batteries on a type SMF and VRLA 12V 240AH capacity open rack with an autonomy of one hour.

5.13.1. Automatic by-pass

Each UPS (inverter) should have an automatic by-pass to transfer uninterrupted power from the inverter to the by-pass network and vice versa during specific operating procedures or in the event of an anomaly (overload, downstream short-circuit, abnormal rise in room temperature).

The operator could also control the transfer manually from the control panel. In the event of a malfunction in the detection circuit, the by-pass should lock onto one of the channels (inverter or emergency network), according to the operator's predefined choice, in order to avoid repeated abnormal transfers. The number of transfers must be programmable.

The system should allow for asynchronous transfer when operating conditions permit. This programmable function will ensure transfer to the back-up source in the event of a serious breakdown, even if the inverter and the grid are not synchronized. This asynchronous transfer takes place after a very brief programmable interruption of 10 ms to a few cycles. The by-pass and rectifier inputs will be separated so that they are supplied by two separate and independent sources.

The UPS should be equipped with a back feed detection circuit. In the event of an internal fault in the automatic by-pass, this information will help to open the upstream supply circuit to prevent inadvertent upstream power return.

5.13.2. Maintenance by-pass

Maintenance, tests and adjustments will be carried out without disconnecting the load. For this purpose, a set of manual switches (upstream rectifier, upstream automatic by-pass, downstream inverter and automatic by-pass) incorporated in the equipment, will supply the load from the mains (manual by-pass), disconnect and isolate the rectifier, inverter and automatic by-pass.

5.14. Bill of Quantities

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|---|---|------|----------|-------------------------------------|--------------------------|
| I. High-voltage electricity | | | | | |
| 1.1. Earthing network | | | | | |
| 1.1.1 | Supply and installation of an earth connection using a 35mm ² bare copper cable loop beneath the excavation, including earthing outlets and related works. Computing centre premises Set: | Set | 1 | | |
| 1.1.2 | Earthing and interconnection (equipotential bonding) of all cable trays Metal masses of cable trays and masses of servers, racks, inverters etc. Set | Set | 1 | | |
| 1.1.3 | Construction of an 80x80x80 reinforced concrete manhole, including three 2- metre ground spikes and a ribbed sheet metal or cast iron cover with the following dimensions: Set: | Set | 1 | | |
| Sub-total | | | | | |
| 1.2 Electrical cabinets and switchboards | | | | | |
| | Supply, erection and connection of cabinets and switchboards, in keeping with the plans and specifications under this contract, including steel sheet casings, copper busbars, main circuit breakers, divisional circuit breakers, contactors, main and divisional busbars, meters, indicator lights, surge arresters to protect against atmospheric surges, cabling, wiring, painting, locks, earthing, front panel and all ancillary works. | | | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|--|--|------|----------|-------------------------------------|--------------------------|
| 1.2.1 | Computing Centre cabinet Set: | Set | 1 | | |
| 1.2.2 | 01 corrugated sheet metal cabinet in the Server Room Set: | Set | 1 | | |
| 1.2.3 | 02 corrugated sheet metal cabinet in the Server Room Set: | Set | 1 | | |
| 1.2.5 | Supply and installation of a 4P400A compact circuit breaker, including installation accessories Set: | Set | 2 | | |
| Sub-total | | | | | |
| 1.3. Low-voltage electrical conduit | | | | | |
| 1.3.1 | Supply, unwinding, laying and connection of U1000 RO 2V series cables with the following cross sections, including installation and assembly accessories and all related fittings. 4 x 180 mm ² Linear metre: | lm | 100 | | |
| 1.3.2 | 5 x 50 mm ² Linear metre: | lm | 20 | | |
| 1.3.3 | 5 x 35 mm ² Linear metre: | lm | 60 | | |
| 1.3.4 | 5 x 10 mm ² | | | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|---------|--|------|----------|-------------------------------------|--------------------------|
| 1.3.5 | Linear metre: 5 x 6 mm ² | lm | 50 | | |
| 1.3.6 | Linear metre: 3 x 4 mm ² | lm | 100 | | |
| 1.3.7 | Linear metre: 3 x 2.5 mm ² | lm | 50 | | |
| 1.3.8 | Linear metre: 1 x 35 mm ² green yellow | lm | 50 | | |
| 1.3.9 | Linear metre: Supply, installation and assembly of galvanized steel cable trays (high voltage, low voltage and safety), including supports, brackets, covers for trays installed on terraces, installation of accessories and all related fittings. | lm | 100 | | |
| 1.3.9.1 | 100 x 30 with cover Linear metre: | lm | 60 | | |
| 1.3.9.2 | 200 x 30 Linear metre: | lm | 150 | | |
| 1.3.10 | Construction of trenches in all types of soil to a minimum depth of 0.60m and 0.80m, including excavation, backfilling, compaction, marking and related associated works. Linear metre: | lm | 100 | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|------------------------------------|--|------|----------|-------------------------------------|--------------------------|
| 1.3.11 | Supply and installation of permanent virtual circuit (PVC) nozzles with the following diameters for high and low voltage networks, including all related fittings. | | | | |
| 1.3.11.1 | Nozzle diameter 160 Linear metre: | lm | 200 | | |
| 1.3.11.2 | Nozzle diameter 63 Linear metre: | lm | 200 | | |
| 1.3.12 | Construction of an 80 x 80 x 80 reinforced concrete inspection chamber, including a corrugated sheet metal or cast iron cover, with the following dimensions Set: | Set | 4 | | |
| 1.3.13 | Construction of a 90x60x60 reinforced concrete inspection chamber, including a corrugated sheet metal or cast iron cover, with the following dimensions Set: | Set | 4 | | |
| Sub-total | | | | | |
| 1.4. Electric installations | | | | | |
| 1.4.1 | Installation of a light source, including grey ICD6 protective conduits, a power supply line from the corresponding cabinet using U500 V conductors or U500 VGV section cable as shown on the plans, junction and branch boxes and all associated services. Set: Supply, installation and connection of the following lighting control equipment, including protective conduits and conductors from the junction and distribution box, and all related fittings. | Set | 50 | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|---------|--|------|----------|-------------------------------------|--------------------------|
| 1.4.1.1 | Single light switch Set: | Set | 2 | | |
| 1.4.2.2 | Dual light switch Set: | Set | 4 | | |
| 1.4.2.3 | On/off switch Set: | Set | 2 | | |
| 1.4.2 | Installation of the following outlet, including complete outlets, protective conduits with diameters as shown on the drawings, conductors, flush-mounted boxes, junction boxes, power supply lines from the associated control and protection cabinets and all related fittings: | | | | |
| 1.4.2.1 | Single phase 2P + T, 10/16 A, 220 V outlet fitted on side panels Set: | Set | 4 | | |
| 1.4.2.2 | Single-phase 2P+T, 10/16A, 220V corrugated outlet fitted on side panels Set: | Set | 4 | | |
| 1.4.2.6 | Floor box fitted with a 1P +N+ T, 16 A industrial socket outlet Set: | Set | 64 | | |
| 1.4.2.7 | Floor-mounted box with 1P + N + T, 1 + 32 A + industrial socket outlet Set: | SET | 36 | | |
| 1.4.2.9 | Floor-mounted box with 8 2P+T - 10/16A sockets and 4 RJ 45 sockets Set: | Set | 4 | | |
| 1.4.2.8 | Supply and installation of electrical power supply for a split system using | | | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|----------------------|---|------|----------|-------------------------------------|--------------------------|
| 1.4.2.11 | a cable or a 3 x 4 mm ² wire, including a socket, ø 13 conduit and all related fittings. Set: Supply and installation of an electrical power supply for a split system using 3x4 mm ² cable or wire, including a socket, ø 13 conduit and all related fittings. Set: | Set | 4 | | |
| 1.4.2.12 | Supply and installation of a three-phase external power supply using U1000 RO2V series cables with a cross-section of 5x10 mm ² , including protective conduit and all related fittings. Set: | Set | 4 | | |
| 1.4.2.13 | Supply and installation of electrical power for access and control Set: | Set | 8 | | |
| | | Set | 6 | | |
| Sub-total | | | | | |
| 1.5. Lighting | | | | | |
| 1.5.1 | The supply, installation and connection of all functional lighting in accordance with the specifications of this contract, including all related works. Very low 40w square LED recessed ceiling light Unit: | U | 42 | | |
| 1.5.4 | 12W round LED decorative light Unit: | U | 8 | | |
| Sub-total | | | | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|-------------------------------|---|------|----------|-------------------------------------|--------------------------|
| 1.6. Security lighting | | | | | |
| 1.6.1 | <p>Supply, installation and connection in accordance with the plans and specifications of the 1-hour autonomous units, including junction boxes, cables, conduits, labels and all related works.</p> <p>60 lm stand-alone unit</p> <p>Set:</p> | Set | 14 | | |
| Sub-total | | | | | |
| II. Fire safety | | | | | |
| 3.1. Fire detection | | | | | |
| 3.1.1 | <p>Supply, installation and operation of a fire detection system in accordance with the specifications of this contract and plans, including all related works.</p> <p>A fully equipped addressable fire detection system with a capacity of 200 detection address points, combined with a CMSI with a capacity of 20 control points (DAS).</p> <p>Set:</p> | Set | 1 | | |
| 3.1.2 | <p>Supply, installation and assembly of a factory tested NOVEC 1230 clean agent system, complete with all accessories, detector, nozzles and black steel pipes, fire detection and extinguishing unit.</p> <p>160 kg capacity set:</p> | Set | 1 | | |
| 3.1.3 | Addressable optical smoke detector in false floor and false ceiling | | | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|-----------------------|--|------|----------|-------------------------------------|--------------------------|
| | Unit: | U | 11 | | |
| 3.1.4 | Addressable optical thermo-velocity heat detector for false floor and false ceiling | | | | |
| | Unit: | U | 11 | | |
| 3.1.5 | Addressable manual switch with short-circuit isolators | | | | |
| | Unit: | U | 5 | | |
| 3.1.6 | Action indicator | | | | |
| | Unit: | U | 6 | | |
| 3.1.7 | Audio alarm | | | | |
| | Unit: | U | 6 | | |
| 3.1.8 | CO ₂ 5 kg fire extinguisher | | | | |
| | Unit: | U | 4 | | |
| 3.1.9 | Set of NTHG and CR1 telephone cables (9/10) / for detection including protective conduit | | | | |
| | Lot: | Lot | 1 | | |
| 3.1.9 | Lot of CR1 2x15 fire resistant cables for the audio alarm and HVAC controls. | | | | |
| | Lot: | Lot | 1 | | |
| Sub-total | | | | | |
| III. Inverters | | | | | |
| | Supply, installation and commissioning, in accordance with the specifications of the contract, of a rack-mounted inverter with 10-minute | | | | |

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes |
|----------------------|--|------|----------|-------------------------------------|--------------------------|
| 3.1 | autonomy, complete with inverter charger rectifier and static inverter contactor, grouped together in a first cabinet, and sealed lead-acid storage batteries, placed in a second cabinet next to it, protected by circuit breakers, including its connection to the emergency section cabinet, as shown on the plans, and all related fittings. 60 KVA capacity inverter Set: | Set | 2 | | |
| Sub-total | | | | | |
| IV. Generator | | | | | |
| 4.1 | The supply, installation and commissioning, in accordance with the specifications of this contract, of a generator, including inverters and their accessories and spare parts, as specified in this contract and on the drawings, and all related fittings. 300 kVA generator including inverters Set: | Set | 1 | | |
| 4.2 | Emergency cabinets Set: | Set | 1 | | |
| Sub-total | | | | | |
| TOTAL | | | | | |

VI. REFURBISHMENT OF RCC PREMISES

6.1. Description

6.1.1. Overview - preparatory activities

Bidders are invited to visit the premises of the University of Djibouti's Faculty of Engineering to assess the project's exact scope. The field technical specifications signed by the Project Manager and the bidder will be submitted as part of the construction record.

Bidders are called upon to assess and evaluate the volume of preparatory work required.

The premises to be assessed include:

- ✓ the server room.
- ✓ the UPS room.
- ✓ the monitoring room.
- ✓ the S.A.S.

The preparatory work in this chapter will cover the entire site and consist of:

- ✓ Site clearance.
- ✓ Removing rubble to the public landfill.
- ✓ Bringing in equipment.
- ✓ Preparing the site for offices.
- ✓ Putting up a site sign.
- ✓ Fencing the site.
- ✓ Connecting the site to the University of Djibouti network.
- ✓ Preparing construction plans.
- ✓ Complete cleaning of the site and packing.

6.1.2. Component Description

The purpose of this project is to develop and upgrade:

- ✓ the server room.
- ✓ the UPS room.
- ✓ the monitoring room; and
- ✓ the S.A.S.

The future Computing Centre of the University of Djibouti will comprise:

| No. | Description | Length (m) | Width (m) | Height (m) |
|-----|-----------------|------------|-----------|------------|
| 1 | Server room | 15 | 8 | 3.5 |
| 2 | UPS room | 5 | 3 | 3.5 |
| 3 | Monitoring room | 5 | 4.3 | 3.5 |
| 4 | S.A.S. | 7.5 | 4.4 | 3.5 |

6.1.3. *Site Facilities*

The Contractor should have at his/her disposal, for purposes of establishing his/her worksite, a plot of land specifically reserved for the project and allocated to him/her by the Beneficiary.

Within three (three) days of receiving notification of contract award, the Contractor must submit a site installation plan to the Beneficiary for approval (crane, concrete batching plant, etc.).

It is important and imperative that bidders visit the project site to assess environmental and material supply issues, and the need to fence off the entire site at the Contractor's expense.

The Contractor shall take all necessary steps to ensure that all equipment and materials required for the execution of works are delivered within the time limits specified in the work schedule. He/she shall also take all the necessary steps to ensure their prompt installation on the construction site.

Production of a site sign board

The Contractor shall produce a site sign board containing all project-related information which shall be approved by the Beneficiary or its Technical Controller prior to the commencement of works.

Site fence

A fence with an access gate fitted with a lock or padlock will be erected within the perimeter of the site. The Contractor will include in his/her bid the provision of a site guard service for the duration of the works.

Connection to networks

The Contractor shall be responsible for connecting facilities to various networks to meet site needs. He/she shall be responsible for ensuring that enough water is available at all times to meet site needs and shall under no circumstances be deemed to be in default if the suppliers or concessionaires in Djibouti are in default.

Cleaning and packing

At the end of the works, the Contractor shall pack up all his/her equipment. No equipment or materials shall be left on the site or in the vicinity of the site.

Once the equipment has been removed, a report confirming that the site has been restored shall be prepared and included in the works acceptance report.

6.2. Civil Engineering Works

6.2.1. *Overview*

Overview of component

All the works to be executed will mainly include:

- ✓ Removal of existing partitions, other fixtures and fittings, and related items.
- ✓ Removal of existing electrical equipment and related items.
- ✓ Related civil engineering/bricklaying works to backfill cable trenches, flooring, opening/closing walls, fixing doors and repairs as necessary to prepare the site for refurbishment, in accordance with these technical and functional specifications.
- ✓ Thermal insulation of the server room floor.
- ✓ Raised floor with suitable base.
- ✓ Perforated metal suspended ceiling with suitable fixing.
- ✓ Server room, cloister, doors, glass viewing windows (2-hour fire rated).
- ✓ Doors, windows, cupboards and furniture according to design.
- ✓ Structured layout of cable trays in all areas.
- ✓ Interior painting of server room; and
- ✓ Other miscellaneous civil engineering works and ironmongery, according to site requirements.

Technical documents and specific standards

Routine works will be carried out in keeping with the relevant unified technical document (UTD) specifications, standards and regulations and their amendments in force at the time of bidding, including but not limited to the following:

- ✓ UTD 20.1: small masonry works.
- ✓ UTD 20.12: rough masonry works on roofs to be waterproofed.
- ✓ UTD 22.1: external walls in large prefabricated solid or ribbed panels of ordinary concrete.
- ✓ UTD 23.1: works on walls and reinforced concrete walls.
- ✓ UTD 24.1: fumigation works.
- ✓ UTD 24.2: chimneys.
- ✓ UTD 26.2: screeds and tiles based on hydraulic binders.
- ✓ UTD 32: metal structures.
- ✓ UTD 40: covering.
- ✓ UTD 41: cladding.
- ✓ UTD 42: facade waterproofing.
- ✓ UTD 43: roof waterproofing.
- ✓ Fire and panic safety regulations for buildings; and
- ✓ FB Rules (P92-701) (December 1993): Computing Rules - Methods for Predicting Fire Behaviour of Concrete Structures through Computing.

Construction plans

The Contractor shall be responsible for preparing, prior to the commencement of works and within 2 weeks:

- ✓ All design documents, including the detailed project report with initial, working and final drawings.

- ✓ Drawings for electrical, civil, UPS, HVAC and IBMS infrastructure limited to data centre requirements.
- ✓ Electrical drawings: SLD with LT plan, logic circuits, power distribution diagram, cable plan, cable tray layout, cutting details, earthing systems, equipment layout, lighting layout and wiring diagrams.
- ✓ Layout of civil works: server room layouts, DC stages, cross sections, individual zone layouts.
- ✓ IBMS zone: drawings for access control system, video surveillance, fire detection and alarm system, fire extinguishing system, VESDA system layout, insect repellent, water leak detection, etc.
- ✓ Operation and maintenance manuals for equipment installed in the data centre, including standard operating procedures, equipment handling and fault analysis techniques, AMC planning, data centre monitoring, reporting and escalation matrix for all areas, preventive and predictive maintenance planning formats.

These plans will be submitted to the Beneficiary or its Technical Controller for approval.

6.2.2. *Demolition and Removal Works*

- ✓ Careful demolition of existing walls, in accordance with demolition plans.
- ✓ Careful removal of doors and windows.
- ✓ Removal of all existing electrical installations including cabling, wiring, panels, switchboards and removal of all debris from site to designated location.
- ✓ Careful opening of an opening in a masonry wall, including coating and restoration; and
- ✓ Any other old material / unwanted installation in the area.

6.2.3. *Masonry work - reinforced concrete elements*

Throughout the duration of the project, masonry works will include the construction of all types and thicknesses of external and internal walls as defined in the project management plans.

They will comprise:

- ✓ construction of internal and external walls of 20x20x40 or 15x20x40 class B40 with concrete blocks.
- ✓ reinforced concrete vertical and horizontal masonry reinforcement.
- ✓ preparation of mortar.
- ✓ internal coating.
- ✓ construction of concrete slabs and screeds for external units and the generator.
- ✓ fittings and sealing support in all wooden, metal or galvanized steel joinery (frames, subframes, grills, metal doors, etc.).
- ✓ construction of a protective shelter for a generator with a galvanized sheet iron roof, wire fencing around the 4 (four) facades with access, with an IPE framework; and
- ✓ construction of an aluminium sheet roof with an IPE frame.

6.2.4. *Suspended Ceiling Lining*

Lining

The works must comply with all relevant standards. A partition wall comprising two plasterboard panels screwed to a galvanized steel frame with 48 mm thick rails and studs at a maximum distance of 40 cm, supported at the centre by a horizontal frame of 48 mm studs, including all fittings:

- ✓ Material: BA 13.
- ✓ Thickness: +/- 140 mm.
- ✓ Number of plasterboards: 4;
- ✓ Type of installation: staggered.
- ✓ Fire resistance: CF 2h.
- ✓ Acoustic index $R_w + C = 39$ dB without insulation and $R_w + C = 45$ dB with 45 mm thick CF 2h rock wool.
- ✓ Galvanized steel framework.
- ✓ Finishing: treatment of joints, corners and trims with joint tape and coating.
- ✓ Standards and certifications: Reaction to fire certificate M1: LNE 9080.0477.CEMATE/1, standard NF P 72-302 plasterboard; and
- ✓ Knauf system or equivalent.

Suspended ceiling

Suspended ceiling works will involve installing a removable suspended ceiling for decorative purposes without reducing the volume of the various Data Centre compartments.

Plasterboard tiles

Plasterboard tiles in 600 x 600 mm format with straight edges. MO reaction to fire. Installed on a metal frame suspended 20 cm above the ceiling in the various rooms.

Painting

Flame retardant dustproof paint must be used throughout the Data Centre. A 10 mm to 12 mm layer of putty should be applied over the cement coating to ensure a flat and smooth finish on exposed walls and columns. Existing surfaces must be scraped, cleaned and markings retained before caulking. Once the material has dried during application, it should be smoothed by rubbing with sandpaper. A primer and two coats of plastic emulsion paint of an approved brand and shade should be applied to this smoothed surface. This applies to all vertical flat surfaces and fire-rated plasterboard ceilings. The server room must also be painted with mastic paint to level and plumb, followed by two coats of fireproof paint. The actual server room ceiling should be painted with a fire-retardant, dust-proof paint.

6.4.5. Cladding - Joinery

Technical raised floor

The installation of a technical raised floor in the Data Centre to accommodate heavy loads corresponding to high-density bays, as well as the routing of cables, security systems and refrigerant piping for bay coolers.

The 40 cm high raised floor will be electrically neutral and earthed to IT equipment manufacturers' specifications.

Slab

- ✓ Technical floor panel with a high-density chipboard core.
- ✓ Cladding: stratified.
- ✓ Modulation: 600 x 600 mm.
- ✓ 0.5 mm galvanized steel sheet.
- ✓ Breaking load $\geq 8\text{KN}$.
- ✓ Load capacity $\geq 4\text{KN}$.
- ✓ Slab weight: 11 520 kg.
- ✓ Transverse electrical resistance from 5 x 10s to 2 x 10 120.
- ✓ Mechanically crimped PVC edge covering the sheet and protecting the cladding.
- ✓ Cylinders height: 35 to 38 cm.
- ✓ Finished suspended floor height: 40 cm.
- ✓ Fire rating: M1.
- ✓ Supply of ten suction cups.

Cylinder and cross beam

- ✓ Galvanized steel Height: 35 to 38 cm $\pm 20\%$.
- ✓ Head height: 70 mm.
- ✓ Dome bar: 18 mm.
- ✓ Castellated nut.
- ✓ Adjustment range: $\pm 20\text{mm}$.
- ✓ Grounded with a bare flexible multi-strand copper grounding braid and connected to the cylinder rod/collar.
- ✓ Galvanized steel U-shaped stability beams of 600 mm are used to stiffen and stabilise the technical floor.
- ✓ Horizontal blocking of the structure.
- ✓ Raised access floor beam used to support 2 consecutive panels with intermediate cylinders.
- ✓ Fixing: clips onto the cylinder head, can be U-screwed in galvanized steel 30 x 30 x 30 x 1 mm.
- ✓ Cylinders fixed to floor with anti-vibration adhesive.
- ✓ PVC gasket on cross member and cylinder head.

Perforated slab with airflow adjustment

- ✓ Size: 600 x 600 mm.
- ✓ Tubular steel frame + 5 reinforcements.
- ✓ Perforated steel top plate ≥ 2 mm.
- ✓ 800 cm² passage.
- ✓ PVC edging.
- ✓ Air flow from 500 m³/h to 2 600 m³/h.
- ✓ Fire rating: MO.

PVC skirting

- ✓ Format: roll.
- ✓ Fixing: to clean surface with strong adhesive.
- ✓ With co-extruded sealing lip.
- ✓ Width: 100 mm.

Metal access ramp

- ✓ Metal access step with anti-slip coating and load capacity of 1200 kg/m².

Fire door joinery

The doors will be 120-minute fire doors fitted with an electric lock and panic bar. The fire door must meet the following technical specifications:

- ✓ L-shaped, 15/10 mm thick, galvanized steel, folded frame profile to allow coplanarity of the leaf frame, with an opening for inserting the intumescent seal, with holes for fixing to the pre-dormer or with clips for fixing to the joinery.
- ✓ These doors are fitted with panic bars.
- ✓ 120 MN metal firestop.
- ✓ With insulation.
- ✓ Cylinder lock.
- ✓ Sealing gaskets.
- ✓ Magnetic lock sensor.
- ✓ RAL 9010 embossed epoxy polyester powder coat finish.
- ✓ Black PVC handle with U-shaped steel core to prevent accidental gripping.
- ✓ Safety handles.
- ✓ Test report from approved laboratory.
- ✓ Doors must comply with the UNI9230 standard; and
- ✓ Dimensions as per architectural plans.

6.2.6. Air Conditioning

- ✓ Six 20 kW sensitive load precision air conditioners operating in N + 1 redundancy mode to maintain temperature, humidity and selected dust levels in the server room.
- ✓ Two 5 kW precision air conditioners operating in N + 1 redundancy mode to maintain temperature, humidity and selected dust levels in the inverter room; and
- ✓ Comfort air conditioners: a total of 4 split air conditioning units with individual 24 000 BTU stabilizers for related areas.

Precision air-conditioning system

General description

Supply, installation, testing and commissioning of DX type bottom discharge air conditioning units, specifically designed for a high sensible heat ratio with a variable cooling technique to suit low latent loads of systems to be installed in server rooms for efficient and uniform cooling distribution. Warm air is discharged through the suspended ceiling area.

Units should be equipped with a microprocessor based programmable logic controller, 95% high efficiency filter down to 5 microns, evaporator, DX cooling coils, variable speed EC fan motor, humidification, heating settings, scroll compressors, matching remote condensers, interconnected refrigerant pipework, refrigerant charge, all necessary valves, fittings, fire controls, humidity sensor and front panel display, controls, etc. The proposed unit should have a reasonable capacity of 8 TR or more with oil separators and other accessories, as well as safety devices for automatic system operation, and should be compatible for integration with any brand of open protocol BMS. The precision unit must be air cooled and use R-407C / R-410A refrigerant. Any required external units must be installed in accordance with the manufacturer's recommended procedure. In addition, the condensers must be able to withstand ambient temperatures of 45 degrees Celsius and/or humidity levels of up to 90% without performance degradation

Precision air conditioners must allow for continuous operation and be capable of delivering high air flow and maintaining a temperature range of 20 degrees Celsius with a maximum of +1 degree and a relative humidity of 50% with a maximum variation of 5% on either side. A programmable sequencer should be provided to automatically operate one or a combination of heat pumps according to the pre-programmed setting. The equipment should be adapted for operation with 415 volts. Three-phase, 4-wire, 50 Hz power supply. Alternating current with a voltage fluctuation of $\pm 10\%$ and a frequency fluctuation of $\pm 5\%$. The power supply for lighting and single-phase equipment should be 230 volts AC.

upply. Alternating current with a voltage fluctuation of $\pm 10\%$ and a frequency fluctuation of $\pm 5\%$. The power supply for lighting and single-phase equipment should be 230 volts AC.

PAC unit control strategies should be PID logic controls with dew point compensation for accurate temperature and humidity control. A choice of return or supply air control must be provided depending on the application. Access to controller settings must be password protected to prevent unauthorised access. In normal operating mode, the main display should show the unit number, temperature and relative humidity setpoints, as well as actual values, graphs, time, date and operating status. Dynamic icons should identify the operating mode of the system. A 48-hour real-time log of temperature and humidity data should be maintained by the control system. All parameters and data should be backed up by an on-board battery.

d identify the operating mode of the system. A 48-hour real-time log of temperature and humidity data should be maintained by the control system. All parameters and data should be backed up by an on-board battery.

Each unit must be capable of providing reasonable cooling capacity at nominal room temperatures with adequate airflow and should be designed for 24-hour, 365-day operation. Each unit should have a built-in soft start device to limit the starting current. The design of the internal cooling should follow that of the cold/hot aisle. A raised floor should be provided in all areas where precision air conditioners are to be installed. Precision air conditioners must supply air through grills installed with a raised floor. Each unit should have facilities for full integration with the proposed BMS. All other components required for the heat pumps to operate correctly must be included in the package cost.

ed floor. Each unit should have facilities for full integration with the proposed BMS. All other components required for the heat pumps to operate correctly must be included in the package cost.

The three units of the precision air-conditioning system operate in N+1 redundancy mode or in sequential mode to maintain the selected temperature, humidity and dust control in the server room. The systems supplied should include all equipment (including but without limitation) for this purpose, accessories adapted to the raised floor and suspended ceiling, pipework, refrigerant, input power cables to the ground floor distribution panel, communication cables, brackets, power distribution panel and switchgear and accessories, appropriate junction boxes with circuit breakers for individual equipment connection to the air handling units (AHUs) and integration with the proposed building management system (BMS).

This includes but not limited to the following:

- ✓ Precision air-conditioning units (indoor cooling unit and outdoor air-cooled condensing unit) with motors and drives, etc;
- ✓ Refrigerant pipe insulation.
- ✓ Supply air grills with dampers.
- ✓ Return air grills.
- ✓ Return air plenum.
- ✓ Floor insulation.
- ✓ Foundation bolts, grouting, vibration isolators, base frames, etc. for mounting the outdoor unit, indoor unit and other equipment; and
- ✓ Supply and installation of drawn copper pipework with suitable 13 mm nitrile rubber insulation for indoor and outdoor units for suction pipes and copper pipes for liquid lines.

The other specifications are as follows:

| No. | DESCRIPTION | REQUIREMENTS |
|-----|----------------------------------|--|
| 1 | Flow direction | Downflow |
| 2 | Internal condition | 20 °C + 1 °C (DB) and 50% ±5% HR |
| 3 | Room conditions | 42°C DBT |
| 4 | Total sensible capacity per unit | 20kw |
| 5 | Air quantity per unit | 4800 CFM (minimum) |
| 6 | Filters | Filter to be supplied with the Package unit with 95% |

| | | |
|---|-------------------------------------|---|
| | | efficiency down to 5 microns. |
| 7 | Face velocity through cooling coils | < 2,5 metres/s |
| 8 | Load type | High sensible heat load (sensible heat factor greater than 0.90) |
| 9 | Programmable sequence controller | For automatic operation of one or a combination of heat pumps based on the pre-programmed setting |

Humidifier

The precision air-conditioning system must have a built-in humidifier and electric heater. Alternatively, it may be an infrared type consisting of high-intensity quartz lamps mounted above and outside the water supply. The humidifier should be designed to distribute the water vapour evenly into the bypass airflows of the environmental control system to ensure complete integration of the water vapour into the supply air without condensation and without obstructing the distribution of the airflow in the server room. The capacity of the humidifier must be adjustable from 30% to 100%. The unit must be designed for ft³/min between 580 and 600. (The use of a heater for dehumidification is not permitted for greater energy efficiency).

It is necessary to ensure that the electrodes or quartz lamps do not operate without water. The unit must inhibit bacterial growth and eliminate the need for chemical treatment. It must be fully serviceable and designed for quick and inexpensive maintenance.

The capacity of the humidifier must be adjustable from 30% to 100%. The vapour should be evenly distributed in the bypass airflow of the environmental control system to ensure complete integration of water vapour in the supply air without condensation. It must be integrated.

Cabinet

The frame should be made of 2.5, 2.0- and 1.20-mm folded steel. The outer panels should be made of 1.2 mm galvanized sheet steel. The front, rear and end panels should be fitted using 25 mm fibreglass insulation. The side panels should be double walled to reduce noise and vibration and enhance its robustness. The enclosure should be powder coated. The hinged front panels should be removable from the front. The cabinet should be fully assembled using pop rivets for greater rigidity.

The coil and fan section must be internally insulated for acoustic and thermal purposes with 25 mm thick resin-bonded glass wool of a density of 48 kg/cm³ covered with a high-quality fire-retardant glass nylon fabric. The insulation must be fireproof.

Refrigeration circuit

The refrigeration system should be the direct expansion type and include a hermetic scroll compressor complete with crankcase heaters.

Compressor

The compressor must be a high efficiency scroll design with infinitely variable cooling capacity. Each compressor should be equipped with a service rotary-lock valve and integral HP and LP overloads and mounted on vibration isolators.

Pressure gauge connections should be provided on each compressor. An adjustable time delay circuit should be provided on each compressor for restart in the event of an interruption power supply. The refrigerant used should be HFC and R-407-C which are environmentally friendly due to the long life of the Data Centre's equipment and the availability of spare parts and refrigerant.

Fan motor unit

The fan should be driven by a weather-proof electric motor suitable for operation on a 50 Hz AC supply.

Evaporator coil

The evaporator coil should preferably be made of 28-31 mm grooved copper tubes (grooved bore type) and aluminium finned louvres (0.10 mm and 11 fins per inch).

The frame and drip tray should be made of thick aluminium. The drip tray should be double-glazed for condensate drainage and easily removable for cleaning. Hydrophilic treatment of the evaporator is preferred for all units.

Air-cooled condenser

Each condensing unit must include the following elements:

- ✓ a heat rejection coil block, which must be constructed from suitably sized copper tubing expanded onto straight aluminium fins (about 12 fins/inch);
- ✓ a fan that operates quietly, with a sound level of no more than 65 decibels at one metre. A low-speed motor will directly drive the fan, which will be made of CRCA sheet metal and powder-coated.
- ✓ both the compressor and condenser must stop at the same time.
- ✓ the condenser must be suitable for horizontal/vertical installation.
- ✓ the whole unit should be supported by a corrosion-resistant four-legged frame; and
- ✓ each condenser should be fitted with a speed control to automatically vary the fan speed according to the change in room temperature.

Servicing access

No side access should be required for service and maintenance. All servicing should only be possible from the front of the unit.

Microprocessor controller

Each air conditioner should be equipped with a single microprocessor with the following controls:

Type of control

Controls must be microprocessor and a PID-based programmable logic controllers. They must display separate operating modes (cooling, heating, humidification and dehumidification) and alarm conditions (high temperature, loss of probe, HP and LP compressors, wet floor, no airflow, and low humidification water). The display and indicators must be visible from the front without removing the exterior panels. When an alarm condition is met, both local and remote alarms will be triggered. Each unit will have a splitter monitor located outside the room. The control cable will be routed between the two monitors.

The control system should help in the programming or adjustment of the following conditions:

- ✓ Temperature setpoint.
- ✓ Humidity setpoint.
- ✓ High temperature alarm.
- ✓ Low temperature alarm.
- ✓ High humidity alarm.
- ✓ Low humidity alarm.
- ✓ Unit identification number.
- ✓ Start-up time, fan and cold start, timer operation.
- ✓ Sensor calibration.
- ✓ Remote shutdown and general alarm management.
- ✓ Compressor sequencing.
- ✓ Return temperature control; and
- ✓ Selection of modulating outputs.

Alarms

The system must trigger an audible, visual and general alarm in one of the following situations:

- ✓ High / low temperature.
- ✓ High / low humidity.
- ✓ Air leakage / lack of airflow.
- ✓ High / low pressure.
- ✓ Low humidifier water level.
- ✓ Damp floor.
- ✓ Maintenance intervals.
- ✓ Other required conditions; and
- ✓ Spare alarm 1 and 2 (customized text).

Diagnosis

An on-board surge detection circuit should protect the controller from abnormally low sector voltages and trigger a soft restart of the unit's components when the main returns to normal levels. The controller should have an automatic restart function that returns the equipment to normal operation when the mains power supply is restored.

The unit must also be fitted with the following protection devices:

- ✓ Single/reverse phasing.
- ✓ Phase imbalance.
- ✓ Overload trip; and
- ✓ Proportional, integral and derivative (PID) and dew point control strategies must be used.

Operation and cascade modes

To save energy by preventing units from operating in opposite modes. If the condition is not met by two units, the 3rd unit is switched on and when the condition is met it is switched off.

Display

In normal operating mode, the display should show the unit number, relative temperature and humidity set-points and actual values, graphics, time, date and operating status. It should be able to record a 48-hour log of real time temperature and humidity data, updated every minute.

Large backlit LCD graphic display for easy viewing of text and graphics showing: unit number, time and date, temperature and humidity values (actual and set) and four-hour history graph, 'Dynamic' operating mode icons, all other key parameters.

Other activities:

- ✓ Balancing of the entire precision air conditioning system.
- ✓ Provide a return air plenum in GI powder-coated sheet metal to connect the heat pump unit to the suspended ceiling for the return air path. The plenum colour must match that of the heat pump unit.
- ✓ PAC unit.
- ✓ Supply of return air grills without ceiling dampers.
- ✓ All minor masonry, carpentry and civil engineering work such as cutting openings in masonry walls, internal cloistering, RCC slabs, etc. for pipes and cables, and making good the same.
- ✓ Existing work/decoration to be carried out by the contractor.
- ✓ Principal Engineer.
- ✓ All other work relating to the above items in accordance with the specifications, drawings and conditions of the contract, except those specifically excluded.
- ✓ From the drainage pipe unit to the drainage sump.
- ✓ Site cleaning and delivery.
- ✓ Test reports, recommended spare parts list, as-built drawings, operation and maintenance manual for the entire precision air conditioning system; and
- ✓ Training of the staff of the Beneficiary.

Bill of Quantities

| No. | Description | Unit | Quantity | Supply and Installation Price (USD) | Total Price Net of Taxes (USD) |
|--|--|----------------|----------|-------------------------------------|--------------------------------|
| 1. | Site installation (site fencing, storeroom and site office), site cleaning and withdrawal. | Lumpsum amount | 1 | | |
| Sub-total | | | | | |
| 2. Demolition - Removal | | | | | |
| 2.1 | This price includes the demolition of existing walls. The work will include demolition with a hammer or other equipment. It also entails unloading and transporting rubble to any public rubbish dump. | m ² | 28 | | |
| 2.2 | This price includes the careful removal of doors and windows in the areas specified by the Client. | U | 13 | | |
| 2.3 | This price includes the removal of light fittings and electrical circuits, including all removal procedures. | Set | 1 | | |
| 2.4 | This price includes the opening of bays in the brickwork and plastering to ensure that the joinery fits perfectly. | m ² | 20 | | |
| Sub-total | | | | | |
| 3. Brickwork and reinforced concrete elements | | | | | |
| 3.1 | This price includes the construction of a 20 x 20 x 40 breeze-block wall, including horizontal and vertical chaining. | m ² | 100 | | |
| 3.2 | This price includes three coats of interior plastering and all related works. | m ² | 200 | | |
| 3.3 | This price includes the construction of a slab to support the A/C and generator. | m ² | 30 | | |

| | | | | | |
|--------------------------------------|--|----------------|-----|--|--|
| 3.4 | This price includes the construction of a screened shelter for a generator, including galvanised sheet metal cover, frame and anchor blocks. | Set | 1 | | |
| 3.5 | This price includes the construction of an aluminium sheet roof, including framework, guttering and all installation requirements. | m ² | 150 | | |
| Sub-total | | | | | |
| 4. Lining – Suspended ceiling | | | | | |
| 4.1 | Supply and installation of a 1/2 still partition wall in panels of varying height with 100 mm thick rock wool insulation, in accordance with this contract and architectural drawings. | m ² | 350 | | |
| 4.2 | Supply and installation of a removable 120 m fire-rated suspended ceiling. | m ² | 150 | | |
| 4.3 | Scraping, dusting and repainting of interior and exterior including 2 coats of mastic, 1 coat of impregnation, 3 coats of paint on plaster and brickwork. | m ² | 800 | | |
| Sub-total | | | | | |
| 5. Cladding - Joinery | | | | | |
| 5.1 | F+P of a technical false floor measuring 60 cm x 60 cm, core in high density chipboard, steel tray, laminate covering 30 cm to 40 cm high, including crossbar and jack | m ² | 150 | | |
| 5.2 | F+P of a perforated panel with airflow control for the server room | m ² | 20 | | |
| 5.3 | Supply of suction pads for moving false floor tiles | U | 10 | | |
| 5.4 | F+P in non-flammable PVC skirting attached using superglue | ml | 50 | | |
| 5.5 | F+P of 1.2 x 1 m metal access ramp | U | 3 | | |
| 5.6 | F+P 120 m metal fire door with panic bar | U | | | |

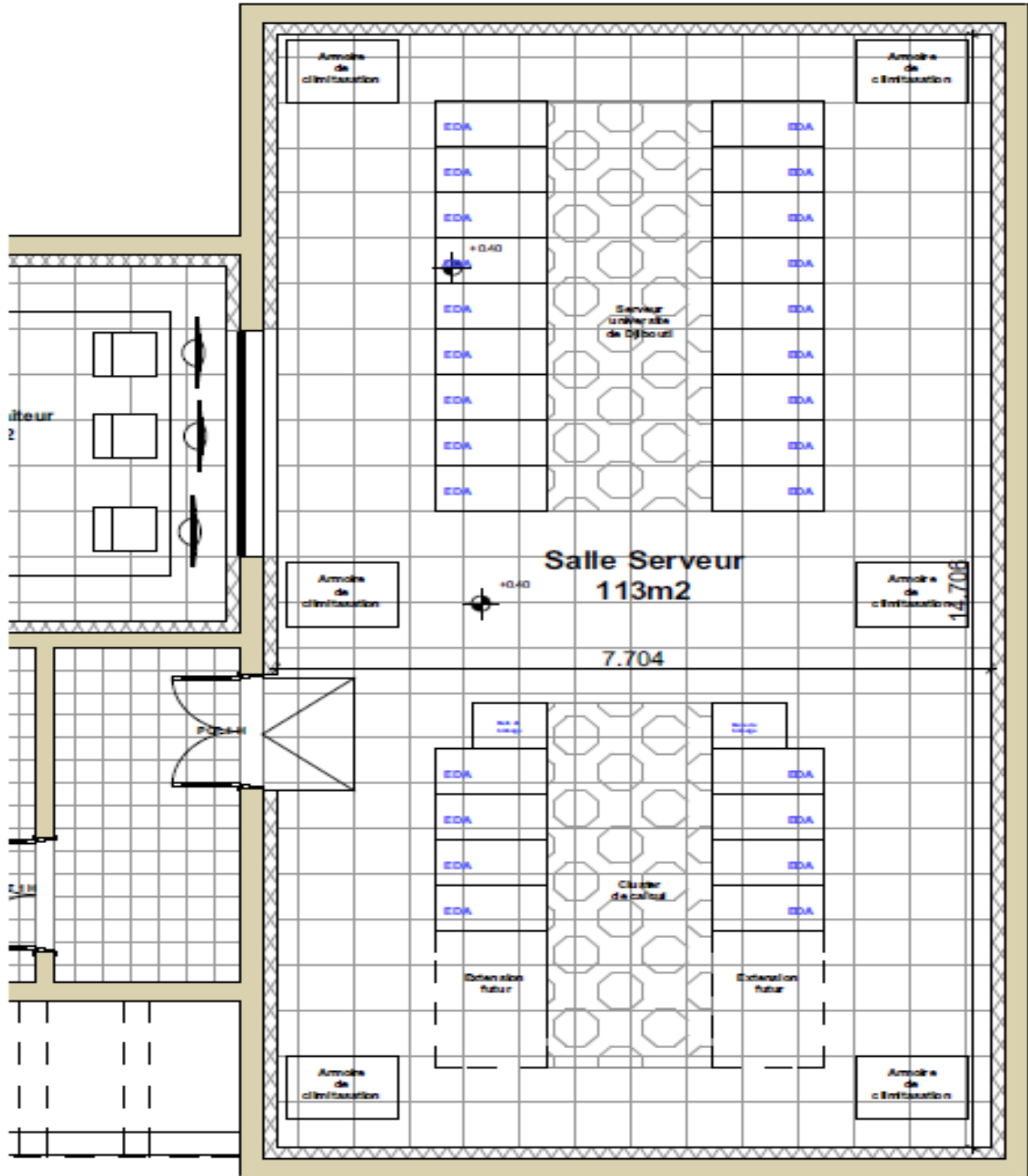
| | | | | | |
|----------------------------|--|----------------|-----|--|--|
| 5.6.1 | 1 m x 2.15 m | U | 3 | | |
| 5.6.2 | 1.5 m x 2.15 m double-leaf | U | 3 | | |
| 5.7 | F+P of a 3 x 2 m double-glazed aluminium window | U | 1 | | |
| 5.8 | F+P of a 1 x 2 m double-glazed aluminium window | U | 2 | | |
| 5.9 | F+P Alucobond cladding on the façade of the data centre | m ² | 150 | | |
| Sub-total | | | | | |
| 6. Air conditioning | | | | | |
| 6.1 | Supply and installation of a 24 000 btu wall-mounted split, including refrigeration networks, commissioning tests and all details required for a perfect finish. | U | 4 | | |
| 6.2 | Supply and installation of a precision split unit with a sensible cooling capacity of 5.9 kW and an air flow rate of 1 850 m ³ /h, including commissioning and all details required for a perfect finish. | U | 2 | | |
| 6.3 | Supply and installation of a precision cabinet with a sensible cooling capacity of 20 kW and an air flow rate of 4 800 m ³ /h, including commissioning and all details required for a perfect finish. | U | 6 | | |
| Sub-total | | | | | |
| TOTAL | | | | | |

VII. CONTRACT DURATION AND LOCATION

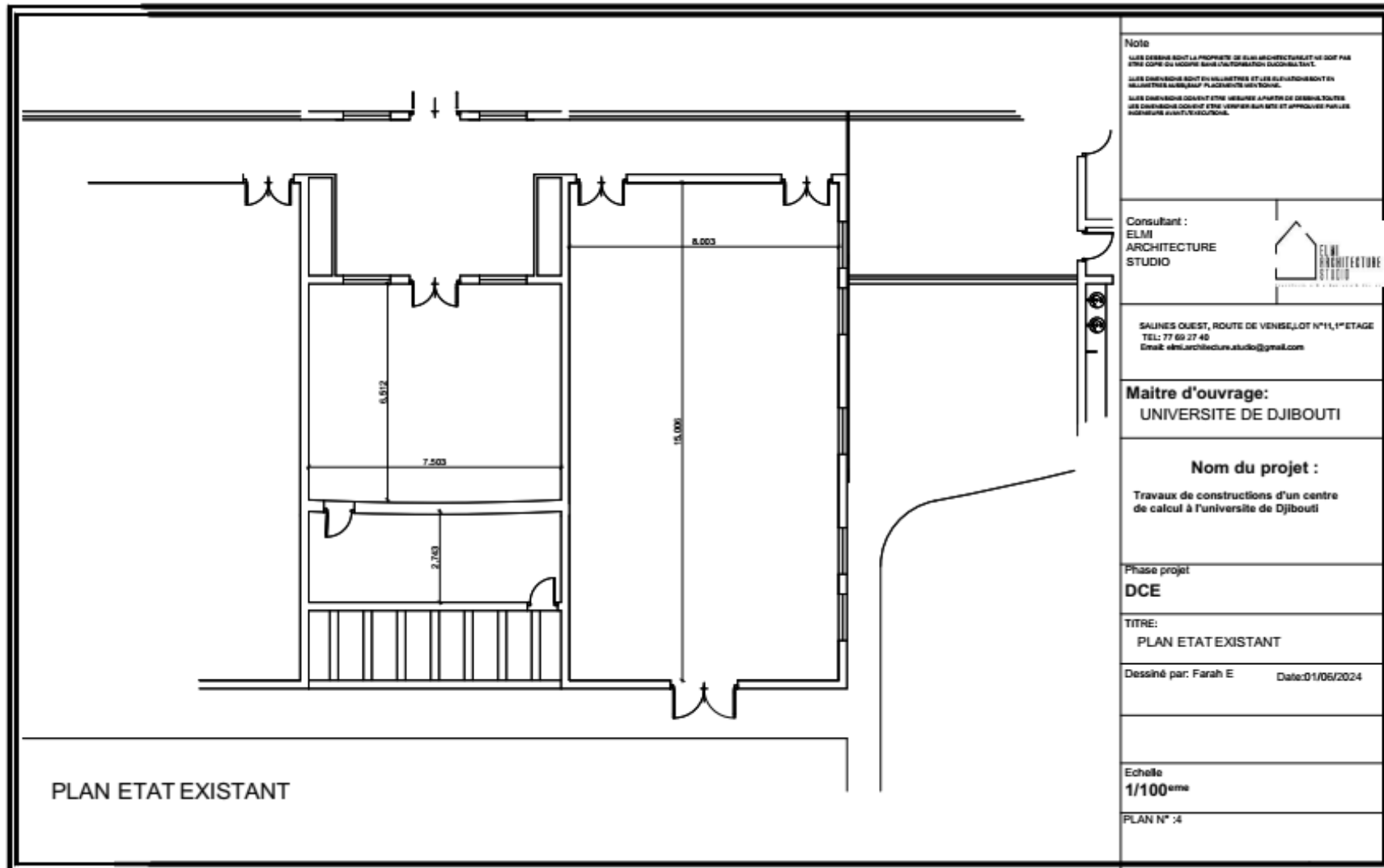
The contract will be implemented over a Eight-month period at the Faculty of Engineering of the University of Djibouti.

VIII. ANNEXES

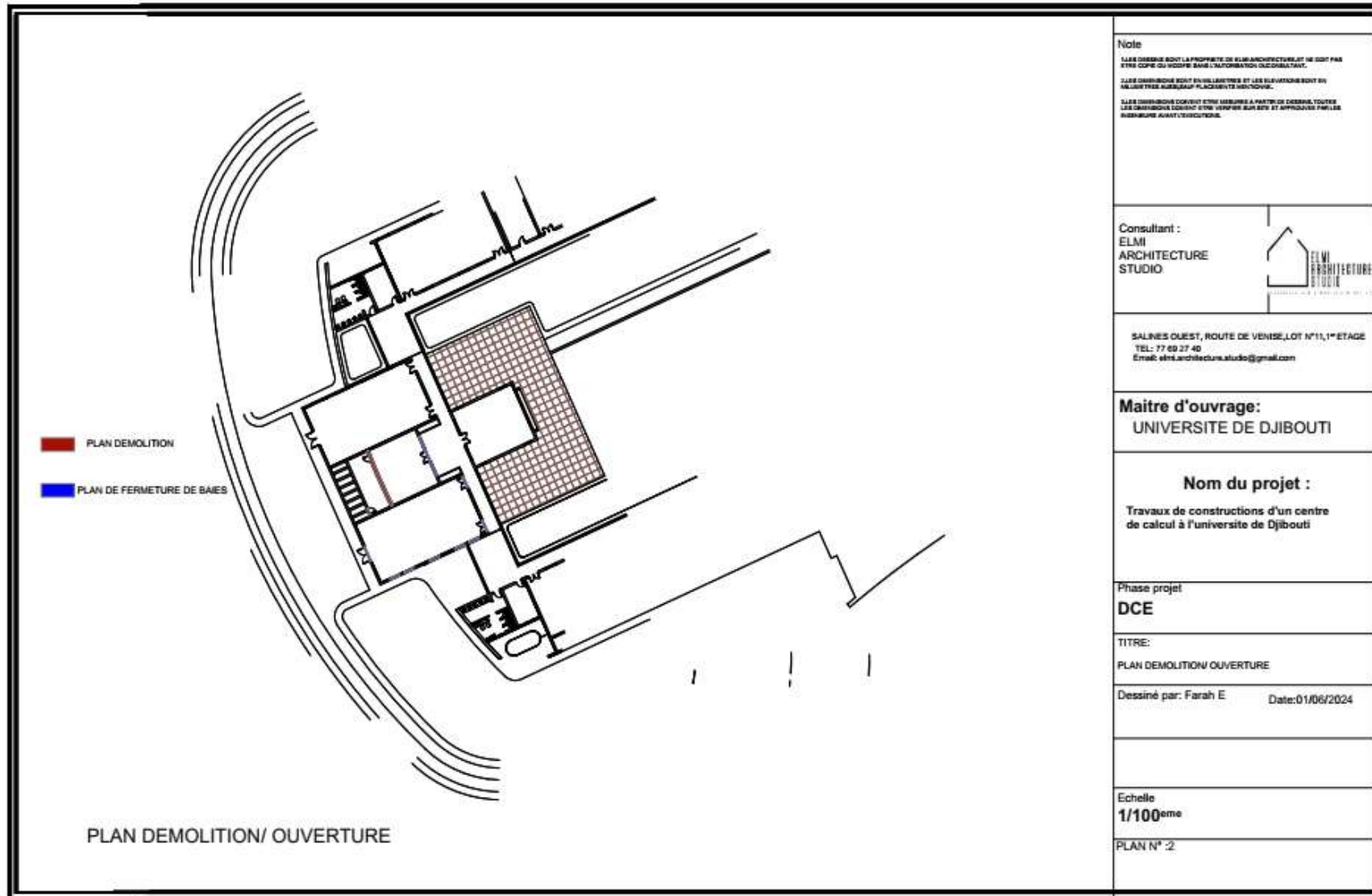
Plan of the Computer Room



Existing Structural Plan

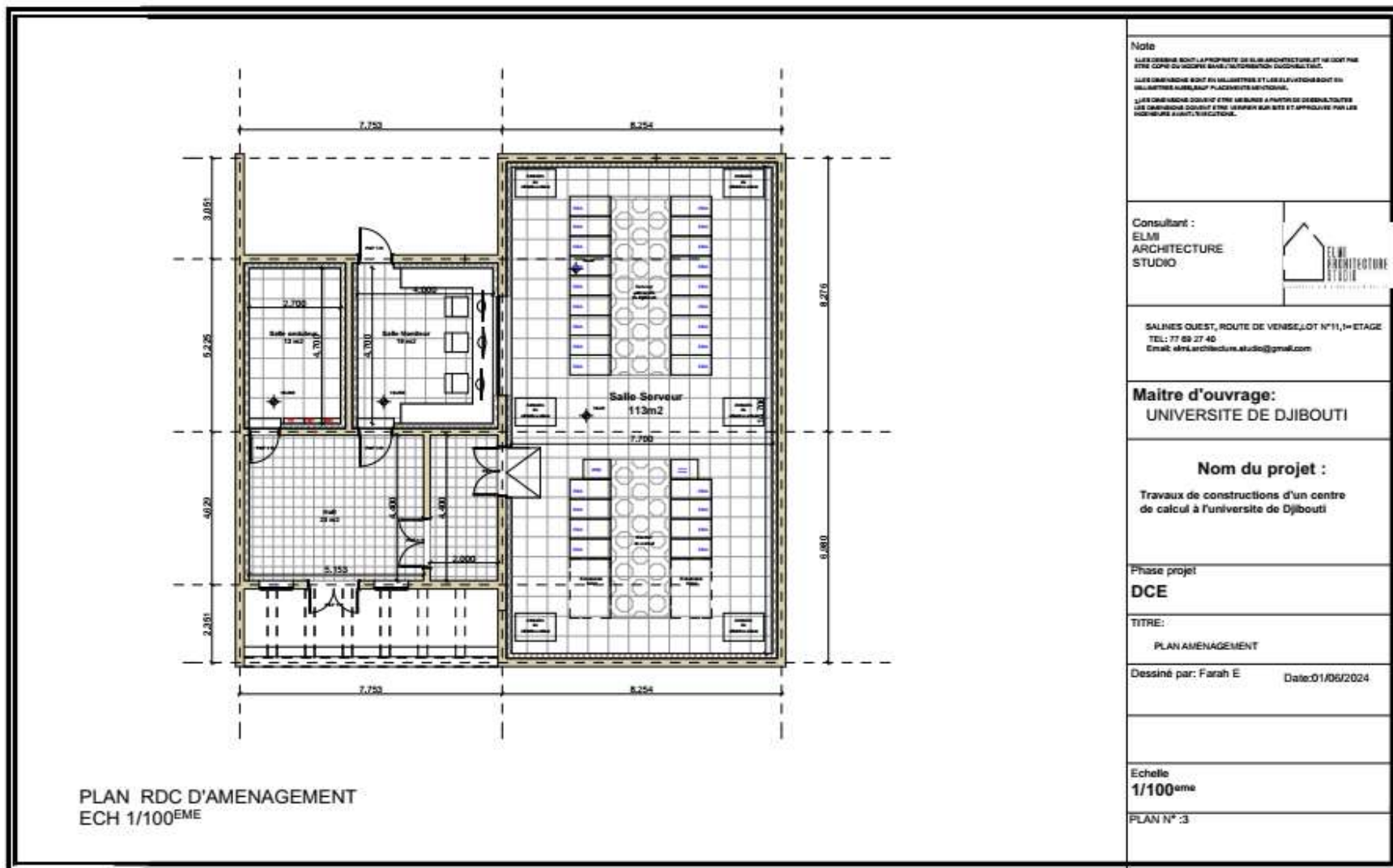


Demolition/Extension Plan

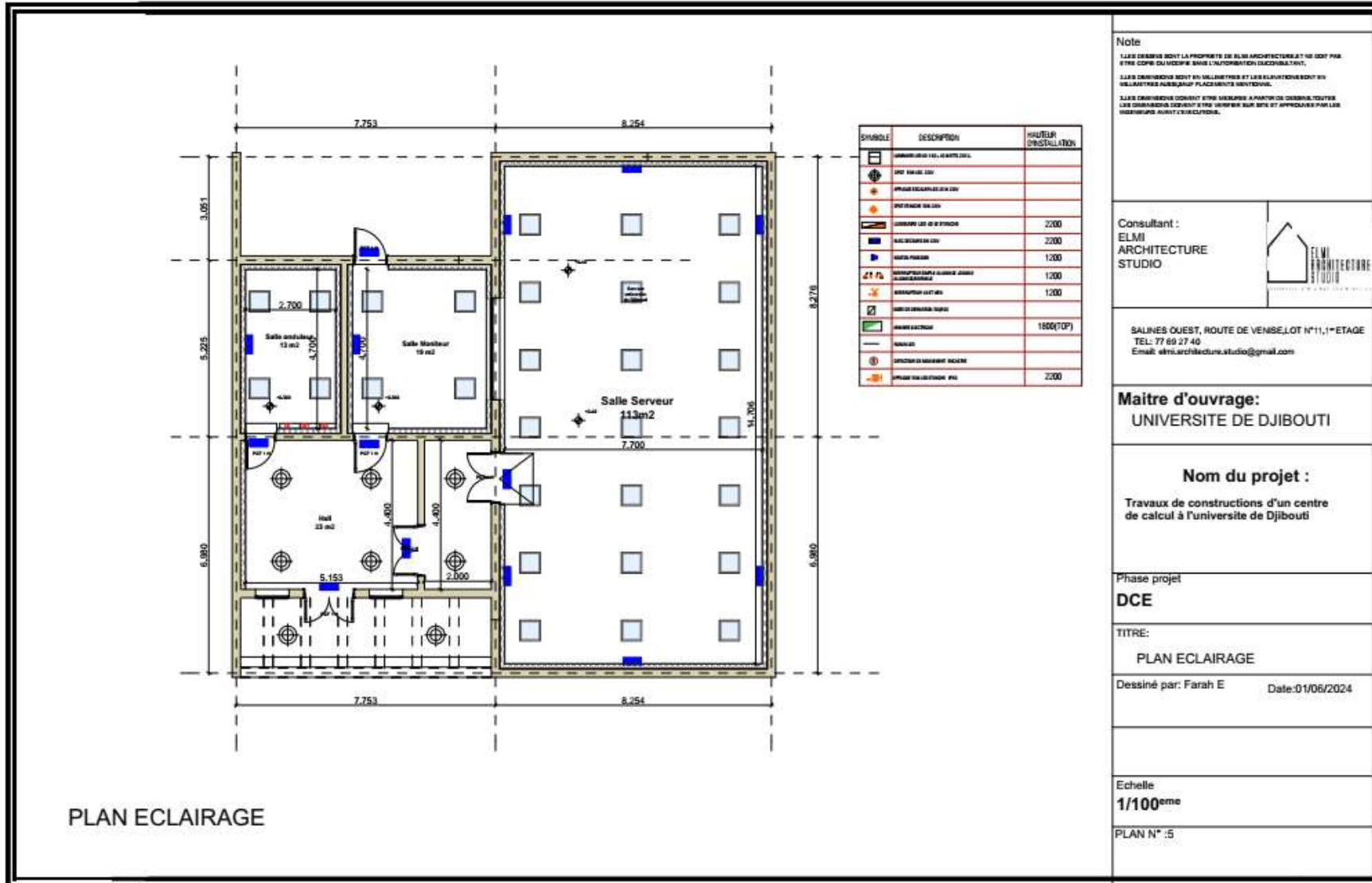


| | |
|---|---|
| <p>Note</p> <p>LES DIMENSIONS SONT LA PROPRIETE DE ELMI ARCHITECTURE ET NE DOIT PAS ETRE COPIE OU MODIFIE SANS L'AUTORISATION OBLIGATOIRE.</p> <p>LES DIMENSIONS SONT EN MILIMETRES ET LES SURFACES SONT EN METRES CARRES SAUF PLACEMENTS SPECIFIQUES.</p> <p>LES DIMENSIONS CORRECTES SONT ASSUREES A PARTIR DE COTES. TOUTES LES DIMENSIONS CORRECTES SONT VERIFIEES SUR SITE ET APPROUVEES PAR LE PROPRIETAIRE AVANT L'EXECUTION.</p> | |
| <p>Consultant : ELMI ARCHITECTURE STUDIO</p> |  |
| <p>SALINES OUEST, ROUTE DE VENISE, LOT N°11, 1^{er} ETAGE TEL: 77 69 27 40 Email: elmi.architecture.studio@gmail.com</p> | |
| <p>Maitre d'ouvrage: UNIVERSITE DE DJIBOUTI</p> | |
| <p>Nom du projet : Travaux de constructions d'un centre de calcul à l'universite de Djibouti</p> | |
| <p>Phase projet DCE</p> | |
| <p>TITRE: PLAN DEMOLITION/ OUVERTURE</p> | |
| <p>Dessiné par: Farah E Date: 01/06/2024</p> | |
| <p>Echelle 1/100^{eme}</p> | |
| <p>PLAN N° :2</p> | |

Development Plan



Lighting Plan



Note
 1. LES DESSINS SONT LA PROPRIÉTÉ DE ELMI ARCHITECTURE STUDIO. ILS NE DOIVENT ÊTRE COPIÉS NI REPRODUITS SANS L'AUTORISATION ÉCRITE D'ELMI ARCHITECTURE STUDIO.
 2. LES DIMENSIONS SONT EN DÉCAIMÈTRES ET LES SURFACES SONT EN MÈTRES CARRÉS. TOUS LES DIMENSIONS DOIVENT ÊTRE VÉRIFIÉES SUR SITE ET APPROUVÉES PAR LES MEMBRES AVANT L'EXÉCUTION.

Consultant :
ELMI ARCHITECTURE STUDIO

SALINES OUEST, ROUTE DE VENSE, LOT N°11, 1^{er} ETAGE
 TEL: 77 69 27 46
 Email: elmi.architecture.studio@gmail.com

Maitre d'ouvrage:
 UNIVERSITE DE DJIBOUTI

Nom du projet :
 Travaux de constructions d'un centre de calcul à l'université de Djibouti

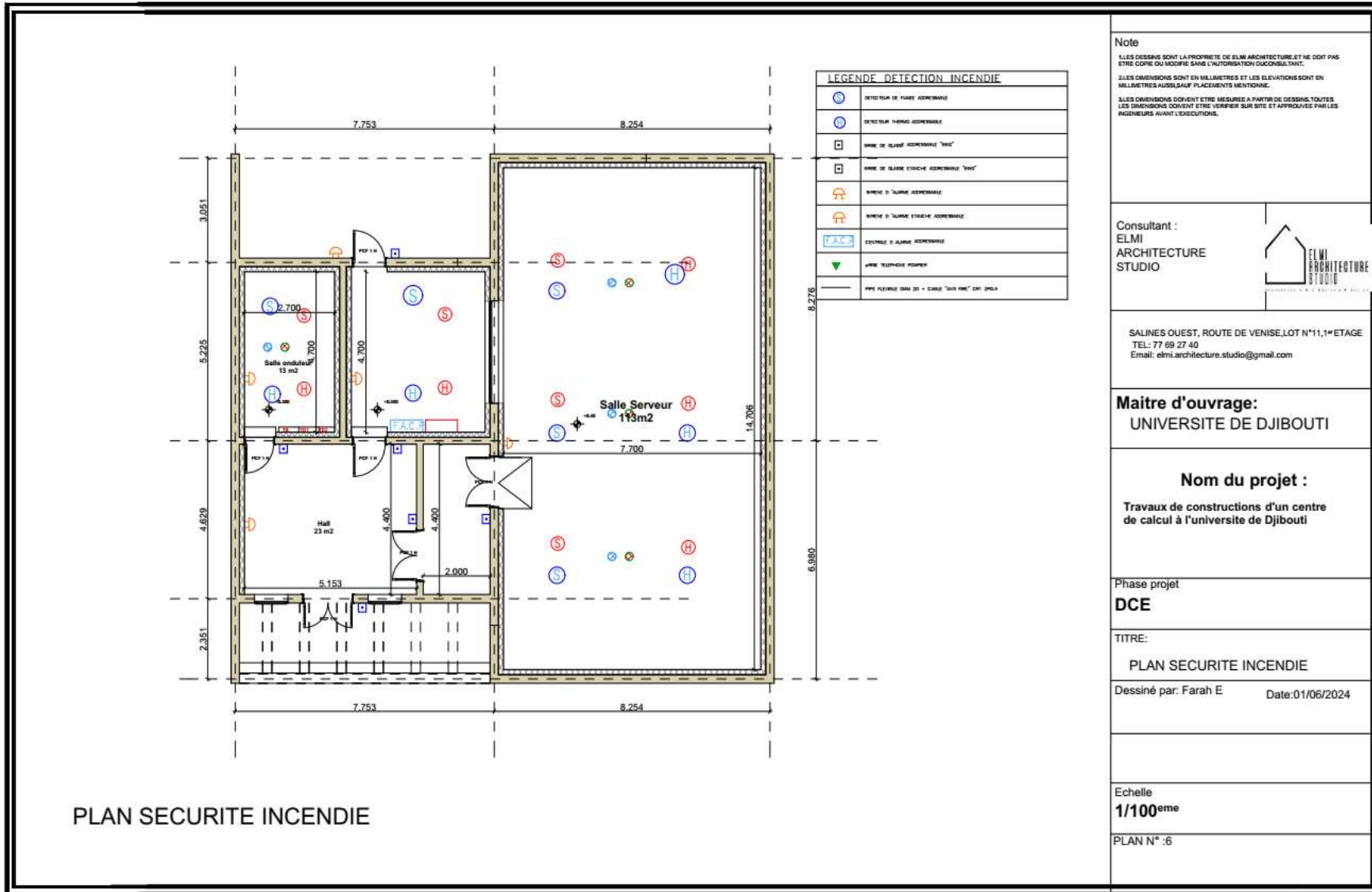
Phase projet
DCE

TITRE:
PLAN ECLAIRAGE

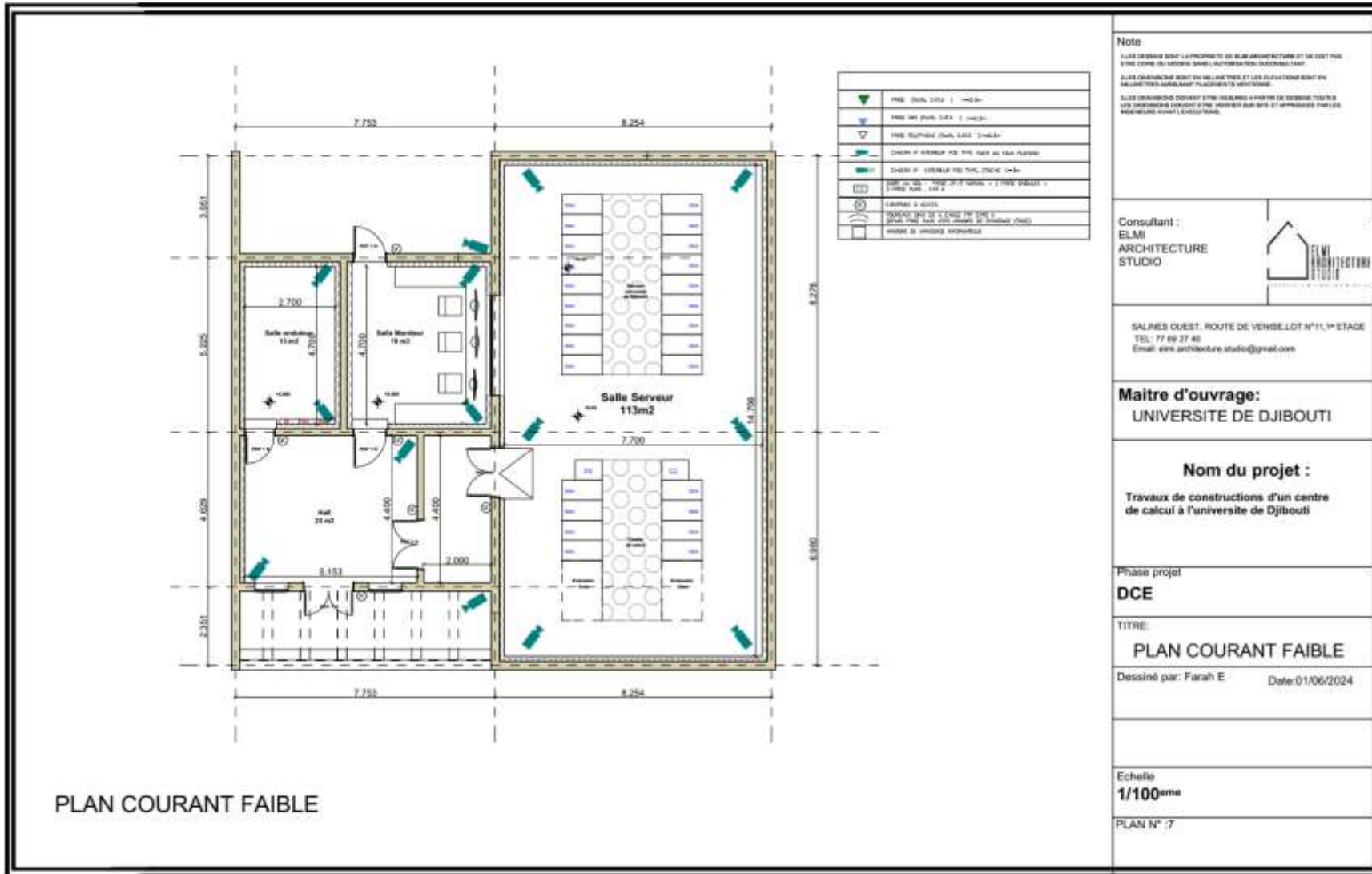
Dessiné par: Farah E Date: 01/06/2024

Echelle
1/100^{ème}
 PLAN N° : 5

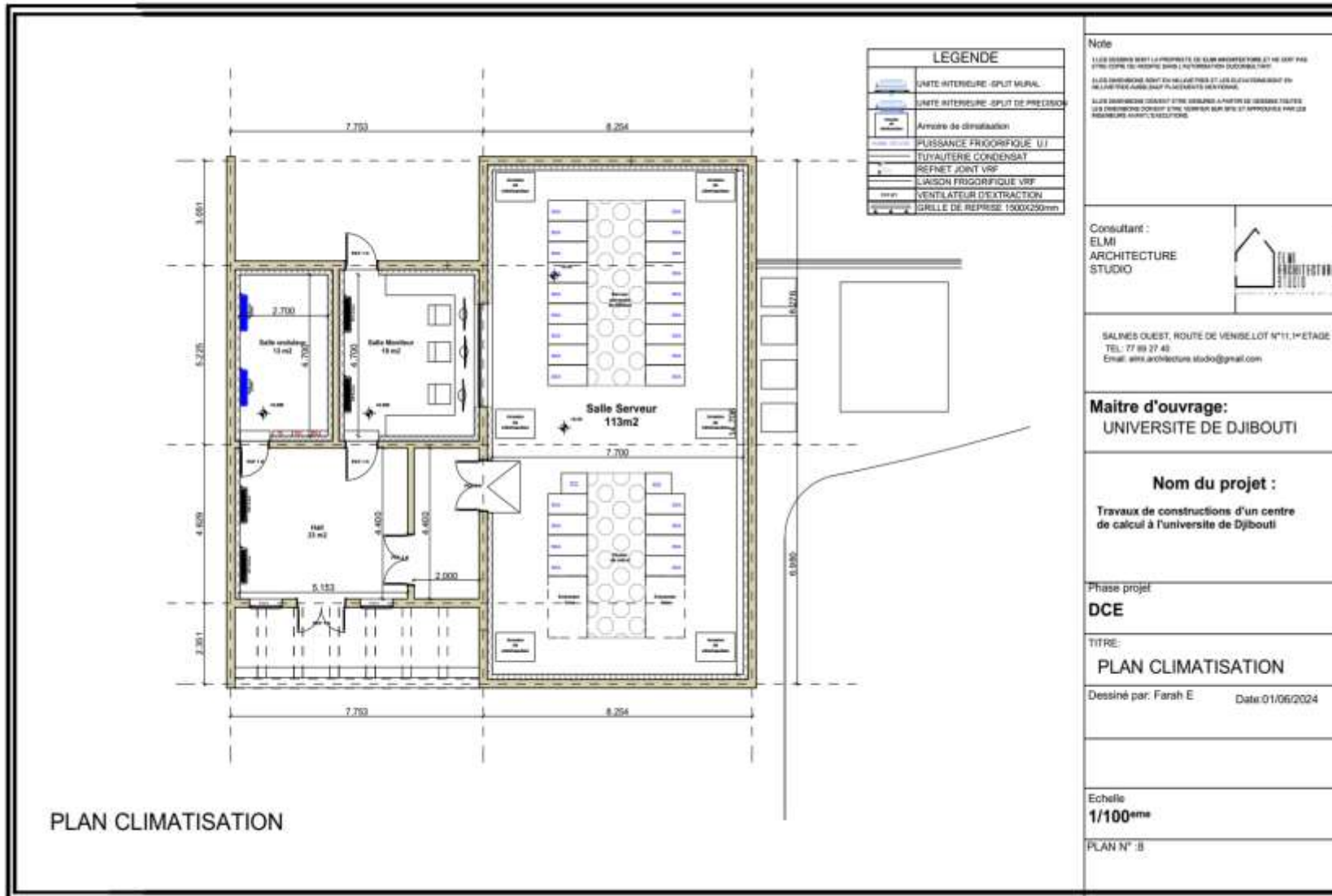
Fire Safety Plan



Low Voltage Plan



Air Conditioning Plan



Main Site Facade

| | |
|--|---|
| <p>COUPE 01</p> <p>COUPE 02</p> <p>FAÇADE PRINCIPALE SITE</p> | <p>D'INSTALLATION</p> <p>Note LES DIMENSIONS SONT LA PROPRÉTÉ DE L'ARCHITECTURE ET NE DOIVENT ÊTRE COPIÉES NI MODIFIÉES SANS L'AUTORISATION DE L'ARCHITECTE. LES DIMENSIONS SONT EN MÉTRÉS ET LES ÉLÉMENTS SONT EN MILLIMÈTRES À MOINS D'ÊTRE PRÉCISÉMENT AUTrement. LES DIMENSIONS SONT EN MÉTRÉS ET LES ÉLÉMENTS SONT EN MILLIMÈTRES À MOINS D'ÊTRE PRÉCISÉMENT AUTrement. LES DIMENSIONS SONT EN MÉTRÉS ET LES ÉLÉMENTS SONT EN MILLIMÈTRES À MOINS D'ÊTRE PRÉCISÉMENT AUTrement.</p> <p>Consultant : ELM ARCHITECTURE STUDIO</p> <p>P1.jpg</p> <p>SALINES OUEST, ROUTE DE VEINDE, LOT N°11, 1^{ER} ETAGE TEL: 77 89 27 40 Email: elm.architecture.univdji@gmail.com</p> <p>Maitre d'ouvrage: UNIVERSITE DE DJIBOUTI</p> <p>Nom du projet : Travaux de constructions d'un centre de calcul à l'universite de Djibouti</p> <p>Phase projet DCE</p> <p>TITRE: COUPE-FACADE</p> <p>Dessiné par: Farah E Date:01/06/2024</p> <p>Echelle 1/100^{eme}</p> <p>PLAN N° :6</p> |
|--|---|

5. Inspections and Tests

The following inspections and tests shall be performed: *As disclosed in the technical specification enclosed.*

Part 3 – Contract

Section VIII - General Conditions of Contract

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Section VIII - General Conditions of Contract

- 1. Definitions**
- 1.1 The following words and expressions shall have the meanings hereby assigned to them:
- (a) “Bank” means the financing institution named in the Special Conditions of Contract (SCC).
 - (b) “Borrower” means the entity named as the Borrower in the SCC.
 - (c) “Contract” means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
 - (d) “Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto.
 - (e) “Contract Price” means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
 - (f) “Letter of Bid” means the document entitled letter of bid, which was completed by the Supplier and includes the signed offer to the Purchaser for the Goods.
 - (g) “Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Goods.
 - (h) “Drawings” means the drawings of the Goods, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Purchaser in accordance with the Contract.
 - (i) “Schedules” means the document(s) entitled schedules, completed by the Supplier and submitted with the Letter of Bid, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

- (j) “Bid” means the Letter of Bid and all other documents which the Supplier submitted with the Letter of Bid, as included in the Contract.
- (k) “Day” means calendar day.
- (l) “Completion” means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (m) “GCC” means the General Conditions of Contract.
- (n) “Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (o) “Purchaser’s Country” is the country specified in the **Special Conditions of Contract (SCC)**.
- (p) “Purchaser” means the entity purchasing the Goods and Related Services, as **specified in the SCC**.
- (q) “Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (r) “SCC” means the Special Conditions of Contract.
- (s) “Subcontractor” means any person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (t) “Supplier” means the person, private or government entity, or a combination of the above, whose Bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (u) “The Project Site,” where applicable, means the place named in the **SCC**.
- (v) “Party” means the Purchaser or the Supplier as the context requires.
- (w) “Change Order” or “Change” is defined in Clause 33 [Change Orders and Contract Amendments.]
- (x) Bank Procurement Framework is defined as

Procurement Framework for Goods, Works, Non-Consulting and Consulting Services under “Bank Financing” as defined under Procurement Policy for Bank Group funded operations.

- 2. Contract Documents** 2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.
- 3. Fraud and Corruption** 3.1 The Bank requires compliance with the Integrity Framework comprising the African Development Bank Group’s Sanctions Procedures, the Bank’s Whistleblowing and Complaints Policy, the Bank’s Procurement Policy under the Procurement Framework and any other applicable Policies and Procedures including their updates, as set forth in Appendix 1 to the GCC.
- 3.2 The Purchaser requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the Bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.
- 4. Interpretation** 4.1 In the Contract, except where the context requires otherwise:
- (a) words indicating one gender include all genders;
 - (b) words indicating the singular also include the plural and vice-versa;
 - (c) provisions including the word “agree”, “agreed” or “agreement” requires the agreement to be recorded in writing;
 - (d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
 - (e) the word “tender” is synonymous with bid and “tenderer” with “bidder” and the words “tender documents” with “bidding documents”;
 - (f) The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

4.2 Incoterms

- (a) Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms **specified in the SCC**.
- (b) The terms EXW, CIP, FCA, CFR and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms specified in the **SCC** and published by the International Chamber of Commerce in Paris, France.

4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Nonwaiver

- (a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of

the Contract.

- 5. Language**
- 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language specified in the **SCC**. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.
- 6. Joint Venture, Consortium or Association, Subcontractors**
- 6.1 Unless otherwise specified in SCC, if the Supplier is a joint venture, consortium, or association (JV), all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser. Any limit on the maximum number of members in the Joint Venture, Consortium or Association shall be as specified in SCC. Minimum Share of a Member of the JV shall be as specified in SCC.
- 7. Eligibility**
- 7.1 The Supplier and its Subcontractors shall have the nationality of an eligible country of the Bank in accordance with the Bank's Procurement Policy for the Bank Group Funded Operation described under the Bank's Procurement Framework, and as listed in Section V, Eligible Countries under Appendix 2 to General Conditions. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.
- 7.2 All Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their origin in Eligible Countries of the Bank in accordance with the Bank's Procurement Policy for the Bank Group Funded Operation described under the Bank's Procurement Framework, and as listed in Section V, Eligible Countries. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another

commercially recognized article results that differs substantially in its basic characteristics from its components.

8. Notices

- 8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the **SCC**. The term “in writing” means communicated in written form with proof of receipt.
- 8.2 A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

9. Governing Law

- 9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Purchaser’s Country, unless otherwise specified in the **SCC**.
- 9.2 Throughout the execution of the Contract, the Supplier shall comply with the import of goods and services prohibitions in the Purchaser’s Country when
- (a) as a matter of law or official regulations, the Borrower’s country prohibits commercial relations with that country; or
- 9.2 (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower’s Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

10. Settlement of Disputes

- 10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- 10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the **SCC**.
- 10.3 Notwithstanding any reference to arbitration herein,
- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise

agree; and

- (b) the Purchaser shall pay the Supplier any monies due the Supplier.

- 11. Inspections and Audit by the Bank**
- 11.1 The Supplier shall keep, and shall make all reasonable efforts to cause its Subcontractors to keep, accurate and systematic accounts and records in respect of the Goods in such form and details as will clearly identify relevant time changes and costs.
- 11.2 Pursuant to paragraph 2.2 e. of Appendix 1 to the General Conditions the Supplier shall permit and shall cause its subcontractors and subconsultants to permit, the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors' and subconsultants' attention is drawn to Sub-Clause 3.1 which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
- 12. Scope of Supply**
- 12.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.
- 13. Delivery and Documents**
- 13.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are specified in the **SCC**.
- 14. Supplier's Responsibilities**
- 14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.
- 15. Contract Price**
- 15.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its Bid, with the exception of any price adjustments authorized in the **SCC**.
- 16. Terms of Payment**
- 16.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the **SCC**.
- 16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing,

as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.

16.3 Payments shall be made promptly by the Purchaser, but in no case later than sixty (60) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.

16.4 The currencies in which payments shall be made to the Supplier under this Contract shall be those in which the Bid price is expressed.

16.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the **SCC**, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the **SCC**, for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.

17. Taxes and Duties

17.1 For goods manufactured outside the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's Country.

17.2 For goods Manufactured within the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

17.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

18. Performance Security

18.1 If required as specified in the SCC, the Supplier shall, within twenty-eight (28) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the **SCC**.

18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

18.3 As specified in the SCC, the Performance Security, if required, shall be denominated in the currency(ies) of the Contract, or in a freely convertible currency acceptable to the Purchaser; and shall be in one of the format stipulated

by the Purchaser in the SCC, or in another format acceptable to the Purchaser.

18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the **SCC**.

19. Copyright

19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party

20. Confidential Information

20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.

20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.

20.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:

- (a) the Purchaser or Supplier need to share with the Bank or other institutions participating in the financing of the Contract;
- (b) now or hereafter enters the public domain through no fault of that party;

- (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
- (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

20.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

21. Subcontracting 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the Bid. Such notification, in the original Bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.

21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

22. Specifications and Standards 22.1 Technical Specifications and Drawings

- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VI, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
- (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval

by the Purchaser and shall be treated in accordance with GCC Clause 33.

- 23. Packing and Documents**
- 23.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the SCC, and in any other instructions ordered by the Purchaser.
- 24. Insurance**
- 24.1 Unless otherwise specified in the **SCC**, the Goods supplied under the Contract shall be fully insured—in a freely convertible currency from an eligible country—against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the **SCC**.
- 25. Transportation and Related Services**
- 25.1 Unless otherwise specified in the **SCC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.
- 25.2 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

- (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

25.3 Prices charged by the Supplier for related services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services

26. Inspections and Tests

26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the **SCC**.

26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in the Purchaser's Country as specified in the **SCC**. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will

be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.

26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 26.4.

26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.

27. Liquidated Damages

27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the **SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those **SCC**. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 35.

28. Warranty

28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

28.2 Subject to GCC Sub-Clause 22.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.

28.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the **SCC**, or for eighteen (18) months after the date of

shipment from the port or place of loading in the country of origin, whichever period concludes earlier.

28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

28.5 Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the **SCC**, the Purchaser may proceed to take within a reasonable period 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.

29. Patent Indemnity

29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
- (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred

to in GCC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

29.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.

29.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

30. Limitation of Liability

30.1 Except in cases of criminal negligence or willful misconduct,

- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
- (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the Purchaser with respect to patent infringement

31. Change in

31.1 Unless otherwise specified in the Contract, if after the date

Laws and Regulations

of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of the Purchaser's Country where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

32. Force Majeure 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

32.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

32.3 If a Force Majeure situation arises, the Supplier shall promptly 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.

33. Change Orders and Contract Amendments

33.1 The Purchaser may at any time order the Supplier through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) the method of shipment or packing;

- (c) the place of delivery; and
- (d) the Related Services to be provided by the Supplier.

33.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.

33.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33.4 Subject to the above, no variation in, or modification of, the terms of the Contract shall be made except by written agreement signed by the parties.

34. Extensions of Time

34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

34.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

35. Termination

35.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
 - (i) if the Supplier fails to deliver any or all of the

Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34;

- (ii) if the Supplier fails to perform any other obligation under the Contract; or
 - (iii) if the Supplier, in the judgment of the Purchaser has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix 1 to the GCC, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency.

- (a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser

35.3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms

and prices. For the remaining Goods, the Purchaser may elect:

- (i) to have any portion completed and delivered at the Contract terms and prices; and/or
- (ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

35.4 Anytime the contract is terminated for any reason indicated under clause 35, the advance payments made, if any, on the undelivered Goods and Related Services, if not already recovered from the Supplier shall become payable to the Purchaser which the Supplier shall pay to the Purchaser within 15 days from the date of receipt of notice of such termination failing which the amount will be recovered as demand by calling the advance payment Bank Guarantee provided under the contract.

36. Assignment

36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

37. Export Restriction

37.1 Notwithstanding any obligation under the Contract to complete all export formalities, any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, which arise from trade regulations from a country supplying those products/goods, systems or services, and which substantially impede the Supplier from meeting its obligations under the Contract, shall release the Supplier from the obligation to provide deliveries or services, always provided, however, that the Supplier can demonstrate to the satisfaction of the Purchaser and of the Bank that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Purchaser's convenience pursuant to Sub-Clause 35.3.

APPENDIX 1 TO GENERAL CONDITIONS

Fraud and Corruption

(Text in this Appendix shall not be modified)

1. Purpose

1.1 The Bank's Integrity Framework and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption¹.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

- i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party²;
- ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party³ to obtain financial or other benefit or to avoid an obligation;
- iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v. "obstructive practice" is:

(a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt,

¹ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

² For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution, including Bank staff and employees of other organizations taking or reviewing procurement decisions.

³ For the purpose of this sub-paragraph, "party" refers to a public official, including Bank staff and employees of other organizations taking or reviewing procurement decisions.; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution."

fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Integrity Framework and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;⁴ (ii) to be a nominated⁵ sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants), consultants, contractors, and suppliers, and their sub-contractors, sub-

⁴ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

⁵ A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

consultants, service providers, suppliers, agents personnel, permit the Bank to inspect⁶ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

⁶ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

APPENDIX 2 TO GENERAL CONDITIONS

Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank Group Financed Procurement

A. Provisions under Section 5 “Eligibility” of the Procurement Policy for Bank Group Funded Operations and Chapter A2 of the Operations Procurement Manual under Procurement Framework of the African Development Bank

1. The African Development Fund (ADF) permits firms and individuals from all countries to offer goods, works and services for ADF funded projects.

However, the proceeds of any Financing undertaken in the operations of the African Development Bank (ADB) and the Nigeria Trust Fund (NTF) shall be used for procurement of goods and works, including the related services, provided by bidders from Eligible⁷ Countries.⁸ Any conditions for participation shall be limited to those that are essential to ensure the firm’s capability to fulfill the contract in question. In the case of ADB and NTF, bidders from non-Member Countries offering goods, works and related services (including transportation and insurance) are not eligible even if they offer these from Eligible Member Countries. Any waiver to this rule will be in accordance with the Articles 17(1) (d) of the Agreement Establishing the African Development Bank and 4.1 of the Agreement Establishing the Nigeria Trust Fund.

B. Rules and Procedures for Procurement of Goods and Works

Overview

1. The eligibility criteria for participation in the supply of goods, works and related services, to be procured through the ADB and NTF Financing, derive from the requirements of the Agreement Establishing the African Development Bank, Article 17.1.d, and the Agreement Establishing the Nigeria Trust Fund, Article 4.1. The foregoing requirements basically prescribe two types of eligibility criteria:
 - i) The eligibility of the bidder;
 - ii) The eligibility of the goods, works and related services.

Eligibility of the Bidder Under the ADB & NTF Financing

⁷ Refer to Bank Framework for additional information on Eligibility.

⁸ “Eligible Countries” shall mean: (a) in the case of the African Development Bank (ADB) and the Nigeria Trust Fund (NTF), the Member Countries of the ADB; and (b) in the case of the African Development Fund, any country.

2. The eligibility of the bidder shall be based on nationality, in accordance with the following rules:
 - (a) Natural Persons: A natural person is eligible if he or she is a national of a Member Country of the ADB. Where a person has more than one nationality, such a person shall be eligible if the nationality indicated in his or her bid is that of a Member Country of ADB.
 - (b) Corporations: A corporation is eligible if it satisfies the following criteria:
 - i) it is incorporated in a country that is a Member of the ADB;
 - ii) it is a national of a country that is a Member of the ADB, as determined by the law of its place of incorporation; and
 - iii) it has its principal place of business in a country that is a Member of the ADB.
 - (c) Joint Ventures and Associations: An unincorporated joint venture, partnership, or association, shall be eligible if more than 50% of the value of its works and/or services is executed by its members satisfying the eligibility requirements for individuals or corporations.

Eligibility of the Goods, Works and Related Services

3. In order to be eligible, the goods to be procured must have been mined, grown, or produced, in the form in which they are purchased, in an Eligible Member Country.
4. For works contracts, which may include civil works, plant construction, or turnkey contracts, the contractor must satisfy the nationality criteria of eligibility, either as a natural person, or corporation, or joint venture and association. Labour, equipment, and materials needed for carrying out the works contract, shall be supplied from Eligible Member Countries.
5. For contracts, which have been awarded on the basis of Cost, Insurance and Freight (CIF), or Carriage and Insurance Paid (CIP), bidders shall be free to arrange for ocean and other transportation, and the related insurance, from any Eligible Member Country. On the other hand, where goods are shipped on FOB basis, and the Bank has agreed to finance transportation and insurance separately, which are arranged by the purchaser, under a separate contract, the Bank shall be satisfied that the services are supplied from Eligible Member Countries.

List of Eligible Countries

6. List of Eligible countries can be found in African Development Bank's website:

<https://www.afdb.org/en/about-us/corporate-information/members/>

Ineligible Countries in reference to ITB 4.8 and ITB 5.1

7. In reference to ITB 4.8 and ITB 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8(a) and ITB 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state “none”].*

Under ITB 4.8(b) and ITB 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state “none”]*

Section IX - Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

[The Purchaser shall select insert the appropriate wording using the samples below or other acceptable wording, and delete the text in italics]

| | |
|--------------------|--|
| GCC 1.1 (a) | The Financing Institution is <i>[Insert complete legal name of the Financing Institution such as that of ADB, ADF, NTF, etc. as applicable]</i> |
| GCC 1.1 (b) | The Borrower is <i>[Insert complete legal name of the Borrower]</i> |
| GCC 1.1(o) | The Purchaser's Country is: <i>[insert name of the Purchaser's Country]</i> |
| GCC 1.1(p) | The Purchaser is: <i>[Insert complete legal name of the Purchaser]</i> |
| GCC 1.1 (u) | The Project Site(s)/Final Destination(s) is/are: <i>[Insert name(s) and detailed information on the location(s) of the site(s)]</i> |
| GCC 4.2 (a) | The meaning of the trade terms shall be as prescribed by Incoterms. If the meaning of any trade term and the rights and obligations of the parties thereunder shall not be as prescribed by Incoterms, they shall be as prescribed by: <i>[exceptional; refer to other internationally accepted trade terms]</i> |
| GCC 4.2 (b) | The version edition of Incoterms shall be <i>[insert date of current edition]</i> |
| GCC 5.1 | The language shall be: <i>[insert the name of the language]</i> |
| GCC 6.1 | <p>A minor member of the JV having participation in the JV of -----% of the value of the Contract <i>[specify a percentage pursuant to provision made under BDS of ITB 4.1 (a)]</i>, is excluded from joint and several liability: Yes -----No-----</p> <p>If "Yes" specify the following:</p> <p>i) Name and Address of the minor member is----- and</p> <p>ii) All other members shall remain jointly and severally liable for the fulfilment of all provisions of the entire Contract</p> <p><i>[Delete, entire text above if no such exception for a minor member was provided under BDS of ITB 4.1 (a)]</i></p> |

| | |
|-----------------|---|
| GCC 6.1 | Maximum numbers of members in the Joint Venture, Consortium or Association (JV) shall not exceed Two (2) . |
| GCC 6.1 | Minimum share of a member of Joint Venture, Consortium or Association (JV) in the contract shall not be less than 20% percent of the total value of the contract. |
| GCC 8.1 | <p>For notices, the Purchaser's address shall be:</p> <p>Attention: <i>[insert full name of person, if applicable]</i></p> <p>Street Address: <i>[insert street address and number]</i></p> <p>Floor/ Room number: <i>[insert floor and room number, if applicable]</i></p> <p>City: <i>[insert name of city or town]</i></p> <p>ZIP Code: <i>[insert postal ZIP code, if applicable]</i></p> <p>Country: <i>[insert name of country]</i></p> <p>Telephone: <i>[include telephone number, including country and city codes]</i></p> <p>Facsimile number: <i>[insert facsimile number, including country and city codes]</i></p> <p>Electronic mail address: <i>[insert e-mail address, if applicable]</i></p> |
| GCC 9.1 | The governing law shall be the law of: <i>[insert name of the country or state]</i> |
| GCC 10.2 | <p>The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall be as follows:</p> <p><i>[The bidding document should contain one clause to be retained in the event of a Contract with a foreign Supplier and one clause to be retained in the event of a Contract with a Supplier who is a national of the Purchaser's Country. At the time of finalizing the Contract, the respective applicable clause should be retained in the Contract. The following explanatory note should therefore be inserted as a header to GCC 10.2 in the bidding document.</i></p> <p><i>"Clause 10.2 (a) shall be retained in the case of a Contract with a foreign Supplier and clause 10.2 (b) shall be retained in the case of a Contract with a national of the Purchaser's Country."</i></p> <p>(a) Contract with foreign Supplier:</p> <p><i>[For contracts entered into with foreign suppliers, International commercial arbitration may have practical advantages over other dispute settlement methods. The Bank should not be named as arbitrator, nor should it be asked to name an arbitrator. Among the rules to govern</i></p> |

the arbitration proceedings, the Purchaser may wish to consider the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules of 1976, the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC), the Rules of the London Court of International Arbitration or the Rules of Arbitration Institute of the Stockholm Chamber of Commerce.]

If the Purchaser chooses the UNCITRAL Arbitration Rules, the following sample clause should be inserted:

GCC 10.2 (a)—Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force.

If the Purchaser chooses the Rules of ICC, the following sample clause should be inserted:

GCC 10.2 (a)—All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules.

If the Purchaser chooses the Rules of Arbitration Institute of Stockholm Chamber of Commerce, the following sample clause should be inserted:

GCC 10.2 (a)—Any dispute, controversy or claim arising out of or in connection with this Contract, or the breach termination or invalidity thereof, shall be settled by arbitration in accordance with the Rules of the Arbitration Institute of the Stockholm Chamber of Commerce.

If the Purchaser chooses the Rules of the London Court of International Arbitration, the following clause should be inserted:

GCC 10.2 (a)—Any dispute arising out of or in connection with this Contract, including any question regarding its existence, validity or termination shall be referred to and finally resolved by arbitration under the Rules of the London Court of International Arbitration, which rules are deemed to be incorporated by reference to this clause.

(b) *Contracts with Supplier national of the Purchaser's Country:*

| | |
|-----------------|--|
| | In the case of a dispute between the Purchaser and a Supplier who is a national of the Purchaser's Country, the dispute shall be referred to adjudication or arbitration in accordance with the laws of the Purchaser's Country. |
| GCC 13.1 | <p>Details of Shipping and other Documents to be furnished by the Supplier are documents including but not limited to a negotiable bill of lading, a non-negotiable sea way bill, an airway bill, a railway consignment note, a road consignment note, insurance certificate, Manufacturer's or Supplier's warranty certificate, inspection certificate issued by nominated inspection agency, Supplier's factory shipping details etc.</p> <p>The above documents shall be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.</p> |
| GCC 15.1 | <p>The prices charged for the Goods supplied and the related Services performed <i>[insert "shall" or "shall not," as appropriate]</i> be adjustable.</p> <p>If prices are adjustable, the following method shall be used to calculate the price adjustment <i>[see attachment to these SCC for a sample Price Adjustment Formula]</i></p> |
| GCC 16.1 | <p>Sample provision</p> <p>GCC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p>Payment for Goods supplied from abroad:</p> <p>Payment of foreign currency portion shall be made in United States Dollars (USD) in the following manner:</p> <ul style="list-style-type: none"> (i) Advance Payment: Ten (10) percent of the Contract Price shall be paid within thirty (30) days of signing of the Contract, and upon submission of claim and a bank guarantee for equivalent amount valid until the Goods are delivered and in the form provided in the bidding document or another form acceptable to the Purchaser. (ii) On Shipment: Eighty (80) percent of the Contract Price of the Goods shipped shall be paid through irrevocable confirmed letter of credit opened in favor of the Supplier in a bank in its country, upon submission of documents specified in GCC Clause 13. (iii) On Acceptance: Ten (10) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods upon submission of claim supported by the |

| | |
|-----------------|--|
| | <p>acceptance certificate issued by the Purchaser.</p> <p>Payment of local currency portion shall be made in _____ [currency] within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.</p> <p>Payment for Goods and Services supplied from within the Purchaser's Country:</p> <p>Payment for Goods and Services supplied from within the Purchaser's Country shall be made in _____ [currency], as follows:</p> <p>(i) Advance Payment: Ten (10) percent of the Contract Price shall be paid within thirty (30) days of signing of the Contract against a simple receipt and a bank guarantee for the equivalent amount and in the form provided in the bidding document or another form acceptable to the Purchaser.</p> <p>(ii) On Delivery: Eighty (80) percent of the Contract Price shall be paid on receipt of the Goods and upon submission of the documents specified in GCC Clause 13.</p> <p>(iii) On Acceptance: The remaining ten (10) percent of the Contract Price shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate for the respective delivery issued by the Purchaser.</p> |
| GCC 16.5 | <p>The payment-delay period after which the Purchaser shall pay interest to the supplier shall be 60 days.</p> <p>The interest rate that shall be applied is 2%.</p> |
| GCC 18.1 | <p>A Performance Security <i>shall be required</i></p> <p><i>The amount of the Performance Security shall be: 10% of the contract price.</i></p> |
| GCC 18.3 | <p>If required, the Performance Security shall be in the form of: <i>a Demand Guarantee.</i></p> <p>If required, the Performance security shall be denominated in <i>the currencies of payment of the Contract, in accordance with their portions of the Contract Price</i>"</p> |
| GCC 18.4 | <p>Discharge of the Performance Security shall take place: <i>as per date indicated in sub clause GCC 18.4</i></p> |

| | |
|-----------------|---|
| GCC 23.2 | <p>The packing, marking and documentation within and outside the packages shall be: in accordance with industry standards and regulatory requirements, ensuring the safe transport and handling of goods.</p> <p>Packaging materials should be durable and suitable for the contents, while marking should include clear labeling with the product name, handling instructions, and destination details.</p> <p>Documentation shall consist of an accurate packing list, shipping invoice, and any necessary customs declarations to facilitate smooth transit and compliance with legal obligations, among others.</p> |
| GCC 24.1 | <p>The insurance coverage shall be as specified in the Incoterms.</p> <p>If not in accordance with Incoterms, insurance shall be as follows:</p> <p><i>Comprehensive Insurance</i></p> |
| Ad | <p>Responsibility for transportation of the Goods shall be as specified in the Incoterms.</p> <p><i>Additionally, the Supplier is required under the Contract to transport the Goods to a specified place of final destination within the Purchaser's Country, defined as the Project Site, transport to such place of destination in the Purchaser's Country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price"; or any other agreed upon trade terms (specify the respective responsibilities of the Purchaser and the Supplier).</i></p> |
| GCC 25.2 | <p>Related services to be provided are: <i>Selected services covered under GCC Clause 25.2</i></p> |
| GCC 26.1 | <p>The inspections and tests shall be: In compliance with quality standards and specifications, including visual inspections for damage, functional testing of components, and performance evaluations under specified conditions.</p> <p>These assessments will be documented thoroughly, and any non-conformities will be addressed promptly to maintain product integrity and safety.</p> |
| GCC 26.2 | <p>The Inspections and tests shall be conducted at: the Project Site <i>i.e University of Djibouti</i></p> |
| GCC 27.1 | <p>The liquidated damage shall be: <i>0.5 % per week of delay</i></p> |
| GCC 27.1 | <p>The maximum amount of liquidated damages shall be: <i>5% of the contract amount</i></p> |

| | |
|--------------------------------------|---|
| <p>GCC 28.3</p> | <p>The period of validity of the Warranty shall be: <i>[insert number]</i> days</p> <p>For purposes of the Warranty, the place(s) of final destination(s) shall be:</p> <p><i>University of Djibouti in Djibouti</i></p> <p>Sample provision</p> <p>GCC 28.3—In partial modification of the provisions, the warranty period shall be _____ hours of operation or _____ months from date of acceptance of the Goods or (_____) months from the date of shipment, whichever occurs earlier. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the Contract. If, for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall, at its discretion, either:</p> <p>(a) make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with GCC 26.7,</p> <p>or</p> <p>(b) pay liquidated damages to the Purchaser with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be (_____).</p> <p><i>[The rate should be higher than the adjustment rate used in the Bid evaluation under BDS 35.6(f)]</i></p> |
| <p>GCC 28.5, GCC 28.6</p> | <p>The period for repair or replacement shall be: A maximum of thirty days</p> |

Attachment: Price Adjustment Formula: If Applicable (TBD).

If in accordance with GCC 15.1, prices shall be adjustable, the following method shall be used to calculate the price adjustment:

- 15.1 Prices payable to the Supplier, as stated in the Contract, shall be subject to adjustment during performance of the Contract to reflect changes in the cost of labor and material components in accordance with the formula:

$$P_1 = P_0 \left[a + \frac{bL_1}{L_0} + \frac{cM_1}{M_0} \right] - P_0$$

$$a+b+c = 1$$

in which:

- P_1 = adjustment amount.
 P_0 = Contract Price (base price).
 a = fixed element representing profits and overheads included in the Contract Price and generally in the range of five (5) to fifteen (15) percent.
 b = estimated percentage of labor component in the Contract Price.
 c = estimated percentage of material component in the Contract Price.
 L_0, L_1 = *labor indices applicable to the appropriate industry in the country of origin on the base date and date for adjustment, respectively.
 M_0, M_1 = *material indices for the major raw material on the base date and date for adjustment, respectively, in the country of origin.

The Bidder shall indicate the source of the indices, and the source of exchange rate (if applicable) and the base date indices in its Bid.

The coefficients a , b , and c as specified by the Purchaser are as follows:

- $a = [insert\ value\ of\ coefficient]$
 $b = [insert\ value\ of\ coefficient]$
 $c = [insert\ value\ of\ coefficient]$

Base date = thirty (30) days prior to the deadline for submission of the Bids.

Date of adjustment = $[insert\ number\ of\ weeks]$ weeks prior to date of shipment (representing the mid-point of the period of manufacture).

The above price adjustment formula shall be invoked by either party subject to the following further conditions:

- (a) No price adjustment shall be allowed beyond the original delivery dates. As a rule, no price adjustment shall be allowed for periods of delay for which the Supplier is entirely responsible. The Purchaser will,

however, be entitled to any decrease in the prices of the Goods and Services subject to adjustment.

- (b) If the currency in which the Contract Price P_0 is expressed is different from the currency of origin of the labor and material indices, a correction factor will be applied to avoid incorrect adjustments of the Contract Price. The correction factor shall be: Z_0 / Z_1 , where,

Z_0 = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price P_0 on the Base date, and

Z_1 = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price P_0 on the Date of Adjustment.

- (c) No price adjustment shall be payable on the portion of the Contract Price paid to the Supplier as advance payment.

Section X - Contract Forms

Table of Forms

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Notification of Intention to Award

[This Notification of Intention to Award shall be sent to each Bidder that submitted a Bid.]

[Send this Notification to the Bidder's Authorized Representative named in the Bidder Information Form]

For the attention of Bidder's Authorized Representative

Name: *[insert Authorized Representative's name]*

Address: *[insert Authorized Representative's Address]*

Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]*

Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to Bidders. The Notification must be sent to all Bidders simultaneously. This means on the same date and as close to the same time as possible.]

DATE OF TRANSMISSION: This Notification is sent by: *[email/fax]* on *[date]* (local time)

Notification of Intention to Award

Purchaser: *[insert the name of the Purchaser]*

Project: *[insert name of project]*

Contract title: *[insert the name of the contract]*

Country: *[insert country where IFB is issued]*

Loan No. /Credit No. / Grant No.: *[insert reference number for loan/credit/grant]*

OCBI / LCB No: *[insert OCBI reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period you may:

- a) request a debriefing in relation to the evaluation of your Bid, and/or
- b) submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Bidder

| | |
|------------------------|--|
| Name: | <i>[insert name of successful Bidder]</i> |
| Address: | <i>[insert address of the successful Bidder]</i> |
| Contract price: | <i>[insert contract price of the successful Bid]</i> |

2. Other Bidders *[INSTRUCTIONS: insert names of all Bidders that submitted a Bid. If the Bid's price was evaluated include the evaluated price as well as the Bid price as read out.]*

| Name of Bidder | Bid price | Evaluated Bid price (if applicable) |
|-----------------------|---------------------------|--|
| <i>[insert name]</i> | <i>[insert Bid price]</i> | <i>[insert evaluated price]</i> |
| <i>[insert name]</i> | <i>[insert Bid price]</i> | <i>[insert evaluated price]</i> |
| <i>[insert name]</i> | <i>[insert Bid price]</i> | <i>[insert evaluated price]</i> |
| <i>[insert name]</i> | <i>[insert Bid price]</i> | <i>[insert evaluated price]</i> |
| <i>[insert name]</i> | <i>[insert Bid price]</i> | <i>[insert evaluated price]</i> |

3. Reason/s why your Bid was unsuccessful

[INSTRUCTIONS: State the reason/s why this Bidder's Bid was unsuccessful. Do NOT include: (a) a point by point comparison with another Bidder's Bid or (b) information that is marked confidential by the Bidder in its Bid.]

4. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on *[insert date]* (local time).

You may request a debriefing in relation to the results of the evaluation of your Bid. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award.

Provide the contract name, reference number, name of the Bidder, contact details; and address the request for debriefing as follows:

Attention: *[insert full name of person, if applicable]*

Title/position: *[insert title/position]*

Agency: *[insert name of Purchaser]*

Email address: *[insert email address]*

Fax number: *[insert fax number]* **delete if not used**

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

5. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, *[insert date]* (local time).

Provide the contract name, reference number, name of the Bidder, contact details; and address the Procurement-related Complaint as follows:

Attention: *[insert full name of person, if applicable]*

Title/position: *[insert title/position]*

Agency: *[insert name of Purchaser]*

Email address: *[insert email address]*

Fax number: *[insert fax number]* **delete if not used**

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

Further information:

For more information see the Bank's Procurement Framework

In summary, there are four essential requirements:

1. You must be an 'interested party'. In this case, that means a Bidder who submitted a Bid in this bidding process, and is the recipient of a Notification of Intention to Award.
2. The complaint can only challenge the decision to award the contract.
3. You must submit the complaint within the period stated above.
4. You must include, in your complaint, all of the information required by

the Procurement Framework.

6. Standstill Period

DEADLINE: The Standstill Period is due to end at midnight on [*insert date*] (local time).

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

The Standstill Period may be extended as stated in Section 4 above.

If you have any questions regarding this Notification please do not hesitate to contact us.

On behalf of the Purchaser:

Signature: _____

Name: _____

Title/position: _____

Telephone: _____

Email: _____

[INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful Bidder. In case of joint venture, the Bidder must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Bidder is any natural person who ultimately owns or controls the Bidder by meeting one or more of the following conditions:

- directly or indirectly holding 25% or more of the shares*
- directly or indirectly holding 25% or more of the voting rights*
- directly or indirectly having the right to appoint a majority of the board of*

Beneficial Ownership Disclosure Form

OCBI / LCB No.: *[insert number of bidding process.]*

Invitation for Bid No.: *[insert identification]*

To: *[insert complete name of Purchaser]*

In response to your request in the Letter of Acceptance dated *[insert date of letter of Acceptance]* to furnish additional information on beneficial ownership: *[select one option as applicable and delete the options that are not applicable]*

(i) we hereby provide the following beneficial ownership information.

Details of beneficial ownership

| Identity of Beneficial Owner | Directly or indirectly holding 25% or more of the shares (Yes / No) | Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No) | Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent |
|------------------------------|--|--|--|
| | | | |

| | | | |
|---|--|--|--|
| | | | governing body of the Bidder (Yes / No) |
| <i>[include full name (last, middle, first), nationality, country of residence]</i> | | | |

OR

(ii) *We declare that there is no Beneficial Owner meeting one or more of the following conditions:*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder

OR

(iii) *We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Bidder shall provide explanation on why it is unable to identify any Beneficial Owner]*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder]"

Name of the Bidder: **[insert complete name of the Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ***[insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

* In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to "Bidder" in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

** Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Letter of Acceptance

[use letterhead paper of the Purchaser]

[date]

To: *[name and address of the Supplier]*

Subject: **Notification of Award Contract No.**

This is to notify you that your Bid dated ***[insert date]*** for execution of the ***[insert name of the contract and identification number, as given in the SCC]*** for the Accepted Contract Amount of ***[insert amount in numbers and words and name of currency]***, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish (i) the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms and (ii) the additional information on beneficial ownership in accordance with BDS ITB 45.1 within eight (8) Business days using the Beneficial Ownership Disclosure Form, included in Section X, - Contract Forms, of the Bidding Document.

Authorized Signature: _____
Name and Title of Signatory: _____
Name of Agency: _____

Attachment: Contract Agreement

Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT made the *[insert: **number**]* day of *[insert: **month**]*, *[insert: **year**]*.

BETWEEN

- (1) *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of of the Government of {insert name of Country of Purchaser}, or corporation incorporated under the laws of {insert name of Country of Purchaser}]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called "the Purchaser"), of the one part, and
- (2) *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier"), of the other part:

WHEREAS the Purchaser invited Bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
 - (a) the Letter of Acceptance
 - (b) the Letter of Bid
 - (c) the Addenda Nos. _____ (if any)
 - (d) Special Conditions of Contract
 - (e) General Conditions of Contract
 - (f) the Specification (including Schedule of Requirements and Technical Specifications)
 - (g) the drawings
 - (h) the completed Schedules (including Price Schedules)

- (i) any other document listed in GCC as forming part of the Contract
3. In consideration of the payments to be made by the Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and 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 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.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: *[insert signature]* _____
in the capacity of *[insert title or other appropriate designation]*
In the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]* _____
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

Performance Security

Option 1: (Bank Guarantee)

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _ *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the supply of _ *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant to issue this guarantee, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*,¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.

¹ The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, and denominated either in the currency (ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

² Insert the date twenty-eight days after the expected completion date as described in GC Clause 18.4. The Purchaser should note that in the event of an extension of this date for completion of the Contract, the Purchaser would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Purchaser might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Option 2: Performance Bond

By this Bond *[insert name of Principal]* as Principal (hereinafter called "the Supplier") and *[insert name of Surety]* as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[insert name of Purchaser]* as Obligee (hereinafter called "the Purchaser") in the amount of *[insert amount in words and figures]* specified as the penal sum of this Bond, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Supplier and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Supplier has entered into a written Agreement with the Purchaser dated the __ day of _____, 20 ____, for *[name of contract and brief description of Goods and related Services]* in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Supplier shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Supplier shall be, and declared by the Purchaser to be, in default under the Contract, the Purchaser having performed the Purchaser's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or Bids from qualified Bidders for submission to the Purchaser for completing the Contract in accordance with its terms and conditions, and upon determination by the Purchaser and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Purchaser and make available as supply progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the specified penal sum set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Purchaser to Supplier under the Contract, less the amount properly paid by Purchaser to the Supplier; or

- (3) pay the Purchaser the amount required by Purchaser to complete the Contract in accordance with its terms and conditions up to a total not exceeding the specified penal sum of this Bond.

The Surety shall not be liable for a greater sum than the specified penal sum of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of completion of the contract.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Purchaser named herein or the heirs, executors, administrators, successors, and assigns of the Purchaser.

In testimony whereof, the Supplier has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this _____ day of _____, 20____.

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

Advance Payment Security Demand Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

At the request of the Applicant to issue this guarantee, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (____) *[insert amount in words]*¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (d) has used the advance payment for purposes other than toward delivery of Goods; or
- (e) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

¹ The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Purchaser.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number *[insert number]* at *[insert name and address of Applicant's bank]*.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, has been certified for payment, or on the *[insert day]* day of *[insert month]*, 2 *[insert year]*, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.