



INDIAN OCEAN COMMISSION

**« BUILDING REGIONAL RESILIENCE THROUGH STRENGTHENED
METEOROLOGICAL, HYDROLOGICAL AND CLIMATE SERVICES IN THE INDIAN
OCEAN COMMISSION MEMBER COUNTRIES - (HYDROMET) »**

BIDDING DOCUMENTS

for

Acquisition and installation of S Band Radars

IPC No: *COI/HYDROMET/AOI/2026/M05*

Project: HYDROMET

Purchaser: Indian Ocean Commission (IOC)

Countries: *Comoros, Madagascar, Mauritius, Seychelles*

Issued on October 12, 2026

Standard Format for Invitation for Bids

Date: 12 October 2026

Name of Country: Mauritius

Name of Project: HYDROMET

IFB N°: COI/HYDROMET/AOI/2026/M05

1. The Indian Ocean Commission in acronym, IOC has received funding from the Agence Française de Développement ("AFD"), the European Commission ("EU") and the Green Climate Fund ("GCF") toward the cost of the project « BUILDING REGIONAL RESILIENCE THROUGH STRENGTHENED METEOROLOGICAL, HYDROLOGICAL AND CLIMATE SERVICES IN THE INDIAN OCEAN COMMISSION MEMBER COUNTRIES» (HydroMET) ». It is intended that part of the proceeds of these funds will be applied to eligible payments under the contract ¹ for **Acquisition and installation of radars.**

2. The *IOC* now invites sealed bids from eligible bidders for the procurement of *Radars* ("the Goods").

3. Interested eligible bidders may obtain further information from and inspect the Bidding Documents at the office of *Secretariat General of the Indian Ocean Commission (IOC), Service contrats et Marchés, Blue Tower, 4th Floor, Rue de l'Institut, Ebène, Mauritius*. mail: *smc@coi-ioc/org* ou *gina.bonne@coi-ioc.org* and inspect the Bidding Documents between the hours of 8:30 AM and 4:00 PM

4. A complete set of Bidding Documents can be downloaded by interested bidders from the COI website.

5. The provisions in the Instructions to Bidders and in the General Conditions of Contract are the provisions of the Agence Française de Développement's *Bidding Documents for Procurement of Goods*.

6. Bids must be delivered to the above office² on or before 3:00 PM on Monday **07 december 2026** and must be accompanied by *Bid-Securing Declaration*.

7. Bids will be opened in public and in the presence of bidders' representatives who choose to attend at *3:00 PM on Thursday 17 December 2026* at the offices of IOC.

8. Qualification criteria are as follows:

(i) Be an authorized seller or reseller of the required equipment, operational for at least five (5) years; (ii) Have an operational after-sales service; (iii) Possess a manufacturer's authorization; (iv) Have satisfactorily and substantially completed, during the last ten (10) years, at least one similar contract with a value of not less than USD 3,000,000, and one or more similar contracts with a combined value of not less than USD 6,000,000. A single similar contract with a value of at least USD 6,000,000 may satisfy both requirements. .

Additional details are provided in the Bidding Documents.

¹ Substitute "contracts" where bids are called concurrently for multiple contracts. Add a new para. as follows: "Bidders may bid for one or several contracts, as further defined in the bidding documents. Bidders wishing to offer discounts in case they are awarded more than one contract will be allowed to do so, provided those discounts are included in the Bid Submission Form."

² Substitute the Purchaser's address for bid submission if different from its address for inquiry and issuance of bidding documents.

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PART 1 – Bidding Procedures

Section I. Instructions to Bidders

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Section I. Instructions to Bidders

A. General

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| 1. Scope of Bid | <p>1.1 In connection with the Invitation for Bids, specified in the Bid Data Sheet (BDS), the Purchaser, as specified in the BDS, issues these Bidding Documents for the Procurement of Goods and Related Services incidental thereto as specified in Section VII, Schedule of Requirements. The name, identification and number of lots (contracts) of this International Procurement Competition (IPC) are specified in the BDS.</p> <p>1.2 Throughout these Bidding Documents:</p> <ul style="list-style-type: none"> (a) The term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, telex) with proof of receipt; (b) If the context so requires, “singular” means “plural” and vice versa; and (c) “Day” means calendar day. |
| 2. Source of Funds | <p>2.1 The Purchaser specified in the BDS has applied for or received financing (hereinafter called “funds”) from the Agence Française de Développement (hereinafter called “the AFD”), The European Union Development Fund (EDF) and the Green Climate Fund(GFC), toward the project named in BDS. The Purchaser intends to apply a portion of the funds to eligible payments under the contract for which these Bidding Documents are issued.</p> |
| 3. Prohibited Practices | <p>3.1 The AFD requires compliance with its policy regarding prohibited practices as set forth in Section VI.</p> <p>3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (where declared or not), sub-contractors, sub-consultants, service providers or suppliers and to permit the AFD to inspect all accounts, records and other documents relating to the submission of the application, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the AFD.</p> |
| 4. Eligible Bidders | <p>4.1 A Bidder may be a firm that is a private entity, a state-owned entity- subject to ITB 4.3- or any combination of such entities in the form of a joint venture (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, all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. 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.</p> <p>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</p> |

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) Participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or
- (f) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods that are the subject of the bid; or
- (g) Any of its affiliates has been hired (or is proposed to be hired) by the Purchaser for the Contract implementation; or
- (h) Has a close business or family relationship with a professional staff of the Purchaser (or of the project implementing agency, or of a recipient of a part of the funds) who: (i) are directly or indirectly involved in the preparation of the bidding documents 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 AFD throughout the procurement process and execution of the contract.

4.3 The AFD's eligibility criteria to bid are described in Section V, Eligibility criteria.

4.4 A Bidder shall not be under suspension from bidding by the Purchaser as the result of the execution of a Bid-Securing Declaration.

4.5 A Bidder shall provide such evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

5. Eligible Goods and Related Services

5.1 All the Goods and Related Services to be supplied under the Contract and financed by the AFD may have their origin in any country in accordance with Section V, Eligibility Criteria.

- 5.2 For purposes of this Clause, 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.

B. Contents of Bidding Documents

6. Sections of Bidding Documents

- 6.1 The Bidding Documents 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. Eligibility Criteria;
- Section VI. AFD Policy - Prohibited Practices and Environmental and Social Responsibility;

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 Invitation for Bids issued by the Purchaser is not part of the Bidding Documents.
- 6.3 Unless obtained directly from the Purchaser, the Purchaser is not responsible for the completeness of the Bidding Documents, responses to requests for clarification or Addenda to the Bidding Documents 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 Documents and to furnish with its Bid all information or documentation as is required by the Bidding Documents.

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| 7. Clarification of Bidding Documents | 7.1 A Bidder requiring any clarification of the Bidding Documents 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 no later than 14 (fourteen) days prior to the deadline for submission of bids. The Purchaser shall forward copies of its response to all Bidders who have acquired the Bidding Documents 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 Documents, the Purchaser shall amend the Bidding Documents 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 Documents by issuing addenda.

8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents 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 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. |

C. Preparation of Bids

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| 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: <ul style="list-style-type: none"> (a) Bid submission Form and the Bidding Forms in accordance with ITB 12; (b) Completed schedules, in accordance with ITB 12 and 14; (c) Bid Security or Bid-Securing Declaration, in accordance with ITB 19.1; |

- (d) Alternative bids, if permissible, in accordance with ITB 13;
- (e) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;
- (f) Statement of Integrity, Eligibility and Environmental and Social Responsibility duly signed, in accordance with ITB 12;
- (g) Documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;
- (h) Documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to bid;
- (i) Documentary evidence in accordance with ITB 16, that the Goods and Related Services to be supplied by the Bidder are of eligible origin;
- (j) Documentary evidence in accordance with ITB 16 and 29, that the Goods and Related Services conform to the Bidding Documents;
- (k) 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 Bid Submission Form information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

12. Bid Submission Form, Bidding Forms and Statement of Integrity and Price Schedules

12.1 The Bid Submission Form, the Bidding Forms and the Statement of Integrity 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 20.4. 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 Bid Submission Form 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 Bid Submission Form 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 Bid Submission Form.
- 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 quotation shall be treated as nonresponsive and shall be rejected, pursuant to ITB 29. 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 If so specified in ITB 1.1, bids are being invited for individual lots (contracts) or for any combination of lots (packages). Unless otherwise **specified in the BDS**, prices quoted shall correspond to 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer discounts for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4 provided the bids for all lots (contracts) are opened at the same time.
- 14.7 The term DAP, DDP 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**.
- 14.8 Prices shall be quoted as specified in each Price Schedule included in Section IV, Bidding Forms. The disaggregation of price components is required solely for the purpose of facilitating the comparison of bids by the Purchaser. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Section V, Eligibility Criteria. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Section V, Eligibility Criteria. Prices shall be entered in the following manner:
- (a) For Goods manufactured in the Purchaser's Country:
- (i) The price of the Goods quoted DAP named place of destination, 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; and
- (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.

- (b) For Goods manufactured outside the Purchaser's Country, to be imported:
 - (i) The price of the Goods, quoted DAP named place of destination, in the Purchaser's Country, **as specified in the BDS**; and
 - (ii) Any Purchaser's Country sales and other taxes which will be payable on the Goods if the contract is awarded to the Bidder.
- (c) For Goods manufactured outside the Purchaser's Country, already imported:
 - (i) The price of the Goods, quoted DAP named place of destination, excluding 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;
 - (ii) All custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported in the Purchaser's country, payable on the Goods, if the Contract is awarded to the Bidder;
 - (iii) Any Purchaser's Country sales and other taxes which will be payable on the Goods if the contract is awarded to the Bidder; and
- (d) For Related Services specified in Section VII - Schedule of Requirements:
 - (i) The price of each item comprising the Related Services (exclusive of any applicable taxes);
 - (ii) All custom duties, sales and other taxes applicable in the Purchaser's country, payable on the Related Services, if the Contract is awarded to the Bidder.

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| 15. Currencies of Bid and Payment | 15.1 | The currency(ies) of the bid and the currency(ies) of payments shall be as specified in the BDS . 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 . |
| 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 Documents, 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 their eligibility in accordance with ITB 4, Bidders shall complete the Bid Submission Form, 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 period **specified in the BDS** after the bid submission deadline date 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 Clause 19, it shall also be extended for twenty-eight (28) days beyond the deadline of the extended validity 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, 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**;
 - (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, as **specified in the BDS**, in original form and, in the case of a bid security, 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 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 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 from an eligible country as specified in Section V, Eligibility Criteria. If the unconditional guarantee is issued by a financial institution located outside the Purchaser's Country, the issuing financial institution shall have a correspondent financial institution located in the

Purchaser's Country to make it enforceable. 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 is specified pursuant to ITB 19.1, any bid not accompanied by a substantially responsive Bid Security or Bid-Securing Declaration shall be rejected by the Purchaser as non-responsive.
- 19.5 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 42.
- 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 may be forfeited or the Bid Securing Declaration executed:
- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Submission Form, or any extension thereto provided by the Bidder; or
 - (b) If the successful Bidder fails to:
 - (i) Sign the Contract in accordance with ITB 41; or
 - (ii) Furnish a performance security in accordance with ITB 42.
- 19.8 The Bid Security 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 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 security is **not 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 Bid Submission Form, or any extension thereto provided by the Bidder; or
 - (b) If the successful Bidder fails to: sign the Contract in accordance with ITB 41; or furnish a performance security in accordance with ITB 42;

the Purchaser may, **if provided for in the BDS**, 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 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.
- 20.3 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. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, then the Bid shall be signed by every member of the proposed JV.
- 20.4 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

D. Submission and Opening of Bids

21. Sealing and Marking of Bids

- 21.1 The Bidder shall enclose the original and all copies of the bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", "ALTERNATIVE" and "COPY". These envelopes containing the original and the copies shall then be enclosed in one single envelope.
- 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 Documents 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 20.2. 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 Bid Submission Form or any extension thereof.
- 25. Bid Opening**
- 25.1 Except as in the cases specified in ITB 23 and 24, the Purchaser shall publicly open and read out in accordance with ITB 25 all bids received by the deadline (regardless of the number of bids received), at the date, time and place **specified in the BDS** in the presence of Bidders’ designated representatives and anyone who choose 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. 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. 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. 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. Only bids that are opened and read out at Bid opening shall be considered further.

- 25.3 All other 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 lot (contract) if applicable, including any discounts and alternative bids; the presence or absence of a Bid Security or Bid-Securing Declaration, if required; and any other details as the Purchaser may consider appropriate. Only discounts and alternative bids read out at Bid opening shall be considered for evaluation. The Bid Submission Form and the Price Schedules are to be initialed by a minimum of three representatives of the Purchaser attending bid opening. The Purchaser shall neither discuss the merits of any bid nor reject any bid (except for late bids, in accordance with ITB 23.1).
- 25.4 The Purchaser shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot (contract) if applicable, including any discounts, and alternative bids; and the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required. 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.

E. Evaluation and Comparison of Bids

- 26. Confidentiality**
 - 26.1 Information relating to the examination, evaluation, and comparison of the bids, and qualification of the Bidders and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the bidding process until information on Contract Award is communicated to all Bidders in accordance with ITB 40.
 - 26.2 Any attempt by a Bidder to influence the Purchaser in the examination, evaluation, and comparison of the bids, and qualification of the bidders, 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 shall do so in writing.

- 27. Clarification of Bids**
- 27.1 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, given a reasonable time for a response. Any clarification submitted by a Bidder 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 31.
- 27.2 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.
- 28. Deviations, Reservations, and Omissions**
- 28.1 During the evaluation of bids, the following definitions apply:
- (a) "Deviation" is a departure from the requirements specified in the Bidding Documents;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Documents.
- 29. Determination of Responsiveness**
- 29.1 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.
- 29.2 A substantially responsive Bid is one that meets the requirements of the Bidding Documents 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 Documents, the Purchaser's rights or the Bidder's obligations under the proposed Contract; or
 - (b) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.
- 29.3 The Purchaser shall examine the technical aspects of the bid submitted in accordance with ITB 16, in particular, to confirm that all requirements of Section VII, Schedule of Requirements have been met without any material deviation or reservation, or omission.
- 29.4 If a bid is not substantially responsive to the requirements of the Bidding Documents, it shall be rejected by the Purchaser and may not

- subsequently be made responsive by correction of the material deviation, reservation, or omission.
- 30. Nonconformities, Errors and Omissions**
- 30.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonmaterial nonconformities in the Bid.
- 30.2 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 in the bid related to documentation requirements. Requesting information or documentation on such nonconformities 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.
- 30.3 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.
- 31. Correction of Arithmetical Errors**
- 31.1 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.
- 31.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 31.1 shall result in the rejection of the Bid.
- 32. Conversion to Single Currency**
- 32.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted in a single currency as **specified in the BDS**.
- 33. Margin of Preference**
- 33.1 **Unless otherwise specified in the BDS**, a margin of preference shall not apply.
- 34. Evaluation of Bids**
- 34.1 The Purchaser shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.

- 34.2 To evaluate a Bid (evaluation will be done for Items or Lots (contracts), as **specified in the BDS**), the Purchaser shall consider the following:
- (a) The Bid Price as quoted in accordance with clause 14;
 - (b) Price adjustment for correction of arithmetic errors in accordance with ITB 31.1;
 - (c) Price adjustment due to discounts offered in accordance with ITB 14.4;
 - (d) Price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 30.3;
 - (e) Converting the amount resulting from applying (a) to (d) above, if relevant, to a single currency in accordance with ITB 32;
 - (f) The additional evaluation factors as specified in Section III, Evaluation and Qualification Criteria.
- 34.3 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.
- 34.4 If these Bidding Documents allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Bid Submission Form, is specified in Section III, Evaluation and Qualification Criteria
- 34.5 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;
 - (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;
 - (c) In the case of Related Services, customs duties and sales and other similar taxes that will be payable on the Related Services if the contract is awarded to the Bidder;
 - (d) Any allowance for price adjustment during the period of execution of the contract, if provided in the bid.
- 34.6 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 Section III, Evaluation and Qualification Criteria. The criteria and methodologies to be used shall be as specified in Section III, Evaluation and Qualification Criteria.

- 34.7 If the bid, which results in the lowest Evaluated Bid Price, is significantly lower than the Purchaser's estimate, the Purchaser shall require the Bidder to produce detailed price analyses for any or all items of the Price Schedules, to demonstrate the internal consistency of those prices with the supply requirements and the method and schedule proposed. If one or several inconsistencies are evidenced, the bid shall be declared non-compliant and rejected.

35. Comparison of Bids

- 35.1 The Purchaser shall compare the evaluated prices of all substantially responsive bids established in accordance with ITB 34.2 to determine the lowest evaluated bid.

36. Qualification of the Bidder

- 36.1 The Purchaser shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

- 36.2 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.

- 36.3 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 next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.

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

- 37.1 The Purchaser reserves the right 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.

F. Award of Contract

38. Award Criteria

- 38.1 Subject to ITB 37.1, the Purchaser shall award the Contract to the Bidder whose bid has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

39. Purchaser's Right to Vary Quantities at Time of Award

- 39.1 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 Documents.

40. Notification of Award

- 40.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the “Letter of Acceptance”) shall specify the sum that the Purchaser will pay the Supplier in consideration of the supply of Goods (hereinafter and in the Conditions of Contract and Contract Forms called “the Contract Price”). At the same time, the Purchaser shall also notify all other Bidders of the results of the bidding.
- 40.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 40.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 40.1, requests in writing the grounds on which its bid was not selected.

41. Signing of Contract

- 41.1 Promptly after notification, the Purchaser shall send the successful Bidder the Contract Agreement.
- 41.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.
- 41.3 Notwithstanding ITB 41.2 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 AFD 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.

42. Performance Security

- 42.1 Within twenty-eight (28) days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the Performance Security in accordance with the GCC, 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.
- 42.2 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 or execution of the Bid-Securing Declaration. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose bid is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

Section II. Bid Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Clause Reference	A. General
ITB 1.1	The number of the Invitation for Bids is: COI/HYDROMET/AOI/2026/M05
ITB 1.1	The Purchaser is: Indian Ocean Commission
ITB 1.1	The name and identification number of the IPC are: Acquisition and installation of radars N°COI/HYDROMET/AOI/2026/M05
ITB 2.1	The name of the Project is: HYDROMET
	B. Contents of Bidding Documents
ITB 7.1	For <u>clarification of bid purposes</u> only, the Purchaser's address is: Secretariat General of the Indian Ocean Commission (IOC) Attention: Gina BONNE, Chargée de mission Blue Tower, 3rd floor, Institute Road, Ébène, Maurice Tel: (230) 402 6100 Email: gina.bonne@coi-ioc.org with copy to smc@coi-ioc.org A pre-bid conference will be held at Secretariat General of the Indian Ocean Commission (IOC) Blue Tower, 3rd floor, Institute Road, Ébène, Maurice A link to virtual meeting will be sent to the Consultants
ITB 7.1	Web page: https://www.commissionoceanindien.org
	C. Preparation of Bids
ITB 10.1	The language of the bid is English. All correspondence exchange shall be in the English language. Language for translation of supporting documents and printed literature is English.

ITB 11.1 (k)	The Bidder shall submit the following additional documents in its bid: • A company registration document • A written guarantee that the use of the proposed equipment is not likely to have an effect on the social, health of users and does not lead to environmental pollution.
ITB 13.1	Alternative Bids shall not be considered.
ITB 14.5	The prices quoted by the Bidder shall not be adjustable.
ITB 14.6	Prices quoted shall correspond at least to <i>100 %</i> of the items specified. Prices quoted for each item shall correspond at least to hundred percent of the quantities specified for this item.
ITB 14.7	The Incoterms edition is Incoterms 2020. Under DAP Incoterms, the responsibilities of the Supplier and the Buyer shall be allocated as follows: Insurance The Supplier shall be responsible for insuring the goods up to the agreed place of destination. Transportation The Supplier shall arrange and bear all transportation costs up to the DAP destination, including pre-carriage, main carriage and inland transportation. Customs Clearance • Supplier: Export customs formalities, licences and related export costs. • Buyer: Import customs clearance, licences, authorisations and related formalities. Duties, Taxes and VAT Import duties, taxes and VAT shall be borne by the Buyer. Storage Storage costs resulting from the Buyer's obligations, including import clearance, site unavailability or failure to receive the goods, shall be borne by the Buyer. Costs resulting from the Supplier's obligations or failure shall remain with the Supplier. Transfer of Risk and Final Delivery Risk shall transfer to the Buyer at the agreed DAP destination, when the goods are placed at the Buyer's disposal on the arriving means of transport, ready for unloading. The Supplier shall arrange and pay for delivery to the site, while unloading shall be the Buyer's responsibility.

ITB 14.8 (b) (i)	Named Place of Destination: DAP Incoterm: <u>The destinations are in the following countries:</u> • Comoros – Ngazidja-Grande Comores, • Mauritius – Rodrigues Island • Seychelles – Pralin Island • Madagascar- Morondava The complete description of locations is indicated in section VII paragraph 3.
ITB 15.1	The prices shall be quoted by the bidder in: US dollars (USD). The Bidder is not 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	Lifetime of the Goods are expected to be (for the purpose of spare parts): fifteen (15) years.
ITB 17.2 (a)	Manufacturer's authorization is required
ITB 17.2 (b)	After sales service is required
ITB 18.1	The bid validity period shall be 120 days.
ITB 18.3 (a)	The bid price shall be adjusted by the following factor: as will be indicated in the request for bid validity extension
ITB 19.1	A Bid Security is not required. A Bid-Securing Declaration is required
ITB 19.3 (d)	Other types of acceptable securities: None
ITB 19.9	If the Bidder incurs any of the actions prescribed in subparagraphs (a) or (b) of this provision, the Purchaser will declare the Bidder ineligible to be awarded contracts by the Purchaser for a period of five (5) years.
ITB 20.1	In addition to the original of the bid, the number of hard copies is Two (2) and the number of electronic copy is One (1)
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of a power of attorney established in the name of the signatory of the bid
	D. Submission and Opening of Bids
ITB 22.1	For bid submission purposes, the Purchaser's address is: Secretariat General of the Indian Ocean Commission (IOC) Service contrats et Marchés Blue Tower, 4th Floor, Rue de l'Institut, Ebène, Mauritius

	Telephone: (+230) 402 6100 - Fax: (+230) 465 6789 The deadline for the submission of bids is: Date: 07 December 2026 Time: 03:00 PM (GMT +4) If the tender is sent by express delivery, the tenderer must send proof of shipment of its tender to the addresses gina.bonne@coi-ioc.org and smc@coi-ioc.org no later than the deadline for submission above mentioned. The Purchaser shall not consider any bid that arrives after the bid opening session.
ITB 22.1	Bidders shall not have the option of submitting their bids electronically.
ITB 25.1	The bid opening shall take place at: Secretariat General of the Indian Ocean Commission (IOC) Service contrats et Marchés Blue Tower, 4th Floor, Rue de l'Institut, Ebène, Mauritius Telephone: (+230) 402 6100 - Fax: (+230) 465 6789 Date: 17 December 2026 Time: 03:00 PM (GMT +4) The Purchaser shall not consider any bid that arrives after the bid opening. No minimum number of bids is required in order to proceed to bid opening. Bidders wishing to participate in bid opening by online platform must send a request to the following address: gina.bonne@coi-ioc.org and smc@coi-ioc.org a week before the day of the bid opening. IOC will send the connexion address.
	E. Evaluation and Comparison of Bids
ITB 32.1	The source of exchange rate shall be: Central bank of Mauritius The date for the exchange rate shall be the deadline for the submission of bids
ITB 33.1	A margin of domestic preference shall not apply.
ITB 34.2	Evaluation will be done per lot (the single lot is composed of four radars) 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 highest price 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.
	F. Award of Contract
ITB 39.1	The maximum percentage by which quantities may be increased is: 15%

	The maximum percentage by which quantities may be decreased is: 15%
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Section III. Evaluation and Qualification Criteria

This Section complements the Instructions to Bidders. It contains the criteria that the Purchaser may use to evaluate a bid and determine whether a Bidder has the required qualifications. No other criteria shall be used.

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1.Evaluation (ITB 34)

1.1 Evaluation Criteria (ITB 34.6)

The Purchaser's financial evaluation of Bids for Goods may take into account, in addition to the Bid Price quoted in accordance with ITB Clause 14.8, one or more of the following factors as specified in ITB Sub-Clause 34.2 (f), using the following criteria and methodologies.

Not applicable

2.Qualification (ITB 36)

After determining the lowest-evaluated bid in accordance with ITB 35.1, the Purchaser shall carry out the postqualification of the Bidder in accordance with ITB 36, using only the requirements specified. Requirements not included in the tables below shall not be used in the evaluation of the Bidder's qualifications.

Eligibility and Qualification Criteria				Compliance Requirements			Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
1. Eligibility							
1.1	Nationality	Nationality in accordance with ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	Conflict of Interest	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Bid Submission Form
1.3	AFD Eligibility	Not being ineligible for AFD financing, as described in ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Statement of Integrity (appendix to Bid Submission Form)
1.4	State-owned Entity	Meets conditions of ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments

Eligibility and Qualification Criteria				Compliance Requirements			Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2. Historical Contract Non-Performance							
2.1	History of Non-Performing Contracts	Termination of a contract ³ did not occur as a result of Supplier default in the past 5 years.	Must meet requirement ²	Must meet requirements	Must meet requirement ⁴	N/A	Form CON-2
2.2	Suspension Based on Execution of Bid Securing Declaration by the Purchaser or withdrawal of the Bid within Bid validity	Not under suspension based on execution of a Bid Securing Declaration pursuant to ITB 4.4 or withdrawal of a Bid pursuant ITB 19.9.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Bid Submission Form
2.3	Pending Litigation	All pending litigation shall in total not represent more than one hundred percent (100%) of the Bidder’s net worth and shall be treated as resolved against the Bidder.	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2

³ Non-performance shall include all terminations of contracts where (a) non-performance was not challenged by the supplier, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the supplier. Non-performance shall not include contracts where Purchasers decision was overruled by the dispute resolution mechanism.

⁴ This requirement also applies to contracts executed by the Bidder as JV member.

Eligibility and Qualification Criteria		Compliance Requirements			Documentation		
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
3. Financial Situation and Performance							
3.1	Financial Capabilities	Submission of audited balance sheets or if not required by the law of the Bidder's country, other financial statements acceptable to the Purchaser, for the last 3 years to demonstrate the current soundness of the Bidder's financial position based on the following criteria: a) liquidity ratio ≥ 1.1 ((Current Assets) / (Current Liabilities) ≥ 1.1) b) indebtedness ratio $\leq 80\%$ ((Total Liabilities) x 100 / (Total Assets) $\leq 80\%$)]	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN – 3.1, with attachments
3.2	Minimum Total Turnover	The Bidder, or the Joint Venture as a whole, shall have a minimum total turnover of USD 10,000,000 over the last three (3) years. In the case of a Joint Venture, the turnover of all members shall be aggregated to meet this requirement..	Must meet requirement	Must meet requirement			Form FIN – 3.2

Eligibility and Qualification Criteria		Compliance Requirements					Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
4. Experience							
4.1	Similar Experience	A minimum number of similar ⁵ contracts specified below that have been satisfactorily and substantially ⁶ completed as Supplier, or joint venture member ⁷ , by the application submission deadline: The Bidder shall demonstrate satisfactory and substantial completion, during the last ten (10) years, of at least one similar contract with a value of not less than USD 3,000,000, and one or more similar contracts with a combined value of not less than USD 6,000,000. A single similar contract with a value equal to or greater than USD 6,000,000 shall be considered as meeting both requirements.	Must meet requirement	Must meet requirement ⁸	N/A	N/A	Form EXP 4.1
4.2	Specific Experience	The Bidder shall demonstrate its	Must meet requirement	Must meet requirement	N/A	N/A	Form EXP 4.1

⁵ The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VII, Schedule of Requirements. Summation of number of small value contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.

⁶ Substantial completion shall be based on 80% or more completed under the contract.

⁷ For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share, by value, shall be considered to meet this requirement.

⁸ In the case of JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		capacity and commitment to provide after-sales service, maintenance, technical support and access to spare parts in all IOC beneficiary countries throughout the applicable warranty and technical support periods. The proposed arrangements shall be detailed in the Bidder’s Operation and Maintenance Plan.Bid ⁹					

3.Domestic Preference (ITB 33)

Not applicable

⁹ An acceptable alternative to meet this requirement is the evidence by the Bidder of one successful experience in the past five (5) years of creating and operating for a period of time exceeding one year an after sales services facility in a foreign country.

Section IV. Bidding Forms

Table of Forms

Bid Submission Form	Erreur ! Signet non défini.
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Price Schedule: Goods Manufactured Outside the Purchaser's Country, Already Imported	Erreur ! Signet non défini.
Price Schedule: Goods Manufactured in the Purchaser's Country	Erreur ! Signet non défini.
Price and Completion Schedule - Related Services	Erreur ! Signet non défini.
Form of Bid Security (Bank Guarantee)	Erreur ! Signet non défini.
Form of Bid-Securing Declaration	Erreur ! Signet non défini.
Manufacturer's Authorization	Erreur ! Signet non défini.

Bid Submission Form

[The Bidder shall prepare his Bid Submission Form on a Letterhead paper specifying his name and address]

Date: _____

IPC No.: _____

Invitation for Bid No.: _____

Alternative No.: _____

To: _____

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB 8) _____;
- (b) We have no conflict of interest in accordance with ITB 4.2.
- (c) 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 4.4.
- (d) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedule specified in the Schedule of Requirements the following Goods: _____;
- (e) The total price of our Bid, excluding any discounts offered in item (f) below is:
 - i) In case of only one lot, total price of the Bid _____
 - ii) In case of multiple lots, total price of each lot _____
 - iii) In case of multiple lots, total price of all lots (sum of all lots) _____
- (f) The discounts offered and the methodology for their application are:
 - i) The discounts offered are: _____
 - ii) The exact method of calculations to determine the net price after application of discounts is shown below: _____
- (g) Our bid shall be valid for a period of _____ days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (h) If our bid is accepted, we commit to obtain a performance security in accordance with ITB 42 of the Bidding Documents;
- (i) We are not participating, as a Bidder, in more than one bid in this bidding process in accordance with ITB 4.2(e), other than alternative bids submitted in accordance with ITB 13;

- (j) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (k) We understand and accept that the Purchaser reserves the right to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders; and
- (l) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption.

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 to be attached with the Bid

Appendix to Bid Submission Form

Statement of Integrity, Eligibility and Environmental and Social Responsibility

Reference name of the bid or proposal: _____ (The "Contract")

To: _____ (The "Contracting Authority")

1. We recognise and accept that *Agence Française de Développement* ("AFD") only finances projects of the Contracting Authority subject to its own conditions which are set out in the Financing Agreement which benefits directly or indirectly to the Contracting Authority. As a matter of consequence, no legal relationship exists between AFD and our company, our joint venture or our suppliers, contractors, subcontractors, consultants or subconsultants. The Contracting Authority retains exclusive responsibility for the preparation and implementation of the procurement process and performance of the contract. The Contracting Authority means the Purchaser, the Employer, the Client, as the case may be, for the procurement of goods, works, plants, consulting services or non-consulting services.
2. We hereby certify that neither we nor any other member of our joint venture or any of our suppliers, contractors, subcontractors, consultants or subconsultants are in any of the following situations:
 - 2.1) Being bankrupt, wound up or ceasing our activities, having our activities administered by the courts, having entered into receivership, reorganisation or being in any analogous situation arising from any similar procedure;
 - 2.2) Having been:
 - a. convicted, within the past five years by a court decision, which has the force of *res judicata* in the country where the Contract is implemented, of fraud, corruption or of any other offense committed during a procurement process or performance of a contract (in the event of such conviction, you may attach to this Statement of Integrity supporting information showing that this conviction is not relevant in the context of this Contract);
 - b. subject to an administrative sanction within the past five years by the European Union or by the competent authorities of the country where we are constituted, for fraud, corruption or for any other offense committed during a procurement process or performance of a contract (in the event of such sanction, you may attach to this Statement of Integrity supporting information showing that this sanction is not relevant in the context of this Contract);
 - c. convicted, within the past five years by a court decision, which has the force of *res judicata*, of fraud, corruption or of any other offense committed during the procurement process or performance of an AFD-financed contract;

- 2.3) Being listed for financial sanctions by the United Nations, the European Union, and/or France for the purposes of fight-against-terrorist financing or threat to international peace and security;
 - 2.4) Having been subject within the past five years to a contract termination fully settled against us for significant or persistent failure to comply with our contractual obligations during contract performance, unless this termination was challenged and dispute resolution is still pending or has not confirmed a full settlement against us;
 - 2.5) Not having fulfilled our fiscal obligations regarding payments of taxes in accordance with the legal provisions of either the country where we are constituted or the Contracting Authority's country;
 - 2.6) Being subject to an exclusion decision of the World Bank and being listed on the website <http://www.worldbank.org/debarr> (in the event of such exclusion, you may attach to this Statement of Integrity supporting information showing that this exclusion is not relevant in the context of this Contract);
 - 2.7) Having created false documents or committed misrepresentation in documentation requested by the Contracting Authority as part of the procurement process of this Contract.
3. We hereby certify that neither we, nor any of the members of our joint venture or any of our suppliers, contractors, subcontractors, consultants or subconsultants are in any of the following situations of conflict of interest:
 - 3.1) Being an affiliate controlled by the Contracting Authority or a shareholder controlling the Contracting Authority, unless the stemming conflict of interest has been brought to the attention of AFD and resolved to its satisfaction;
 - 3.2) Having a business or family relationship with a Contracting Authority's staff involved in the procurement process or the supervision of the resulting Contract, unless the stemming conflict of interest has been brought to the attention of AFD and resolved to its satisfaction;
 - 3.3) Being controlled by or controlling another bidder or consultant, or being under common control with another bidder or consultant, or receiving from or granting subsidies directly or indirectly to another bidder or consultant, having the same legal representative as another bidder or consultant, maintaining direct or indirect contacts with another bidder or consultant which allows us to have or give access to information contained in the respective applications, bids or proposals, influencing them or influencing decisions of the Contracting Authority;
 - 3.4) Being engaged in a consulting services activity, which, by its nature, may be in conflict with the assignments that we would carry out for the Contracting Authority;
 - 3.5) In the case of procurement of goods, works or plants:
 - i. Having prepared or having been associated with a consultant who prepared specifications, drawings, calculations and other documentation to be used in the procurement process of this Contract;
 - ii. Having been recruited (or being proposed to be recruited) ourselves or any of our affiliates, to carry out works supervision or inspection for this Contract;
 4. If we are a state-owned entity, and to compete in a procurement process, we certify that we have legal and financial autonomy and that we operate under commercial laws and regulations.

5. We undertake to bring to the attention of the Contracting Authority, which will inform AFD, any change in situation with regard to points 2 to 4 here above.
6. In the context of the procurement process and performance of the corresponding contract:
 - 6.1) We have not and we will not engage in any dishonest conduct (act or omission) deliberately intended to deceive others, to intentionally conceal items, to violate or vitiate someone's consent, to make them circumvent legal or regulatory requirements and/or to violate their internal rules in order to obtain illegitimate profit;
 - 6.2) We have not and we will not engage in any dishonest conduct (act or omission) contrary to our legal or regulatory obligations or our internal rules in order to obtain illegitimate profit;
 - 6.3) We have not promised, offered or given and we will not promise, offer or give, directly or indirectly to (i) any Person who holds a legislative, executive, administrative or judicial mandate within the State of the Contracting Authority regardless of whether that Person was nominated or elected, regardless of the permanent or temporary, paid or unpaid nature of the position and regardless of the hierarchical level the Person occupies, (ii) any other Person who performs a public function, including for a State institution or a State-owned company, or who provides a public service, or (iii) any other person defined as a Public Officer by the national laws of the Contracting Authority's country, an undue advantage of any kind, for himself or for another Person or entity, for such Public Officer to act or refrain from acting in his official capacity;
 - 6.4) We have not promised, offered or given and we will not promise, offer or give, directly or indirectly to any Person who occupies an executive position in a private sector entity or works for such an entity, regardless of the nature of his/her capacity, any undue advantage of any kind, for himself or another Person or entity for such Person to perform or refrain from performing any act in breach of its legal, contractual or professional obligations;
 - 6.5) We have not and we will not engage in any practice likely to influence the contract award process to the detriment of the Contracting Authority and, in particular, in any anti-competitive practice having for object or for effect to prevent, restrict or distort competition, namely by limiting access to the market or the free exercise of competition by other undertakings;
 - 6.6) Neither we nor any of the members of our joint venture or any of our suppliers, contractors, subcontractors, consultants or subconsultants shall acquire or supply any equipment nor operate in any sectors under an embargo of the United Nations, the European Union or France;
 - 6.7) We commit ourselves to comply with and ensure that all of our suppliers, contractors, subcontractors, consultants or subconsultants comply with international environmental and labour standards, consistent with laws and regulations applicable in the country of implementation of the Contract, including the fundamental conventions of the International Labour Organisation (ILO) and international environmental treaties. Moreover, we shall implement environmental and social risks mitigation measures when specified in the environmental and social commitment plan (ESCP) provided by the Contracting Authority.
7. We, as well as members of our joint venture and our suppliers, contractors, subcontractors, consultants or subconsultants authorise AFD to inspect accounts, records and other documents relating to the procurement process and performance of the contract and to have them audited by auditors appointed by AFD.

Name: _____ In the capacity of: _____

Duly empowered to sign in the name and on behalf of¹⁰: _____

Signature: _____ Dated: _____

¹⁰ In case of joint venture, insert the name of the joint venture. The person who will sign the application, bid or proposal on behalf of the applicant, bidder or consultant shall attach a power of attorney from the applicant, bidder or consultant.

Technical bid form

Bider should complete the third column of the tables mentioned in section 6.to 9, giving details of their technical specifications or comments, including any references to documents provided in their bid

Form ELI-1.1: Bidder Information Form

Date: _____
IPC No. and title: _____
Page _____ of _____ pages

Bidder's name
In case of Joint Venture (JV), name of each member:
Bidder's actual or intended country of constitution: <i>[indicate country of Constitution]</i>
Bidder's actual or intended year of constitution:
Bidder's legal address [in country of constitution]:
Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ☐ Articles of Constitution (or equivalent documents of association) of the legal entity named above; ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1; ☐ In case of state-owned enterprise or institution, in accordance with ITB 4.3 documents establishing: a) Legal and financial autonomy; b) Operation under commercial law; c) Establishing that the Bidder is not dependent agency of the Purchaser.
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Form ELI-1.2: Bidder's JV Information Form

(to be completed for each member of Bidder's JV)

Date: _____
IPC No. and title: _____
Page _____ of _____ pages

Bidder's JV name:
JV member's name:
JV member's country of constitution:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ☐ Articles of Constitution (or equivalent documents of association) of the legal entity named above; ☐ In case of a state-owned enterprise or institution, documents establishing: a) Legal and financial autonomy; b) Operation in accordance with commercial law; and c) Absence of dependent status, in accordance with ITB 4.3. 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Form CON-2: Historical Contract Non-Performance, Pending Litigation and Litigation History

(to be completed by the Bidder and by each member of the Bidder's JV)

Bidder's Name: _____

Date: _____

JV Member's Name _____

IPC No. and title: _____

Page _____ of _____ pages

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
☐ Contract non-performance did not occur since 1st January <i>[insert current year number less 5]</i> specified in Section III, Evaluation and Qualification Criteria, subclause 2.1.			
☐ Contract(s) not performed since 1st January <i>[insert current year number less 5]</i> specified in Section III, Evaluation and Qualification Criteria, subclause 2.1			
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, Qualification Criteria and Requirements			
☐ No pending litigation in accordance with Section III, Qualification Criteria and Requirements, subclause 2.3.			
☐ Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, subclause 2.3 as indicated below.			
Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), US\$ Equivalent (exchange rate)
		Contract Identification: _____ Name of Purchaser: _____ Address of Purchaser: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	

Form FIN-3.1: Financial Situation and Performance

Bidder's Name: _____

Date: _____

JV Member's Name _____

IPC No. and title: _____

Page _____ of _____ pages

1. Financial data

Type of Financial information in (currency)	Historic information for previous _____ years, (amount in currency, currency, exchange rate*, US\$ equivalent)				
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

*Refer to ITB 15 for the exchange rate

2. Financial documents

The Bidder and its parties shall provide copies of financial statements for _____ years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

- (a) Reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member);
- (b) Be independently audited or certified in accordance with local legislation;
- (c) Be complete, including all notes to the financial statements;
- (d) Correspond to accounting periods already completed and audited.

☐ Attached are copies of financial statements¹¹ for the _____ years required above and complying with the requirements.

¹¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

Form FIN-3.2: Average Annual Supplier Turnover

Bidder's Name: _____

Date: _____

JV Member's Name _____

IPC No. and title: _____

Page _____ of _____ pages

		Annual turnover data	
Year	Amount Currency	Exchange rate	US\$ equivalent
<i>[indicate year]</i>	<i>[insert amount and indicate currency]</i>		
Average Annual Turnover *			

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

Form EXP-4.1: Experience

Bidder's Legal Name: _____

Date: _____

JV Member's Legal Name: _____

IPC No.: _____

Page _____ of _____ pages

Similar Contract No. __ /insert specific number] of [total number of contracts] __ required	Information	
Contract Identification	_____	
Award date	_____	
Completion date	_____	
Role in Contract	_____	
Total contract amount	_____	US\$ equivalent _____
If member in a JV, specify participation in total contract amount	_____ %	US\$ equivalent _____
Purchaser's Name:	_____	
Address:	_____	
Telephone/fax number:	_____	
E-mail:	_____	

Form EXP – 4.1 (cont.) Experience (cont.)

Bidder's Legal Name: _____ Page _____ of _____ pages
 JV Member's Legal Name: _____

Similar Contract No. __/insert specific number] of [total number of contracts] required	Information
Description of the similarity in accordance with Sub-Factor 4.1 or 4.2 of Section III:	
Amount	_____
Physical size	_____
Complexity	_____
Methods/Technology	_____
Other Characteristics	_____

Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms 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.]*

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

(Group C bids, goods to be imported) Currencies in accordance with ITB Sub-Clause 15							Date: _____ IPC No: _____ Alternative No: _____ Page N° _____ of _____
1	2	3	4	5	6	7	8
Line Item N°	Description of Goods	Country of Origin	Delivery Date at named place of destination	Quantity and physical unit	DAP <i>[insert named place of destination]</i> in accordance with ITB 14.8(b)(i)	Sales and other taxes paid or payable per item if Contract is awarded, in accordance with ITB 14.8(b)(ii)	Total Price per Line item (Col. 5x6)
<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 DAP per unit]</i>	<i>[insert sales and other taxes paid or payable per item if Contract is awarded]</i>	<i>[insert total price of the line item]</i>
Total Price							

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

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

(Group C bids, Goods already imported) Currencies in accordance with ITB Sub-Clause 15								Date: _____ IPC 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 at named place of destination	Quantity and physical unit	DAP Unit price excluding Custom Duties and Import Taxes paid, in accordance with ITB 14.8(c)(i)	Custom Duties and Import Taxes paid per unit in accordance with ITB 14.8(c)(ii), [to be supported by documents]	Sales and other taxes paid or payable per item if Contract is awarded, in accordance with ITB 14.8(c)(iii)	Total Price per line item (Col. 5x6)
<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 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]*

Price Schedule: Goods Manufactured in the Purchaser's Country

Purchaser's Country _____ Currencies in accordance with ITB Sub-Clause 15					(Group A and B bids) Date: _____ IPC No: _____ Alternative No: _____ Page N° _____ of _____		
1	2	3	4	5	6*	7	8
Line Item N°	Description of Goods	Delivery Date at named place of destination	Quantity and physical unit	Unit price DAP	Cost of local labor, raw materials, transportation, insurance and components 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 14.8(a)(ii)	Total Price per line item (Col. 4 x 5)
<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 DAP unit price]</i>	<i>[Insert cost of local labor, raw material, transportation, insurance and components from within the Purchase's country as a % of the DAP 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							

- Only in case of Domestic Preference applies

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

Price details by items

Each item unit price of equipment must be detailed as following

No	Description	Sub cost	Unit	Quantity	Unit price DAP	Amount
1	Item	Equipment cost				
		Design services				
		Installation, training, test, etc.				
		Spare parts	package			
		Other...				
	Total for item					

*One table by each item

Price and Completion Schedule - Related Services

Currencies in accordance with ITB Clause 15						Date: _____ IPC No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8
Service N°	Description of Services	Country of Origin	Delivery Date at named place of destination	Quantity and physical unit	Unit Price net of duties and applicable taxes, in accordance with ITB 14.8 (d) (i)	Duties and other taxes payable per line item if Contract is awarded, in accordance with ITB 14.8(d)(ii)	Total Price per Service net of duties and taxes (Col.5 x 6)
<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 named place of destination]</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 duties and other taxes payable per line item if Contract is awarded]</i>	<i>[insert total price per 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]*

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)]*

Bid No.: *[number of bidding process]*

Alternative No.: *[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 *five years* starting on *following resignation date*, 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 Form 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 or any extension thereto accepted by us, (i) fail or refuse to execute the Contract; or (ii) fail or refuse to furnish the Performance Security, if required in accordance with the ITB.

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 of 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]*

IPC No.: *[insert number of bidding process]*

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. Eligibility Criteria

Eligibility in AFD-Financed Procurement

11.1.1 Financing allocated by the AFD to a Contracting Authority has been entirely untied since 1st January 2002. To the exception of any equipment or any sector which is subject to an embargo by the United Nations, the European Union or France, all goods, works, plants, consulting services and non-consulting services are eligible for the AFD financing regardless of the country of origin of the supplier, contractor, subcontractor, consultant or subconsultant inputs or resources used in the implementation processes. The Contracting Authority means the Purchaser, the Employer, the Client, as the case may be, for the procurement of goods, works, plants, consulting services or non-consulting services.

11.1.2 Natural or legal persons (including all members of a joint venture or any of their suppliers, contractors, subcontractors, consultants or subconsultants) shall not be awarded an AFD-financed contract if, on the date of submission of an application, a bid or a proposal, or on the date of award of a contract, they:

2.1) Are bankrupt or being wound up or ceasing their activities, are having their activities administered by the courts, have entered into receivership, or are in any analogous situation arising from a similar procedure;

2.2) Have been:

a. convicted, within the past five years by a court decision, which has the force of *res judicata* in the country where the contract is implemented, of fraud, corruption or of any other offense committed during a procurement process or performance of a contract, unless they provide supporting information together with their Statement of Integrity (Form available as Appendix to the Application, Bid or Proposal Submission Form) which shows that this conviction is not relevant in the context of this contract;

b. subject to an administrative sanction within the past five years by the European Union or by the competent authorities of the country where they are constituted, for fraud, corruption or for any other offense committed during a procurement process or performance of a contract, unless they provide supporting information together with their Statement of Integrity (Form available as Appendix to the Application, Bid or Proposal Submission Form) which shows that this sanction is not relevant in the context of this contract;

c. convicted, within the past five years by a court decision, which has the force of *res judicata*, of fraud, corruption or of any other offense committed during the procurement process or performance of an AFD-financed contract;

2.3) Are listed for financial sanctions by the United Nations, the European Union and/or France for the purposes of fight-against-terrorist financing or threat to international peace and security;

2.4) Have been subject within the past five years to a contract termination fully settled against them for significant or persistent failure to comply with their contractual

obligations during contract performance, unless this termination was challenged and dispute resolution is still pending or has not confirmed a full settlement against them;

2.5) Have not fulfilled their fiscal obligations regarding payments of taxes in accordance with the legal provisions of either the country where they are constituted or the Contracting Authority's country;

2.6) Are subject to an exclusion decision of the World Bank and are listed on the website <http://www.worldbank.org/debar>, unless they provide supporting information together with their Statement of Integrity (Form available as Appendix to the Application, Bid or Proposal Submission Form) which shows that this exclusion is not relevant in the context of this contract;

2.7) Have created false documents or committed misrepresentation in documentation requested by the Contracting Authority as part of the procurement process of this Contract.

11.1.3 State-owned entities may compete only if they can establish that they (i) are legally and financially autonomous, and (ii) operate under commercial law. To be eligible, a state-owned entity shall establish to the AFD's satisfaction, through all relevant documents, including its Charter and other information the AFD may request, that it: (i) is a legal entity separate from their state (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to their state, can acquire rights and liabilities, borrow funds and be liable for repayment of its debts, and can be declared bankrupt.

Section VI. AFD Policy - Prohibited Practices – environmental and social responsibility

1. Corrupt and Fraudulent Practices

The Contracting Authority and the suppliers, contractors, subcontractors, consultants or subconsultants must observe the highest standard of ethics during the procurement process and performance of the contract. The Contracting Authority means the Purchaser, the Employer, the Client, as the case may be, for the procurement of goods, works, plants, consulting services or non-consulting services.

By signing the Statement of Integrity the suppliers, contractors, subcontractors, consultants or subconsultants declare that (i) “it did not engage in any practice likely to influence the contract award process to the Contracting Authority’s detriment, and that it did not and will not get involved in any anti-competitive practice”, and that (ii) “the procurement process and the performance of the contract did not and shall not give rise to any act of corruption or fraud”.

Moreover, the AFD requires including in the Procurement Documents and AFD-financed contracts a provision requiring that suppliers, contractors, subcontractors, consultants or subconsultants will permit the AFD to inspect their accounts and records relating to the procurement process and performance of the AFD-financed contract, and to have them audited by auditors appointed by the AFD.

The AFD reserves the right to take any action it deems appropriate to check that these ethics rules are observed and reserves, in particular, the rights to:

- (a) Reject a proposal for a contract award if it is established that during the selection process the bidder or consultant that is recommended for the award has been convicted of corruption directly or by means of an agent, or has engaged in fraud or anti-competitive practices in view of being awarded the Contract;
- (b) Declare mis procurement when it is established that, at any time, the Contracting Authority, the suppliers, contractors, subcontractors, consultants or subconsultants their representatives have engaged in acts of corruption, fraud or anti-competitive practices during the procurement process or performance of the contract without the Contracting Authority having taken appropriate action in due time satisfactory to the AFD to remedy the situation, including by failing to inform the AFD at the time they knew of such practices.

The AFD defines, for the purposes of this provision, the terms set forth below as follows:

- (a) Corruption of a Public Officer means:
 - (i) The act of promising, offering or giving to a Public Officer, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such Public Officer to act or refrain from acting in his official capacity; or
 - (ii) The act by which a Public Officer solicits or accepts, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such Public Officer to act or refrain from acting in his official capacity.
- (b) A Public Officer shall be construed as meaning:
 - (i) Any person who holds a legislative, executive, administrative or judicial mandate (within the country of the Contracting Authority) regardless of whether that person was nominated or

- elected, regardless of the permanent or temporary, paid or unpaid nature of the position and regardless of the hierarchical level the person occupies;
- (ii) Any other person who performs a public function, including for a State institution or a State-owned company, or who provides a public service;
 - (iii) Any other person defined as a Public Officer by the national laws of the country of the Contracting Authority.
- (c) Corruption of a private person means:
- (i) The act of promising, offering or giving to any person other than a Public Officer, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such person to perform or refrain from performing any act in breach of its legal, contractual or professional obligations; or
 - (ii) The act by which any person other than a Public Officer solicits or accepts, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such person to perform or refrain from performing any act in breach of its legal, contractual or professional obligations;
- (d) Fraud means any dishonest conduct (act or omission), whether or not it constitutes a criminal offence, deliberately intended to deceive others, to intentionally conceal items, to violate or vitiate consent, to circumvent legal or regulatory requirements and/or to violate internal rules in order to obtain illegitimate profit.
- (e) Anti-competitive practices mean:
- (i) Any concerted or implied practices which have as their object or effect the prevention, restriction or distortion of competition within a marketplace, especially where they (i) limit access to the marketplace or free exercise of competition by other undertakings, (ii) prevent free, competition-driven price determination by artificially causing price increases or decreases, (iii) restrict or control production, markets, investments or technical progress; or (iv) divide up market shares or sources of supply;
 - (ii) Any abuse by one undertaking or a group of undertakings which hold a dominant position on an internal market or on a substantial part of it;
 - (iii) Any practice whereby prices are quoted or set unreasonably low, the object of which is to eliminate an undertaking or any of its products from a market or to prevent it from entering the market.

2. Environmental and social responsibility

In order to promote sustainable development, the AFD seeks to ensure that internationally recognised environmental and social standards are complied with. Candidates for AFD-financed contracts shall consequently undertake in the Statement of Integrity to:

- (i) Comply with and ensure that all their subcontractors or subconsultants comply with international environmental and labour standards, consistent with applicable law and regulations in the country of implementation of the contract, including the fundamental conventions of the International Labour Organisation (ILO) and international environmental treaties;

- (ii) Implement environmental and social risks mitigation measures when specified in the environmental and social management plan (ESMP) provided by the Contracting Authority.

PART 2 – Supply Requirements

Section VII. Schedule of Requirements

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1. List of Goods and Delivery Schedule

[The Purchaser shall fill in this table, with the exception of the column “Bidder’s offered Delivery date” to be filled by the Bidder. The item list should be identical to the Price Schedule (Section IV)]

Line Item N°	Description of Goods and deliverables	Quantity	Physical unit	Named place of Destination as specified in BDS	Delivery (as per Incoterms) Date		
					Earliest Delivery Date at named place of destination	Latest Delivery Date at named place of destination	Bidder’s offered Delivery date at named place of destination <i>[to be provided by the bidder]</i>
1	Solid State Power Amplifier S Band Weather Radar	4	unit	See Section VII paragraph 3.1 Site List	approximately twelve (12) months after Contract signature	twenty-four (24) months after Contract signature	

(See technical specifications in section VII of this packs).

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]

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>
	<i>Training for maintenance and operation of radars</i>				
	<i>Servicing , maintenance and support</i>				
	<i>Supply of a package of spare parts sufficient for at least twenty-four (24) months of normal operation following expiry of the applicable warranty period. The package shall be included in the Contract Price.</i>				
	<i>Supply of consumables sufficient for at least twenty-four (24) months of normal operation following expiry of the applicable warranty period. The consumables shall be included in the Contract Price.</i>				

	Training and Factory Acceptance Test on provider's site				
	Training and site Acceptance Test in each beneficiary country				
	Commissioning				
	Calibration including tools				
	Data integration and telecommunication support				
	Technical support				
	Communication plan development and implementation				
	Final handover				
					

The services price will be included in the bid evaluation

1. If applicable

3. Technical Specifications

HYDROMET PROJECT IN SWIO (South West Indian Ocean)

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Glossary

Term or Abbreviation	Description
AFD	Agence Française de Développement
API	An application programming interface (API) is a computing interface which defines interactions between multiple software intermediaries
AMSS	Automatic message Switching System
ASCAT	Advanced Scatterometer instrument aboard the EUMETSAT Metop satellites providing Surface Winds images, Ice images, Ultra High Resolution (UHR) winds images
ASOS	Automated surface weather station
B2B	Business to Business
B2C	Business to Consumer
BCP	Business Continuity Plan (BCP).
COI	Commission de l’Océan Indien
CONTRACTOR	“Contractor” means the person named as Contractor in the Letter of Tender accepted by the Employer and the legal successors in title to this person
CTD	Conductivity Temperature Depth
DRC	Disaster Recovery Centre
ECMWF	European Centre for Medium-Range Weather Forecasts
ENSO	The El Niño-Southern Oscillation (ENSO) is a recurring climate pattern involving changes in the temperature of waters in the central and eastern tropical Pacific Ocean. On periods ranging from about three to seven years, the surface waters across a large swath of the tropical Pacific Ocean warm or cool by anywhere from 1°C to 3°C, compared to normal.
ESHS	Acronym for Environment, Social, Health and Safety
ESMF	Acronym for Environment and Social Management Framework
ESMP	Acronym for Environment and Social Management Plan
GCC	General Conditions of Contract - please refer to section VIII

Term or Abbreviation	Description
GFS	NOAA (National Oceanic and Atmospheric Administration) Global Numerical Weather Model NOAA is the National Meteorological Service of United States
GOOS	Global Ocean Observing System
GTS	Global Telecommunication System
GUI	Graphical User Interface
HPC	High performance computer
ICD	Interface Control Document
Infrastructure Resource Manager	Container-orchestration system for automating computer application deployment, scaling, and management
Interfacing Contractor	Contractor engaged by the Purchaser or other agencies having an interface issue with the Contractor for the Project.
IOC	Indian Ocean Commission
IOD	The Indian Ocean Dipole (IOD), also known as the Indian Niño, is an irregular oscillation of sea surface temperatures in which the western Indian Ocean becomes alternately warmer (positive phase) and then colder (negative phase) than the eastern part of the ocean.
JCOMM	Joint WMO and UNESCO/International Oceanographic Commission Technical Commission on Oceanography and Marine Meteorology
KML	Keyhole Markup Language (KML) is an XML notation for expressing geographic annotation and visualization within two-dimensional maps and three-dimensional Earth browsers
KPI	Acronym for Key performance Indicator
MJO	MJO (Madden-Julian Oscillation), is an eastward moving disturbance of clouds, rainfall, winds, and pressure that traverses the planet in the tropics and returns to its initial starting point in 30 to 60 days, on average
MMHS	National Meteorological and Hydrological Service
NWP	Numerical Weather Prediction
OSCAR	Observing Systems Capability Analysis and Review Tool OSCAR is a web-based application developed by WMO in support of Earth Observation applications, studies and global coordination

Term or Abbreviation	Description
	It allows to retrieve WIGOS metadata for all surface-based observing stations and platforms For more details, please refer to https://oscar.wmo.int/surface/#/
PURCHASER	“Purchaser” means the entity purchasing the Goods and Related Services, as specified in the Special Conditions of Contract (SCC)
PWS	Public Weather Services
RFI	Requests for Information
RODS	Remote Operational Display systems
RTH	Regional Telecommunication Hub
SOP	Standard Operation procedure
SST	Sea surface temperature
SUPPLIER	“Supplier” means the natural person, private or state 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
SWIO	South West Indian Ocean
WDQMS	WIGOS Data Quality Management System (WDQMS). WDQMS is a web-based application to monitor the availability and quality of observations exchanged internationally
WIGOS	WMO Integrated Global Observing System (WIGOS) provides a framework for the integration and sharing of observational data from National Meteorological and Hydrological Services (NMHSs) and other sources.
WIS	WMO Information System
WRF	The Weather Research and Forecasting (WRF) model is a numerical weather prediction (NWP) system designed to serve both atmospheric research and operational forecasting needs
WMO	World Meteorological Organization

1 General Information

1.1 Background and History

The Indian Ocean Commission (IOC) is an intergovernmental organization comprising five Member States: The Union of the Comoros, France on behalf of Reunion, Madagascar, Mauritius, and Seychelles. Created by the Port Louis Declaration in 1982, the IOC was institutionalized in the Seychelles in 1984 by the General Cooperation Agreement, better known as the "Victoria Agreement".

To address their vulnerability to numerous weather and climate hazards, including floods, droughts, storms, tropical cyclones and storm surges, IOC island states need better climate data and early warning systems to better plan for climate change adaptation in the region and to reduce information inequalities, faced by several groups of population like women and elderly with low literacy, who are more vulnerable to and impacted by climate change

The development objective of the HYDROMET project is to strengthen the resilience and adaptive capacity of regional and national communities to the impacts of climate change in the southwest Indian Ocean Island states. This project is funded by the French Development Agency, the European Union, and the Green Climate Fund.

Through the agreements between AFD and IOC (AFD CZZ 2343 01 Z and EU CZZ 2343 03, dated November 26, 2021, and AFD, GCF and IOC (AFD CZZ 3202 01 U dated December 17, 2021, IOC has been designated to serve as the Executing Entity ("EE") of the Hydromet Project. IOC is responsible for the management and monitoring of the project according to the procedures indicated in the management manual.

1.2 HydroMET objectives

The objective of this 5 years project “named HydroMET” is to strengthen the adaptive capacity and climate resilience of vulnerable communities, especially women, and economic sectors in Comoros, Madagascar, Mauritius, and Seychelles. This objective will be achieved through:

- a) Institutional strengthening, reforms, and capacity building at regional and national levels, and public-private engagement.
- b) Improving and modernising hydro-meteorological systems and services that will provide users with timely, reliable, and accurate information to prevent, mitigate and adapt to climate-related risks and climate change.
- c) Strengthening the use of climate services, establishing a Multi Hazard impact-based forecast and early warning Advisory (MH-IBF-EWA) supported by a knowledge and decision support system, and improving capacity to implement a people-centred multi-hazard impact-based forecast and early warning services (MH-IBF-EWS).
- d) Increasing women’s access to climate-related information and participating in designing of climate services, in particular hydro-meteorological services

The HydroMET project seeks to establish a comprehensive and inclusive weather and climate information system, in particular better early warning systems for the whole Southwest Indian Ocean region and maritime domain and to improve the dissemination of the related information to development sectors including aviation, disaster risk reduction, agriculture, tourism, fisheries and other maritime activities, and the general public.

Hydrometeorological systems and equipment will be modernised to improve the monitoring of meteorological, climatic and hydrological risks and to better detect and understand the effects of climate change on the region and its countries. As well as developing terrestrial observation

networks in line with international requirements and standards (GBON) to improve numerical weather prediction and climate analysis, radar and satellite technologies will also be put in place to monitor the positions and intensities of tropical cyclones and climate-related risks that appear rapidly with local impacts. There are plans to set up a regional centre dedicated to the maintenance and calibration of this equipment. Training and activities aimed at better understanding and predicting climate-related hazards, assessing risks and developing forecasting of multiple hazards and their impacts will be organised within the regional facilities. The integration of data and systems will be pursued through the establishment of data centres at regional and national levels. Regional centres will be provided with equipment for the calibration and maintenance of observation systems, training in observation and data exchange, forecasting and warning, and the management of climate data.

Quality management systems (QMS) will be put in place to ensure streamlined processes. Impact-based multi-hazard forecasting and the capacity of early warning systems/services will be strengthened by moving from deterministic to probabilistic forecasting approaches. An analysis of threshold and extreme values will be carried out to characterise flooding and other climate-related hazards/risks. In collaboration with disaster risk management authorities and other sectors, a risk analysis will be carried out integrating hazard, exposure and vulnerability to assess the potential impacts of significant weather and climate events using risk matrices. Tools for analysing and assessing hazards, exposure, vulnerability, impacts and risks will be provided for decision support to reduce risks, losses and damage. Assessment of the socio-economic value of policies and decisions taken on the basis of risk information is envisaged to better ensure the sustainability of investments to be made.

2 HYDROMET Site Status and Conditions

2.1 Hydromet Radar Sites List

Activity	Qty	Related Sites
Weather Radar S Band Dual Polarisation Solid State Power Amplifier (SSPA)	4 units	1. Comoros – Ngazidja - Grande Comores 2. Madagascar - Morondava 3. Mauritius – Rodrigues Island 4. Seychelles – Praslin Island

Sites description will be provided during the inception phase through the Initial Project Study and Design - Please refer to the Annex 1

2.2 Site work Requirements

No	Site Status and Conditions Requirements
	Site Surveys
2.2.1	The Supplier shall carry out all further site investigations he deems necessary for the design of the Works.
2.2.2	The survey shall be carried out by the Supplier and agreed with the Purchaser.
	Access to site during installation
2.2.3	Entry to and exit from the Site shall be only available at the locations for which the Purchaser has given his consent.
2.2.4	The Supplier shall make its own arrangements, subject to the consent of The Purchaser, for any further access required to the Site.
2.2.5	In addition, the Supplier shall ensure that access to every portion of the Site is continually available to the Purchaser.
2.2.6	The Supplier shall be responsible for ensuring that any entry or exit through the Site boundaries are controlled such that no disturbance to residents or damage to public or private property occur because of the use of such entry or exit by his employees and Sub-Contractors.
2.2.7	Alternative access shall be provided to premises should interference with the existing access, public or private, is necessary to enable the Works to be carried out. The arrangements for the alternative access shall be as agreed by the Purchaser and the concerned agency. Unless agreed otherwise, the permanent access shall be reinstated as soon as practicable after the Work is complete and the alternative access shall be removed immediately it is no longer required, and the ground surfaces reinstated. Proper signage and guidance shall be provided for traffic/user's diversions.
	Site Establishment
2.2.8	The Supplier shall provide and maintain its own site accommodation at locations consented by the Purchaser. Offices, sheds, stores, mess rooms, garages, workshops, other accommodation on the Site shall be maintained in a clean, stable and secure condition.
	Suppliers Co-ordination with others (if any)
Information	The Purchaser will inform the Supplier, in case of another activity on the Site Work from another Supplier that might disturb or interrupt the Supplier.
2.2.9	The Supplier shall, in accordance with the Purchaser requirements, coordinate the Suppliers own Works under the Contract with that of the Interfacing Parties. In addition, the Supplier shall take all necessary steps to ensure that the Works are coordinated and integrated with the Works of the Interfacing Parties and others, and shall comply with any applicable directions which the Purchaser may give
2.2.10	The Supplier shall carefully review pertinent information made available by the Purchaser relating to the nature and programming of the

No	Site Status and Conditions Requirements
	Interfacing Parties' contracts and use such information in its planning of the Works
2.2.11	The Supplier shall communicate, coordinate and exchange information directly with the Interfacing Parties. Information necessary to fulfil the Supplier’s interface obligations shall be directly requested and obtained from the Interfacing Parties and receipt acknowledged. Conversely, the Supplier shall provide directly to the Interfacing Parties information within the Supplier's scope that is required by them
2.2.12	The Supplier shall advise the Purchaser in writing of any problems encountered in obtaining necessary information and/or lack of cooperation from any Interfacing Contractor (Supplier engaged by the Purchaser or other agencies having an interface issue with the Supplier for this Project). If the Purchaser considers that the resolution of an Interface is not proceeding satisfactorily, the Purchaser will review the matter and establish a coordinated plan directing the Supplier and the Interfacing Parties as to the required action
2.2.13	Any claim of additional costs by the Interfacing Parties because of the Supplier's failure to keep to specified dates shall be addressed by the Supplier.
	Climatic Conditions and Disaster Risks on Site
2.2.14	The Supplier shall, in the design, construction of the Works and operation. take full account of the climatic conditions and disaster risks throughout the Site.
	Environmental and social safeguards requirements
	Environmental Safeguards
2.2.15	The Supplier shall conduct an Environmental and Social Impact Assessment (ESIA) prior to commencement of the Works, identifying potential impacts on biodiversity and sustainable use of natural resources (land, water, air, radiation), ..
2.2.16	The Supplier shall prepare and implement an Environmental and Social Management Plan (ESMP), approved by the Purchaser, detailing mitigation, monitoring, and reporting measures
2.2.17	The Supplier shall ensure proper waste management, including segregation, storage, recycling, and disposal of solid and liquid waste in compliance with national legislation and international standards.
2.2.18	The Supplier shall strictly control the use, storage, and disposal of hazardous substances, and establish emergency response procedures for accidental spills.
2.2.19	The Supplier shall adopt energy-efficient and low-carbon technologies and implement measures to minimize water and energy consumption on site.
	Social Safeguards

No	Site Status and Conditions Requirements
2.2.20	The Supplier shall respect the rights of local communities and establish a transparent stakeholder engagement process, vulnerable people and culture, including regular consultations and disclosure of project information.
2.2.21	The Supplier shall establish a Grievance Redress Mechanism (GRM), accessible to workers and affected communities, ensuring timely resolution of complaints.
2.2.22	The Supplier shall comply with International Labour Organization (ILO) standards, including non-discrimination, prohibition of child labour, and respect for freedom of association.
2.2.23	The Supplier shall ensure that working conditions meet national and international occupational health and safety standards, and shall mitigate nuisances such as noise, dust, and traffic impacts on surrounding populations.
2.2.24	The Supplier shall promote gender equality and inclusion of vulnerable groups in employment, training, and capacity-building opportunities generated by the Project.
2.2.25	The Supplier shall adopt and enforce a Code of Conduct, consistent with the HYDROMET Environmental and Social Management Manual, that establishes a zero-tolerance policy towards Sexual Exploitation, Abuse, and Sexual Harassment (SEA/SH).
2.2.26	The Supplier shall ensure that all employees, subcontractors, and consultants sign and comply with the Code of Conduct, which prohibits any form of SEA/SH and Violence Based on Gender (VBG) in connection with the Project.
2.2.27	Any confirmed breach of the Code of Conduct related to SEA/SH shall constitute a serious violation of contractual obligations and may result in immediate dismissal of the offender, financial penalties, suspension of works, or termination of the Contract.
	Electromagnetic Health Protection
2.2.28	Risk Assessment: The Supplier shall conduct an Electromagnetic Field (EMF) risk assessment prior to commissioning, ensuring compliance with ICNIRP and WHO exposure guidelines.
2.2.29	Safety Zones: The Supplier shall establish and clearly mark restricted access zones around radar installations to prevent unauthorized or prolonged exposure.
2.2.30	Monitoring: Continuous monitoring of EMF levels shall be implemented, with results reported to the Purchaser and disclosed to stakeholders.
2.2.31	Worker Protection: The Supplier shall provide training and protective measures for employees working near radar equipment, including rotation schedules to minimize exposure
2.2.32	Community Safeguards: The Supplier shall inform local communities of safety measures, maintain transparent communication, and integrate EMF concerns into the Grievance Redress Mechanism (GRM).
	Compliance and Monitoring

No	Site Status and Conditions Requirements
2.2.33	The Supplier shall submit periodic environmental and social monitoring reports to the Purchaser, demonstrating compliance with the safeguards and corrective actions taken.
2.2.34	Failure to comply with environmental and social safeguard obligations shall constitute a breach of contract and may result in penalties, suspension of works, or termination of the Contract.
	Electricity, Water, Gas Supply and Temporary Utility to Site
2.2.35	Whenever necessary, the Supplier shall make provisions for temporary utility services such as power, lighting, water, communications and other support for the use of his personnel, his sub-contractors.
2.2.36	The Supplier shall also ensure that the temporary services do not interface with the Permanent Works or prevent the installation and testing of the permanent services by others.

2.3 Site Safety requirements

No	Site Safety Requirements
2.3.1	The hereunder specifications are applicable during the site works until the site acceptance of each site. In case of required intervention of the Supplier during warranty, extended warranty, or system wide warranty periods, then the hereunder safety requirements shall be applicable.
2.3.2	The Supplier shall be responsible for the security of the Site for the full time the Site is in its possession until the Site Acceptance Tests or trial operations.
	GENERAL REQUIREMENTS
2.3.3	The Supplier shall describe its view of the security environment and threats in the area where the Contract will be performed and/or the danger area and present a security analysis for the relevant area and for the activities it will perform therein. It shall specify the method and references used to perform this analysis and describe the main threat scenarios that can be identified at the bidding stage.
2.3.4	The Supplier shall take all measures necessary to safeguard the health and welfare of the general public; employees and all other persons entitled to be upon the Site and shall ensure that the Works are carried out in a safe and efficient manner.
2.3.5	1.1.1.1 The Supplier, his Sub-Contractors and all persons employed by him on the Site shall comply in every respect with the provisions of any relevant statutory regulations and/or with the requirements of National Law as may be considered applicable to the Works.

No	Site Safety Requirements
2.3.6	The compensation for affected workers or their relatives shall be paid by the Supplier in such cases utmost expeditiously in accordance with the National regulations.
	TECHNICAL PROPOSAL
2.3.7	The technical proposal shall identify and evaluate the security threats in relation to the contract.
2.3.8	The technical proposal shall describe the measures planned to monitor local security.
2.3.9	The bidder shall describe the modes of travel within the countries; the physical means of travel and the security measures planned in connection with such travels.
2.3.10	The bidder shall describe the roles and measures planned for the Supplier itself, for external participants and those expected from the Purchaser and local authorities, identifying each actor.
2.3.11	STATEMENT OF THE SUPPLIER'S SAFETY POLICY
2.3.12	The Supplier shall produce a 'Policy Statement' signed by the Managing Director or equivalent senior officers acceptable to the Engineer of each company of the consortium, partnership or joint venture comprising the Supplier, declaring that the Supplier shall ensure that safety and industrial health are given priority consideration in all aspects of the Works and by the Supplier in discharging his contractual obligations and Safety Policy.
	CONTRACTUAL, LEGAL OBLIGATIONS, AND CODE OF PRACTICES
2.3.13	The Supplier shall comply with the statutory and contractual obligations regarding safety, rescue and industrial health imposed on the Supplier and how the Supplier will supervise, monitor and audit his site safety assurance system to ensure due compliance with these obligations.
2.3.14	Labour safety arrangements by the Supplier shall be in accordance with the applicable legislation in the Countries.
2.3.15	The design and construction shall comply with the applicable legislation in the Countries.
2.3.16	The Supplier shall comply with all safety and industrial health legislation including the rules and regulation of the Countries.
2.3.17	The Supplier shall keep on the site copies of safety and industrial health regulations and documents.
2.3.18	All regulations and documents referred in this clause shall be translated into languages which are understood by the operators and supervisors engaged by the Supplier or Subcontractors, and such translations shall be displayed or kept alongside those in English language.

No	Site Safety Requirements
	APPOINTMENT, DUTIES AND RESPONSIBILITIES OF SAFETY STAFF
2.3.19	The name(s) and experience of person(s) within the Supplier’s proposed management structure who would be responsible for coordinating and monitoring the overall safety performance of the Supplier, all Sub-Contractors and safety officers as required shall be identified and got approved from the Engineer.
2.3.20	The Supplier shall describe the safety staff and its organizational structure until site acceptance or trial operations. The safety staff should identify the personnel to be, engaged for site safety assurance, the responsibilities of the participants and the subdivision of the site safety assurance tasks into elements which can be effectively controlled, technically and managerially.
2.3.21	Names, addresses, telephone, email and fax numbers of all safety staff during the site implementation shall be listed where known.
2.3.22	The powers vested in the safety staff, which shall be sufficient to enable them to take urgent and appropriate action to make safe the site and prevent unsafe working practices or other infringements of the safety plan or statutory regulations.
2.3.23	The Supplier shall appoint a ‘System Safety Expert’ whose duties throughout the period of the Contract shall be entirely connected with the safety and industrial health aspects of the Supplier's activities on the site.
2.3.24	The System Safety Expert shall be a suitably qualified and experienced person who shall supervise and monitor compliance with the site safety plan.
2.3.25	The System Safety Expert shall, but without limitation, carry out auditing of the operation of the site safety plan in accordance with a rolling program to be submitted, from time to time, to the Engineer for his consent.
2.3.26	The Supplier's staff organization plan shall show direct lines of communication and reporting between the System Safety Expert and the Supplier’s site representative and between the safety officer and the person responsible for the Contract.
2.3.27	The Supplier shall instruct and require the Supplier’s site representative and the person responsible to be directly accountable in all matters concerning site safety.
	SUB-CONTRACTORS
2.3.28	The means by which safety, rescue and industrial health matters and requirements will be communicated to sub-Contractors of all tiers and their due compliance with the site safety plan and all relevant statutory regulations shall be ensured by the Supplier.

No	Site Safety Requirements
2.3.29	The Supplier shall describe the method by which the safety procedures and practices proposed by sub- Contractors will be reviewed for compliance with the site safety plan and statutory regulations including the provision of hazard and risk assessments and method statements.
2.3.30	The Supplier shall provide its sub-Contractors with copies of the site safety plan and shall incorporate into all sub-contract documentation provisions to ensure the compliance with such plan at all tiers of the sub-contracting.
2.3.31	The Supplier shall be responsible of all its subcontractors site works regarding site safety.
	POLICY FOR IDENTIFYING HAZARDS
2.3.32	The Supplier shall produce a list of safety and health hazards identified for this Contract and the procedures and method statements for achieving effective and efficient minimization of the risks associated with such hazards.
	ACCIDENT REPORTING, CRISIS MANAGEMENT PROCESS
2.3.33	The Supplier shall describe the Supplier's procedure for reporting and investigating accidents, dangerous occurrences, or occupational illness.
2.3.34	The Engineer shall be notified by the Supplier immediately of occurrence of any accidents whether on-site or off-site in which the Supplier, its personnel or plant, or those of its sub-Contractors are directly or indirectly involved and which results in any injuries to any persons, loss / damage to plant and machinery, disruption of traffic etc.
2.3.35	Such initial notification may be verbal and shall be followed by a written comprehensive report within 24 hours of the accident.
2.3.36	Additionally, the Supplier shall notify the Engineer in writing within twenty-four (24) hours of any incident occurring whether on-site or off-site at which the Supplier or any sub-Contractors are involved and could have resulted in serious injuries to persons or significant damage to the Works. Failure to report such incidences shall be considered as a serious breach of Safety Procedures.
2.3.37	The Supplier shall prove that it has set up a crisis management process involving the local organization and its head office. It shall describe the main procedures for triggering this process and its key operating procedures For this purpose, the Supplier shall describe the alert process, from the local organization to its head office, and the interaction with the Purchaser.
2.3.38	SAFETY EQUIPMENT IN CONSTRUCTION SITES

No	Site Safety Requirements
<i>Information</i>	The here under safety equipment are applicable to construction works
2.3.39	The Supplier shall describe how safety equipment, scaffolds, working platforms, hoists, ladders and other means of access, lifting, lighting, signing and guarding equipment shall be inspected, tested and maintained and the standards below which such items will be removed from the site and replaced shall be elaborated.
2.3.40	The Supplier shall produce policy and procedures for ensuring that all his plant and equipment used on the works site is maintained in a safe condition and is operated in a safe manner.
2.3.41	Also, regulations and procedures covering all safety and health aspects of the Works, including where appropriate but not limited to the following shall be produced by the Supplier: 1. Housekeeping 2. Working on or near airports or ports 3. Fire prevention precautions and firefighting equipment 4. Working in confined spaces 5. Excavation 6. Hot weather working 7. Electrical equipment 8. Welding/cutting operations and equipment 9. Personal protection clothing and equipment 10. Cranes 11. Hoists 12. Other lifting appliances 13. Manual lifting 14. Ladders 15. Power tools 16. Hand tools and portable power-driven tools 17. Hazardous substances 18. Working at height 19. Structural steel erection if any 20. Lighting 21. Protection against falling objects;
2.3.42	The Supplier shall identify the safety equipment, rescue apparatus and protective clothing which will be required for the Works.
2.3.43	The identification shall include the quantity, sourcing, standards of manufacture, storage provisions and means of ensuring proper utilization by all workmen and staff employed directly or indirectly by the Supplier and repair to or replacement of damaged equipment.
2.3.44	The Supplier shall ensure that safety equipment and protective clothing as described in the safety plan is available and used on the site at all material times and those measures for the effective enforcement of proper utilization and necessary replacement of such equipment and clothing is incorporated into the site safety plan. Such

No	Site Safety Requirements
	equipment shall include, but not be limited to, site helmets, goggles and other Eye protectors, hearing protectors, safety harnesses, safety equipment for working in confined spaces (e.g., sewers, drains etc.), rescue equipment, equipment to rescue persons from drowning (if applicable), fire extinguishers, first aid equipment, and, where appropriate, suitable fall arrest equipment.
2.3.45	The Supplier shall regularly inspect, test, and maintain all safety equipment, scaffolds, guard-rails, working platforms, hoists, ladders and other means of access and egress, lifting, lighting, signage and guarding equipment.
2.3.46	Lights and signs shall be kept clear of obstructions and legible to read.
2.3.47	Equipment, which is damaged, dirty, incorrectly positioned or not in working order shall be repaired or replaced immediately.
2.3.48	The Supplier shall provide adequate stand-by equipment to ensure the safety of personnel, the Works and the public.
	FIRST AID
2.3.49	First Aid Base This requirement is applicable to construction works: 1. First aid bases shall be located at each of the Supplier's principal work area. 2. The First Aid base shall consist of a treatment room fitted with two treatment couches, two stretchers, a hand wash basin, sterilizing equipment and lockable cupboards to contain sufficient medical supplies for the Supplier's personnel, the Purchaser's / the Engineer's personnel including visitors to the Site. 3. The first aid base shall contain a recovery room that shall be furnished with six chairs and a centre table. 4. The first aid base shall be air-conditioned with cooling and heating capability sufficient to maintain the inside temperature 22°C. 5. Portable First Aid box shall contain material as prescribed by the National regulations shall be maintained at each of local site offices and work locations where twenty (20) or more persons work at a time.
2.3.50	This requirement is applicable to construction works: 1. A qualified doctor shall be available on call during all times when work is being undertaken on Site. 2. A nurse/ paramedical staff shall attend the first aid bases during all times when work is being undertaken on the Site. 3. In each Site office and location, at least one employee of the Supplier shall be trained in first aid and shall be available during all working hours for the purpose of attending to emergencies.

No	Site Safety Requirements
	4. The Supplier may conclude a contract with the local health centre(s), where they are unable to implement any of the above services, as approved by the Engineer.
	DISCIPLINARY PROCEDURES
2.3.51	The Supplier's disciplinary procedures with respect to dealing with safety related matters both with his own staff and that of sub-Suppliers shall be given
2.3.52	Any employees of the Supplier or sub-Contractor of any tiers who commit a serious breach of the safety regulations shall be liable to summary dismissal and shall not be re-employed on the Contract or allowed on any of the sites.
2.3.53	The Supplier shall provide full co-operation and assistance in all safety surveillance carried out by the Engineer or the Purchaser. Any breaches of the site safety plan or the statutory regulations or others disregard for the safety of any persons may be the reason for the Engineer to exercise his authority to require the Supplier's site representative's removal from the site. Besides this Engineer may impose token penalty for such lapses as considered fit
	SAFETY DEVICES
2.3.54	This requirement is applicable to construction works All plant and equipment used on or around the site shall be fitted with appropriate safety devices which shall always be operational and shall be regularly inspected and tested.
2.3.55	This requirement is applicable to construction works These shall include, amongst others, effective safety catches for crane hooks and other lifting devices.
2.3.56	This requirement is applicable to construction works Functioning automatic warning devices and where applicable, an up-to-date test certificate, for cranes and hoists.
2.3.57	When required, all plant and equipment used on or around the site shall be operated by suitably trained and qualified personnel.
	Testing and Certification of Lifting Gear (applicable for construction works)
2.3.58	The Supplier shall provide and maintain safe mechanical cranes, hoists and conveying facilities for the lifting and transport of material and shall comply with all relevant codes of practice for safe use of cranes.
2.3.59	All cranes, hoists and the like shall be fitted with audible overload warning devices.
2.3.60	All such equipment shall be regularly maintained in accordance with manufacturers' recommendations and standards having regard to local legislation and recommendations from the appropriate statutory authority.

No	Site Safety Requirements
2.3.61	Prior to use on site, all lifting appliances and lifting gears shall be tested to an approved safety margin and suitably identified in accordance with the requirements of the current legislation.
2.3.62	The safe working load shall be clearly and indelibly marked on all lifting appliances and lifting gear either by stamping or by the addition of permanently secured tag labels.
2.3.63	Stamping shall not be permitted on any stress-bearing part.
2.3.64	The Supplier shall prepare and maintain an up-to-date register containing test certificates of all lifting and hoisting equipment used on the Works.
2.3.65	The register shall, from the commencement of construction, be available on site for inspection by the Engineer and relevant authorities.
2.3.66	Heavy plant or equipment, which does not come under the jurisdiction of any local statutory legislation, shall be subject to the testing and examination requirements as recommended by its manufacturer or in the absence of such, it shall be the responsibility of the Supplier to submit a standard or method of testing and examination to the Engineer for review.
2.3.67	Competent operators with certificates certifying that the proposed operator has received training in the general principles of crane operation and specific training in the type of lifting or hoisting equipment he is required to operate shall be provided for the control of all lifting and hoisting equipment.
	FIRE REGULATION AND SAFETY
2.3.68	This requirement is applicable to construction works The Supplier shall provide and maintain all necessary temporary fire protection and firefighting facilities on the site during the construction of the Works and shall comply with all requirements of the local fire services department.
2.3.69	This requirement is applicable to construction works These facilities may include, without limitation, sprinkler systems and fire hose reels in temporary site buildings, raw water storage tanks and portable fire extinguishers suitable for the conditions on the site and potential hazards.
2.3.70	This requirement is applicable to construction works The Supplier shall submit details of these facilities to the Engineer for review prior to commencement of work on the site.
2.3.71	This requirement is applicable to construction works If, in the Engineer's opinion, the use of naked lights may cause a fire hazard, the Supplier shall take such additional precautions and provide such additional firefighting equipment as the Engineer considers necessary.
2.3.72	The term "naked light" shall be deemed to include electric arcs and oxyacetylene or other flames used in welding or cutting metals.

No	Site Safety Requirements
2.3.73	Oxyacetylene burning equipment will not be permitted in any confined space. If required, the burning equipment of the oxy-propane type shall be used.
	ELECTRICAL SAFETY
2.3.74	The Supplier will review the interfaces with the Purchaser operations and prepare a specific safety plan for all works that may affect The Purchaser operations.
2.3.75	No flammable material shall be stored in places other than the rooms specially constructed for this purpose in accordance with the provisions of National explosives regulations.
2.3.76	Protective and safety equipment such as rubber gauntlets or gloves, earthing rods, linemen's belt, portable artificial respiration apparatus, safety goggles etc., shall be provided as per the requirement of the Work.
2.3.77	Necessary number of caution boards such as "Staff working online, do not switch on" shall be readily available in the vicinity of electrical installation.
2.3.78	Charts displaying methods of giving artificial respiration to a recipient of electrical shock (one in English and another one in the regional language) shall be prominently displayed at appropriate places.
2.3.79	No work shall be undertaken on live installations, or on installation, which could be energized unless another person is present to immediately isolate the electric supply in case of any accident and to render first aid, if necessary.
2.3.80	When working on or near live installations, suitable insulated tool should be used, and special care should be taken to see that those tools accidentally do not drop on live terminals causing shock or dead short.
2.3.81	The electrical switch controls in distribution boards shall be clearly marked to indicate the areas being controlled by them.
2.3.82	Before starting any work on the existing installation, it shall be ensured that the electric supply to that portion is cut off. Precautions, like displaying "Staff at Work" caution boards on the controlling switches, removing fuse carrier from these switches shall be taken against accidental operation. Caution boards shall be kept with the person working on the installation.
2.3.83	All electrical panels & switchgear shall conform to relevant Standard.
2.3.84	All equipment / sub-systems shall conform to relevant IEC standard on Electromagnetic Compatibility (EMC).
2.3.85	Cable routes of all the newly laid cables by the Supplier shall be clearly identified.
2.3.86	The Supplier shall ensure grounding of the installed equipment and the use of automatic cut-off devices with associated insulation control.

No	Site Safety Requirements
2.3.87	All installed equipment shall be earthed, and the grounds of the same installation shall be connected to a grounded outlet by protective conductors.
2.3.88	The Supplier shall ensure protection against direct lightning strikes on created buildings or technical installation.
2.3.89	The Supplier shall ensure protection against lightning falling on the ground in the vicinity of the cables.
2.3.90	Surge Protection shall be carried out.
2.3.91	For new constructions, the Supplier shall create an earth network per building such that its resistance is as low as possible (maximum 1 ohm).
2.3.92	When needed, the Supplier shall interconnect the earth networks.
	LABOUR SAFETY
2.3.93	When necessary, the Supplier shall take measures for placing the dangerous parts of the installed equipment (e.g., high voltage equipment) out of the reach of personnel and users.
2.3.94	Site Publicity: 1. The Supplier shall ensure that safety, rescue, and industrial health matters are given a high degree of publicity to all persons regularly or occasionally on the site. 2. Posters, in both local language and English, drawing attention to site safety, rescue and industrial health regulation shall be made or obtained from the appropriate sources and shall be displayed prominently in relevant areas of the site. 3. These posters shall be changed monthly in order to ensure their continued impact.
2.3.95	When required, the Supplier shall maintain site boundary fences in first class condition. Notices shall be displayed at Intervals around the Site to warn the public of the dangers of entering the Site.
	SITE SAFETY PLAN
2.3.96	The brief outline of site safety plan shall cover the following: 1. Safety personnel for construction works. 2. Safety Equipment. 3. First Aid. 4. Disciplinary procedures. 5. Safety Devices. 6. Fire Regulations and Safety. 7. Electrical Safety. 8. Labor Safety.

3 PHASING REQUIREMENT

No	Phasing Requirements
3.1	The Bidder shall provide in its proposal a project schedule including the following milestones: 1. T0 at project kick-off within two months after contract sign 2. Delivery of the Inception report including the Initial Study and Design within 3 (three) months after kick-off 3. Factory acceptances until 2nd year 4. Shipments, the Supplier is responsible for shipping from the country of origin to the final destination of the goods, including insurance costs until 2nd year. Shipments and delivery of the radar systems shall commence approximately twelve (12) months after Contract signature and shall be progressively completed over the following twelve (12) months, in accordance with the approved implementation schedule for the four radar sites. 5. Following delivery at each site, installation, commissioning, Site Acceptance Tests (SAT), applicable training and Provisional Acceptance shall be completed in accordance with the approved implementation schedule. Provisional Acceptance may be granted separately for each radar site in accordance with GCC Clause 28.3. 6. Independent warranty and technical support for each radar site for twelve (12) months from the date of its respective Provisional Acceptance, in accordance with GCC Clause 28.3 Project Technical Completion shall be achieved following Provisional Acceptance of all four radar sites and completion of all associated project-wide deliverables.
3.2	The Supplier shall provide the detailed implementation timeline for each item showing the main milestones (Factory acceptance, site acceptance, standard warranty, etc.) in its proposal.

4 Performance Requirements and key performance index

No	Performance Requirements
4.1	The Supplier shall support The Purchaser in reaching the Project Key Performance Indicators according to the hereunder table
4.2	The Supplier shall provide specific dashboard(s) enabling to measure and monitor KPIs thanks to user-friendly comprehensive graphical user interface
4.3	The Supplier shall issue a KPI report every 6 months.

No	Performance Requirements
4.4	The Key Performance Indicator (KPI) in this bidding document guides establishing the monitoring of effectiveness and efficiency of key functions for the. modern meteorological radar network part of the infrastructure upgrade in the IOC/HYDROMET program. The final scope of KPIs can be determined through a survey and project design study (PDS). The PDS will include the review and update of the feasibility study on aspects related to access, use, weaknesses and gaps on nowcasting, impact-based forecasting for multi-Hazards early warning systems supporting early warning for all in the region. Key functions of the radars to consider include cyclone and other monsoon disturbances nowcasting as well as flood monitoring. Key sectors in need of modernized early warning in the HYDROMET programme include agriculture and fisheries, tourism, health, disaster and water management are to be considered in the radar network design study. Access and use of currently available products, services and early warnings, their weaknesses and gaps as well the requirements to address gaps through a meteorological radar observation and information network in the region. The study will include existing and other upcoming meteorological radar programmes of countries and partners active in the South West Indian Ocean tropical cyclone basin. Update of feasibility study report will include information on climate, type and frequency of bad weather in each beneficiary country, operational stability and after sale services, the access and use of products, services and early warnings in the four beneficiary countries, related weaknesses and gaps, user requirements with emphasis on products and services derived from meteorological radar observations. Based on this update study report, the bidder will explore additional functional requirements and related products from meteorological radars for the key sectors mentioned above. Information and Communication Technology systems should be included to harmonize and integrate radar data and facilitate their real time exchange across the region for a robust early warning system. “Key functions and catalogue of expected products for national and regional use may be useful “ The Supplier and Purchaser must refine and finalize the detailed Key Performance Indicator (KPI) specifications during the Final System Design Review (FSD) activity, subject to agreement and approval by the Purchaser. The refinement should include KPIs on the design, manufacture, supply, installation, testing and commissioning, training, maintenance and technical support during the warranty period.

5 General Key Performance Index of HYDROMET Radar observation system

KPI-ID	KPI Name	Unit	Associated objectives	Target values	Sources and means of verification	Commitment to reach KPI value	Supplier Support for KPI measurement
KPI 1	Radar observation systems availability	Number	The radar observation network is operational (see the catalogue with minimum set of radar products for nowcasting and flood monitoring)	T0: 0 Project completion: 4 radars operational	Radars operational status reports All deployed radars are operational	SUPPLIER	SUPPLIER
KPI 2	Daily Number of Weather Radar Observation report available on the data centre	Percentage	The data of weather radars are available and of good quality	T0: 0% Project completion: 95%	Radar data archive quality status report All radars data are disseminated with a qualitative data availability of at least 95%	SUPPLIER	SUPPLIER
KPI 3	Regional mosaic of products	YES/NO	The four radars products are embedded in	T0: NP Project completion: YES	Archive of radar mosaic The mosaic images are available and disseminated	SUPPLIER	SUPPLIER

KPI-ID	KPI Name	Unit	Associated objectives	Target values	Sources and means of verification	Commitment to reach KPI value	Supplier Support for KPI measurement
			a regional mosaic of the SWIO region				
Notes: <i>The Key Performance Indicators (KPIs) must be further developed and agreed upon by both parties (The Supplier and The Purchaser to ensure quality, professional and efficient communication and collaboration throughout project execution) during the Final Survey stage and form part of the contract.</i>							

6 Transversal Activities and General Requirements

6.1 Suppliers Documents

No	Supplier's document Requirements
6.1.1	In order to ensure compliance with the Requirement of Contract and satisfactory Programmed execution of the works within specified targets, and quality in design, manufacturing, supply, installation, commissioning, training, maintenance and technical support, a series of Management Plans shall be developed
6.1.2	The Plans and Documents shall be coordinated with each other and shall collectively define, describe, and encompass the Supplier's proposed methods, procedures, processes, organization, sequencing of activities, etc. and shall show how these combine to assure that the Works truly meet the requirements in respect of the mentioned subjects.
6.1.3	All plans and documents shall be submitted as detailed below: 1. As required in accordance with the Works Program. 2. Whenever the development of the Supplier's designs or planning allows the plan to be developed further. 3. In response to comments made by the Purchaser's Personnel/Engineer 4. Whenever any change occurs that invalidates the information contained in the previously submitted and reviewed document, within 28 days of the occurrence of such change.
6.1.4	During the project implementation the Supplier shall deliver the following documents for approval by The Purchaser 1. Project Management plan as described in paragraph 5.2 2. Quality assurance, control and improvement plan as described in the paragraph 5.4 3. Site Safety Plan during implementation 4. Monthly progress report made of a. Implementation progress for each activity b. Current issues c. Project updated schedule d. Detailed schedule for next quarter or 3 months e. updated risks including implementation of control measures f. updated Documentation status including the timelines 5. Minutes of meetings 6. Site survey reports

	7. Detailed Design Study (functional, technical and operational) 8. Construction Design Package for activities with civil works. 9. Inception report 10. Installation Program prior to a site installation (schedule installation, pre-requisites, share of Work with Engineer and external entities, installation methods statements) 11. Worksite and overall ESMP (Environmental, Social and gender Management Plan) for this radar project. 12. Commitment letter to respect AFD, GCF and IFC part of world bank environmental and social safeguard standards and the HYDROMET project updated Environmental and Social Management Framework, the related action plan as well as the Gender action Plan 13. Testing and Commissioning Management Plan. 14. Acceptance books (2 weeks before the Factory acceptance session, one working day before the Site acceptance session) with result reports (preFAT/ preSAT reports). 15. Training plans. 16. Training materials. 17. Data and products catalogue. 18. Interface Control Documents. 19. Operation & Maintenance Plan including Standard Technical Procedures (backups/restore, switch to DRC, etc.) and Business Continuity Plan. 20. The Operating and Maintenance Manual for each activity/sub activity 21. Initial Standard Operational Procedures to be approved and maintained by the Purchaser operational staff. 22. Network architecture (annual update). 23. Functional and Technical as-built documents as final Detailed Design Study Project Technical Completion report.
6.1.5	In order to ease review by the Purchaser, when possible, the submitted documents will have a format which allow modification by the reviewer (e.g. WORD or EXCEL format).
6.1.6	The Supplier shall maintain a shared list of: 1. Pending documents. 2. Documents under review. 3. Approved documents.
	Technical As-built documents (applicable only for civil works)

6.1.7	The Supplier shall maintain all records necessary for the preparation of the As-Built Documents. The Supplier shall prepare and submit the As-Built Drawings and the Records which shall become the contents of the As-Built Documents on the Purchaser agreement.
6.1.8	The As-Built Drawings shall be endorsed by the Supplier as true records of the constructed Works.
6.1.9	The As-Built Records shall include the recorded photographs as being consistent to Progress Reports in the Conditions of Contract.
6.1.10	As part of the As-Built Documents, the Supplier shall maintain all records necessary for the financial completion and commissioning of the project.
6.1.11	In addition to the Design Manual, the Supplier shall prepare and submit the Operation and Maintenance Manuals (O&M Manuals) as part of the As-Built documents.

6.2 Project Management

No	Project Management Requirements
6.2.1	The Supplier shall develop in detail, a logical method of executing the Works considering their complex nature and different phases and shall provide a Project Management Plan which reflect the detailed planning undertaken for implementation of the project.
6.2.2	The Project Management Plan (PMP) shall provide a clear over- view of the Supplier's organization, the management system and methods to be used for completion of the Works
6.2.3	The Supplier shall deliver a project management plan describing: 1. Project organization, workflow, including reporting and coordination with the Purchaser. 2. The general project schedule and milestones. 3. The risks management. 4. The support for KPI's measurements 5. Documentation list and control.

No	Project Management Requirements
6.2.4	Project organization The Project Management Plan shall include a diagram showing the organizational structure for the management of the Contract, with locations, names and position titles of the Supplier's personnel and their line of control, staff relationship clearly showing the principal organizational interfaces both within the Supplier's own organization (including sub-contractors of every tier if necessary) and with Other Suppliers if necessary and Relevant Authorities, defining how each of these interfaces is to be managed and controlled. The diagram shall include associate organizations and sub-contractors to be engaged in the Execution of the Works, and it shall clearly show the individuals and lines of responsibility linking the various groups. It shall also identify the persons designated as a point of contact for the Purchaser.
6.2.5	General project schedule and milestones Milestones shall be an integral part of all Programs and all activities. Sequencing and interrelationships required to achieve each completion obligation shall be shown.
6.2.6	The Project Management Plan shall describe the documentation list and the procedure for documentation control.
6.2.7	The Project Management Plan submitted by the Supplier shall be reviewed by the Purchaser, who will have the right to seek amendments as deemed necessary.
6.2.8	Project requirements management In order to facilitate the requirements traceability, the Supplier shall provide and regularly update through a Web-based software for tracking requirements. Each requirement description should contain the following information (or equivalent): 1. Tender/Scope/WBS reference 2. Project activity/sub-activity 3. Name 4. Description 5. Importance (mandatory, important, or minor) 6. Type of requirement a. Specified in the contract b. Not specified in the contract and commonly agreed c. Not specified and not agreed by supplier d. Bogue not related to an existing requirement 7. Associated tests 8. Status a. NEW: not yet reviewed by the supplier b. CANCELLED: after mutual decision

No	Project Management Requirements
	c. TO BE DONE d. ON HOLD (supplier waiting for the Purchaser clarifications) e. TO BE VALIDATED: delivered and to be tested by the Purchaser f. VALIDATED: successfully tested by the Purchaser 9. Delivery Version (concerns software requirement) 10. Delivery date or target date of delivery 11. Attached files if needed 12. Discussion threads The Supplier shall share the above information (at least in read-only mode) with the Engineer.

6.3 Supplier Personnel Requirements

No	Supplier's Team Requirements
6.3.1	The Technical Proposal shall describe the mobilized team with at least the following roles during the supply and installation activities under the Contract: 1. Project director - holding project management certification (e.g. Project Management Professional) or more than ten (10) years of relevant experiences including international, described in the resume or portfolio. 2. Project manager - holding project management qualifications/certification (e.g. Project Management Professional) or more than five (5) years of relevant experiences including international experience, described in the resume or portfolio. 3. Radar hardware expert who will carry out the installation of the radar system, both mechanical and electrical. 4. Radar system software expert who master's the proposed weather radar system application and as a speaker on met-ocean applications in on-site training 5. Radar meteorology expert for products generation and support for interpretation and use by sectors 6. System Integrator, has at least 3 (three) years of experience in the IT system integration with systems virtualization and infrastructure hyperconvergence competencies, described in the resume or portfolio. International experience is an asset. 7. Local Project Coordinator (short term)- with at least three (3) years of relevant experience to the project needs in Indian Ocean proven by relevant resume or portfolio. 8. Local Technical Experts (short term) - with at least two (2) years of relevant experience to the project needs in Indian Ocean proven by relevant resume or portfolio.

6.3.2	The skills and experience of each member of the Supplier's team shall be described in the proposal.
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6.4 Quality Assurance

No	Quality Assurance, control and improvement Requirements
6.4.1	The Supplier shall establish and implement a Quality Management System for the Design, manufacture, supply, installation, test and commissioning, training, operation, maintenance and technical support of the project as described below, The Quality Management System shall be applied without prejudice to, or without in any way limiting, any Quality System that the Supplier already maintains
6.4.2	The Supplier shall submit the Quality plan with Assurance, Control and improvement sections for approval by the client.
6.4.3	The Supplier's quality management system shall be tailored specifically to the Contract and the Works in accordance with S 9001 – Quality Management System, the latest edition of the International Standard ISO 9001, and the Supplier shall submit his quality management system titled as the Project Quality Assurance Plan for the Engineer review
	General Assurance
6.4.4	The Quality Management System documentation shall comply with include, but shall not be limited to the following: 1. Project Quality Plan. 2. Quality Procedures, Works Instructions and Standard Forms. 3. Documentation 4. Supply, construction 5. Installation 6. Manufacturing 7. Quality control including Inspection, testing, commissioning and audits. 8. Quality improvement
6.4.5	The Supplier shall plan, perform and record all quality control activities to ensure that all work is performed in accordance with the requirements of the Contract and is detailed in the quality plans which are required under this section. Such activities shall include, without limitation, the inspections end/or test expressly or implicitly required by the Contract.

No	Quality Assurance, control and improvement Requirements
6.4.6	Quality audits shall be conducted to verify the Supplier's implementation and compliance with the quality management system as specified herein
	Submission of Quality Documentation
6.4.7	A quality policy statement signed by the Chief Executive Officer (CEO) of the Supplier (or other senior management of the Supplier) declaring that the Supplier shall ensure that Quality Management is given the highest practicable priority by the Supplier in executing the Works. In the event that the Supplier is a consortium, partnership or joint venture, statements signed by the Chief Executive Officer (or other senior management of the Supplier) of each of the companies comprising the consortium partnership or joint venture shall be submitted
6.4.8	Quality system documents to be submitted shall embrace all activities of the Supplier and his Sub-Contractors including his suppliers, for the execution of the Works.
6.4.9	Within 90 days after the Commencement Date, the Supplier shall submit the following documents for review: (i) Project Quality Plan (ii) Project Quality Procedures and instruction manual
	Format of Quality System
6.4.10	The delivered documents shall have a standardized format and show clearly on the document: (1) The document title, the document number (if any) and the page number on each page. (2) Approval page. (3) The revision status, with the amendments identified within the revised documents
	Project Quality Plan
6.4.11	The Project Quality Plan shall describe the Supplier's management structure and the quality management system for the execution of the Works and shall, without limitation, be defined as follows: (1) The organization of the Supplier's managerial staff with particular reference to any member of a partnership, consortium or Joint venture, and the main Sub-Contractors. Organization charts shall be produced to

No	Quality Assurance, control and improvement Requirements
	illustrate the sub-division of the Works into elements for effective technical and managerial control, the reporting structure and the interface relationship between all parties involved. (2) The appointment of a Quality Manager (3) The specific allocations of responsibility and authority given to managerial and technical staff with reference to the design and site supervision of the Works. (4) The Contract specific quality procedures, works instructions and/or standard forms, if applicable (5) A full list of quality procedures works instructions, and/or standard forms, including any contract specific documents, to be applied to the Contract.
	Quality Manager
1.1.1	The Supplier shall appoint a suitably qualified and experienced full-time person as the Quality Manager to be responsible for the task of establishing the documented quality management system and ensuring that the quality management system is implemented and maintained effectively
6.4.12	The Quality Manager shall be directly responsible to the senior level of management and is able to discharge his duties without hindrance or constraint. In addition, the Supplier shall make available any such resources that are necessary to ensure the effective implementation of the quality management system
6.4.13	The Quality Manager's responsibilities shall include: 1) On and off-site quality review 2) Monitoring and reporting 3) Reviewing all Quality documentation; Quality Plan, Works Procedures, Inspection and Test Plans, etc.
6.4.14	The Supplier shall submit for review by the Purchaser details of qualifications, experience, authority, and responsibility of the proposed Quality Manager, as part of the Project Quality Plan.
	Quality Audits and Controls
6.4.15	The Supplier shall present in its proposal its quality certification and the frequency of quality audits.

No	Quality Assurance, control and improvement Requirements
6.4.16	The Supplier shall be precise in its proposal how quality non-conformities are processed.
6.4.17	The Supplier shall continuously monitor the performance of its quality management system and shall yearly report its status including the related findings, in order the Engineer can verify that all the quality records as objective evidence of the Implementation of the Supplier's quality management system are properly indexed, filed, maintained and updated.

6.5 Infrastructure and Installation General Requirement

No	Infrastructure and Installation requirements
	Civil works (Weather radar towers)
6.5.1	The Supplier shall deliver a Construction Design Package
6.5.2	All construction phase drawings and documents shall be revised, upgraded, detailed and integrated in the Construction Design Package.
6.5.3	The Supplier shall fully verify and endorse all Drawings and documents.
6.5.4	The Construction Phase for the whole or a part of the Works shall commence immediately upon the issue by the Engineer of a 'Notice of No Objection' in respect of the relevant Detailed Design Submission, subject to the availability of the Site in accordance with the agreed Program for site hand over by the Purchaser. Construction shall not be commenced until the appropriate Construction Reference Drawings and other documents forming the Construction Design Package have been endorsed as "Request for Construction" through the Supplier's Internal Authorizing and Quality Assurance Process.
6.5.5	The Construction stage drawings shall be coherent and complete set of Document in line with the preliminary Design Document as received Notice of No Objection and shall carry Preliminary design and detailed design reference.
6.5.6	Detailed Design Drawings shall form part of the Drawings to be used for installation purposes and construction shall be strictly in accordance with the relevant Design Stage.
6.5.7	The Construction Phase shall include the completion and submission of the Construction/Installation Design and the As-Built Documents.

No	Infrastructure and Installation requirements
6.5.8	The design of the permanent and temporary works of this contract shall be carried out in accordance with the Supplier's Quality Assurance Plan in compliance with the Purchaser's Requirements.
6.5.9	The Supplier shall produce the respective Construction Design Package which shall include, but not limited to: 1. The 'Good for Construction Drawings'. 2. Updated construction stage related Project Management Plans. 3. The updated Works & Material Specifications. 4. Updated Technical Drawings. 5. Updated detailed design Report. 6. Method Statements/ work procedures/ construction sequences. 7. The Interface Drawings related to the other Construct Contracts. 8. Field change Drawing & Design if any.
6.5.10	The Good for Construction Drawings and Construction Reference documents shall include site sketches, dimensioned drawing, fabrication and shop drawings, erection plan and sequences, etc.
6.5.11	The Construction Design and Construction Technical Drawings including updated Works Specifications / Method Statements etc. shall be derived directly from the Detailed Design as approved by the Engineer including the incorporated changes as commented by the Engineer attached to the Notice of No Objection.
6.5.12	The Working/ Fabrication Drawings and the Construction Practicing Documents shall be prepared to facilitate construction to meet the required workmanship as well as technical requirements.
6.5.13	Upon the Internal Authorization Process, the Supplier shall submit the Construction Design Package as the "Request for Construction" to the Engineer for consent and issue of a Notice of No Objection. Upon receipt of the "Notice of No Objection" or "Notice of No Objection with Comments", the Supplier shall endorse the original paper drawings in respect of the Working Drawings as "Good for Construction" as per the Internal Authorization Process and issue.
6.5.14	The "Good for Construction Drawings" and the Working Drawings shall be used for construction purposes and only those drawings and documents that have been endorsed and certified through the procedure and have received "Notice of No Objection" as above or those that the Engineer has expressly stated as not requiring his endorsement shall be issued to the Site.
6.5.15	The Construction execution shall be strictly in accordance with the Construction Design Package, for which "Notice of No Objection" has been issued by the Engineer and "Good for Construction" drawings has been

No	Infrastructure and Installation requirements
	issued as per the authorization process detailed as above.
6.5.16	In the eventuality of a required additional particular work, the Supplier shall submit the Construction Design and Drawings for this particular work to the Engineer at least 5 days prior to the planned / scheduled date of commencement of that particular work.
	Electrical works, cabling
6.5.17	The Supplier shall lay all additional electrical, network and/or telecommunication cables required for the System.
6.5.18	All electrical works shall comply with all necessary regulations of the relevant authorities and if required, shall be endorsed, and approved by the relevant personnel and authorities (e.g., endorsement of electrical single line diagram by licensed electrical worker) at the cost of the Supplier. All costs associated with the testing shall be borne by the Supplier including the services of any specialized personnel or independent assessors.
6.5.19	For sites requiring electric generators, the Supplier shall supply low pollutant generators.
6.5.20	All generators delivered by the Supplier shall be hosted in indoor location in order to mitigate the noise and air pollution, and to protect them from rain, heat, and dust.
	Computer's environment
6.5.21	The Supplier shall supply and install the necessary server rack(s), including cable management arm and accessories equipped with rack mountable KVM switch and LCD
6.5.22	The Supplier shall ensure that the weather radar workstation rooms shall be equipped with potential additional electric capacity and cooling hardware.
6.5.23	All servers/equipment supplied shall be able to receive power supply from two (2) power sources (e.g., having 2 power supplies in the equipment, provision of automatic power transfer switch for single power inlet devices). In case of site without power from national utility, a solar panel solution will be considered.
6.5.24	As an integrator, the Supplier shall be responsible of any component of the delivered systems, including the Operating systems and middleware's used by the applications.
	Installation

No	Infrastructure and Installation requirements
6.5.25	The Supplier shall carry out site surveys to ensure sufficient knowledge of the Site before submitting the relevant installation drawings and installation related submissions to the Engineer for review.
6.5.26	The Supplier shall provide all necessary and sufficient resources such as tools, test instruments, spares, and equipment, manpower and communication facilities (as indicated in paragraph 5.7.2) to complete all the installation activities. Like stated by the ICNRIP (International Commission on Non-Ionizing Radiation Protection), it is specifically required to deliver instrument measuring the specific absorption rate of electromagnetic waves in the vicinity of the radar (please refer to ICNIRP GUIDELINES FOR LIMITING EXPOSURE TO ELECTROMAGNETIC FIELDS (100 KHZ TO 300 GHZ) published in 2020)
6.5.27	The Supplier shall take every precaution to protect existing equipment and facilities on Site from damage and shall make good any damage caused. Care shall also be taken not to interfere with the operation of existing equipment(s).
6.5.28	The Supplier shall submit Installation Program (schedule installation, Pre-requisites, share of Work with Engineer and external entities, installation methods statements) for each type of installation activities before the commencement of the activity to the Engineer for review. The deadline for giving this document shall be submitted during the Detailed Design Specifications period.
6.5.29	Any installation activity shall commence only after the related Installation Program has been reviewed without objection by the Engineer.
6.5.30	The Supplier shall ensure that his staff are competent and possess all the necessary skills to carry out the installation in a proper and safe manner.
6.5.31	The Supplier shall assign competent site supervisors for each work site to be responsible for all site-related matters.
6.5.32	The Installation Program shall show, through suitable charts, how the Supplier proposes to organize and carry out the Installation. If needed, the Supplier shall coordinate with other Suppliers to agree with the date of access to the physical areas to carry out installation activities.
6.5.33	The Supplier shall develop the Installation Program taking into account: 1. The installation schedule and milestones. 2. The site prerequisites including site access. 3. The responsibilities of each party.
	Interfacing with relevant ‘Other Suppliers’

No	Infrastructure and Installation requirements
6.5.34	The Supplier shall highlight in his Installation Program any item, material, equipment, resource and support required from the 'Other Suppliers with dates, duration and locations.
6.5.35	The Supplier shall also bring to the notice of the Engineer all relevant constraints which may affect the Installation Program.
6.5.36	The Supplier shall include dependencies between relevant activities in the Installation Program.
6.5.37	Any subsequent changes in the reviewed Installation Program shall be submitted to the Engineer for review.
6.5.38	Upon noticing or being advised of any inconsistencies between the installation drawings and documentation and the installed equipment, the Supplier shall notify his acknowledgement to the Engineer and correct such errors.

6.6 Telecommunication & Network

No	Telecommunication & Network Requirements
Informa-tion	This paragraph includes specifications for ensuring that the network will be consistent, adapted to the project needs, easy to operate and maintain.
6.6.1	The Supplier shall document how the networks will be interfaced between weather radar site to NMHS headquarters.
6.6.2	The network architecture design shall cover at least: 1. Data flows to Lot5 and data volumes 2. Internet access assessment and recommendations (Bandwidth, Internet operators, Service Level Agreement). 3. Description of the Network as-built document.
6.6.3	A Network Site survey during the project shall be performed.
6.6.4	The accepted network architecture shall be guaranteed by the Supplier (network equipment delivery, installation, and configuration).
6.6.5	The network shall be delivered with documented monitoring and trouble-shooting tools.
6.6.6	The Systems shall automatically synchronize with the reliable NTS source - periodically to maintain an accurate system time.

No	Telecommunication & Network Requirements
6.6.7	Supervision, administration, and trouble-shooting training on the implemented network, shall be delivered to the Purchaser technical staff.
6.6.8	A network as-built document shall be delivered before the end of the project
6.6.9	The network implementation shall be validated through acceptance tests submitted to the Purchaser
6.6.10	The Supplier shall be able to remotely connect to radar systems for maintenance purpose

6.7 Telecommunication Cost

Activity	Type of telecommunication	Telecommunication costs borne by
Weather Radar	Terrestrial fiber optic or Satellite (VSAT) or GPRS	Supplier during project and 1 (one) year extended after Project Technical Completion - PTC (until the end of the System Wide Warranty)

6.8 Systems Interfaces, Data Integration Support and Services

No	Data Integration support and services Requirements
Information	This paragraph includes specifications for ensuring that weather radar data and products are consistent and that they can be used to develop services for any stakeholder.
6.8.1	As part of the data integration upgrade, the supplier shall provide extended data processing services during the project duration, in order to contribute to products consistency within all Hydromet systems.
6.8.2	In coordination with the Purchaser, the Supplier shall contribute to consistency between all the Hydromet expertise and production systems.

No	Data Integration support and services Requirements
6.8.3	Data catalogue During the Detailed Design the Supplier shall describe the Produced radar data with at least the following information's: Each entry of the catalogue shall contain: 1. Type of data. 2. Volume estimation. 3. Data location and access 4. Format detailed description
6.8.4	The Supplier shall contribute to the radar data in the NMHS data centres, by cooperating with the Purchaser and the Supplier of the other lots.
6.8.5	The Radar Systems shall comply with the WMO standards in particular: 1. WMO Information System (WIS) Manual WMO No 1060
6.8.6	Interface Control Documents For each system interface between two systems, especially the interface with any data collection system delivered in the frame of Hydromet, the Supplier shall comply with the Interface Control Documents (ICD) describing this interface (used protocol, connection parameters, etc.) These interface Control documents shall be delivered by the Supplier of the Lot5, in coordination with the Supplier.
6.8.7	If necessary, the Supplier shall provide support to the Purchaser and Supplier for decoding and displaying the Radar data
6.8.8	Global Supervision The Supplier shall cooperate with the Supplier of the Lot5 (information systems of IOC/Hydromet and integration) in order to enable the technical supervision of the radar systems.

6.9 Specific Equipment

No.	Specific Equipment Requirements
6.9.1	Required equipment for calibration of observation equipment shall be delivered with associated training if it is necessary.
6.9.2	The technical proposal shall detail the proposed spare parts.

6.10 Warehouse facilities

No	Existing Facilities Requirements
	During the implementation, the Supplier shall be responsible to provide the warehouse for storing the equipment's as needed.
6.10.1	The Supplier shall be responsible to bear all costs for the warehouse.
6.10.2	The Supplier shall be responsible to deliver all the equipment to the location site

7 Indicative Quantity Specifications

7.1 Weather Radar S Band Solid State Dual Polarization

No	Description	Volume	Unit
	S BAND SOLID STATE WEATHER RADAR	4	Unit
The prices offered for the above system devices must take into account the following lumpsum cost components:			
A	Weather Radar System and Support	4	Package
A1	Antenna System	4	Set
A2	Signal Processing and Control System	4	Set
A3	Server Workstation (Local)	8	Unit
A4	Client Workstation (Remote)	8	Unit
A5	Network and Communication System	4	Package
A6	Electrical and Mechanical Works		
A6.1.	Connection of national electricity company and Procurement of Transformers	4	Unit
A6.2.	Diesel Emergency power generator or providing of a solar panel facility	4	Unit
A6.3.	Panel Distribution	4	Lot
A6.4.	Smart UPS for the radar itself	4	Unit
A6.5.	UPS for Client Workstation	4	Unit
A6.6.	Lightning Protection	4	Unit

No	Description	Volume	Unit
A6.7.	Grounding System	4	Set
A6.8.	Air Conditioner (AC) 2 PK	4	Packages
A6.9.	System Monitoring and Alert for Power Supply	4	Set
A6.10.	Electric Treatment System	4	Set
A7	Supporting Facilities		
A7.1.	External Hard disk SSD	4	Unit
A7.2.	RAM 32 GB	8	Unit
A7.3.	Laptop	8	Unit
A7.4.	Hard disk NAS	16	Unit
A7.5.	NAS (Network Attached Storage)	8	Unit
A8	Test equipment	4	Packages
B	WEATHER RADAR TOWER		
B1	Antenna Tower	4	Lot
C	TRAINING AND ACCEPTANCE TEST		
C1	Factory Training for Technician	Included	
C2	Factory Training for Forecaster		
C3	Factory Acceptance Test (FAT)		
C4	On-site Training for Technicians		
C5	On-site Training for Forecaster		
C6	Site Acceptance Test (SAT)		
C7	Commissioning Test		
C8	Final Hand Over (FHO)		

8 Indicative Requirements of Weather radar

Bidders should complete the third column of the tables below (6.1 to 6.4), giving details of their technical specifications or comments, including any references to documents provided in their bid.

8.1 Weather Radar S Band Dual Polarisation Solid-State Power Amplification

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
8.1.1	The Weather Radar S Band Dual Polarisation Solid-state power amplification quantities and site locations are specified below.	
8.1.2	General requirements: Weather Surveillance Effective weather surveillance systems are essential for ensuring safety, operational efficiency, and timely decision-making in aviation and meteorological operations. The following capabilities are critical components of a comprehensive surveillance system: 1. Detecting Approaching Systems at Long Range Surveillance systems must be capable of identifying weather systems—such as thunderstorms, squall lines, tropical systems, or frontal boundaries—well before they reach an operational area. Long-range detection allows sufficient lead time for planning and implementing mitigation strategies, including route adjustments, ground delays, or issuing warnings. Early detection helps reduce risks to aircraft, infrastructure, and personnel. 2. Monitoring Developing Systems as They Approach In addition to initial detection, continuous monitoring of weather systems is essential as they move closer. This includes tracking changes in intensity, movement, structure, and potential hazards. Real-time updates enable decision-makers to respond dynamically to evolving conditions, ensuring that forecasts and operational plans remain accurate and relevant. 3. Indicating Areas of High-Intensity Precipitation	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	Surveillance systems must accurately identify and display regions of heavy rainfall, hail, or mixed precipitation. High-intensity precipitation can significantly reduce visibility, affect aircraft performance, increase the risk of runway flooding, and disrupt ground operations. Clear identification of these areas allows pilots and controllers to avoid hazardous zones and maintain safe operations. 4. Detecting Local Strong Winds, dust storm and Windshear The ability to detect localized strong winds, gust fronts, microbursts, and windshear is critical for flight safety, particularly during take-off and landing phases. Windshear can cause sudden and dangerous changes in airspeed and altitude. Advanced surveillance tools, such as Doppler radar, provide timely warnings that help prevent accidents and enhance situational awareness for flight crews and air traffic controllers.	
8.1.3	General requirements: Hydrological Requirements Hydrological monitoring systems play a critical role in flood forecasting, water resource management, and severe weather response. To provide reliable and actionable information, the following requirements are essential: 1. Short Range, High Accuracy Hydrological applications require highly accurate measurements, particularly at short ranges where local rainfall variability can significantly influence runoff and flooding. Small-scale variations in precipitation intensity can lead to major differences in river levels, urban drainage capacity, and flash flood potential. Therefore, monitoring systems must deliver precise rainfall estimates over localized areas to support timely warnings and response actions. 2. High Resolution High spatial and temporal resolution is vital for detecting fine-scale rainfall patterns, especially in urban environments and small catchment areas. Intense rainfall events can develop rapidly and may only affect limited geographic regions. High-resolution data ensures that hydrological models can accurately simulate runoff, streamflow, and	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	surface water accumulation, improving the reliability of flood forecasts. 3. Good Data Quality with Dual-Polarisation The use of dual-polarisation radar technology significantly enhances data quality. By transmitting and receiving signals in both horizontal and vertical orientations, dual-polarisation systems can better distinguish between different types of hydrometeors such as rain, hail, snow, and debris. This improves rainfall estimation accuracy, reduces errors caused by ground clutter or non-meteorological targets, and enhances the reliability of hydrological assessments. 4. Accumulations Accurate measurement and tracking of rainfall accumulations over time are essential for hydrological analysis. Total precipitation amounts over specific durations (e.g., hourly, daily, or event-based accumulations) are key inputs for flood forecasting models. Reliable accumulation data supports the assessment of soil saturation levels, reservoir management, and long-term water resource planning.	
8.1.4	Ability to Switch Modes An effective weather surveillance system must have the flexibility to operate in different scanning modes depending on meteorological conditions and operational priorities. Mode switching allows the system to optimise coverage, resolution, and update frequency to match the current threat level. Operational Modes 1. Watch Mode – Long-Range Focus In Watch Mode, the system prioritises long-range surveillance to detect weather systems at significant distances. This mode is typically used during stable conditions or when monitoring for potential developments beyond the immediate area of concern. The objective is early identification of approaching fronts, convective systems, or large-scale disturbances, providing sufficient lead time for preparedness and planning. 2. Development Mode – Enhanced Scanning Within 200 km	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	Development Mode is activated when weather systems begin forming or intensifying within approximately 200 km of the radar site. In this mode, the system increases scan frequency and resolution within the defined range to closely monitor storm growth, structural changes, and movement. This allows forecasters to assess storm evolution, identify intensification trends, and issue timely advisories or warnings. 3. Local Mode – High-Resolution Monitoring Within 100 km Local Mode concentrates on a smaller radius—typically within 100 km—where high-impact phenomena such as windshear, microbursts, or severe tropical convective cells pose immediate risks. This mode provides rapid updates and detailed wind measurements, which are particularly critical for aviation operations, especially during take-off and landing phases. Mode Switching Mechanisms To ensure responsiveness and operational efficiency, the system must support both automatic and manual switching between modes. • Automatic Switching The system can transition between modes based on predefined criteria. For example, if a specified fraction of the area within 200 km shows precipitation above a certain threshold, the system automatically shifts from Watch Mode to Development Mode. This ensures a rapid response to evolving weather without requiring constant manual intervention. • Manual Switching Forecasters must retain the ability to manually select or override operational modes based on professional judgement, emerging trends, or external information such as satellite data or numerical weather prediction outputs. Manual control provides flexibility in complex or borderline situations. Maintenance of Long-Range Scans Even when operating in Development or Local Mode, the system should	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	continue performing periodic long-range scans. This ensures situational awareness beyond the primary focus area, supports data exchange within radar networks, and maintains broader regional coverage.	
8.1.5	Sea Clutter Considerations Sea clutter presents a significant challenge for weather radar systems operating in coastal and maritime environments. It refers to unwanted radar echoes returned from the sea surface rather than from meteorological targets. 1. Impact of the Easterly Monsoon During the easterly monsoon season, persistent and strong easterly winds generate widespread and continuous wave activity over large sea areas. These rough sea conditions increase the radar reflectivity of the ocean surface, particularly when waves are aligned with the radar beam. 2. Generation of Sea Clutter The interaction between radar signals and the roughened sea surface produces strong non-meteorological echoes known as sea clutter. These echoes can appear similar to precipitation on radar displays, especially at low elevation angles and close to the coastline. Sea clutter can obscure or mask genuine weather signals, particularly light rainfall or developing convective cells over the ocean. 3. Challenges in Mitigation Sea clutter is difficult to eliminate because it is highly variable and influenced by wind speed, wave height, radar frequency, and viewing angle. While signal processing techniques, Doppler filtering, and dual-polarisation parameters can reduce its impact, total suppression is rarely achievable without also affecting weak meteorological returns. 4. Importance of Effective Sea Clutter Handling The ability of a radar system to effectively identify and suppress sea clutter is essential for maintaining accurate precipitation detection and reliable weather monitoring in coastal regions. Advanced clutter filtering	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	algorithms, adaptive thresholding, dual-polarisation discrimination techniques and sea clutter suppression based on ocean dynamics improve the separation of sea returns from true precipitation. This capability is particularly important for marine forecasting, coastal flood monitoring, and aviation operations near coastal airports.	
8.1.6	System Description The Solid-State Dual Polarization Doppler S Band Weather Radar System is responsible for acquiring, processing, and disseminating weather radar information. This system aids in mitigating the risks associated with hazardous weather conditions like severe thunderstorms, heavy rainfall, tropical cyclones, and other extreme events. The Radar System consists of a Polarimetric Doppler radar with the capability to transmit linear horizontal (H) and linear vertical (V) polarization states. It encompasses telecommunications, computer data communication, data processing hardware and software, display and data entry equipment, as well as documentation and specific facilities. These components collectively enable the detection, processing, distribution, and presentation of weather information. The system monitors various meteorological phenomena, including but not limited to precipitation, wind patterns and wind shear, tornadoes, fronts and fine lines, tropical cyclones, mesocyclones, thunderstorms, turbulence, icing conditions, hail, and the freezing/melting level. The scope of work is the procurement of the S Band weather radar system in Mauritius, Comoros, Madagascar and Seychelles. In addition of the 4 unities od radar, this involves the construction of the four Weather Radar Tower, communication systems, measuring instruments, and supporting equipment necessary for weather radar operations.	
8.1.7	Function specifications of goods Acquire qualified and stable weather radar observation data.	
8.1.8	Performance specifications of goods 1. Minimum data availability must be 95% during the project	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	continuously with qualified data. During the project, the system should have a minimum availability of 95% usable, reliable and persistent data in the data centre. Data Availability Level = $[\text{Data Availability} / (\text{Data Availability} + \text{Data Missing})] \times 100\%$, excluding planned maintenance, upgrade or downtime caused by event beyond Supplier responsibility (e.g., Force Majeure, vandalism). 2. The data needs to be transmitted for the purpose of each of the four NMHS and to produce a regional mosaic of products	
	ANTENNA SYSTEM	
8.1.9	Function specifications of goods Transmits and receives electromagnetic waves from weather radar.	
8.1.10	Performance specifications of goods 1. The system antenna should be able to detect meteorological targets within a minimum radius of 450 km. 2. The system antenna should be able to observe meteorological targets using both single polarization (horizontal) and dual polarization (horizontal and vertical). 3. The system antenna should be able to observe Meteorological targets with a velocity of 128 m/s at a resolution of 50 meters. 4. The system antenna should be fitted for tropical weather as it is usual in the Southwest Indian Ocean area (cyclones and flash flood at least)	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
8.1.11	System for S Band 1. Mode: Doppler, Dual-Polarization S-Band 2. Data Output a. Single Polar (Vertical and Horizontal): Reflectivity (Z), Velocity (V), Spectrum Width (W) b. Dual Polar: RhoHV, KDP, ZDR, PhiDP, LDR 3. Operating Frequency: 2700 - 2900 MHz or higher up to 3100 MHz 4. The radar system shall have the equipment certificate from frequency authorities in each country in cooperation with the Met Agencies of each country. 5. Pulse Width: ≤ 1 to ≥ 90 μs, selectable 6. Pulse Repetition Frequency: ≤ 250 to ≥ 2000 Hz, selectable 7. Maximum Operating Range: 500-600 km 8. Typical operating range: 300 -400 km 9. Maximum Velocity: velocity data of 50 m/s up to a range of at least 125 km The bidder should propose a list of recommended spare parts with prices and the MTBF (Mean Time Between Failures) of all parts together with the MTTR (mean time to replace). The bidders should propose a typical maintenance schedule, routine and annual, and the necessary test equipment.	
8.1.12	Transmitter 1. Type: Solid State using multiple SSPAs 2. Peak Power: ≥ 5 kW per channel 3. Transmitter shall have out of band filters to avoid causing interference. 4. There are telecommunication towers near some sites and interference by the radar must be avoided even if this requires sector blanking. A radio engineer should be consulted before final site is	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	finalised. - Sector blanking. The radar must implement both hardware and software sector blanking. Hardware for situations where the radar is never allowed to transmit and software for temporary blanking to protect workers on nearby towers. - Radiation hazard. The bidder should provide a radiation hazard diagram showing danger zones including below the radar.	
8.1.13	Receiver - Type: Down Conversion - Noise Figure: ≤ 2 dB - Sensitivity (MDS): ≤ -114 dBm typical - Receiving Filter: Have Receiving Filter	
8.1.14	Reflector - Type: Parabolic, Prime Focus Reflector - Diameter: Between 5 and 7 m - Minimum Gain: ≥ 45 dBi - Beam Width: $\leq 1.25^\circ$ - Polarization: Should be able to operate in Dual Polarization (Horizontal and Vertical – alternate and STAR modes) and Single (Horizontal), the system will operate normally in dual polarization mode. - Elevation Scanning Range: -2° up to $\geq 90^\circ$ - Scanning speed: ≥ 6 rpm - Minimum side-lobe -29dB - H and V beam width difference $< 0.1^\circ$	
8.1.15	Pedestal - Angular Positioning Accuracy: $\leq 0.1^\circ$ - Safety Devices Pedestal: Pedestal safety features (emergency stop	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	button and safety PLC)	
8.1.16	Radome 1. Type: Quasi-random panel construction with hydrophobic coating 2. Transmission Losses: $\leq 0,2$ dB 3. Flash or steady red obstruction: Flash or steady red obstruction lights to standard SNI 03-7051-2004. 4. Access door either in the floor or to the side with safety interlock devices. 5. Access to service warning lights. 6. Built to withstands winds of up to 92m/s. 7. Colour: White without logos.	
8.1.17	The transmitter and receiver units are enclosed within an industrially standardized cabinet system, complete with a rack cover, designed to reduce the risk of radiation from the weather radar transmission system. This setup adheres to standard operator safety and security protocols. Alternatively, the transmitter and receiver can be affixed to the antenna (antenna mounting). The equipment and antenna systems should be weather-resistant for Indian Ocean conditions, including cyclone winds, and incorporate radome shields that are compatible with the radar's operating frequency, all while maintaining the radar's performance.	
	SIGNAL PROCESSING AND CONTROL SYSTEM	
8.1.18	Function specifications of goods As a device for processing radar raw data and controlling the Radar System.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
8.1.19	Performance specifications of goods 1. The computer signal processing system should be able to process and store weather radar observation signal data. 2. Computer signal processing systems must incorporate filtering capabilities to mitigate interference signals without compromising information through intelligent filtering techniques. 3. Signal processing should be able to filter echo interference (both ground and sea clutter) effectively, thereby optimizing weather radar observations. 4. The weather radar system should be able to provide alerts or warning as a feature or product with minimum two parameters (e.g. rainfall and windspeed). Additionally, it should be equipped with an automatic scan change mode feature that responds to user-defined triggers and the threshold values must be configurable. 5. The weather radar system should be able to operate effectively and efficiently to fulfil the requirements of presenting weather information in a flexible manner. This encompasses: a. Acquisition, processing, and dissemination of raw radar observation data and products. b. Issuing alerts and providing automatic corrections when configuring scanning strategies with input parameters that deviate from the system's technical specifications and limitations.	
8.1.20	Digital Receiver/Signal Processor: 1. Type: 16-bits, multi-channel 2. Number of Processed Range Bins: ≥ 4000 3. Minimum processing Resolution: ≤ 50 m 4. Processing Mode: PPP, FFT/DFT, 2nd Trip recovery, and filtering 5. Scanning Strategies: Volume Scans, Sector Scans, Range Height	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	Indicator (RHI) scans on a repetitive schedule	
8.1.21	The installed weather radar system shall at least have the following product features:	

PPI (Plan Position Indicator)	Standard Analysis	PRT (Point Rainfall Total Plot & Table)	Analyze Hydrologic
RHI (Range Height Indicator)		RSA (River Subcatchment Accumulation)	
CAPPI (Constant Altitude PPI)		RGAUGE (Radar gauge)	
VXSECT (Vertical Cross Section)		VPR (Vertical profile correction)	
MAXDISPLAY (Maximum Column CAPPI)		RDS (Shear in Radial Direction, Radial Shear)	
STSC - PDMR (Sistema de Tempo Severo Convectivo)	Specialized Processing and Corrections	AZS (Shear in Azimuth Direction, Azimuth Shear)	Turbulence and Shear
SCCE 0100 (Correção Volumétrica de Interferência)		ELS (Shear in Elevation Direction, Elevation Shear)	
RCLASS (Rainfall Classification)		RAS (Shear Combined Range and AZ direction, 2D Az shear)	
BBLC (Beam Blockage Correction)		RES (Shear Combined Range and EL direction, 2D El shear)	
BBC (Bright Band Detection and Correction)		3DS (Shear Combined Range, AZ and EL direction, 3D Shear)	
PREC (Precipitation Attenuation Correction)		HZS (Shear in Horizontal Layer Direction, Horizontal Shear)	
VPR (Vertical Profile of Rain Correction)		VCS (Shear in Vertical Layer Direction, Vertical Shear)	
OCC (Beam Occultation Correction)	Echo Height Analysis	SHEAR (All Shear-Package)	Severe Weather Alert and Phenomena Detection
ETOP (Echo Top)		LTB (Shear between Two Layers, Layer Turbulence)	
EBASE (Echo Base)		LLSHEAR (Low level wind Shear)	
LMAX (Layer Maximum)		VIR (Vertically Integrated Reflectivity)	
CMAX (Column Maximum)		WARN (Automatic Severe Weather Warning)	
HMAX (Maximum Height of Maxima)	Wind Analysis	HMC (Hydrometeor Classification)	
ETH (Echo Thickness)		SSANA, SSA (Storm Structure Analysis)	
VAD (Velocity Azimuth Display)		MESO (Meso Cyclone Detection)	
VVP (Volume Velocity Processing)		CDVER, VERG (Convergence/Divergence Product)	
UWT (Uniform Wind Technique)	Storm Analysis	SWI (Severe Weather Indicator)	
HWIND (Horizontal Wind)		DSD (Dust Storm Detection)	
CMM (Combined Moment Display)		HAIL (Hail Detection)	
SRV (Storm Relative Velocity)		MBURST (Microburst Detection)	
SMV (Spectrum Mean Velocity)	Hydrological Analysis	GUST (Gust Front detection)	
LMR (Layer Mean Reflectivity)		FCOM-WARN (Severe Weather Feature Combination)	
SWAD (Severe Weather Analysis)		IDW (Ice Detection and Warning)	
SRI (Surface Rainfall Intensity)		ITRACK (Interactive Storm tracking)	Follow-up and Forecast
SHR (Surface Hourly Rainfall)		STP, GSF (Automatic Storm tracking)	
VIL (Vertically Integrated Liquid)		RSTP (Rain Tracking)	
PAC (Precipitation Accumulation)		CSTP (Centroid Tracking)	
PAL (Long Time Accumulation)		MOSAIC (Radar Network Composite)	
RIH (Rainfall Intensity Histogram)		Dados Básicos (Z, UZ, V, W)	
		Dados Polarimétricos (ρ_{HV} , Φ_{DP} , K_{DP} , Z_{DR} , LDR)	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
8.1.22	Equipped with pre- and post-processing features that are active and function based on dual polarization data, namely: 1. Reflectivity (Z) 2. Radial velocity (V) 3. Spectral width (W) 4. Derived R 5. Derived M (liquid water) 6. Derived S (shear) 7. Standard dual poll correction	
8.1.23	Dual-polarization raw data types: 1. Differential reflectivity (ZDR), 2. Differential propagation phase (PhiDP), 3. Specific differential phase (KDP) 4. Correlation coefficient (RhoHV) 5. Linear Depolarisation Ratio (LDR)	
	SERVER WORKSTATION (On Radar Site)	
8.1.24	Function specifications of goods 1. The complete radar control function manages all functions of the dual-polarization Doppler radar, including product scheduling functions. 2. The Server Workstation Unit is a display system unit responsible for processing, storing, and presenting raw data and/or weather radar products. This encompasses: a. Automated and manual product regeneration. b. Manual saving and conversion of both data and radar products into the standard data exchange ODIM HDF5 FORMAT. c. Display of radar images, encompassing data and products, in both 2-dimensional and 3-dimensional formats.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	d. All processes can be executed either online (real-time) or offline. e. Backup and archiving of raw data and weather products f. Autocalibration	
8.1.25	Performance specifications of goods 1. Capable of efficiently processing, storing, and presenting raw data and weather radar products in accordance with the specified speed requirements. 2. Demonstrate optimal performance in running weather radar applications. 3. Enable the display and 3-dimensional (3D) analysis of volumetric raw data, allowing for the depiction of data for each elevation within a single view. 4. Facilitate time-lapse animation (display and image saving). 5. Capable of generating custom geographical display maps, complete with location labels. 6. Raw data should conform to a standard format, remain unencrypted, and be compatible with all versions of the offered radar application, allowing for conversion to other formats. 7. All products can be saved under specific names, determined by user-entered parameters. 8. Provide alerts within product displays for potentially severe weather, with adjustable parameters that operators can modify based on the anticipated severity at each site. 9. Offer the capability to transmit and display system condition information on the display interface through a flexible graphics-based method. 10. A data and product conversion system are in place to transform data	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	and products into standard formats such as ODIM HDF5 FORMAT, NETCDF, KML, BUFR, and Graphics Formats (PNG, JPG, GIF, TIF). Additionally, there is support for exporting and importing from previous versions. This conversion process is adaptable for both online and offline modes, encompassing both raw data and products. The system should include libraries and detailed documentation outlining the algorithms for each format. 11. Capable of implementing post-processing corrections and data quality control (QC) features. The QC data feature, encompassing both pre-processing and post-processing correction, is designed to uphold the quality of the generated data. 12. Archiving and retrieving of raw data and products. The raw data should be stored in a standardized format, without encryption, and should be readable in all versions of the radar application provided, with the capability to convert into various formats. Two types of raw data are accessible: the pre-filtering process (uncorrected) and the post-filtering process (corrected). 13. Provisions for diagnostics and maintenance facilities (expert systems), along with backup systems for weather radar configurations and applications. This encompasses both radar system applications and meteorological applications. 14. Weather Radar Server: - Comprises two redundant server PCs equipped with Automatic Failover Controller capabilities, ensuring a seamless transition in the event of main server damage. - Display radar data with 64-bit colour depth in both 2D and 3D formats. - Should employ a universally recognized or standard operating system and application software for processing weather	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	data/information. d. The software configuration or architecture should be designed in a modular manner, allowing for ease of development in case of operational requirement changes, hardware updates, or obsolescence. e. Should utilize open software system components to facilitate maintenance and promote interoperability among computers. f. The software employed must be licensed for an unlimited service life, ensuring effortless upgrading and updating in alignment with the vendor's developed software requirements and advancements. g. Software version updates, encompassing feature enhancements and bug fixes, should be conducted, and software application upgrades for radar systems like radar controllers, radar control processors, radar digital receivers, and radar signal processors must be provided at no extra cost. h. If, within the warranty period, it is discovered that the products and features within the application do not align with the required technical specifications of the radar system, software and product upgrades and updates on both the server and client sides will be conducted at no extra cost. i. For hardware upgrades or replacements on a workstation server, there will be no license fees for the associated software, and this arrangement remains valid for a duration of 10 years from the purchase date of the weather radar system. j. The control unit should be equipped with a display unit, a log alarm system, a backup system, and safety/emergency tools. k. Utilize inter-connection/communication and TCP/IP standard protocols for both remote and internal communication	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	requirements. l. Include backup tools for both software and system configurations. m. Comprises hardware components like servers, monitors, mice, keyboards, memory modules, drivers, and printers, as well as software encompassing operating systems and application programs dedicated to weather radar functions and radar operations. Additionally, external storage (NAS) is provided for data storage purposes.	
8.1.26	Indicative Hardware 1. Workstation / HPC: Intel® Xeon® processor W-Family (Series 34xx minimum) or better, Optimized Intel Turbo Boost. 2. RAM: 4-channel memory 32Gb, 2666MHz DDR4 EEC memory 3. Solid State Drive: SSD 4 Tb SATA 2.5 inch minimum or equivalent SAS 4. Display monitor: Similar brands to PC Workstation, Minimum 2 X 24-inch 5. Keyboard and mouse with the same brand as the workstation. 6. I / O ports: minimum 2xUSB and 2xRJ45 Network 7. Operating system: LINUX/UNIX and/ or Windows. 8. Graphics Processing Unit: Minimal NVIDIA Quadro P6000 9. The system shall be equipped with adequate data storage capacity for a full 2 year of data storage for raw and radar generated products upon selection. 10. Printer colour Laser	
8.1.27	Data Conversion Format: 1. ODIM HDF5 FORMAT	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	2. NETCDF & NETCDF-4 (Cartesian) 3. KML/KMZ 4. BUFR Opera 2 + 5. Graphics Format (PNG, JPG, GIF, TIF) 6. Export/Import from Previous Version	
8.1.28	Pre-processing and post-processing correction and QC feature based on Dual Polarization data: 1. Echo classification 2. Clutter Map Filtering 3. Occultation Correction 4. Z-Rainfall attenuation 5. Attenuation Correction 6. Sea Clutter Detection 7. Bright Band Correction 8. Interference filtering	
	CLIENT WORKSTATION (On Nearest Meteorological Station)	
8.1.29	Function specifications of goods The Remote Client Unit is a display system unit designed to process, store, and present raw data and/or weather radar products. This encompasses: 1. Automated and manual product regeneration. 2. Manual saving and conversion of both data and radar products into the standard data exchange ODIM HDF5 FORMAT. 3. Display of radar images, encompassing data and products, in both 2-dimensional and 3-dimensional formats. 4. All processes can be executed either online (real-time) or offline.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
8.1.30	Performance specifications of goods 1. Capable of efficiently processing, storing, and presenting raw data and weather radar products in accordance with the specified speed requirements. 2. Demonstrate optimal performance in running weather radar applications. 3. Enable the display and 3-dimensional (3D) analysis of volumetric raw data, allowing for the depiction of data for each elevation within a single view. 4. Facilitate time-lapse animation (display and image saving). 5. Capable of generating custom geographical display maps, complete with location labels. 6. Raw data should conform to a standard format, remain unencrypted, and be compatible with all versions of the offered radar application, allowing for conversion to other formats. 7. All products can be saved under specific names, determined by user-entered parameters. 8. Provide alerts within product displays for potentially severe weather, with adjustable parameters that operators can modify based on the anticipated severity at each site. 9. Offer the capability to transmit and display system condition information on the display interface through a flexible graphics-based method. 10. A data and product conversion system are in place to transform data and products into standard formats such as ODIM HDF5 FORMAT, NETCDF, KML, BUFR, and Graphics Formats (PNG, JPG, GIF, TIF). Additionally, there is support for exporting and importing from previous versions. This conversion process is adaptable for both	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	online and offline modes, encompassing both raw data and products. The system should include libraries and detailed documentation outlining the algorithms for each format. 11. Provisions for diagnostics and maintenance facilities (expert systems), along with backup systems for weather radar configurations and applications. This encompasses both radar system applications and meteorological applications. 12. Client Weather Radar: - The Remote Client Unit can be composed of multiple distinct client workstation PCs or can be configured as a single client workstation, in accordance with the specific design of each radar system. - Display radar data with 64-bit colour depth in both 2D and 3D formats. - Should employ a universally recognized or standard operating system and application software for processing weather data/information. - The software employed must be licensed for an unlimited service life, ensuring effortless upgrading and updating in alignment with the vendor's developed software requirements and advancements. - Software version updates, encompassing feature enhancements and bug fixes, should be conducted, and software application upgrades for radar systems like radar controllers, radar control processors, radar digital receivers, and radar signal processors must be provided at no extra cost. - If, within the warranty period, it is discovered that the products and features within the application do not align with the required technical specifications of the radar system, software and product	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	upgrades and updates on both the server and client sides will be conducted at no extra cost. g. For hardware upgrades or replacements on a workstation server, there will be no license fees for the associated software, and this arrangement remains valid for a duration of 10 years from the purchase date of the weather radar system. h. Each client workstation unit is equipped with a 3 kVA UPS. i. Utilize inter-connection/communication and TCP/IP standard protocols for both remote and internal communication requirements. j. Include backup tools for both software and system configurations. k. Comprises hardware components like servers, monitors, mice, keyboards, memory modules, drivers, and printers, as well as software encompassing operating systems and application programs dedicated to weather radar functions and radar operations. Additionally, external storage (NAS) is provided for data storage purposes.	
8.1.31	Indicative Hardware: 1. Workstation / HPC: Intel® Xeon® processor W-Family (Series 34xx Minimum), Optimized Intel Turbo Boost 2. RAM: 4-channel memory 32Gb, 2666MHz DDR4 EEC memory 3. Solid State Drive: Minimum SSD 4 Tb SATA 2.5 inch or equivalent SAS 4. Display monitor: Similar brands to PC Workstation, Minimum 2 X 24-inch 5. Keyboard and mouse with the same brand as the workstation. 6. I/ O ports: minimum 2xUSB and 2xRJ45 Network	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	7. Operating system: LINUX/UNIX and/ or Windows. 8. Graphics Processing Unit: Minimal NVIDIA Quadro P6000 9. The system shall be equipped with adequate data storage capacity for a full 2 year of data storage for raw and radar generated products upon selection. 10. Printer colour Laser.	
8.1.32	Data Conversion Format: 1. ODIM HDF5 FORMAT 2. NETCDF & NETCDF-4 (Cartesian) 3. KML/KMZ 4. BUFR Opera 2 + 5. Graphics Format (PNG, JPG, GIF, TIF) 6. Export/Import from Previous Version	
8.1.33	Pre-processing and post-processing correction and QC feature dual polarization data: 1. Echo Classification 2. Clutter Map Filtering 3. Doppler clutter suppression 4. Occultation Correction 5. Z-Rainfall attenuation 6. Attenuation Correction (Dual Pol PhiDP method) 7. Sea Clutter Detection 8. Bright Band Correction 9. Interference filtering	
	NETWORK AND COMMUNICATION (On Radar Site)	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
8.1.34	Function specifications of goods Transmit raw data and radar products from the site to the Head Office in each country, as well as from the site to the nearest meteorological station(client).	
8.1.35	Performance specifications of goods This system establishes a data communication link connecting the tower/radar site with the client radar in the operational room (for forecasters and observers). The constructed topology must offer reliable real-time communication services, ensuring consistent radar data updates to facilitate EWS operations.	
8.1.36	Technical Specifications 1. A dedicated communication network with a minimum bandwidth of 20 Mbps (1:1) is required for the connection from the Site to the Head Office. Similarly, for the connection from the Site to the nearest meteorological station(client), a dedicated bandwidth of at least 15 Mbps (1:1) is necessary. In cases where a fiber optic network is unavailable at the location, the communication network should be adjusted to the existing infrastructure. It is imperative to ensure the seamless functionality of the communication network, enabling smooth reception and utilization of radar data in the operational room (client). This support is essential for the efficient performance of the nearest meteorological station forecasters and the Head Office in each country. 2. The established network can employ wireless technology or internet communication via Multiprotocol Label Switch (dedicated line), with a focus on ensuring assured data availability for client workstations in the operational room in real time. When constructing a wireless-based communication system, careful planning and testing of device installation are essential.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	3. The topological design and communication technology utilized are adjusted to the specific topographic conditions at each site, with a primary emphasis on enhancing the efficiency and reliability of the designed data communication network. The preliminary design for radar data communication should be discussed with the Hydromet Team to evaluate the feasibility of its implementation. 4. Centralizing radar data at the Head Office in each country involves transmitting real-time radar data from the radar site to the Head Office using Multiprotocol Label Switch internet communication (dedicated line). 5. The built system must transmit the radar database (raw data and products) from the radar site. The data from the radar site is sent through the available communication system so that it can be received at the weather radar client workstation at Head Office. Priority should be given the 2D key products if there is a loss of full connectivity. The 3D volumes should only be sent if the bandwidth is sufficient 6. Radar data at each site is acquired from the radar system, then processed through the existing file transfer system and sent via network switch and TCP / IP protocol to the MPLS / VSAT transmission system to the NMHS Head Office. 7. The metadata of the Radar S Dual Polar shall be provided to the local WIGOS system in compliancy with WIGOS Metadata Standard (WMO 1192).	
	MOSAIC SOFTWARE	
8.1.37	The system should encompass the creation and operationalisation of a regional mosaic of products to be share in each country.	
8.1.38	The primary objectives of the system are to:	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	1. Generate a real-time, regional-scale radar mosaic from the operational weather radars 2. Improve monitoring and tracking of precipitation systems and severe weather 3. Support operational forecasting, nowcasting, and warnings 4. Ensure high availability, reliability, and low latency suitable for 24/7 operations 5. Comply with relevant international meteorological standards and best practices	
8.1.39	The Supplier shall design, develop, install, configure, and commission a fully operational Weather Radar Mosaic System. The scope includes, but is not limited to: 1. Ingestion of real-time and historical radar data from four radars 2. Implementation of radar data quality control and correction algorithms 3. Generation of national radar mosaic products 4. Visualization and dissemination of mosaic products 5. Integration with existing NMS systems 6. Training, documentation, and operational handover	
8.1.40	Mosaic Generation and Output 1. Near-real-time generation of mosaic products 2. Animation and time-series capabilities 3. Export in standard formats (e.g. GeoTIFF, NetCDF, PNG) 4. Optional provision of web services (WMS/WCS/WPS/REST APIs)	
8.1.41	Mosaic Visualization 1. Web-based or desktop visualization interface 2. Interactive map display with zoom, pan, and overlays 3. Animation of recent radar mosaic sequences 4. Integration with geographic and administrative boundaries	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	TEST EQUIPMENT	
8.1.42	A sufficient set of Test Equipment shall be provided for conducting measurements on the S Band radar system that will be installed; therefore, the offered items must be compatible with the radar system.	
	ELECTRICAL MECHANICAL WORKS	
8.1.43	Connection of national electricity company and procurement of transformers 1. The weather radar system, in general, must be able to operate with a voltage of 220V AC $\pm$ 10% (1 phase), 50 Hz. Procurement of transformers and connection of electricity from national electricity company is borne by the supplier, including the air conditioner needed to ensure the smooth operation of the radar. 2. The installation of electric power and the electricity usage has to be beard by Supplier until Project technical completion added one year	
8.1.44	Solar panel generator The installation of the solar panel supply system is carried out before the implementation of the weather radar system installation. 1. The minimum Solar Panel Emergency Generator meets the following specifications: a. A Battery Pack sized for at least 5 days of autonomous radar operation under normal scanning conditions. b. A High-End Battery Management System (BMS) capable of protecting equipment from power blackouts, surges, and fluctuations, and optimizing charge-discharge cycles. c. DC Link - Galvanic Isolation of Radar Power Supply: The Bidder shall ensure that the radar's input mains voltage is galvanically isolated from the utility mains supply through a dedicated DC link.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	This isolation must prevent surges and voltage instabilities originating from the external power grid from propagating into the radar system, thereby protecting sensitive radar components and ensuring stable operation. d. Solar Panels: A minimum of 18 solar panels rated at no less than 440 Wp each, providing continuous battery charging capacity and grid power offset. e. Smart Battery Operational System • A specialized control software that intelligently adjusts radar scanning strategies based on real-time grid power availability, battery charge status, and solar charge input. • The system must maintain full radar operations during grid outages, switching to an eco-mode when battery reserves fall below configurable thresholds (default 50% charge, configurable to 30%), ensuring observational continuity during extended outages	
8.1.45	Panel Distribution Establishing cable connections within Radar System Installations and associated Support components. Adapting to on-site conditions and carrying out installations accordingly.	
8.1.46	Lightning Protection Lightning Protection/Over Voltage Protection 1. Minimum 3 (three) Rods installed in Radome and connected to Radome base ring. Lightning/ over Voltage Protection on the Cabinet system. 2. 4 (Four) Rods installed around the radome integrated with the building grounding system, radar system and data communication. 3. The radar system is equipped with an Emergency Switch-OFF System	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	which is integrated with the MPDB, Cabinet System and Pedestal System. 4. Meets the installation standard of SNI ICS 91.120.40. Ground resistance 1. Resistance ≤ 1 ohm, integrated with existing grounding systems. The potential difference with neutral ≤ 0.8 Volt. 2. The grounding system must be integrated with all-weather radar operational components, both building grounding and data telecommunications.	
8.1.47	Grounding System Directing surplus or leakage current into the ground through a conductor in the event of a lightning strike or electrical network fault. Safeguarding the S Band Weather Radar system installation against overcurrent and leakage current. The grounding is aligned with the installation site's specifications, integrated into the existing grounding system, and maintains a resistance of $\leq 1 \Omega$. The voltage between neutral and ground remains ≤ 0.8 Volt.	
8.1.48	Air Conditioner (AC) 2 PK Air Conditioner (AC) is an electronic device that functions as a room cooler. Possess the capability to regulate the temperature within the weather radar system's server room according to requirements, thereby preventing the weather radar system from experiencing overheating. The room cooler or Air Conditioner (AC) used is a Split AC with inverter technology with a power of 2 PK (1400 – 2000 Watt).	
8.1.49	System Monitoring and Alert for power supply As a preventive and corrective power supply system installed to facilitate maintenance and maintain the availability of device functions. Capable of displaying real-time information on fuel availability,	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	generator operating hours, power output, oil pressure and other power supply technical statuses. 1. Web-based monitoring or desktop application 2. Allows for customization according to needs in the field.	
8.1.50	Electric Treatment System 1. Input Voltage: 150 VAC to 250 VAC / 280 VAC to 430 VAC 2. Input Frequency: 50 Hz / 60 Hz 3. Output Voltage: 220 VAC + 2% / 380 VAC + 2% 4. Output Frequency: 50 Hz / 60 Hz 5. Output Efficiency: Efficiency 6. Auto Surge Protection 7. Auto-Extreme Protection 8. Output Voltage Stabilizer 9. Overload Protection 10. Overheat Protection 11. Harmonic Reducer 12. Noise Filter 13. Automatic Recovery 14. Active Data Line Protection	
	SUPPORTING FACILITIES	
8.1.51	External Hard disk SSD External SSD hard drive serves as additional storage space externally Able to provide additional storage space (back-up) from the Weather Radar System when the main storage space is full and has a high data transfer rate. External HDD SSD can at least meet the following specifications:	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	1. Type: Portable SSD 2. Capacity: 4 TB 3. Interface: USB3.0 (USB2.0 Compatible) 4. Compatible: PC & Mac Computer (no driver needed) Windows & Mac Support 5. Speed Read: up to 1050 MB/s 6. Speed Write: up to 1000 MB/s	
8.1.52	RAM 32 GB Workstation spare parts. Improve the performance of workstation devices. 32 GB RAM, meets the following minimum specifications: 1. Size: 32 GB 2. Product Bus Type: PC4-21300 3. Type: DDR4 4. Type Detail: Synchronous Registered (Buffered) 5. Speed: 2666MHz 6. Pin Count: 288 Pin 7. Voltage: 1.2 V	
8.1.53	Laptop (one per country) To monitor the Weather Radar System. Have good and fast capability/performance in running weather radar applications and have a large storage capacity. A minimum laptop can meet the following specifications: 1. Processor: Intel Core i7-11370H 12M Cache, up to 4.80 GHz, with IPU 2. Screen Size: 14" (16:10) 2.8K (2880x1800) 3. Memory: 32GB LPDDR4x	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	4. Storage Capacity: 2 TB SSD 5. Graphics Type: NVIDIA® GeForce® MX450 6. Wireless connectivity: Wi-Fi 6 7. Bluetooth: 5 8. Interface: 1 USB-A, 1 USB-C, 1 Headphone/ mic combo 9. Operating System: Windows 11 Pro, Microsoft Office 2019	
8.1.54	Hard disk NAS NAS hard drives function as hardware media for storing non-volatile data of various digital content. Able to store, back up, and archive Weather Radar data which can be accessed streaming simultaneously with work non-stop 24 hours. A minimum NAS hard drive can meet the following specifications: 1. Capacity: 8 TB 2. Interface: SATA 512e / 4KN 3. Cache: 256 MB 4. Speed 7200 RPM 5. Technology: HAMR/CMR	
8.1.55	NAS (Network Attached Storage) NAS serves as additional network-connected storage space Capable of offering supplementary storage capacity (backup) from the Weather Radar System for situations when the primary storage becomes full, while also maintaining a high data transfer rate. NAS can at a minimum meet the following technical specifications: 1. Type: NAS 2. Processor: Intel Core i5, 64 bits 3. Interface: 2xPCIe Slot Gen 3, 2xGigabit External 4. Port, USB 3.2, IR sensor, HDMI Out, LCD Display, LED indicator.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	5. Internal Bays: Minimal 4 x 3.5-inch SATA 6Gb/s, 3Gb/s	
	WEATHER RADAR TOWER	
8.1.56	Serves to place the weather radar system Capable of withstanding the weather radar system load and easy to perform weather radar maintenance	
8.1.57	Antenna Tower 1. The particular design of the radar tower is not strictly defined in this specification, however, due to minimized waveguide losses the radar equipment room shall be located on the top of the tower rather than on the ground. However, it is in the Supplier's responsibility to consider the individual site requirements. 2. The main criteria for building weather radar towers should be: a. Able to withstand the load of radar systems according to the type of S Band radar. b. The tower height up to the base of the antenna pedestal should be at around 10-20 meters and will be defined after a site survey. 3. The tower shall be made of steel (or a consecrated building which is more stable) including a staircase inside the tower or at the side of the tower. 4. The maximum tower deflection due to the mechanical load of the antenna or wind, and rain shall be less than 0.1° at the base of the antenna pedestal. 5. The design shall withstand continuous wind speeds of up to 92 m/s. 6. Safety rails are required for all ladders and stairs 7. Lightning of the antenna platform and the staircase for the nighttime access to the radar pedestal shall be included	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	8. General-purpose power supply outlets shall be installed at the base of the tower and inside the radome. 9. A suitable electrical mechanism with a capacity of at least 300 kg for lifting equipment shall be used during the installation and remain permanently.	
8.1.58	Radar System Life and Reliability Life/Operation The supportable life cycle of the system shall be 15 years after acceptance at site. The system shall be capable of continuous operation during its useful life. The Supplier shall ensure that spare parts are available for 15 years	
8.1.59	Components All components of the system shall be of industry standard.	
8.1.60	Remote Power Control The power switches to each individual subsystem of the radar such as antenna servo amps, radar control unit, transmitter, digital receiver, signal generator, dehydrator, all computer servers, and any other subsystems shall be remotely (via internet) operable to power cycle the subsystems individually.	
8.1.61	The S band radar system shall send the observed data to the Lot5 acquisition system.	
8.1.62	Warranty 1. Supplier shall provide remote technical support and monitoring 24/7 service 2. Supplier shall provide maintenance and warranty until project technical completion added one year, the cost of spare parts required during warranty period is the responsibility of the Supplier.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
8.1.63	Training Factory and site trainings shall be provided as detailed in paragraphs 5.2	
8.1.64	Maintenance Training 1. The maintenance training shall provide the course participants with a technical overview and information concerning the system (basic system features, main functionality, and applications). 2. The course shall include fault localization discussion. 3. The course shall provide knowledge of the personnel safety at the radar facility, especially for maintenance purposes. 4. The course shall be designed to provide the participants with detailed knowledge of the function and interaction of the software modules comprising the radar station programs. 5. On completion of the course, the trainees shall be fully conversant with the software interface to the radar system, and data transmission to allow them to monitor the system performance and diagnose and correct typical faulty operating conditions, as well as carry out upgrades with new program versions	
8.1.65	Operations Training 1. The operations training shall include system setup, configuration, reinstallation, operational controls, procedures, and status checks. 2. The course shall include training on utility software and test instrumentation. 3. The course shall give the participants knowledge of the functions and products that are included in the product generation and visualization software, and applications of products. 4. Analyse to weather extreme based on weather radar product 5. Utilization weather radar for marine 6. Utilization for Preprocessing method (attenuation correction, bright band echo correction, occultation correction, etc.)	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	7. After completing the course, the participants shall be able to take responsibility for: a. The daily operation of the weather radar system b. Remotely control local and deployed sites c. Administer the users, server processes and client applications d. Administer changes in access control, resource utilization, etc. e. Configure the software f. Handle errors in the system and in external interfaces.	
8.1.66	Training Materials and Documentation The supplier shall supply 1. Course material during all training courses. The course material will remain with the trainees for later reference. The course shall include the use of the actual handbooks that make up the official documentation of the radar system. 2. Guidance for weather radar measurement using maintenance tools.	
8.1.67	Testing and commissioning 1. Testing shall be performed on all components of the radar system by the technical expert from the factory. 2. A test and evaluation program to validate that the delivered system will meet the system requirements shall be designed. 3. A system test that verifies the functional, performance and stability requirements described in this document shall be designed and run at the factory. 4. The site acceptance test will be run to verify the functional performance and stability of the radar. 5. After the successful completion of the site acceptance test, the radar site will be commissioned to ensure that the design intent is respected all sub-systems perform interactively (Antenna, radome, transmitter, digital	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	receiver, receptor, software system...) and all verifications well documented.	
8.1.68	Pre-Installation Information Package A pre-installation information package shall be provided for guidance in site preparation work. This package is expected to be a deliverable of the site study and detailed design phase. Moreover, a guide for site environmental and social safeguards will be provided by the client to be used for site preparation work.	
8.1.69	Installation Material All materials like wave guides, templates for pedestal and radome, interconnecting cables, grouting bolts etc. required for the installation of the system shall be supplied along with the equipment. The exact length of waveguide and cables required for each site shall be specified by the Indenter.	
8.1.70	Installation 1. Install: The installation shall be carried out by the supplier and the technical expert from the factory. 2. Structure: The supplier shall take into consideration that the system is required to be installed in existing building/structures or on a standard tower.	
8.1.71	Documentation 1. As-built wiring diagrams and assembly drawings shall be provided with delivery of the system. 2. Wiring diagrams shall be provided. 3. A software maintenance manual shall be provided that illustrates the organization of the software modules, data flow, file structure, interfaces, etc. 4. An Operations & Maintenance manual shall be delivered with the system. 5. The manual shall have a section that details the concept of operation.	

<i>No</i>	Weather Radar S Band Dual Polar Solid-state Requirements	Specification proposed or comments
	6. The operations section of the manual shall provide procedures for configuration of any subsystem along with documentation for any subsystem specific software or process. 7. The maintenance section of the manual shall describe the procedures for preventive maintenance associated every applicable subsystem.	

8.2 Training and Acceptance Test

No	Training
8.2.1	Function specifications of goods 1. Training activities are designed to enhance human resource capabilities in the field of weather radar. For operational weather radar training, two types of training are essential: Factory Training (FT) conducted at the manufacturer's facility, and On-Site Training (OST) carried out at the installation site. 2. The Factory Acceptance Test (FAT) is a crucial operational testing phase for the radar system. It takes place at the manufacturer's facility, involving the ordered equipment that has previously undergone operational testing during the Factory Training (FT). The purpose is to validate that the equipment operates in accordance with the defined technical specifications. This includes testing the technical specifications, overall functionality, and performance of the equipment while ensuring the availability of data. 3. The Site Acceptance Test (SAT) is a procedural step involving the operational testing of the radar system. It is conducted at the actual location of system installation. 4. The Commissioning Test is a comprehensive inspection and a sequence of functional and performance tests performed on the weather radar system that has been installed on-site.

No	Training
	5. Provisional Acceptance is the formal process by which the completed radar site is accepted by the Purchaser following successful installation, commissioning, completion of the Site Acceptance Tests (SAT), applicable contractual training and confirmation that the radar system is fully operational, in accordance with GCC Clause 28.3.. 6. Final Acceptance shall be carried out in accordance with GCC Clause 28.3 and shall apply to the Contract as a whole.
8.2.2	Performance specifications of goods 1. The execution of Factory Training (FT) must involve the utilization of the radar system that has been ordered, encompassing both hardware and software components, including the PC server. This practice ensures that the radar system's condition and performance, slated for deployment, are thoroughly tested during the training procedure. 2. On-Site Training (OST) is conducted after the completion of radar system installation and the establishment of supporting infrastructure at the site. This training is undertaken once the system has been operational for a minimum of 1 (one) week, or when at least 97% of the 1008 data volume (1 data volume per 10 minutes) from observations at the radar site has been attained. This data volume serves as material for practical exercises and radar image analysis. 3. The execution of the Factory Acceptance Test (FAT) takes place at the radar manufacturer's facility and occurs after or upon the end of the FT activity. During the FAT, the provided weather radar system (comprising both software and hardware components) is employed. This practice facilitates the identification of any potential issues with the weather radar system from the outset, prior to its deployment at the radar site. 4. The FAT implementation method involves performing a comprehensive assessment against the provider's offer document. This evaluation encompasses all system components, including measurement and calibration aspects, the integrity of System Hardware components, Software functionality, and radar products. This evaluation process adheres to the guidelines outlined in the document: a. System Measurement and Calibration.

No	Training
	b. Completeness of Weather Radar System Components c. Completeness of data and products as well as the performance of the radar system d. Factory Training Implementation Report and Implementer Recommendations. 5. The aforementioned document serves as Supporting Data appended to the Minutes of FAT Implementation, with or without accompanying notes. This documentation acts as the foundation for the radar system's dispatch. 6. The Site Acceptance Test (SAT) is conducted after the completion of On-Site Training. Its purpose is to assess the alignment of the installed radar system with the Factory Acceptance Test report. Additionally, it evaluates the comprehensiveness and functionality of the weather radar operational support system. The SAT implementation method involves performing a thorough conformity check based on the provider's offer document. This evaluation encompasses all system components, including measurement and calibration aspects, the completeness of System Hardware components, Software functionality, and radar products. These evaluations are conducted during operational tests, adhering to the guidelines outlined in the Document: a. On-Site Weather Radar System Measurement and Calibration. b. Completeness of Weather Radar System Components. c. Completeness of data and products as well as the performance of the radar system. d. Completeness of the functions and performance of the weather radar support system. e. Report on Implementation of Onsite Training and Implementer Recommendations. 7. The aforementioned document serves as Supporting Data appended to the Minutes of SAT Implementation, with or without accompanying notes. This documentation acts as the foundation for the commissioning test. 8. The implementation of the Commissioning Test outlines the required system performance thresholds that the provider must achieve. These thresholds include: a. Operational System Performance: 95 %

No	Training
	b. Data Availability: 95 % c. Verification of Rain Observations: Rain observations at the installation location must match surface rainfall products with a minimum accuracy of 95% using the dichotomous method (contingency table), considering comparative data availability. d. In cases where point (c) cannot be carried out due to unfavourable weather conditions, full payment will still be processed. If the results from point (c) do not align, the provider is responsible for adjusting enhance the system until point (c) is achieved. The document specifying the system performance levels mentioned above is attached as supporting data to the Minutes of First Job Handover (PHO). 9. Final Hand Over (FHO) by examining and testing the function and performance of the radar system by carrying out validation tests of the output data of weather radar observations with weather observation data and forecasts as well as early warnings available at the location of the installed weather radar since it is operational until before the maintenance period ends. The level of system performance that must be met by the provider includes: 10. The Final Hand Over (FHO) involves a comprehensive evaluation and testing of the radar system's functionality and performance. This is achieved through validation tests, comparing the output data of weather radar observations with available weather observation data, forecasts, and early warnings at the radar's installed location. These tests encompass the period of radar operation until shortly before the maintenance period concludes. The provider must attain the following system performance thresholds: a. Operational System Performance: 95 % b. Data Availability: 95 % c. Verification of Rain Observations: Rain observations at the installation location must match surface rainfall products with a minimum accuracy of 95% using the dichotomous method (contingency table), considering comparative data availability. The document outlining the system performance standards mentioned above is utilized as supporting data, appended to the Minutes of FHO Handover for reference and documentation purposes.

No	Training
	11. The FAT and SAT documents made by the manufacturer must be able to describe the results of tests or functional and performance tests of each item listed in this technical specification document and the offer from the provider. 12. All FT, OST, FAT, SAT, and Commissioning business trips (including accommodation) from the time of departure to return, must comply with the current health protocol. 13. Business travel expenses for carrying out FT and FAT activities are borne by the Provider through this activity, 14. Providers are required to provide assistance to Purchaser personnel who will take part in FT Forecaster and FT Technician activities.
8.2.3	Technical Specifications 1. The training activities consist of 3 types of training namely: - Factory Training (FT) for technicians takes place at weather radar manufacturing facilities for a duration of at least 28 days, including overseas trips. The primary objective is to enhance human resource capabilities, particularly among technicians specializing in weather radar system hardware. This training is intended for a group of 4 technicians. - Factory Training (FT) for forecasters takes place at weather radar manufacturing facilities for a duration of at least 14 days, including overseas trips. The primary objective is to enhance human resources capabilities, particularly among radar data operators and analysts. This training is intended for a group of 4 forecasters. - On-site training takes place at the weather radar installation site with the objective of imparting comprehension of both weather radar hardware (for on-site training technicians) and software (for on-site training forecasters). The training includes participation from 7 technicians conducted at radar site, and 7 forecasters at forecast operational offices, each group attending for 6 working days. On-site training sessions for both technicians and forecasters occur after the installation process has been successfully completed and after an operational testing phase of at least 3 (three) days.

No	Training
	2. Modules and syllabus for training according to Technical Support for Project Implementation. Training materials include at least: a. For the Operations Manager: 1. Mastery of weather radar operational management. 2. Standard Operating Procedure (SOP) for Weather Radar. b. For Technicians: 1. Basic radar system weather radar technology (radar working principle and function and relationship between radar hardware components). 2. Installation and configuration of radar systems and radar applications/software. Basic mastery of computers, operating systems and networks. 3. Standard Operating Procedure (SOP) for Weather Radar. 4. Introduction and operation of measuring instruments. 5. Mastery of maintenance and troubleshooting of weather c. For Operators and Analysts: 1. Scanning strategy according to information needs 2. The difference between each type of dual-polarization radar data: a. Reflectivity (Z) b. Radial velocity (V) c. Spectral width (W) d. Correlation coefficient (RhoHV) e. Differential phase shift (PhiDP) f. Specific differential phase shift (KDP) g. Differential Reflectivity (ZDR) h. Linear Depolarisation Ratio (LDR) d. Product algorithm, how to generate products, interpret products, and choose products for each weather phenomenon: 1. Heavy rain 2. Hail 3. Flood 4. Strong wind, Tornado 5. Volcanic ash e. Use of all the features of the weather radar data processing application.

No	Training
	f. Include doppler clutter suppression, sea clutter mitigation, wind farms, PhiDP attenuation correction g. Format of data and products, as well as how to convert data to other commonly used formats. 3. The training activities consist of 4 types of acceptance tests namely: Factory Acceptance Test (FAT) followed by 3 people from users of goods, for 7 (seven) days including trips (overseas). Official travel costs are calculated during the departure process until returning to the homeland, including during quarantine. The Site Acceptance Test (SAT) is carried out by at least 3 people with a minimum implementation time of 3 (three) days. The Commissioning Test is carried out by a minimum of 3 people with a minimum implementation time of 3 (three) days. The Final Hand Over is carried out by at least 5 people with a minimum implementation time of 5 (five) days. 4. The sequence of activities implementation is as follows: a. Factory Training for Technician b. Factory Training for Forecaster c. Factory Acceptance Test (FAT) d. On-site Training for Technicians e. On-site Training for Forecaster f. Site Acceptance Test (SAT) g. Commissioning Test h. Final Hand Over (FHO)

9 Packaging, Shipment and Storage of Material

No	Shipment Requirements
	Packaging
9.1	Each case, crate or package shall be of robust construction and suitable for the intended purpose. Packaging material that are likely to suffer deterioration in quality as a result of exposure to environmental conditions likely to be met during transit from the factory of origin to the Site shall not be used.
9.2	Where applicable, the contents of each case, crate or package shall be protected against the harmful effects of ingress of moisture / water by enclosing within a heavy- duty waterproof membrane.
9.3	Each case, crate or package shall be legibly and indelibly marked in large letters with the address, Contract number, “right way up”, opening points and other markings like “fragile”, “keep dry”, “handle with care” etc. along with visual display of internationally accepted symbols as necessary to permit material to be readily identified and handled during transit and when received at site.
9.4	Each case, crate or package shall contain a comprehensive packing list showing the number, mark, size, weight.
9.5	Care shall be taken to prevent movement of equipment within containers by the provision of bracing, straps and securing bolts as necessary.
9.6	Spare parts shall be suitably packed for storage over a long period (e.g project duration) without deterioration and shall be clearly identified showing full name and part number without any need to unwrap packaging.
	Shipment
9.7	All shipments shall be adequately protected to preclude damage during shipment. The Supplier’s quality control personnel shall verify the inspection and preparation for shipment.

No	Shipment Requirements
9.8	After successful factory acceptance, the equipment shall be delivered on their final destination according to Delivered at Place (DAP) incoterms.
9.9	For each shipment, the Supplier shall deliver the following documents 1. Shipping invoices with equipment description, quantity, unit prices and total amount prices 2. Packing list and bill of lading 3. Certificate of origins The Supplier shall be responsible in handling the delivery of goods from customs to final warehouse.
	Handling, Storage and Delivery
9.10	Handling procedures shall include the use of special crates, boxes, containers, transportation vehicles, equipment, and facilities for material handling.
9.11	The Supplier shall ensure or get confirmation from the Purchaser that the Site is ready and in good conditions for delivery.
9.12	No dangerous goods shall be delivered to the Site.

10 Technical Support

10.1 Technical Support Requirements

No	Technical Support Requirements
10.1.1	The Supplier shall prepare and submit for review by the Purchaser an Operation & Maintenance Plan. The Plan shall include all the aspects related with the Monitoring, Control & Operation of the system / subsystem/ equipment and Maintenance thereof.

10.1.2	Each radar site shall benefit from an independent warranty period of twelve (12) months commencing on the date of its respective Provisional Acceptance, in accordance with GCC Clause 28.3. The warranty period applicable to one radar site shall not affect, reduce or modify the warranty period applicable to any other radar site. During the applicable warranty period, the Supplier shall remain responsible, at no additional cost to the Purchaser, for maintenance, technical support, corrective interventions and replacement of defective parts required for the proper operation of the radar system..
10.1.3	Final Acceptance shall apply to the Contract as a whole and shall be granted twelve (12) months after the Provisional Acceptance of the last radar site, subject to the Supplier having satisfactorily fulfilled all contractual warranty, maintenance, technical support and defect-remedy obligations applicable to the four radar sites, in accordance with GCC Clause 28.3. No separate system-wide warranty period shall apply in addition to the site-specific warranty periods defined above..
10.1.4	The financial offer shall include as an option an additional year of maintenance and operational support for all systems.
10.1.5	The technical proposal shall include an operation and maintenance plan with at least: 1. The Supplier's support team description. 2. The Supplier's technical support organization with the different levels of support and associated workflow. 3. The proposed Service Level Agreement for each type of system (please refer to next paragraph). 4. The description of the different support actions including preventive actions 5. The preventive tests and maintenance actions during the warranty and technical support periods. 6. Describe how documentation will be updated.

10.1.6	The Supplier shall propose a password management solution at the project technical completion and all administration accounts and passwords shall be recorded in the password management system.
10.1.7	The technical proposal shall detail the cost of maintenance and spare parts.
10.1.8	Where applicable, the Supplier shall have the capability to test the backup & restore procedures to establish if the data can be recovered when needed. These capabilities shall be tested at regular intervals and reported to the Purchaser. Where possible these tests shall be performed in presence of relevant Purchaser staff members.
10.1.9	The end of Wide System Warranty shall also be extended until resolution of any blocking or major issue if any (the level of issue is described in paragraph 7.2).
10.1.10	Technical support management In order to facilitate the technical support traceability, the Supplier shall use and update a Web-based software for tracking support tickets. Each ticket should contain the following information (or equivalent): 1. Name 2. Description 3. Importance (mandatory, important, or optional) 4. Type of issue 5. Concerned system or sub-activity 6. Supplier contact 7. Purchaser contact 8. Status a. NEW: not yet reviewed by the supplier b. CANCELLED: after mutual decision c. TO BE DONE d. ON HOLD (supplier waiting for Purchaser clarifications) e. TO BE VALIDATED: delivered and to be tested by Purchaser f. VALIDATED: successfully tested by Purchaser

	9. Delivery version (concerns software requirement) 10. Delivery date if applicable 11. Attached files if applicable
10.1.11	Tracking discussions for each ticket For each ticket a discussion thread tracking the exchanges between the intervener's (supplier, NMHS) shall be possible on the ticket tracking web interface.
10.1.12	Purchaser Account for the ticket tracking web application An Purchaser account shall be created enabling the Purchaser authorized experts/managers to follow-up the status of the tickets and to update the status of each ticket.
10.1.13	Tickets reporting The tickets tracking tool shall allow the display of tickets with filtering feature.
10.1.14	Required equipment for observation systems maintenance shall be delivered with associated training when needed.
10.1.15	The Operation and Maintenance manuals shall include the details of each system, subsystem, equipment / components.
10.1.16	During the Warranty, technical support and maintenance periods, the as-built and Operation & Maintenance manuals shall be maintained by the Supplier
10.1.17	The systems/data operational availability shall comply with the table of next paragraph (paragraph 9.2) $\text{Data Availability Level} = \left[\frac{\text{Data Availability}}{\text{Data Availability} + \text{Data Missing}} \right] \times 100\%$ Excluding planned maintenance, upgrade or downtime caused by event beyond Supplier responsibility (e.g., Force Majeure, vandalism) For offshore equipment's, system downtime will not include travel for accessing the equipment.
10.1.18	The Supplier shall provide tools to calculate and report (tables and graphics) the systems/data availability for each type of activity (monthly frequency)

11 Environment, Social, Health and Safety (ESHS) Requirements

No	Environment, Social, Health and Safety (ESHS) Requirements
11.1	The Supplier shall not provide materials or services originated by any sub-Supplier from a country under embargo by the United Nations, the European Union or France
11.2	The Supplier shall confirm that its status is not one of the hereunder listed below: • Bankrupt/wound up, is having its affairs administered by the courts, is the subject of safeguard proceedings, has ceased trading, or is in any analogous situation arising from proceedings of a similar nature. • Has been convicted within the last 5 (five) years by a judgment that has the force of res judicata in the country where the project is being carried out of fraud, corruption or any offence committed in connection with the award or performance of a contract, subject to any additional information that bidders may deem useful to provide as part of the declaration of integrity and eligibility (form attached to the Bid), which will make it possible to consider that such conviction is not relevant to the project financed by the Agency. • Appears on the lists of financial sanctions adopted by the United Nations, the European Union and/or France, in particular to combat the financing of terrorism and breaches of international peace and security. • In professional matters, has been guilty of serious misconduct within the last five years in connection with the award or performance of a contract, established by any means that the Purchaser can justify.

No	Environment, Social, Health and Safety (ESHS) Requirements
	• Has not fulfilled their obligations relating to the payment of social security contributions or their obligations relating to the payment of taxes in accordance with the legal provisions of the country in which they are established or those of the country of the Purchaser. • Has been convicted within the last five years by a judgment having the force of res judicata for fraud, corruption or any offence committed in connection with the award or performance of a contract financed by the Agency. • Is subject to an exclusion decision issued by the World Bank, as of May 30, 2012, and as such appears on the list published at http://www.worldbank.org/debarr, subject to additional information that bidders will deem useful to transmit as part of the declaration of integrity and eligibility (form appended to the Bid), which will make it possible to consider that this exclusion decision is not relevant in the context of the project financed by the Agency. • Is guilty of misrepresentation in providing the information required by the Purchaser as part of the procurement process.
11.3	Public establishments and enterprises are eligible to participate on condition that they can establish (i) that they enjoy legal and financial autonomy, (ii) that they are governed by the rules of commercial law. To this end, public establishments and enterprises must provide any document (including their articles of association) enabling them to establish to the Agency's satisfaction (i) that they have a legal personality distinct from that of their State, (ii) that they do not receive any public subsidy or significant budgetary aid, (iii) that they are governed by the provisions of commercial law and that, in particular, they are not obliged to transfer their financial surpluses to their State, that they may acquire rights and obligations, borrow

No	Environment, Social, Health and Safety (ESHS) Requirements
	funds, are liable for repayment of their debts and may be subject to bankruptcy proceedings.
11.4	In order to promote sustainable development, the Supplier and its sub-Suppliers shall comply with internationally recognized environmental and social standards. (see above reference documentation on the standards and manuals for ESS)
11.5	The Supplier shall respect and ensure respect by all its subcontractors, in accordance with the laws and regulations applicable in the country where the project is carried out, of the environmental and social standards recognized by the international community, including the fundamental conventions of the International Labour Organization (ILO) and international conventions for the protection of the environment.
11.6	The Supplier shall implement environmental and social risk mitigation measures as defined in the environmental and social management plan or, where applicable, in the environmental and social impact statement provided by the Purchaser.

12Annex 1 - Template of a Site Description

A. GENERAL INFORMATION	
Location	
Site ID	

Site Name (following the naming convention)			
GPS Surveyed Latitude	S Deg	x ^o	x'. x"
GPS Surveyed Longitude	E Deg	x ^o	x'. x"
GPS Datum			
Site Address			
B. MAP LOCATION			

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C. SITE PICTURE LOCATION		TAKING DATE; DD-MM- YYYY
DIRECTION TO 0°		DIRECTION TO 45°
DIRECTION TO 90°		DIRECTION TO 135°
DIRECTION TO 180°		DIRECTION TO 225°

DIRECTION TO 270°	DIRECTION TO 315°
ROAD TO LOCATION	JETTY TO LOCATION

BOAT TO LOCATION	OTHER
OTHER	OTHER

OTHER	OTHER

D. SITE CONDITION			
D.1. CLIMATIC CONDITION			
Temperature (last 10 years, 2010-2019)	Min = x°	Max = y°	Av = z°
Rainfall (last 10 years, 2010-2019)	Min = x mm	Max = y mm	Av = z mm
Wind Speed (last 10 years, 2010-2019)	Min = x m/s (x knot)	Min = y m/s (y knot)	Av = z m/s (z knot)
Relative Humidity (last 10 years, 2010-2019)	Min = x %	Max = y %	Av = z %
Wave (last 10 years, 2010-2019)	Min = x m	Max = y m	Av = z m
Tidal (last 10 years, 2010-2019)	Min = x m	Max = y m	Av = z m

D.2. TOPOGRAPHIC AND GEOGRAPHIC CONDITION	
Ground Elevation / MSL	(+/-) x.x msl
Depth of sea (if build on ocean)	x m
Surrounding Site Location	☐ Ocean ☐ Residential Area. ☐ Rock / Stone ☐ Coastal / Beach ☐ Commercial Area ☐ Swamp ☐ Forest ☐ Industrial Area. ☐ Roadside ☐ Mangrove ☐ Agricultural Area. ☐ Others: ☐ Mountain ☐ Airport / Harbour
Disaster Risk	☐ Typhoon ☐ Earthquake ☐ Extreme Lightning ☐ Flood ☐ Tsunami ☐ Storm ☐ Landslide ☐ Liquefaction ☐ Others: ☐ Volcano ☐ Forest fires
Earthquake Zone	
Level of difficulties for construction or equipment installation	☐ Easy ☐ Normal ☒ Hard
Other Information:	

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4. Drawings

These Bidding Documents includes no drawings.

5. Inspections and Tests

Inspections and tests shall be performed in accordance with the technical specifications in section VII of this document.

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) “AFD” means the Agence Française de Développement;
- (b) “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;
- (c) “Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto;
- (d) “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;
- (e) “Day” means calendar day;
- (f) “Completion” means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract;
- (g) “GCC” means the General Conditions of Contract;
- (h) “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;
- (i) “Purchaser’s Country” is the country specified in the Special Conditions of Contract (SCC);
- (j) “Purchaser” means the entity purchasing the Goods and Related Services, as specified in the SCC;
- (k) “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;
- (l) “SCC” means the Special Conditions of Contract;
- (m) “Subcontractor” means any natural person, private or state 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;

- (n) “Supplier” means the natural person, private or state 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;
 - (o) “The Project Site,” where applicable, means the place named in the SCC.
- 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 AFD requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Appendix 1 to the SCC.
- 4. **Interpretation**
 - 4.2 If the context so requires it, singular means plural and vice versa.
 - 4.3 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;
 - (b) The terms CIP 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.
 - 4.4 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.
 - 4.5 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.
 - 4.6 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.

4.7 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

- 6.1 If the Supplier is a joint venture, consortium, or association, 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.

7. Eligibility

- 7.1 All Goods and Related Services to be supplied under the Contract and financed by the AFD shall have their origin in any eligible source as specified in the SCC. 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.

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| 10. Settlement of Disputes | <p>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.</p> <p>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.</p> <p>10.3 Notwithstanding any reference to arbitration herein,</p> <p style="padding-left: 40px;">(a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and</p> <p style="padding-left: 40px;">(b) The Purchaser shall pay the Supplier any monies due the Supplier.</p> |
| 11. Inspections and Audit by the AFD | <p>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.</p> <p>11.2 The Supplier shall permit, and shall cause its Subcontractors and consultants to permit, the AFD and/or persons appointed by the AFD to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the AFD if requested by the AFD.</p> |
| 12. Scope of Supply | <p>12.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.</p> |
| 13. Delivery and Documents | <p>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.</p> |
| 14. Supplier's Responsibilities | <p>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.</p> |
| 15. Contract Price | <p>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</p> |

- 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 as specified in the SCC, 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 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 The Performance Security 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 AFD 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 VII, 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 named place of 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' named place of 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

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 incidental 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, and/or at the Goods' named place of 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 named place of 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 named place of 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 Laws and Regulations

- 31.1 Unless otherwise specified in the Contract, if after the date 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 amendment 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 27, 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 GCC Clause 3, 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.

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 AFD 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.

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(i)	The Purchaser's country is: Mauritius
GCC 1.1(j)	The Purchaser is: Indian Ocean Commission
GCC 1.1 (o)	The Project Sites/Named Place of Destinations are: <u>The destinations are in the following countries:</u> • Comoros- Ngazidja-Grande Comores • Mauritius- Ile Rodrigues, • Seychelles-Ile Pralin, • Madagascar- Morondava
GCC 4.2	The meaning of the trade terms shall be as prescribed by Incoterms.

	The version edition of Incoterms shall be Incoterms 2020. (a) Under DAP Incoterms, the responsibilities of the Supplier and the Buyer shall be allocated as follows: Insurance The Supplier shall be responsible for insuring the goods up to the agreed place of destination. Transportation The Supplier shall arrange and bear all transportation costs up to the DAP destination, including pre-carriage, main carriage and inland transportation. Customs Clearance • Supplier: Export customs formalities, licences and related export costs. • Buyer: Import customs clearance, licences, authorisations and related formalities. Duties, Taxes and VAT Import duties, taxes and VAT shall be borne by the Buyer. Storage Storage costs resulting from the Buyer's obligations, including import clearance, site unavailability or failure to receive the goods, shall be borne by the Buyer. Costs resulting from the Supplier's obligations or failure shall remain with the Supplier. Transfer of Risk and Final Delivery Risk shall transfer to the Buyer at the agreed DAP destination, when the goods are placed at the Buyer's disposal on the arriving means of transport, ready for unloading. The Supplier shall arrange and pay for delivery to the site, while unloading the radars from the transporting vehicle shall be the Buyer's responsibility
GCC 5.1	The governing and communication language shall be English
GCC 7.1	Goods and services from countries under embargo from France, the European Union, or the United Nations are not eligible.

GCC 8.1	For <u>notices</u>, the Purchaser's address shall be: General Secretariat of Indian Ocean Commission (IOC) Attention : Gina BONNE, Chargé de mission Blue Tower, 3rd floor, Institute Road, Ebene, Maurice Tel : (230) 402 6100 Email : gina.bonne@coi-ioc.org with copy to smc@coi-ioc.org
GCC 9.1	The governing law shall be the law of: Mauritius
GCC 10.2	The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall be as follows: (a) Contract with foreign Supplier: GCC 10.2—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. (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	For Goods supplied from abroad: Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by cable or by electronic way previously agreed between parties the full details of the shipment, including Contract number, description of Goods, quantity, the mode of transport, the bill of lading number and date, place of loading, date of shipment, place of discharge, etc. The Supplier shall mail the following documents to the Purchaser, with a copy to the Insurance Company: (i) Copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount; (ii) Original and two (2) copies of the negotiable, clean, on-board bill of lading marked "freight prepaid" and two (2) copies of nonnegotiable bill of lading; (iii) Copies of the packing list identifying contents of each package; (iv) Insurance certificate; (v) Manufacturer's or Supplier's warranty certificate; (vi) Inspection certificate, issued by the nominated inspection agency, and the Supplier's factory inspection report; and (vii) Certificate of origin. The above documents shall be received by the Purchaser at least one week before arrival of the Goods at the place of arrival and, if not received, the Supplier will be responsible for any consequent expenses.

	For Goods from within the Purchaser's country: Upon delivery of the Goods to the transporter, the Supplier shall notify the Purchaser and mail the following documents to the Purchaser: (i) copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount; (ii) delivery note, railway receipt, or truck receipt; (iii) Manufacturer's or Supplier's warranty certificate; (iv) inspection certificate issued by the nominated inspection agency, and the Supplier's factory inspection report; and (v) certificate of origin. 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.
GCC 15.1	The prices charged for the Goods supplied and the related Services performed shall not be adjustable.
GCC 16.1	GCC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows: Payment for Goods and services supplied from abroad: Payment of foreign currency portion shall be made in US Dollar in the following manner: For the purposes of paragraphs (ii), (iii) and (iv) below, "Site Contract Price" means the portion of the total Contract Price allocated to the relevant radar site, as identified in the Price Schedules. Payments relating to shipment, delivery and Provisional Acceptance may be made separately for each radar site, according to the actual progress achieved at that site. A delay affecting one radar site shall not prevent payment in respect of another radar site for which the applicable contractual milestone has been satisfactorily achieved. (i) Advance Payment: Twenty (20) 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 documents or another form acceptable to the Purchaser; (ii) Payment upon Shipment: Thirty (30) percent of the Site Contract Price shall be paid within thirty (30) days following shipment of the Goods allocated to the relevant radar site and submission and acceptance of the shipping documents specified below.. A delay in the shipment of Goods for one radar site shall not prevent payment in respect of Goods duly shipped for another radar site.

	The Supplier shall notify the Purchaser and the Insurance Company by cable or by electronic way previously agreed between parties the full details of the shipment, including Contract number, description of Goods, quantity, the mode of transport, the bill of lading number and date, place of loading, date of shipment, place of discharge, etc. The Supplier shall mail the following documents to the Purchaser, with a copy to the Insurance Company: (i) Copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount; (ii) Original and two (2) copies of the negotiable, clean, on-board bill of lading marked "freight prepaid" and two (2) copies of non-negotiable bill of lading; (iii) Copies of the packing list identifying contents of each package; (iv) Insurance certificate; (v) Manufacturer's or Supplier's warranty certificate; (vi) Inspection certificate, issued by the nominated inspection agency, and the Supplier's factory inspection report; and (vii) Certificate of origin. The above documents shall be received by the Purchaser at least one week before arrival of the Goods at the place of arrival and, if not received, the Supplier will be responsible for any consequent expenses. (iii) On delivery: Thirty-five (35) percent of the Site Contract Price shall be paid within thirty (30) days following delivery of the Goods at the designated delivery point for the relevant radar site, against submission of the documents specified in GCC Clause 13 and confirmation by the Purchaser that the Goods have been duly received. Payment upon delivery shall not constitute Provisional Acceptance of the radar site. A delay affecting the delivery of Goods for one radar site shall not prevent payment in respect of another radar site for which the corresponding delivery milestone has been satisfactorily achieved. Provisional Acceptance of each radar site shall only be granted following successful installation, commissioning, completion of the Site Acceptance Tests (SAT), and confirmation that the radar system is fully operational in accordance with GCC Clause 28.3. (iv) . (v) On Provisional Acceptance: Fifteen (15) percent of the Site Contract Price shall be paid within thirty (30) days following successful installation and commissioning of the radar system, satisfactory completion of the Site Acceptance Tests (SAT), completion of the applicable contractual training, confirmation that the radar system is fully operational in accordance with the Contract requirements, and issuance by the Purchaser of the Provisional Acceptance Certificate for the relevant radar site.
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	(vi) Final Acceptance and Release of Security: Final Acceptance shall apply to the Contract as a whole and shall be granted twelve (12) months after the Provisional Acceptance of the last radar site, subject to the Supplier having satisfactorily fulfilled all warranty, maintenance, technical support and defect-remedy obligations applicable to all four radar sites. Final Acceptance shall not be granted separately for individual radar sites. Upon issuance of the Final Acceptance Certificate by the Purchaser, any Performance Security or other security retained to cover the Supplier's warranty obligations shall be released in accordance with GCC Clause 18.4. Payment of local currency portion shall be made in US Dollar 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.
GCC 16.1	Payment to the Supplier of the amounts due in each currency shall be made into the following bank accounts: <i>[insert bank account details at the time of contract signing]</i>
GCC 16.5	The payment-delay period after which the Purchaser shall pay interest to the supplier shall be 90 days. The interest rate for payments in foreign currency that shall be applied is LIBOR + 200 bp.
GCC 17.3	The following taxes, duties and fees exemptions apply to the Contract: The Buyer has obtained an exemption applicable to the Contract, concerning the payment of VAT and import taxes in the Buyer's country in accordance with Note No. 1130/39/8 V.2 dated 18 November 1998 from the Ministry of Foreign Affairs and International Trade of the Republic of Mauritius. The Buyer has taken steps to obtain exemption rulings in the three other countries (Comoros, Madagascar and Seychelles).
GCC 18.1	The amount of the Performance Security shall be: ten percent (10%) of the contract price <u>The Performance Security shall remain valid until completion of the warranty obligations and Final Acceptance of the Contract and shall be released in accordance with GCC 18.4 following Final Acceptance.</u>
GCC 18.3	The Performance Security shall be in the form of: a Bank Guarantee The Performance security shall be denominated in the currencies of payment of the Contract, in accordance with their portions of the Contract Price.

GCC 23.2	The packing, marking and documentation within and outside the packages shall be comply with the technical requirements described in section VII, point 3 of this dossier. However : • Supplies will be delivered in packaging to prevent damage or deterioration during transit until arrival at destination. • The packaging becomes the property of the beneficiary, subject to respect for the environment.
GCC 24.1	The insurance coverage shall be as specified in the Incoterms.
GCC 25.1	Responsibility for transportation of the Goods shall be as specified in the Incoterms.
GCC 25.2	Services to be provided are: • Trainings • Servicing and maintenance • Spare parts • Commissioning • Calibration • Data integration • Technical support • Communication • handover <i>(shall be included in the Contract Price).</i>
GCC 26.1	The inspections and tests shall be as specified in Section VII - Schedule of Requirements
GCC 26.2	The Inspections and tests shall be conducted at the supplier facilities and in the four beneficiary countries: Comoros, Madagascar, Mauritius and Seychelles.
GCC 27.1	The liquidated damage shall be 0.5% per week
GCC 27.1	The maximum amount of liquidated damages shall be: 10%

GCC 28.3	Each radar site shall be subject to Provisional Acceptance following successful installation and commissioning, satisfactory completion of the Site Acceptance Tests (SAT), completion of the applicable contractual training, and confirmation that the radar system is fully operational in accordance with the Contract requirements. Provisional Acceptance may be granted separately for each radar site. Each site shall benefit from an independent warranty period of twelve (12) months commencing on the date of its respective Provisional Acceptance. The warranty period applicable to one site shall not affect, reduce or modify the warranty period applicable to any other site. During the warranty period, the Supplier shall remain responsible, at no additional cost to the Purchaser, for all maintenance, technical support, corrective interventions and replacement of defective parts required for the proper operation of the radar system. Final Acceptance of the Contract shall be granted twelve (12) months after the Provisional Acceptance of the last radar site, subject to the Supplier having satisfactorily fulfilled all contractual warranty, maintenance and technical support obligations and having remedied all outstanding defects. Any Performance Security covering the Supplier's warranty obligations shall remain valid until completion of such obligations and shall be released in accordance with GCC 18.4 following Final Acceptance. In addition to the Supplier's obligations during the warranty period, the Supplier shall provide, as part of the Contract Price, a package of spare parts and consumables sufficient for at least twenty-four (24) months of normal operation following expiry of the applicable warranty period. The Bidder shall provide a detailed list of such spare parts and consumables, including quantities, manufacturer references and recommended replacement frequencies. For purposes of the Warranty, the named place(s) of destination(s) shall be: • Comores Ngazidja -Grande Comores • Mauritius –Rodrigues island • Madagascar – Morondava (aéroport) • Seychelles -Pralin island Each radar site shall benefit from its own independent warranty period of twelve (12) months starting from the date of its Provisional Acceptance. The warranty period applicable to one site shall not affect or reduce the warranty period applicable to any other site. .
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GCC 28.5 and GCC 28.6	The period for repair or replacement shall be: Twenty-one days.
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Appendix 1 to Special Conditions of Contract: Prohibited Practices Policy and environmental and social responsibility

1. Corrupt and Fraudulent Practices

The Contracting Authority and the suppliers, contractors, subcontractors, consultants or subconsultants must observe the highest standard of ethics during the procurement process and performance of the contract. The Contracting Authority means the Purchaser, the Employer, the Client, as the case may be, for the procurement of goods, works, plants, consulting services or non-consulting services.

By signing the Statement of Integrity the suppliers, contractors, subcontractors, consultants or subconsultants declare that (i) “it did not engage in any practice likely to influence the contract award process to the Contracting Authority’s detriment, and that it did not and will not get involved in any anti-competitive practice”, and that (ii) “the procurement process and the performance of the contract did not and shall not give rise to any act of corruption or fraud”.

Moreover, the AFD requires including in the Procurement Documents and AFD-financed contracts a provision requiring that suppliers, contractors, subcontractors, consultants or subconsultants will permit the AFD to inspect their accounts and records relating to the procurement process and performance of the AFD-financed contract, and to have them audited by auditors appointed by the AFD.

The AFD reserves the right to take any action it deems appropriate to check that these ethics rules are observed and reserves, in particular, the rights to:

- (a) Reject a proposal for a contract award if it is established that during the selection process the bidder or consultant that is recommended for the award has been convicted of corruption, directly or by means of an agent, or has engaged in fraud or anti-competitive practices in view of being awarded the Contract;
- (b) Declare misprocurement when it is established that, at any time, the Contracting Authority, the suppliers, contractors, subcontractors, consultants or subconsultants their representatives have engaged in acts of corruption, fraud or anti-competitive practices during the procurement process or performance of the contract without the Contracting Authority having taken appropriate action in due time satisfactory to the AFD to remedy the situation, including by failing to inform the AFD at the time they knew of such practices.

The AFD defines, for the purposes of this provision, the terms set forth below as follows:

- (a) Corruption of a Public Officer means:
 - (i) The act of promising, offering or giving to a Public Officer, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such Public Officer to act or refrain from acting in his official capacity; or
 - (ii) The act by which a Public Officer solicits or accepts, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such Public Officer to act or refrain from acting in his official capacity.
- (b) A Public Officer shall be construed as meaning:
 - (i) Any person who holds a legislative, executive, administrative or judicial mandate (within the country of the Contracting Authority) regardless of whether that person was nominated or elected, regardless of the permanent or temporary, paid or unpaid nature of the position and regardless of the hierarchical level the person occupies;

- (ii) Any other person who performs a public function, including for a State institution or a State-owned company, or who provides a public service;
- (iii) Any other person defined as a Public Officer by the national laws of the country of the Contracting Authority.
- (c) Corruption of a private person means:
 - (i) The act of promising, offering or giving to any person other than a Public Officer, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such person to perform or refrain from performing any act in breach of its legal, contractual or professional obligations; or
 - (ii) The act by which any person other than a Public Officer solicits or accepts, directly or indirectly, an undue advantage of any kind for himself or for another person or entity, for such person to perform or refrain from performing any act in breach of its legal, contractual or professional obligations;
- (d) Fraud means any dishonest conduct (act or omission), whether or not it constitutes a criminal offence, deliberately intended to deceive others, to intentionally conceal items, to violate or vitiate consent, to circumvent legal or regulatory requirements and/or to violate internal rules in order to obtain illegitimate profit.
- (e) Anti-competitive practices mean:
 - (i) Any concerted or implied practices which have as their object or effect the prevention, restriction or distortion of competition within a marketplace, especially where they (i) limit access to the marketplace or free exercise of competition by other undertakings, (ii) prevent free, competition-driven price determination by artificially causing price increases or decreases, (iii) restrict or control production, markets, investments or technical progress; or (iv) divide up market shares or sources of supply;
 - (ii) Any abuse by one undertaking or a group of undertakings which hold a dominant position on an internal market or on a substantial part of it;
 - (iii) Any practice whereby prices are quoted or set unreasonably low, the object of which is to eliminate an undertaking or any of its products from a market or to prevent it from entering the market.

2. Environmental and social responsibility

In order to promote sustainable development, the AFD seeks to ensure that internationally recognised environmental and social standards are complied with. Candidates for AFD-financed contracts shall consequently undertake in the Statement of Integrity to:

- (i) Comply with and ensure that all their subcontractors or subconsultants comply with international environmental and labour standards, consistent with applicable law and regulations in the country of implementation of the contract, including the fundamental conventions of the International Labour Organisation (ILO) and international environmental treaties;
- (ii) Implement environmental and social risks mitigation measures when specified in the environmental and social management plan (ESMP) provided by the Contracting Authority.

Attachment: Price Adjustment Formula

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 payable to the Supplier;
- 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 coefficients a , b , and c as specified by the Purchaser are as follows:

- $a = [\text{insert value of coefficient}]$
- $b = [\text{insert value of coefficient}]$
- $c = [\text{insert value of coefficient}]$

The Bidder shall indicate the source of the indices and the base date indices in its bid.

Base date = thirty (30) days prior to the deadline for submission of the bids.

Date of adjustment = $[\text{insert number of weeks}]$ 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 unless specifically stated in the extension letter. 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 correspond to the

ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above;

- (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

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

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Letter of Acceptance

[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 Contract Price 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 institution.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions
of Contract, using for that purpose the Performance Security Form included in Section X, Contract Forms,
of the Bidding Documents.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Institution: _____

Attachment: Contract Agreement

Contract Agreement

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 State 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”), 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”).

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 in the sum of [insert Contract Price in words and figures, expressed in the Contract currency (ies)] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the 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 Bid Submission Form and Appendix to Bid Submission Form (including the signed Statement of Integrity);
 - (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 completed Bidding Forms (including Price Schedules);
 - (h) Any other document listed in GCC as forming part of the Contract.
3. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

4. 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.
5. 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]*

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

Performance Security (Bank Guarantee)

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, 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 first 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.

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)]

¹The 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.

²Insert 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 the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Advance Payment Security

[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, 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 first 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:

- (a) Has used the advance payment for purposes other than toward delivery of Goods; or
- (b) Has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

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,

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.

has been certified for payment, or on the *[insert date¹²]*., 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.

[signature(s)]

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

¹² Insert the Delivery date of the Goods at the named place of destination stipulated in the Contract Delivery Schedule. The Purchaser should note that in the event of an extension of the time to perform the Contract, the Purchaser would need to request an extension of this Guarantee from the bank. 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: “We agree to a one-time extension of this Guarantee for a period not to exceed *[six months]* *[one year]*, in response to the Purchaser’s written request for such extension, such request to be presented to us before the expiry of the Guarantee.”