



Ministry of Climate Change, Environment and Energy
Republic of Maldives

TERMS OF REFERENCE

(IULAN NO: (IUL)438-ENV/438/2024/457

SUPPLY AND DELIVERY OF A DRONE SYSTEM

Requesting for proposal (RFP) – Single Envelope

Issued on: 22nd October 2024

Issued By: Enhancing National Development through Environmentally Resilient Islands
(ENDhERI)

Project – Project Management Unit

Contents

Section 1.....	3
Tender Sheet	3
Section 2.....	5
Instruction for Bidders	5
Section 3.....	11
General and special provisions of the agreement	11
Section 4.....	15
Annex 1	15
Documents and checklist to be submitted by the bidder.....	15
Annex 2	16
Proposal Submission Form	16
Annex 3	17
FIN FORM 1.....	17
Annex 4	18
FIN FORM 2.....	18
Annex 5	19
FIN FORM 3.....	19
Annex 6	20
FIN FORM 4.....	20
Annex 7	21
FIN FORM 5.....	21
Annex 8	22
DISCLAIMER FOR CONFLICT OF INTEREST.....	22
Annex 9	23
Criteria to be used for evaluation of bids.....	23
Section 5	26
Details of services/materials/work required.....	26

Section 1

Tender Sheet

Reference No:	Tender Reference		
1	<u>Tender Name:</u> SUPPLY AND DELIVERY OF A DRONE SYSTEM		
2	<u>Bid queries submission timeline and Address:</u> Location: Ministry of Climate Change, Environment and Energy Date: 27/10/2024 (Sunday) Time: 12:00pm Email: procurement@environment.gov.mv CC: endheri@environment.gov.mv Telephone No: 3018300		
5	<u>Bid Clarification Deadline and Address:</u> Location: Ministry of Climate Change, Environment and Energy	Date: 28/10/2024 (Monday)	Time: 12:00pm
6	<u>Proposal submission deadline:</u> Location: Ministry of Climate Change, Environment and Energy - Reception	Date: 04/11/2024 (Monday)	Time: 10:00am
7	<u>Submission instruction</u> Proposals must be delivered in sealed envelopes titled “Do not Open Before 04th November 2024, 1005 hours – SUPPLY AND DELIVERY OF A DRONE SYSTEM” and the submitting party’s name and address Late proposals will be rejected.		
8	<u>Submission address</u> Procurement Section Ministry of Climate Change, Environment and Energy Green Building, Handhuvaree Hingun, Maafannu Male’, 20392, Republic of Maldives Email: procurement@environment.gov.mv Website: www.environment.gov.mv		

	Project name: Enhancing National Development through Environmentally Resilient Islands (ENDhERI)	
7	<u>Bid Opening:</u> Proposals will be opened in the presence of the proponents' representatives who choose to be present at the address below at the time of proposal opening.	Time: 10:05am Date: 04/11/2024 (Monday)
8	<u>Evaluation Criteria on Annex 9</u>	
9	<u>Bid Security amount:</u>	
10	<u>Performance Guarantee amount:</u>	
<u>Note:</u>		

Section 2

Instruction for Bidders

A. General Information

1. Introduction 1.1 This bid is opened to parties who can provide the goods/services mentioned in the tender sheet. The requirements of the goods/services have been detailed in the information sheet.

2. Eligible Bidders 2.1 This bid is opened to all the registered businesses.

 2.2 If any other parties except for the parties mentioned in 2.1 are eligible for proposing the bid it will be stated in the tender sheet.

3. Bid Document and signing 3.1 The bid must be complied as stated in the annex 1 along with the documents stated in the bidder's checklist as one whole document.

 3.2 Bids must be typed in English language in an easy-to-read font. Or if written by hand, it should be legible. All pages of the tender shall bear the signature and stamp of the tenderer or his designee. Each page of the tender shall also be numbered in order to indicate the number of pages.

 3.3 3.3.1 If a person other than the Managing Director signs the bid, a copy of the "Power of Attorney" stating that the person is authorized to sign the bid should be submitted.

 3.3.2 If a person other than the managing partner of the partnerships signs the bid, a copy of the power of attorney stating that the person is authorized to sign the bid shall be submitted.

 3.3.3 If any person other than the Chairman of the Cooperative Societies signs the bid, a copy of the

Power of Attorney stating that the person is authorized to sign the bid shall be submitted.

- | | | |
|-----------------------------|-----|---|
| 4. Number of Bids submitted | 4.1 | Each bidder may submit 1 (one) bid. If any bidder submits more than one bid, all bids submitted by that bidder will be cancelled. |
| 5. Cost of preparing Bid | 5.1 | All expenses incurred in preparing and submitting the bid shall be borne by the bidder. The ministry shall not be responsible for any expenses incurred in this regard. |
| 6. Other principles | 6.1 | If the bidder is a close relative of an employee who works in the Ministry of Climate Change, Environment and Energy or any Ministry under the Ministry of Climate Change, Environment and Energy the bidder must disclose it in Disclaimer of Conflict of Interest form in annex. If such information is not disclosed the tender will be canceled without further notice. |

B. Documents relating to the bid

- | | | |
|---|-----|---|
| 7. Sections of the tender book | 7.1 | Documents related to bid are included in the list below and in amendments.

7.1.1 Bid Sheet (Section-1)

7.1.2 Instructions to Bidders (Section-2)

7.1.3 General and Special Provisions of the Agreement (Section-3)

7.1.4 Annex (Section 4)

7.1.5 Works Related Information (Section–5) |
| 8. Clarification of information regarding the bid | 8.1 | It is the responsibility of the Bidder to obtain any further information regarding the information contained in this Bid Book or in connection with this Bid. |
| | 8.2 | Amendments issued in accordance with Section 9.1 shall form part of the Bid |

9. Changes to the tender 9.1 If it is deemed necessary to make a change to the bid before the expiry of the bid opening period, an amendment (deduction/addition) can may be made.

10. Language used in the tender 10.1 The bidder shall prepare the bid in Dhivehi or English in accordance with the sample given with the bid.

C. Preparation of bids

11. Money used in the bid 11.1 The bidder shall submit the bid price in Maldivian Currency (MVR).

12. Proposing the price 12.1 If it is a GST registered entity, the price should be inclusive of GST. The amount paid for GST should be clearly stated.

13. Duration 13.1 The deadline for work should be submitted in days including holidays except Friday.

13.2 The period offered for the work shall be reasonable for the performance of the work.

13.3 The expiry date of the bid shall be at least 120 days from the date of submission of the bid.

13.4 If the bidder has given more time than the time given by the Ministry for the works specified in the bid, the bid will be rejected.

D. Submission of bids

14. How to close the bid 14.1 The name, address and telephone number of the bidder shall be written on the outside of the envelope.

14.2 Bids should be submitted in a sealed envelope addressed as per the bid sheet.

15. Deadline for submission of bids 15.1 The deadline for submission of bids for this work or service will be mentioned in the bid sheet.

16. Procedure for late bids 16.1 Bids submitted after the deadline will not be accepted.

16.2 Bids sent by email and fax will not be accepted.

E. Bid opening and evaluation

17. Bid opening
- 17.1 If the date scheduled for opening of bids is fixed as a public holiday by the Government for any reason, the opening of bids will be held on the deadline specified in the bid sheet of the next official day.
- 17.2 Any problem with the calculation of qualifying tenders will be corrected as follows.
- 17.3 If the amount in the bid differs from the amount in Dhivehi, the correct amount shall be deemed to be the amount in Dhivehi.
18. Bid Evaluation
- 18.1 The Ministry reserves the right to reject bids if the required information and documents are not submitted in connection with the notice. The Ministry also reserves the right to reject incomplete bids after acceptance. The Ministry reserves the right to cancel bids if the prices offered are inadequate.
19. Determination of the bidder
- 19.1 The successful and unsuccessful bidders will be notified in writing. Following this notice, unsuccessful bidders shall be given 3 (three) days to submit a complaint relating to the bid. The reason for the unsuccessful bid shall be stated upon request by the complainant within this period.
- 19.2 The contract with the successful bidder shall be signed after considering the submissions and answering the questions raised by the unsuccessful bidders within the period specified in 19.1.
20. Selection and notification of the successful bidder
- 20.1 The agreement shall be signed after addressing the complaints and the questions raised by the unsuccessful bidders that have been submitted within the period specified in Article 19.1.

21. Signing the agreement
- 21.1 If the work is abandoned after signing the agreement or if the work is not completed after signing the agreement, action will be taken as per Chapter 11 of the Public Finance Regulation.
- 21.2 If the agreement is not signed within the stipulated time frame as stipulated in Chapter 11 of the Public Finance Regulation, the decision to award this work will be canceled and action will be taken as mentioned in Chapter 11 of the Public Finance Regulation.
- 21.3 The amount stated in the bid sheet shall be submitted as performance guarantee.

F. securities to be Submitted

22. Bid Security
- 22.1 The bid security of the unsuccessful bidders will be returned to them within 7 (seven) days from the date of notification to the successful bidder.
- 22.2 If a bidder withdraws from the bid after the opening of the bid or if the successful bidder cancels the bid after receiving the certificate of success, the bid security submitted by the bidder will be forfeited to the State.
23. Advance and Advance payment guarantee
- 23.1 If an advance is requested, the advance may be issued in accordance with the Public Finance Regulation.
- 23.2 Advance will be issued if the total value of the procurement exceeds MVR 250,000 (Two Hundred and Fifty Thousand Rufiyaa)
- 23.3 If an advance is requested, the advance shall be requested within 45 (forty-five) days of taking over the work.
- 23.4 If the advance is requested for, a security or guarantee issued by a government recognized bank or financial institution

- established in Maldives shall be submitted as advance payment guarantee.
- 23.5 Advance shall not exceed 15% (fifteen percent) of the total cost of the work. The advance payment will be deducted from bills submitted during work or service provision in proportion to the total value of the contract.
24. Performance guarantee
- 24.1 If the bid price is above MVR.500,000/-, the successful bidder shall submit as performance guarantee a security or guarantee issued by a Government recognized bank or financial institution established in Maldives for this project.
- 24.2 If the successful bidder does not submit the performance guarantee within the period given to him, the decision to award the work will be canceled and the bid security submitted by the bidder will be forfeited to the State.
25. Case filing and case investigation
- 25.1 As per the Public Finance Regulation 11.02 filing and investigating of complaints against irregularities in a tender shall be submitted under the finance regulation circular number 13-K/CIR/2018/01 annex 17 through form PR-14.
- 25.2 As mentioned in Rule 11.02 of the Public Finance Regulation, irregularities in a tender shall be submitted in PR-14 form "Bidder Complaint Form-First Stage" in annex 18 of Finance Circular No. 13-K/CIR/2018/01.
- 25.3 Upon submission of irregularities in a tender as per Rule 11.02 of the Public Finance Regulation, within 14 (fourteen) days from the date of filing of the complaint, the matter shall be decided and the decision shall be sent to the complainant in writing under circular number 13-K/CIR/2018/01 annex 19 reply shall be prepared and notified in the PR-14 form (Response of Procurement Officer to the Tender Issue).
26. Submitting for Independent Review
- 26.1 In submitting to the Independent Review Committee for administrative review of a tender as mentioned in Chapter

Committee for
reconsideration

11.02 of the Public Finance Regulation, the tender issue shall be referred to in annex 21 of Public Finance Circular No. 13-K/CIR/2018/0 The complaint may be submitted to the Independent Review Committee through Form PR-1 (Appeal stage).

Section 3

General and special provisions of the agreement

27. Definitions

- 27.1 "Owner of the Work" means a place within the jurisdiction of the Ministry required to carry out the Work.
- 27.2 "Contractor" means the person submitting the tender for the performance of the work.
- 27.3 "Work" means the service or works described in the tender sheet.
- 27.4 "Work Price" means the amount paid to the Contractor upon completion of the Work in accordance with the Agreement.
- 27.5 "Agreement" means the agreement between the Employer and the Contractor regarding the work.

28. Exchange of documents

- 28.1 The parties to this Agreement shall give all notices to each other in connection with this Agreement, generally in the Dhivehi and English language, in writing.
- 28.2 Documents sent from one party to the other shall be sent by hand or by registered post, or to the designated email address specified in the bid.
- 28.3 If you wish to change the address in this Agreement, you must notify the other party in writing.

29. Assignment of work to a third party

- 29.1 No assignment under this Agreement may be assigned to another party.

- 30. Taking over of goods and services**
- 30.1 The date and time of delivery of the materials to the Ministry shall be notified to the Work Wheeler before the materials are delivered to the Ministry.
- 30.2 Once the materials are brought to the Ministry, the contractor (the Ministry) will take over the quantity of the materials.
- 30.3 The owner of work will check that the goods/services have been received as per the agreement after the Ministry takes over. If the work is completed in accordance with the specification after checking the quality, the goods/services will be deemed to have been received in accordance with the agreement. The service/goods provided in violation of the agreement will be returned.
- 31. Contract Duration**
- 31.1 The goods/services shall be delivered within the period specified in the agreement
- 31.2 In the event of an extension of the contractor's control or a natural event/disaster or manufacturing-related matter, the event/disaster or manufacturing-related event shall be submitted to the Contractor before the expiry of the deadline.
- 31.3 Even if an extension is requested for any reason, the extension will be granted in accordance with the Finance Rules.
- 32. Penalty and cancellation of agreement**
- 32.1 If the work or services (excluding consultancy) are not completed within the agreed period, liquidated damages will be deducted in accordance with Article 10.65 of the Financial Rules.

32.2 If the total value of the bid is below MVR.5,000,000/-, the deduction shall be equal to the total value multiplied by 0.005 multiplied by the number of days exceeding the period.

$$\text{Liquidated Damages} = \text{CP} * 0.005 * \text{LD}$$

If the total value of the tender exceeds MVR. 5,000,000/-, the deduction shall be equal to the total value multiplied by 0.0025 multiplied by the number of days overdue.

$$\text{Liquidated Damages} = \text{CP} * 0.0025 * \text{LD}$$

CP (Contact Price): Total contract value

LD (Late Duration): days beyond the term of the contract

32.3 If the Contractor is required to pay for the period of delay, the bill submitted by the Contractor shall be paid for the remaining amount after deducting the amount specified in the bill.

32.4 The Ministry reserves the right to terminate the contract if the liquidated damages exceed 15% of the total cost of the work.

33. Termination of the Agreement

33.1 The Ministry reserves the right to cancel the contract in whole or in part if it is found that the work is not being carried out as specified in the contract.

33.2 If the agreement is terminated for any reason, within 3 working days, the details of the work completed and unfinished work shall be signed by both parties. A list of all the Contractor's items at the work site shall be taken within 3 days. We cannot be held responsible for any problems with any of these items after this period.

- 34. Other things** 34.1 If, after signing the Agreement, the parties become aware that any law or regulation of the Government conflicts with this Agreement or if such law or regulation is enacted, this Agreement shall not be null and void. If such a provision becomes incorporated into this Agreement, both parties agree to maintain this Agreement without termination, albeit by amending such provision.
- 35. Taxes and other fees** 35.1 Taxes, customs duties, import license fees and any other fees payable in connection with this work shall be paid by the contractor.
- 36. Modification of the agreement (Amendments)** 36.1 Any provision of this Agreement may be modified only by agreement signed between the parties.
- 37. The law applicable to the agreement** 37.1 This Agreement shall be governed by, and enforced in accordance with, the laws and regulations of the Republic of Maldives.
- 38. Dispute** 38.1 If any dispute arising out of this Agreement cannot be resolved by negotiation between the parties, the matter shall be submitted to a court of law in Maldives.
- 38.2 Any deficiencies in this Agreement shall be resolved by negotiation between the parties. If not resolved, the case shall be referred to a court of law in Maldives.

Section 4

Annex 1

Documents and checklist to be submitted by the bidder

The following related documents shall be submitted for the bids to be considered sufficiently responsive.

Applicants should submit their proposals containing the following documents and applicable Technical Proposal – Standard Forms and Financial Proposal – Standard Forms under ANNEX 1.

#	Documents to be submitted	✓/ ✗	Page No:
Technical Proposal			
1	Proposal submission form - (Annex 2) (signed by the owner of the entity or person with power of attorney to sign)		
2	Cooperative Profile Sheet issued by the Ministry of Economic Development Profile taken from website: www.business.egov.mv		
3	Tax Clearance Report		
4	Documentation of conflict or non-conflict of interest – (Annex 8)		
Financial Proposal			
5	Financial Breakdown form – (Annex 3- Fin Form 1)		
6	Details of Financial situation (Annex 4 – Fin Form 2)		
7	Average Annual Turnover (Annex 5- Fin Form 3)		
8	Line of Credit Letter (Annex 6 – Fin Form 4)		
9	Current Contract Commitments / Work in Progress (Annex 7 -Fin Form 5)		
10	Financial statements of the business for the year 2023, 2022 and 2021		
11	Business entities that have not completed one year (from the date of business registration to date of bid announcement) are required to submit the bank statement of the business's bank account. (Bank statement should be from the date of account opening to date of bid announcement)		

Note 01: If bidder fails to submit any of the above listed document, their proposal will not be considered for further evaluation.

Annex 2

Proposal Submission Form				
1. Bidder Information				
1.1	Name:			
1.2	Address:			
2. Project Information				
2.1	Project Name:			
2.1	Tender No:			
3. Minimum quantity, price and duration of the goods/services offered				
Detail		Price	GST (8%)	Total
Duration:				
Warranty:				
Guarantee:				
4. Declaration:				
4.1	After due consideration of the information given for the provision of the above-mentioned works/services and the provisions of the Agreement, I / We hereby tender for the provision of these works or services at the above-mentioned price.			
4.2	I / We agree to accept and comply with this tender for 120 days from the date of submission. If the owner requests to sign the agreement within this period, I agree to sign the agreement and work in accordance with the agreement.			
5. On Behalf				
Name:		Signature	Stamp	
Designation				
Date				

Annex 3

FIN FORM 1

Financial Breakdown Form

Date:

Reference No: (generated by the proponent)

No.	Description	Price/Unit (MVR)	Total
1			
2			
3			
4			
Total:			
GST 8%			
Total with GST			

The quotation is valid for 120 days from the date of bid opening.

Indicate the total cost with detail cost to be paid in **Maldivian Rufiyaa (MVR)**.

Note: The total contract price should be quoted inclusive of Goods and Services Tax (GST) or any applicable axes as per the Tax Legislation and must be shown in the breakdown.

Authorized Signature and stamp

Annex 4
FIN FORM 2

Details of Financial Situation

If the business has been registered for more than a year bidder must fill in this form

Financial Data for Previous 3 Years [MVR Equivalent]			
	Year 2023	Year 2022	Year 2021

Information from Balance Sheet

Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			
Working Capital			

Information from Income Statement

Total Revenues			
Profits Before Taxes			
Profits After Taxes			

Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last three years, as indicated above, complying with the following conditions.

- All such documents reflect the financial situation of the Bidder.
- Historic financial statements must be complete, including all notes to the financial statements.
- Historic financial statements must correspond to accounting periods

Annex 5
FIN FORM 3
Average Annual Turnover

Each Bidder must fill in this form

Annual Turnover Data for the Last 3 Years		
Year	Amount Currency	MVR Equivalent
2023		
2022		
2021		
Average Annual Turnover		

The information supplied should be the Annual Turnover of the Bidder in terms of the amounts billed to clients for each year for contracts in progress or completed at the end of the period reported.

Annex 6
FIN FORM 4

Line of Credit Letter

[letterhead of the Bank/Financing Institution]

[date]

To:*[Name and address of the Contractor]*

Dear,

You have requested {name of the bank/financing institution} to establish a line of credit for the purpose of executing {insert Name and identification of Project}.

We hereby undertake to establish a line of credit for the aforementioned purpose, in the amount of {insert amount}, effective upon receipt of evidence that you have been selected as successful bidder.

This line of credit will be valid through the duration of the contract awarded to you.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Annex 7
FIN FORM 5

Current Contract Commitments/Works in Progress

Tenderers and each partner to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

No	Name of contract	Employer, contact address/tel/fax	Value of outstanding work (current MVR equiv)	Estimated completion date	Average monthly invoicing over last six months (MVR/month)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

Annex 8
DISCLAIMER FOR CONFLICT OF INTEREST
Each Applicant must fill in this form

Tender Name:	Click here to enter text.		
Advertisement No:	Click here to enter text.		
Advertisement Date:	Click here to enter text.		
<p><i>I/We, the undersigned as the bidder, submitting the tender in respect of call for captioned tender, confirm:</i></p> <ul style="list-style-type: none"> • <i>that should I/We have any “close relative” or “close associate” working at Ministry of Climate Change, Environment and Energy, I/We will disclose that information with this form. In this instance “close relative” and “close associate” represents the meaning stated in Section 19 of Regulation Number: 2023/R-158 (Public Finance Regulation);</i> • <i>that I/We will disclose any conflict of interest in connection to the contract with this form. A conflict of interest may arise in particular as a result of economic interests, political or national affinities, or any other relevant connection or shared interest;</i> • <i>that I/We will inform the at Ministry of Climate Change, Environment and Energy, without delay, of any situation constituting a conflict of interest or could give rise to a conflict of interest;</i> • <i>that I/We have not made, and will not to make, any offer of any type whatsoever from which an advantage can be derived under the contract;</i> • <i>that I/We have not granted, sought, attempted to obtain or accepted and will not grant, seek, attempt to obtain, or accept any advantage, financial or in kind, to or from any party whatsoever, constituting an illegal or corrupt practice, either directly or indirectly, as an incentive or reward relating to the award of the contract;</i> • <i>that I/We understand that the at Ministry of Climate Change, Environment and Energy reserves the right to verify this information and that I am/We are aware of the consequences which may derive from any false declaration in respect of the information required by the awarding body as a condition of participation in the contract procedure.</i> 			
<input type="checkbox"/> YES , I/We have “close relative” or “close associate” please find the Details below. Name of the Staff(s): NID Card No.: Relationship with the Staff:			
<input type="checkbox"/> NO , I/We do not have “close relative” or “close associate”			
Details of the Bidder			
Name of the Bidder:		Stamp of the Bidding Company	
Signature of the Bidder:		Date:	

Annex 9
Criteria to be used for evaluation of bids

Areas	Details	Points
Price	Lowest Offered Price/ Offered Price ×60 (The lower the price, the more points.)	60
Experience	<p>Points will be awarded based on the document of completion of the works given by the contractor in respect of these types of works done during the last 3 years (2023, 2022 & 2021) for more than MVR 200,000.00 Work-related documents shall be deemed to be the supply of aviation electronics or hardware's related to camera and drone systems. Submitted documents should state the cost of the work, the level of completion and the date of award and completion.</p> <p>5 points will be awarded for each submission. The maximum score for this section is 20 points.</p>	20
Duration	Shortest duration proposed / proposed duration ×20 (The shorter the period, the more points.)	20

-

FINANCIAL SITUATION EVALUATION

To be eligible the financial statements of the bidding party must show, minimum annual turnover of **MVR 300,000.00**, for the year 2023,2022 and 2021. **(Form FIN-1 Annual Turnover)**

(or)

To be eligible the financial statements of the bidding party must show, Minimum value of **MVR 300,000.00**, for the year 2023,2022 and 2021– **(Form FIN -2: Financial Situation)**

(or)

Business entities that have not completed one year (from the date of business registration to date of bid announcement) are required to submit the bank statement of the business's bank account. (bank statement should be from the date of account opening to date of bid announcement). To be eligible the business's bank statement must show a credit balance of minimum **MVR 300,000.00**

(or)

If bidding party is unable to meet any of the above requirement they shall submit 'Line of Credit Letter' As per the template in fin form 4. Credit limit shall be no less than **MVR 300,000.00** – **(Form Fin -4: Line of Credit Letter)**

PRIORITY TO MSME'S

Below MVR 2,500,000

Among bidders who pass the technical and financial evaluation, Micro, Small and Medium Enterprises (MSME's) will be assessed accordingly: The bidder with the highest ranking with a proposed price that doesn't exceed 15% of the price of the bidder with the overall highest ranking will be awarded.

Among bidders who pass the technical and financial evaluation if there is no bidder as described in (a), bidders who belong to the same island as the project is carried out will be assessed accordingly: The bidder with the highest ranking with a proposed price that doesn't exceed 10% of the price of the bidder with the overall highest ranking will be awarded.

Among bidders who pass the technical and financial evaluation if there is no bidder as described in (a) and (b), bidders who belong to the same atoll as the project is being carried out is checked and assessed accordingly: The bidder with the highest ranking with a proposed price that doesn't exceed 5% of the price of the bidder with the overall highest ranking will be awarded.

Among bidders who pass the technical and financial evaluation if there is no bidder as described in (a), (b) and (c), all Maldivian bidders will be checked and assessed accordingly. The bidder with the highest ranking with the lowest proposed price will be awarded

Among bidders who pass the technical and financial evaluation if there is no bidder as described in (a), (b), (c) and (d) all bidders will be assessed accordingly. The bidder with the highest ranking with the lowest proposed price will be awarded

CRITERIA ON CLASSIFYING REGIONAL BASED BUSINESS

- a) Check the bidders permanent address, if the bidder is a sole proprietorship
- b) Check the island to which the business is registered, if the bidder is not a sole proprietorship
- c) The bidder will be considered as a business working in one certain area, as per (a) and (b) accordingly:

- If the bidder is a sole proprietorship, the bidder's registered permanent address as of 1st January of the year the invitation for bid was issued will be considered OR
- If the business had been registered before the year in which the invitation for bid was issued, the island to which the business was registered as of 1st January of the year the invitation for bid was issued will be considered

OR

If the business had been registered within the year in which the invitation for bid was issued, the island to which the business was first registered will be considered.

Section 5
Details of services/materials/work required

Required Items

- 1 x Aircraft with Remote Controller Set
- 1 x RTK Module
- 1 x Flight Battery Charger with Charging HUB
- 4 x Flight Batteries
- 2 x High Speed MicroSD Cards (128GB)
- 1 x GNSS Base Station
- 1 x Base Station Battery
- 1 x Base Station Battery Charger
- 1 x Base Station Tripod
- 1 x Carrying Case for Base Station
- 1 x Carrying Case for Tripod

General Specifications

Aircraft

Net Weight (with propellers and RTK module)	951 g
Max Takeoff Weight	1,050 g
Dimensions (Folded/Unfolded)	Folded (without propellers): 223×96.3×122.2 mm (Length×Width×Height) Unfolded (without propellers): 347.5×283×139.6 mm (Length×Width×Height)
Max Ascent Speed	6 m/s (Normal Mode)
	8 m/s (Sport Mode)
Max Descent Speed	6 m/s (Normal Mode)
	6 m/s (Sport Mode)
Max Flight Speed (at sea level, no wind)	15 m/s (Normal Mode)
Max Wind Speed Resistance	12 m/s [3]
Max Take-off Altitude Above Sea Level	6000 m (without a payload)
Max Flight Time (without wind)	43 minutes [4]
Max Flight Distance	32 km [6]
GNSS	GPS + Galileo + BeiDou + GLONASS (GLONASS is supported only when RTK module is enabled)
Operating Temperature	-10° to 40° C (14° to 104° F)

RGB Camera

Image Sensor	4/3 CMOS
	Effective Pixels: 20 MP
Lens	FOV: 84°
	Equivalent focal length: 24 mm
	Aperture: f/2.8 to f/11
	Focus: 1 m to ∞
ISO Range	100-6400
Shutter speed	Electronic shutter: 8-1/8000 s
	Mechanical shutter: 8-1/2000 s
Max Image Size	5280×3956
Photo Shooting Mode	Single shot: 20 MP
	Timed: 20 MP
Video Resolution	H.264:
	4K: 3840×2160@30fps
	FHD: 1920×1080@30fps
Max Video Bitrate	4K: 130Mbps
	FHD: 70Mbps
Image Format	JPEG/DNG (RAW)
Video Format	MP4 (MPEG-4 AVC/H.264)

Multispectral Camera

Image Sensor	1/2.8-inch CMOS, effective pixels: 5 MP
Lens	FOV: 73.91° (61.2° x 48.10°)
	Equivalent focal length: 25 mm
	Aperture: f/2.0
	Focus: Fixed Focus
Multispectral Camera Band	Green (G): 560 ± 16 nm;
	Red (R): 650 ± 16 nm;
	Red Edge (RE): 730 ± 16 nm;
	Near infrared (NIR): 860 ± 26 nm;
Gain Range	1x-32x
Shutter Speed	Electronic Shutter: 1/30~1/12800 s
Max Image Size	2592×1944
Image Format	TIFF
Video Format	MP4 (MPEG-4 AVC/H.264)
Photo Shooting Mode	Single shot: 5 MP
	Timelapse: 5 MP
	TIFF: 2/3/5/7/10/15/20/30/60 s
Video Resolution	H.264
	FHD: 1920 x 1080@30fps
	Video content: NDVI/GNDVI/NDRE

Gimbal

Stabilization System	3-axis mechanical gimbal (tilt, roll, pan)
Mechanical Range	Tilt: -135° to 45°
	Roll: -45° to 45°
	Pan: -27° to 27°
Controllable Range	Tilt: -90° to 35°
	Pan: Uncontrollable
Max Control Speed (tilt)	100°/s
Angular Vibration Range	±0.007°

Sensing System

Sensing System Type	Omnidirectional binocular vision system, with an infrared sensor at the bottom of the aircraft
Forward	Distance Measuring Range: 0.5 m to 20 m
	Detection Range: 0.5 m to 200 m
	Effective Obstacle Avoidance Speed: Flight Speed ≤15 m/s
	FOV: Horizontal 90°, vertical 103°
Backward	Distance Measuring Range: 0.5 m to 16 m
	Effective Obstacle Avoidance Speed: Flight speed ≤12 m/s
	FOV: Horizontal 90°, vertical 103°
Lateral	Distance Measuring Range: 0.5 m to 25 m
	Effective Obstacle Avoidance Speed: Flight speed ≤15 m/s
	FOV: Horizontal 90°, vertical 85°
Upward	Distance Measuring Range: 0.2 m to 10 m
	Effective Obstacle Avoidance Speed: Flight Speed ≤6 m/s
	FOV: Front and rear 100°, left and right 90°
Downward	Distance Measuring Range: 0.3 m to 18 m
	Effective Obstacle Avoidance Speed: Flight speed ≤6 m/s
	FOV: Front and rear 130°, left and right 160°

Video Transmission

Live View Quality	Remote Controller: 1080p/30fps
Operating Band	2.400-2.4835 GHz
	5.725-5.850 GHz
Max Effective Signal Distance (Unobstructed, No interference)	FCC: 15 km
	CE: 8 km
Latency (depending on environment and mobile device)	Approximately 200 milliseconds
Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC), <20 dBm (CE/SRRC/MIC)

	5.8 GHz: <33 dBm (FCC), <30 dBm (SRRC), <14 dBm (CE)
--	--

Remote Controller

Max Effective Signal Distance (Unobstructed, No interference)	FCC: 15 km
	CE: 8 km
Operating Band of Image Transmission	2.400-2.4835 GHz
	5.725-5.850 GHz
Operating Band of Image Transmission and Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC); <20 dBm (CE/SRRC/MIC)
	5.8 GHz: <33 dBm (FCC); <14 dBm (CE); <23 dBm (SRRC)
Wi-Fi Protocol	802.11 a/b/g/n/ac/ax
	Support 2×2 MIMO Wi-Fi
Wi-Fi Operating Band	2.400-2.4835 GHz
	5.150-5.250 GHz
	5.725-5.850 GHz
Bluetooth Protocol	Bluetooth 5.1
Bluetooth Operating Band	2.400-2.4835 GHz
Screen Resolution	1920×1080
Screen Size	5.5 inches
Screen Frame Rate	60 fps
Screen Brightness	1,000 nits
Touch-Screen	10-point multi-touch
Battery	Lithium-ion battery (5000 mAh, 7.2 V)
Storage Capacity	Internal Memory (ROM): 64 GB
Operating Time	Approx. 3 hours
GNSS	GPS + Galileo + GLONASS

Battery

Capacity	5000 mAh
Standard Voltage	15.4 V
Battery Type	LiPo 4S
Charging Temperature	5° to 40° C (41° to 104° F)

Battery Charger

Input	100V to 240V (AC), 50Hz to 60Hz, 2.5A
Output Power	100 Watts

Charging Hub

Input	USB-C: 5V to 20V, 5.0A
Output	Battery Port: 12V to 17.6V, 8.0A

Rated Power	100 Watts
Charging Type	3 batteries on charging rotation
Charging Temperature	5° to 40° C (41° to 104° F)

RTK Module

Dimensions	50.2×40.2×66.2 mm (Length×Width×Height)
Weight	24±2 g
Interface	USB-C
RTK Position Accuracy	Fixed RTK:
	Horizontal: 1 cm + 1 ppm; Vertical: 1.5 cm + 1 ppm

RTK Base Station

IP Rating	IP65
GNSS Frequency	Simultaneously receive :
	GPS: L1 C/A, L2, L5
	BEIDOU: B1, B2, B3
	GLONASS: F1, F2
	Galileo: E1, E5A, E5B
Positioning Accuracy	Single Point
	Horizontal : 1.5 m(RMS)
	Vertical : 3.0 m(RMS)
	RTK
	Horizontal : 1 cm+ 1 ppm(RMS)
	Vertical : 2 cm+ 1 ppm(RMS)
	1 ppm: For every 1 km increase in distance, the accuracy will be 1 mm less. For example, the horizontal accuracy is 1.1 cm when the receiving end is 1 km away from the base station.
Positioning Update Rate	1 Hz, 2 Hz, 5 Hz, 10 Hz and 20 Hz
Cold Start	<45 s
Hot Start	<10 s
Recapture Time	<1 s
Initialization Reliability	>99.9%
Differential Data Format	RTCM 2.X/3.X
Features	Built-in high-precision 6-axis accelerometer
	Movement monitoring
	Sloping measurements
	Electronic bubble level
Operating Frequency	2.400 GHz to 2.483 GHz 5.725 GHz to 5.850 GHz
Power Consumption	12 W
Power Supply	16.5 to 58.8VDC
Battery	Type : Lithium-ion battery Capacity: 4920 mAh Energy: 37.3 WH

Run Time	WB37 battery : >2 h MG-12000P battery : >50 h
Operating Temperature	4° to 131° F (-20° to 55° C)