



भा. कृ. अनु. प. – केन्द्रीय शुष्क क्षेत्र अनुसंधान संस्थान
 ICAR - Central Arid Zone Research Institute
 जोधपुर (राजस्थान) 342 003 / Jodhpur (Rajasthan) 342 003
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F. No. 66(1)2022-2023/Adm. IV/

Dated: 14.11.2022

NOTICE INVITING TENDER THROUGH E-PROCUREMENT

The Director, ICAR-Central Arid Zone Research Institute, Jodhpur on behalf of the President, Indian Council of Agricultural Research, New Delhi invites online bids under Two bid system from the Manufacturer/ authorised dealers/registered firms for the Supply of Agricultural Drone at ICAR-CAZRI, Jodhpur.

Critical Date Sheet

1.	Date and Time for Issue/Publishing	05.30 PM on 14.11.2022
2.	Document Download / Sale Start Date and Time	05.30 PM on 14.11.2022
3..	Document Download / Sale End Date and Time	02.00 PM on 01.12.2022
4.	Bid Submission start Date and Time	05.30 PM on 14.11.2022
5.	Bid Submission End Date and Time	02.30 PM on 01.12.2022
6.	Date and Time for Opening of technical Bids	03.00 PM on 02.12.2022
7.	Date and Time for opening of Financial Bid	After finalize the Technical Bid
8.	Address for Communication	Director, ICAR-CAZRI, Jodhpur-342003 (Raj.) India

Note : The tender form and other details are available on CAZRI's website www.cazri.res.in & CPPP. The interested Manufacturers/authorized dealer/Agency/firm of repute may download the tender document from above websites and upload the same after completing in all respect in the e-procure.gov.in portal as per guidelines mentioned in the portal by or before the due date & time.

Encl. : Annexure- I to IX (for technical Bid Cover (Cover-I) &
 Annexure- X (for Financial Bid Cover (Cover-II))

**Asstt. Administrative Officer (S)
 for Director**

F.No. 66(1)2022-2023/Admn.IV
Instructions for Online Bid submission

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “**Online Bidder Enrolment**” on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

- 3) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

Technical BidTerms and Conditions

1. The tenderer shall quote rates, which will include the delivery (supply and installations) & other incidental charges. Taxes, if any, should be indicated separately.
2. The rates should be quoted as per the Financial Bid /BOQ format uploaded on the CPP Portal. Taxes, if any, should be indicated separately. It must be noted that the contract shall be awarded to the firm which fulfils all the required specifications, terms and conditions and remains L-1.
3. The firm must also possess valid PAN No., TIN No. & GST registration number and a copy of the same must also be enclosed with the tender document.
4. Copy of Income Tax Return of last 2 years may be furnished.
5. Modification in the tender documents after the closing date and time is not permissible.
6. The successful firm shall have to supply the **item (from the date of confirmed supply order) within 30-40 days /as mentioned in the supply order(P.O.)** and if the materials are not supplied and installed in time then EMD shall be forfeited. The rates quoted shall be valid for 6 months from the date of opening of tender.
7. The contractor/bidder or his representative may contact the undersigned at Tel No.0291-2787152 for any further clarification. No variation in terms of quality of the items shall be entertained or else EMD/Security deposit shall be forfeited.
8. The Director, ICAR-CAZRI, Jodhpur shall have the right to reject all or any of the offers, accept more than one offer, and assign part of the job.
9. Merely quoting of lowest rates does not mean that order shall be given to that firm. The competent authority will finally decide on the basis of quality & performance of past installations.
10. The firm should be submitted the relevant document in technical bid regarding exemption of Bid Security (EMD) in submission of Bid.
11. Rates once finalized will not be enhanced/reduced during the currency of the contract.
In case of foreign currency, conversion rates in INR will be taken on that day when financial bid will open.
12. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded, for whatsoever reason(s), to honour the contract, the earnest money / performance security deposited would be forfeited.
13. The Director, ICAR-CAZRI, Jodhpur reserves the right to cancel the contract at any time during the currency period of the contract without giving any reason.
14. The firm to whom the tender will be awarded, will have to deposit the performance security equal to 5% - 10% of the total amount at the time of installation of the equipment. If the services are not found to be satisfactory, the performance security is liable to be forfeited. No interest will be paid on performance security.
15. If any dispute(s) arises between ICAR-CAZRI, Jodhpur and the firm with reference to the contract, ICAR-CAZRI, Jodhpur will decide it and its decision will be binding on the firms.
16. **Bid Validity** : 90 days.
17. The contract will be given to Least one (L1).
18. The Institute is exempted from payment of excise duty if any. Hence, excise duty will not be paid to the firm.
19. **Payment-** 100% of the contract price on receipt of goods as per specifications by the consignee supported by satisfactory installation/Demonstration and working report.
20. **Installation** :- **Should be done within stipulated delivery period as per the order at the location as mentioned in the tender in consultation with the indenting officer**, failing which Liquidated Damage clause shall apply. Liquidated Damage clause: It would be realized @ 0.5% (half per cent) of the base price (excluding taxes) of the delayed goods for each week of delay subject to maximum 10%.
21. **Price** -
 - i) The price quoted shall be on firm and fixed basis and should be reasonable living no scope for any further negotiation on price.
 - ii) For goods manufactured in India/abroad : The price of the goods should be quoted on FOR basis and in INR (including all kind of charges and taxes) installations commissioning charges, if any.
22. **Jurisdiction of Court** :- The court of the Jodhpur shall have a jurisdiction to decide any dispute arising out of or in respect of contract.

- 23. Force Majeure Clause :-** 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. For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods. Epidemics, quarantine restrictions, strikes, lockout or any act of war. Notice of the happening of any such event is given by either party to the other within 15 days from the date of occurring thereof. However either party at its discretion can terminate the contract in such cases.
- 24. Termination of Contract :-** Time shall be the essence of the contract. The purchaser shall have the right to terminate the contract without any notice in part or in full in any of the following cases:
- a) The delivery of the material is delayed for causes not attributed to Force Majeure after the scheduled date of delivery.
 - b) The seller is declared bankrupt or becomes insolvent.
 - c) The delivery material is delayed due to causes of Force Majeure by more than reasonable time.
 - d) In case Performance Security is not furnished within the time period specified by the purchaser.
 - e) Supply in the case of successful Tenderer should strictly confirm to the specifications of the equipment being purchased.
 - f) Any change in Address/Telephone/Fax/e-mail of the tenderer should immediately be informed. The state of non-communication by the firm will make the offer liable for rejection.
- 25. Acceptance or rejection of offer :-** The Director, ICAR-CAZRI, Jodhpur reserves the right to accept or reject any tender in part or full without assigning any reason thereof. The successful bidder should submit order acceptance letter within 10 days from the date of issue.

'Terms & Conditions are acceptable to us'.

Dated:

(Authorized signatory of the firm)

Technical Bid

Check list of documents to be uploaded by the tenderer in Technical bid cover

The Firms are required to upload copies of the following documents:-

S.No.	Documents required	Attached with Technical bid X Not attached with Technical bid
a)	Bid Security exempted . However a declaration certification regarding exemption of Bid Security may be attached.	
b)	Scanned copy of Firm's registration issued by the Central Govt./State Govt.	
c)	Scanned copy of TIN No. & GST Registration No.	
d)	RTGS detail of the firm	
e)	Scanned copy of Valid PAN issued by Income Tax Department	
f)	Scanned copy of Income Tax Return of last 2 years	
g)	Scanned copy of signed our terms and conditions	
h)	Tender acceptance letter	
i)	Scanned copy of signed Price Bid undertaking	
j)	Undertaking that firm has not black listed by any government organisation	
k)	Undertaking that items shall be supplied as detailed in tender document	
l)	Scanned copy of ink singed tender specific authorization from OEM (Original Equipment manufacturer).	
m)	User list, and Scanned copies of the Work Orders awarded to firm by the other Govt. dept./organizations etc. for the said item(s) of last 2 years.	
n)	Any other, if any	

Signature of the Tenderer with seal

Technical Bid
Details of the Firm

Name of the firm : -----

Registered/Postal Address : -----

S.No.	Particulars	
1.	Phone number/Mobile number	
2.	E-mail Address	
3.	PAN No	
4.	GST / TIN / GST Reg. No.	
5.	Applicable Bank Details : Bank Name : Branch Address with Phone No. Account No. Type of Account (Current/Saving)	
6.	RTGS/IFSC Code & Branch	

Signature of the bidder

Technical Bid
TENDER ACCEPTANCE LETTER
(To be given on Company Letter head)

Date:

To

Sub : Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned Tender/Work' from the web site(s) namely:

_____ as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation to have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract , without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Technical Bid

PRICE BID UNDERTAKING

From: (Full name and address of the Bidder) _____

To

Dear Sir/Madam,

I submit the Price Bid for _____ and related activities as envisaged in the Bid document.

2. I have thoroughly examined and understood all the terms and conditions as contained in the Bid document, and agree to abide by them.

3. I offer to work at the rates as indicated in the price Bid, inclusive of all applicable taxes except Service Tax/GST.

Yours Faithfully,

Signature of the firm with seal

Technical Bid

MANUFACTURER'S (OEM) AUTHORISATION FORM

To

The Director,
ICAR- Central Arid Zone Research Institute,
Jodhpur, Rajasthan 342003

Ref : Your Bidding Documents No.....dated.....

Dear Sir,

We....., who are established and reputable
manufacturers of

.....
(Name and description of the goods offered in the bid) having factories at.....
hereby authorize Messrs.....
(name and address of the agent) to submit a bid, negotiate (as and if necessary) and conclude the
contract with you against your above mentioned Bidding Documents for the above goods
manufactured by us.

No company or firm or individual other than Messrs
..... (name and address of the above agent) is
authorized to bid, negotiate and conclude the contract against this specific Bidding Documents for
the above mentioned goods manufactured by us.

We hereby extend our full guarantee and warranty as per the General Conditions of
Contract, read with modification, if any in the Special Conditions of contract for the goods and
services offered for supply against this Bidding Document by the above firm.

Yours faithfully,

(Signature name and designation)

for and behalf of Messrs.....

[name & address of the manufacturers]

Note: *This letter of authorization should be on the letter head of the manufacturing firm and
should be signed by a person competent and having the power of attorney to legally bind the
manufacturer. The authorization Certificate should be from the "Manufacturer" only and
certificate from any other firm/person including OEM arrangements would not be accepted*

Technical Bid

(Printed on letter head of firm)

TO WHOM IT MAY CONCERN

We hereby certify that our firm M/s
..... has not been black listed by any
Government, or semi Government department in India.

(Signature of the Firm with Seal)

F.No. 66(1)2022-2023/Admn.IV**TECHNICAL BID****Schedule to tender****TECHNICAL SPECIFICATION Supply of Agricultural Drone at ICAR-CAZRI, Jodhpur**

S.No.	Broad Specification	Quantity	FOR
1.	Supply of Agricultural Drone at ICAR-CAZRI, Jodhpur	3 Nos.	02 Nos. of ICAR-CAZRI, Jodhpur and 01 No. KVK, Pali
	Payload Capacity	Minimum 10 Kg capacity as payload	
	Tank Capacity	Minimum 10 Liter/kg	
	Total take-off weight of drone including payload	Maximum Up to 25 kg (as per DGCA norms)	
	Frame Type	Foldable	
	Number of propellers/Motors/Arms	Hexacopter with 6 Number of propellers/Motors/Arms Factor of Safety need to be at least 1.5 (Arms load bearing capacity should be at least 1.5 times the calculated load coming on each arm/propeller/motor)	
	Material of Construction	I. For main body connection Arms: Carbon fiber composite used with metallic fasteners and water proof adhesives. II. For Landing Gear: Aluminum with powder coating, resistant to chemicals or any other similar material with Tensile strength minimum 200MPa. III. For Tank: Chemical resistant material like HDPE/ PP (Poly Propylene) IV. For Tubes and connectors: Chemical resistant material like PVC (Poly Vinyl Chloride), Nylon V. Nozzle Tips: Stainless steel or Ceramic VI. Pump: PP or Nylon with BLDC motor. VII. Propeller: Carbon X (Polyamide + Carbon fiber) or Carbon Fiber composite	
	Battery	Make: Lithium Ion or Lithium Polymer Capacity: 16,000 mAh (6s), 30C Voltage: 44.4 V Connector: AS150/XT 90 Charging time: Maximum 30-40 minutes (Fast Charger- 1kw)	
	Flight Types	I. Autonomous (with control from Ground control station using Google or other equivalent Maps, Software to be used like Mission Planner or equivalent having waypoint navigation system) II. Loiter (Semi auto with control from Ground control Station)	
	Radio Frequency	2.4 GHz or any other approved Unlicensed band (ETA required)	
	Radio Control Range	In LOS up to 2km	
	Video output and control range	In LOS up to 2km with provision of live video streaming HDMI 1080p@ 30 fps	
	Flight time with payload	up to 20 minutes with discharging load	
	Flight altitude range	Up to 1500 m above mean sea level (MSL) and Up to 10 m above ground level (AGL)	
	Hovering accuracy	±0.8 m vertical and ±0.5 m horizontal with GPS Positioning	
	Maximum wind speed resistance	25 Km/Hr or 14 Knots	
	Operating temperature range	0 – 50°C	

	Required Terrain following (altimeter)	Up to 12 meters		
	Required Obstacle detection & Collision avoidance	<ul style="list-style-type: none"> I. Range of Detection: Minimum 10 meters II. Sensors: Radar in Terrain Following & Collision Avoidance III. Optional: For extra control there should be provision to add camera. IV. Rerouting: Drone must have capability to reroute itself or give control to pilot. V. Object size to be detected: Minimum 1meter x 1 meter VI. RADAR based Obstacle Avoidance in flight modes: Autonomous, Loiter both. 		
	Utility attachments	<ul style="list-style-type: none"> 1 Liquid spray tank with nozzles 2. Pellets/granules/seed broadcaster tank with catering mechanism 		
	Spray system	<p>Nozzle Type: High pressure nozzles with flat jet</p> <p>Nozzle numbers: Minimum 4 Numbers</p> <p>Spray speed per nozzle: upto 1.0 litres/nozzle/minute</p> <p>Spray width: minimum 4 meters</p>		
	Safety features	<ul style="list-style-type: none"> I. Communication link failsafe II. tank failsafe, III. Battery failsafe IV. Geo Fence failsafe V. Range failsafe 		
	Provision for Camera mounting	Provisions for mounting multispectral camera and sensors		
	Drone approvals and legal compliances	DGCA approved, UIN enabled		
	Documents requirement	<ul style="list-style-type: none"> I. DGCA approval certificate for the drone I. ETA approval certificate for the Data transmission system used in drone. 		
	Required conditions:	1. Agriculture Drone should be DGCA approved and registered at digital sky portal under appropriate category.		
		2. Company itself shall get and provide the UIN (Unique Identification number) of the drones.		
		3. Company itself shall provide Third Party Insurance of at least one year with each drone.		
		4. Company shall provide charge free Annual Maintenance Contract for dedicated technical support for at least one year.		
		5. Company shall arrange with its own expenses the necessary pilot training to institute personnel with necessary certificate for operating the drone.		
		6. The drone should be provided with all the safety features like sensor based collision avoidance, terrain following, first person view camera, auto-return to launch point etc.		
		7. At least one spare battery and one broadcaster with necessary attachments has to be supplied with the two drones.		
	Warranty	At least 1 Year services warranty available in India		
	Service	<ul style="list-style-type: none"> I. All maintenance, service and spares should be available in India. II. Time: for at least 3 years from purchase of Drones II. Provision of Upgradation should be available if required in future. 		

General Conditions

1. Company should have delivered DGCA compliant drone of same category to any Government Department/Institute Related to Agriculture. Need Acceptance of that Department/Institute.
2. The manufacturer should have proper setup and infrastructure for drone manufacturing in India.
3. Type Approval Certificate of quality Council of India or authorized testing entities shall be necessary

Manufacturer must have service support in the concerned state to provide after sales support, training, repair & maintenance etc. to the customers.

(Signature of the Firm with Seal)