

No.AGC02-19021/17/2023-FM-AGRHO D, Dated:24.05.2023

CORRIGENDUM

The corrigendum is hereby issued to the notification issued by the Department of Agriculture inviting EOI from OEM manufacturers of drones for empanelment of Agriculture Drones to supply under schemes of department of agriculture, Andhra Pradesh for 2023-24 which was published on 15.05.2023 extending the **last date for submission of EOI document upto 02.06.2023.**

Schedule:

Issue of Notification	15-05-2023
Closing date for submission of EOI	02-06-2023 by 5.00 PM
Mode of submission	Hard Copies of the signed EOI document along with enclosures as requested, Agreement copy, and Price Offer letter in a sealed cover to the following address: The Special Commissioner of Agriculture, Department of Agriculture, AP, IHC Corporate Building, Mangalagiri, Guntur, Andhra Pradesh. PIN CODE – 522503

**Sd/-
Special Commissioner of Agriculture**



**GOVT OF ANDHRA PRADESH
DEPT OF AGRICULTURE**

EOI DOCUMENT FOR KISAN DRONE EMPANELMENT

**EXPRESSION OF INTEREST CALLED FOR EMPANELMENT OF AGRICULTURE
DRONES FROM OEM MANUFACTURERS OF DRONES IN THE COUNTRY TO
EMPANEL THEMSELVES FOR SUPPLY OF AGRICULTURE DRONES UNDER
SCHEMES OF DEPT OF AGRICULTURE, ANDHRA PRADESH FOR 2023-24**

**Office of The Special Commissioner of Agriculture,
IHC CORPORATE BUILDING, MANGALAGIRI
GUNTUR DISTRICT – PIN CODE 522503, ANDHRA PRADESH**

**GOVT OF ANDHRA PRADESH
DEPT OF AGRICULTURE**

**EXPRESSION OF INTEREST CALLED FOR EMPANELMENT OF AGRICULTURE
DRONES FROM OEM MANUFACTURERS OF DRONES IN THE COUNTRY TO
EMPANEL THEMSELVES FOR SUPPLY OF AGRICULTURE DRONES UNDER
SCHEMES OF DEPT OF AGRICULTURE, ANDHRA PRADESH FOR 2023-24**

No.AGC02-19021/17/2023-FM-AGRHO

Dt: 15 .05.2023

The Department of Agriculture, Government of Andhra Pradesh is proposing to establish Community Hiring Centres of Kisan Drones in 2023-24 under the Sub Mission of Agriculture Mechanization (SMAM) Scheme of Rashtriya Krishi Vikas Yojana (RKVY) Scheme to provide Agriculture services through Kisan Drones to the farming community.

Hence, the Department of Agriculture, Government of Andhra Pradesh inviting Expressions of Interest from all the OEM manufacturers of Agriculture Drones that are **Type certified by the DGCA, MoCA, GoI**, for empanelment to supply Kisan Drones to selected beneficiaries/ farmers groups under different Centrally sponsored schemes during the year 2023-24.

EOI is invited for the Agriculture Drones of stipulated specifications and in accordance with terms and conditions and the EOI schedule furnished below in the EOI document.

1. Schedule of Empanelment Notification:

Issue of Notification	15-05-2023
Closing date for submission of EOI	25-05-2023 by 5.00 PM
Mode of submission	Hard Copies of the signed EOI document along with enclosures as requested, Agreement copy, and Price Offer letter in a sealed cover to the following address: The Special Commissioner of Agriculture, Department of Agriculture, AP, IHC Corporate Building, Mangalagiri, Guntur, Andhra Pradesh. PIN CODE – 522503

2. Terms of EOI notification:

- a) The Eoi document and technical specifications are available and can be downloaded from the Department website: www.apagrisnet.gov.in
- b) The Special Commissioner of Agriculture reserves the complete right to change the schedule of empanelment, terms and conditions of empanelment and clause of agreement in the process of empanelment. The same will be updated in the www.apagrisnet.gov.in Firms are advised to check the website www.apagrisnet.gov.in regularly for the same.
- c) The Manufacturers applying for empanelment shall enter into an agreement with the Dept of Agriculture as per the terms and conditions stipulated by the Dept of Agriculture.
- d) The Price offer shall be furnished on the letter head of the firm with the signature of the authorized person. The Price offered should be inclusive of the cost of all the components specified under unit cost and inclusive of taxes.
- e) The EOI of the firm along with enclosures as per the checklist viz., Empanelment request letter, Price offering letter, declaration and agreement and other enclosures requested in the EOI document shall be submitted (in hard copies) in sealed envelopes before the last date indicated in the schedule to the Special Commissioner of Agriculture, AP, IHC Corporate, Mangalagiri, Guntur, Andhra Pradesh, PIN CODE- 522503
- f) The EOI can be submitted through Speed post/registered post/ through an authorized representative of the company with valid ID proof.
- g) Online mode of submission of the proposal is not permitted.
- h) Any future corrigenda/information shall be posted on our department website www.apagrisnet.gov.in only.
- i) The empanelment accorded will be valid for 12 months viz., from 01st June 2023 to 31st May 2024. Further, Govt of Andhra Pradesh reserves the right to extend or restrict the empanelment period if it is deemed fit without prior notice.
- j) Any suggestions or clarification regarding the empanelment document can be mailed to andhrafm@gmail.com
- k) **The EOI submitted by the company does not bind the authority to empanel or approve the models. The approval of models and subsequent empanelment purely depends on the satisfying terms and conditions of EOI.**
- l) **The Authority reserves the right to cancel the EOI notification in full or part without assigning any reason thereof.**

3. **Components / Accessories included under Drone unit cost:**

Sl. No	Component/ Accessories (Complying with the specifications enclosed)	Number
1.	Basic Drone inclusive of one pair of batteries	1
2.	Additional sets of Battery (pairs)	6
3.	Battery Chargers	2
4.	Generator	1
5.	Additional Spraying nozzles	6
6.	Additional sets of Landing Gears	2
7.	Additional sets of Propellers (Set comprises of 6 propellers)	2
8.	Tool kit	1
9.	Carrying Case	1

4. **KISAN DRONE Technical Specifications for Empanelment**

The specifications of the Agricultural Drones stipulated for empanelment are as below.

Sl.No.	Item Description		Specifications
A. Drone Details			
1.	Drone Category	:	Rotorcraft
2.	Drone Classification	:	Hexacopter
3.	Drone Class	:	Small with Min. 23.652 kg - Medium with Max. 29.48 kg weight)
4.	Drone Payload type	:	Pesticide Spraying through nozzles, Seed and Granular Fertiliser dispensing
5.	Operating Altitude (ft.)	:	2 – 100 feet above the ground
6.	Flight Modes	:	Manual, Autonomous and Semi-Autonomous (A-B Mode)
7.	Maximum Flying Speed	:	10 m/s
8.	Material of construction	:	Carbon Fibre and aviation aluminium
9.	Flight Range	:	At least 1.0 km within the VLOS
10.	Frame Design	:	Foldable arms
B. Spraying System			
11.	Tank Full Capacity	:	10 -12 Litres for Liquids 8-10 Kgs for Granules and Seeds
12.	Tank Material	:	Double Layer PVC, HDPE, PP or other lightweight and Corrosion resistant
13.	Connecting pipe material	:	HDPE, PVC
14.	Nozzle Mounting	:	Below Propellers
15.	No. of Nozzles	:	4-6 No.s
16.	Type of Nozzle	:	Flat fan with 400 to 500 ml/min.

SI.No.	Item Description		Specifications
17.	Nozzle Colour Code	:	Green
18.	Nozzle Code No.	:	110015 (or) 120015 made of Plastic PVC
19.	Minimum Spray width / Swath / Spacing	:	3.0 m for 4 Nozzles 4.0 m for 6 Nozzles
20.	Spray flow discharge/minute (For 4 – 6 Nozzles)	:	1.6 lpm to 3.0 lpm
21.	Minimum Droplet size	:	100 µm
22.	Nozzle discharge Control	:	RC Switches (on/off) / Auto off at turnings
23.	Spray fluid discharge pump	:	BLDC Pump
24.	Field Capacity of the Drone	:	3 - 4 ha/hr
25.	Flight Stability	:	Stable flying upto 10 kmph ambient wind speeds (Horizontally & Vertically)
C. Power Plant Details			
26.	Power supply type	:	Battery Operated
27.	Motors	:	BLDC with Integrated ESC (Electronic Speed Controller)
28.	No. of Motors	:	06 No.s
29.	BLDC Motors KV Rating	:	100 – 180 KV
30.	BLDC Motors water proofing	:	IPX7 compliance
31.	Battery Capacity	:	16000 mAh – 26000 mAh with 15C – 30 C rating; Preferably Lithium – Polymer batteries
32.	Battery endurance with Payload @ 4.5-5.5 m/s speed travel	:	10 -15 Min.
33.	Minimum no. of cycles of Recharge of battery in it's life time	:	300 cycles of recharge
D. Payload Details			
34.	Payload compatibility	:	Pesticides, Water soluble fertilisers, Liquid Bio-fertilisers, Natural Farming liquids, Seeds and Granular Fertilisers
35.	Payload	:	Minimum 10 litres / lift for liquids (or) 8-10 Kgs /lift for seeds and fertilisers
E. Equipment Details			
36.	GNSS (Global Navigation Satellite System)	:	Mandatory
37.	Autonomous Flight Termination System	:	Mandatory
38.	Geo-Fencing Capability	:	Mandatory

Sl.No.	Item Description		Specifications
39.	Detect and avoid capability	:	Mandatory (With On/Off Facility)
40.	Terrain Radar	:	Mandatory (With On/Off Facility)
41.	Flow Sensor	:	Optional
42.	FPV Camera	:	Mandatory
43.	Fire Resistant – Identification Plate inscribed with UIN and SL No. of the Drone with Model Type	:	Mandatory – Integrated with Drone
44.	Drone Registration and Transfer as per Drone Rules, 2021	:	Mandatory and Shall be completed by the Vendor
45.	Radio Controller / Remote Controller	:	Operating Frequency: 2.4 GHz to 2.4835 GHz (or) 5.825 GHz to 5.875 GHz Operating Temperature : 0°C-55 °C with waterproofing No. of Channels : 12 channels
46.	Max. Transmission Distance	:	More than 2 Km
47.	Display	:	integrated 5.5 inch LCD / LED Screen with Minimum display resolution 1920 X 1080; 1000 cd/m ² brightness (or) detachable & Compatible Visual Display unit with Android System / Any other GCS compatible OS.
48.	Battery Backup of RC	:	Min. 12 hours
49.	Mapping facility	:	Map selection, Flight GPS, A-B Mode, Handheld GPS mode
50.	Mapping and Mission Execution accuracy	:	+ / - 30 cm
F. Fail Safe Features			
51.	Battery Failsafe	:	Mandatory. This is the ability of the drone to return to home / launch pad in case of low battery power
52.	Loss of Communication	:	Mandatory. Ability to return to home / launch pad in case of loss of communication failure
53.	Tank Failsafe	:	Optional. This helps in invoking Return to Home / Launch upon emptying of the tank, which otherwise can be done with manual observation.
54.	Manual RTL (Return to Launch)	:	Mandatory
55.	Windspeed Tolerance	:	8 m/s
G. Accessories			
56.	Generator for Batteries	:	Compatible Generator with the vendor's

SI.No.	Item Description		Specifications
	Charging		Battery specifications to charge 4 batteries at a time.
57.	Battery Charger	:	Compatible with Generator and vendor's Battery specifications

5. Eligibility Criteria and other conditions stipulated for Manufacturers/Drones empanelment:

1. The Agriculture Drone offered shall be DGCA Type certified and shall comply with the technical specifications indicated above in the EOI document.
2. The Agriculture Drones to be supplied are to be registered in the Digital Sky portal of DGCA under the appropriate category and should have Unique Identification Number (UIN) assigned by DGCA.
3. It is the responsibility of the manufacturer to arrange the issue/transfer of UIN number in the name of the Beneficiary as per the Drone Rules 2021.
4. The manufacturer shall submit self-certified copies of all technical compliances/ documents submitted to MoCA and DGCA while getting the Type certificate.
5. The manufacturer will have to submit a copy of the test certificate for each product along with its operating manual.
6. The test certificates validity should be verified by the manufacturer with the testing Institutes as per the present norms as on the date of participation
7. The drone should have all safety features like sensor-based collision avoidance, terrain following, a first-person view camera, and auto return to the launch point.
8. The manufacturer should have a registered office, Registered & authorized Manufacturing unit in India approved by the competent authority with proper setup and infrastructure for drone manufacturing in India.
9. The Manufacturer shall produce the relevant documents viz., Registration of Firm, Registered office, Production Unit, Godown, Manufacturing licence, CIN, PAN, GST Certificate, Company financial status etc.
10. Type approval certificate of the quality council of India (or) authorized testing entities shall be necessary.
11. The manufacturer/Distributor should setup DGCA authorized training facility (RPTO) and service support for pilot training in Andhra Pradesh within 60 days from the date of empanelment.
12. Manufacturer shall indicate the price for the Drone offered for empanelment and subsequent supply covering all the components indicated under unit cost and inclusive of all taxes.
13. Manufacturer shall arrange delivery of Kisan Drones to the selected beneficiaries at the RBK at the cost of the company.
14. Manufacturers shall furnish a certificate on a non-black list /blocked from any state govt in India.

15. The importer/Distributor will be considered an authorized importer/Distributor on behalf of the manufacturer of the tested product. The importer/Distributor should have an after-sale service facility in the districts. They should furnish the letter from the principal manufacturer for selling the products in India and be authorized to sell in AP.
16. The manufacturer on empanelment should submit an Earnest Money Deposit (EMD)/ Bank Guarantee for the amount and terms as decided by the Dept of Agriculture as security check.

GUARANTEE and SERVICE SUPPORT

17. Manufacturers must have strong service support in Andhra Pradesh state to provide after-sales support viz., training, repairs, and maintenance etc. to the customer/ farmer.
18. Manufacturers should have authorized service centres and authorized dealers in all the districts of Andhra Pradesh
19. The manufacturer should arrange third-party insurance for the Agriculture Drones supplied as per the provisions made in the Drone Rules-2021 and amendments thereof at the cost of the manufacturer covering compensation to the persons or property in case of any damage. A copy of such insurance is to be submitted to the Department.
20. The manufacturer shall indicate the details of the warranty /guarantee provided for the Drone unit. The repairs/replacements shall be attended at free of cost within the warranty period.
21. The Firm shall repair or replace any components /items of the Drone System free of cost within **5 days** of receiving the complaint from the buyer without any dispute if they arise due to manufacturing defects or workmanship defects after the Drone starts operating during the warranty/Guarantee period.
22. The Manufacturer shall be responsible for any dispute arising from the supply of the Drone directly or through their authorized entity.
23. If any manufacturer fails to provide such service, an appropriate action will be taken against them, including and not limited to forfeiting bank guarantee/ security deposits besides blacklisting of the firm and legal action.

Instructions to the Manufacturers:

24. Manufacturers shall submit EOI & Agreement in hard copies within schedule to the Spl. Commissioner of Agriculture, AP, IHC Corporate, Mangalagiri, Guntur district - 522503.
25. The manufacturer must submit all the documents as per the checklist.
26. The manufacturer will have to submit one photograph of 6 x 4 inches for each model that they are offering. One photograph of the manufacturing unit with the name of the manufacturing firm.
27. The manufacturers should attach the list of dealers, their addresses, and the period of validity of the dealership, along with the contact details and any other information.
28. The Dept. of Agriculture will approve the indicative prices of Kisan drones as per the recommendations of the State Level Technical Committee (SLTC)

29. The Dept. of Agriculture has the discretion to call for negotiation on price, warranty terms and any other conditions of the EOI submitted by the manufacturer.
30. The department may conduct a site visit to the manufacturing unit to ascertain the facilities available & production capacities of the unit of the manufacturer. In case, the authorities find during the site visit that the applicant is not a manufacturer, the manufacturer shall be rejected.
31. The prices approved by the State-level Technical Committee (SLTC) for Kisan Drones are indicative prices only and the farmers are permitted to negotiate the prices with the suppliers duly exploring the market prices to purchase Kisan drones at competitive prices. Suppliers should supply the drones at a negotiated price to the beneficiaries.
32. The Authority may levy a penalty on the manufacturer if found that the firm-supplied components are not conforming to the quality parameters as stipulated in the DGCA type certificate.
33. The Department has the right to discontinue /reject the manufacturer if found that the product supplied by the manufacturer is not as per the minimum specified DGCA standard and/or specification or its DGCA certification/applicable registration.
34. The department has every right to check/ engage an agency to verify the quality of the products supplied during any part of the year in any district during the year.

. Legal Jurisdiction:

35. Arbitrations if any to be negotiated by the Spl. Commissioner of Agriculture, Department of Agriculture, Government of Andhra Pradesh, Guntur.
36. For any legal remedies, the court at Guntur, Andhra Pradesh shall be the Jurisdiction.

The EOI submitted by the company does not bind the authority to empanel or approve the models. The approval of models and subsequent empanelment purely depends on the satisfying terms and conditions of EOI and discretion of the department.

The Authority reserves the right to cancel the EOI notification in full or part without assigning any reason thereof.

SPL. COMMISSIONER OF AGRICULTURE

EMPANELMENT SUBMISSION FORM

(To be submitted by the manufacturing firm who participates in Empanelment)

{Location, Date}

To:

The Special Commissioner of Agriculture,
Andhra Pradesh

Dear Sir,

1. We, the undersigned, express our willingness to empanel our firm to supply DGCA-certified Agriculture drones < NAME > under various schemes of the Department of Agriculture, AP in compliance to the notification Rc.No. **No.AGC02-19021/17/2023-FM-AGRHOD** dated 12.05.2023 of Dept of Agriculture, GoAP published on 15.05.2023 and hereby quoting price of Kisan Drone < NAME > and submitting all the required documents for consideration of empanelment of our firm.
2. I/We, the undersigned is to certify that the price offered is for all the components included under unit cost indicated in the EOI document and inclusive of all taxes.
3. I/we, the undersigned is to confirm that the firm will arrange third party insurance covering compensation to the person/ property in case of damage at the cost of firm.
4. I/we, the undersigned is to confirm that the firm will arrange supply of Kisan Drones to the selected beneficiaries at their RBK at the cost of the company.
5. We also make ourselves prepared in case of negotiation is required on Price offered, warranty terms and other conditions as desired by the Department of Agriculture.
6. Upon empanelment, We are willing to comply the terms and conditions stipulated regarding EMD/ Bank Guarantee or both as security check.

We understand that the Special Commissioner of Agriculture, Department of Agriculture, AP Guntur is not bound to accept our application.

We remain,

Yours sincerely,

Authorized Signature {In full and initials}:

Name and Title of Signatory:

Name of Manufacturing Firm (company's name):

In the capacity of:

Address:

Contact information (phone and e-mail):

(On Company letter head)
PRICE OFFERED FOR DRONE < NAME >

1. I/We, the undersigned are willing to supply Drone < Name > @ Rs. /- per unit inclusive of the below-listed components to the selected beneficiaries under centrally sponsored schemes of Dept of Agriculture, Govt of Andhra Pradesh in 2023-24.
2. The price quoted is inclusive of all taxes and Transport costs for delivery of the Drone upto RBK.
3. Split up of the components of unit cost is as below

Sl.No	Component/ Accessories (complying to the specifications enclosed)	Number
1.	Basic Drone inclusive of one pair of batteries	1
2.	Additional sets of Battery (pairs)	6
3.	Battery Chargers	2
4.	Generator	1
5.	Additional Spraying nozzles	6
6.	Additional sets of Landing Gears	2
7.	Additional sets of Propellers (Set comprises of 6 propellers)	2
8.	Tool kit	1
9.	Carrying Case	1

4. The price quoted is valid from 1st June'2023 to 31st May'2024 or as modified by the competent authority.
5. Warranty extended for the Drone is for a period of ____ years from the date of delivery of Drone to the beneficiary and during the warranty period, company will arrange repair to the drone/ drone parts or replace the drone/drone parts at the cost of the company through the authorized service centers/authorized dealers.
6. The company is arranging third party insurance to the drones supplied covering the compensation to the persons or property damaged.
7. The company is willing to negotiate the price offered and terms of warranty with Dept of Agriculture.

Signature of the authorized person

DECLARATION

(ON Rs.100/- NON JUDICIAL STAMP PAPER)

I/ We have read and understood the Terms and Conditions of Notification Schedule relevant to "Notification No. AGC02-19021/17/2023" dated:12-05-2023 published on 15-05-2023 and I/we have submitted the document copies in accordance with the Terms and Conditions of the above notification Schedule.

The information furnished is true and factual and I clearly understand that our manufacturer empanelment is liable for rejection, if any information furnished is found not true and factual, at any point of time.

Place:

Date

Signature of Manufacturer

EOI FOR EMPANELMENT OF KISAN DRONES BY DEPT OF AGRICULTURE, GOAP FOR 2023-24

MANUFACTURER PROFILE		
1	Name	M/s
2	Adress of Registered Office	
3	Adress of Manufacturing Unit	
4	Address of the Godown	
5	Type of Firm (Document proof to be provided)	i) Sole Proprietorship firm ii) Partnership firm iii) Private limited firm iv) Public limited firm v) Any other (specify)
6	Year of establishment of firm	
7	Registration Certificate details (Self attested Registration certificate to be furnished)	
8	Details of Drones manufactured (category wise)	
9	Production capacity per year	
10	Turnover of the Company per anum (in Rs.Crores) during the past years 3 years or from the date of establishment which ever is applicable	
11	Industrial license certificate in case of DIC/SSI	
12	GST number of the firm (Self attested copy of GST Certificate and latest paid GST receipt to be furnished)	
13	PAN number of Firm (Self attested copy of PAN Certificate to be furnished)	

14	Name of the Directors/ Proprietors with their DIN/PAN (Enclose attested copies)	
15	Aadhaar number of Managing Director / one Director / Proprietor (Enclose attested copy)	
16	Number of the employees working for the company and production unit	
17	No. of Kisan Drones (category wise) manufactured and sold during the past years 3 years or from the date of establishment which ever is applicable	
18	Certificate of DGCA authorized RPTO established in the State	
19	Address of the DGCA authorized RPTO established in the state	
20	Contact details of authorized person	Name: Designation: Mobile No: Email No: Office Phone No: Address

Signature of the authorized person
(Enclose Copy of the attachments wherever required)

TECHNICAL SPECIFICATIONS OF THE DRONE OFFERED FOR EMPANELMENT

Sl.No.	Item Description	Specifications to be complied for empanelment	SPECIFICATIONS OF DRONE OFFERED FOR EMPANELMENT
A. Drone Details			
1.	Drone Category	:	Rotorcraft
2.	Drone Classification	:	Hexacopter
3.	Drone Class (All up Weight in Kg)	:	Small with Min. 23.652 kg - Medium with Max. 29.48 kg weight)
4.	Drone Payload type	:	Pesticide Spraying through nozzles, Seed and Granular Fertiliser dispensing
5.	Operating Altitude (ft.) (Min and Max)	:	2 – 100 feet above the ground
6.	Flight Modes	:	Manual, Autonomous and Semi-Autonomous (A-B Mode)
7.	Maximum Flying Speed	:	10 m/s
8.	Material of construction	:	Carbon Fibre and aviation aluminium
9.	Flight Range	:	At least 1.0 km within the VLOS
10.	Frame Design	:	Foldable arms
B. Spraying System			
11.	Tank Full Capacity	:	10 -12 Litres for Liquids 8-10 Kgs for Granules and Seeds
12.	Tank Material	:	Double Layer PVC, HDPE, PP or other lightweight and Corrosion resistant
13.	Connecting pipe material	:	HDPE, PVC
14.	Nozzle Mounting	:	Below Propellers
15.	No. of Nozzles	:	4-6 No.s
16.	Type of Nozzle	:	Flat fan with 400 to 500 ml/min.
17.	Nozzle Colour Code	:	Green
18.	Nozzle Code No.	:	110015 (or) 120015 made of Plastic PVC
19.	Minimum Spray width / Swath / Spacing	:	3.0 m for 4 Nozzles 4.0 m for 6 Nozzles
20.	Spray flow discharge/minute (For 4 – 6 Nozzles)	:	1.6 lpm to 3.0 lpm

Sl.No.	Item Description		Specifications to be complied for empanelment	SPECIFICATIONS OF DRONE OFFERED FOR EMPANELMENT
21.	Minimum Droplet size	:	100 µm	
22.	Nozzle discharge Control	:	RC Switches (on/off) / Auto off at turnings	
23.	Spray fluid discharge pump	:	BLDC Pump	
24.	Field Capacity of the Drone	:	3 - 4 ha/hr	
25.	Flight Stability	:	Stable flying upto 10 kmph ambient wind speeds (Horizontally & Vertically)	
C. Power Plant Details				
26.	Power supply type	:	Battery Operated	
27.	Motors	:	BLDC with Integrated ESC (Electronic Speed Controller)	
28.	No. of Motors	:	06 No.s	
29.	BLDC Motors KV Rating	:	100 – 180 KV	
30.	BLDC Motors water proofing	:	IPX7 compliance	
31.	Battery Capacity	:	16000 mAh – 26000 mAh with 15C – 30 C rating; Preferably Lithium – Polymer batteries	
32.	Battery endurance with Payload @ 4.5-5.5 m/s speed travel	:	10 -15 Min.	
33.	Minimum no. of cycles of Recharge of battery in it's life time	:	300 cycles of recharge	
D. Payload Details				
34.	Payload compatibility	:	Pesticides, Water soluble fertilisers, Liquid Bio-fertilisers, Natural Farming liquids, Seeds and Granular Fertilisers	
35.	Payload	:	Minimum 10 litres / lift for liquids (or) 8-10 Kgs /lift for seeds and fertilisers	
E. Equipment Details				
36.	GNSS (Global Navigation Satellite System)	:	Mandatory	
37.	Autonomous Flight Termination System	:	Mandatory	
38.	Geo-Fencing	:	Mandatory	

Sl.No.	Item Description		Specifications to be complied for empanelment	SPECIFICATIONS OF DRONE OFFERED FOR EMPANELMENT
	Capability			
39.	Detect and avoid capability	:	Mandatory (With On/Off Facility)	
40.	Terrain Radar	:	Mandatory (With On/Off Facility)	
41.	Flow Sensor	:	Optional	
42.	FPV Camera	:	Mandatory	
43.	Fire Resistant – Identification Plate inscribed with UIN and SL No. of the Drone with Model Type	:	Mandatory – Integrated with Drone	
44.	Drone Registration and Transfer as per Drone Rules, 2021	:	Mandatory and Shall be completed by the Vendor	
45.	Radio Controller / Remote Controller	:	Operating Frequency: 2.4 GHz to 2.4835 GHz (or) 5.825 GHz to 5.875 GHz Operating Temperature : 0°C-55 °C with waterproofing No. of Channels : 12 channels	
46.	Max. Transmission Distance	:	More than 2 Km	
47.	Display	:	integrated 5.5 inch LCD / LED Screen with Minimum display resolution 1920 X 1080; 1000 cd/m ² brightness (or) detachable & Compatible Visual Display unit with Android System / Any other GCS compatible OS.	
48.	Battery Backup of RC	:	Min. 12 hours	
49.	Mapping facility	:	Map selection, Flight GPS, A-B Mode, Handheld GPS mode	
50.	Mapping and Mission Execution accuracy	:	+ / - 30 cm	
F. Fail Safe Features				
51.	Battery Failsafe	:	Mandatory. This is the ability of the drone to return to home / launch pad in case of low battery power	
52.	Loss of Communication	:	Mandatory. Ability to return to home / launch pad in case of	

Sl.No.	Item Description		Specifications to be complied for empanelment	SPECIFICATIONS OF DRONE OFFERED FOR EMPANELMENT
			loss of communication failure	
53.	Tank Failsafe	:	Optional. This helps in invoking Return to Home / Launch upon emptying of the tank, which otherwise can be done with manual observation.	
54.	Manual RTL (Return to Launch)	:	Mandatory	
55.	Windspeed Tolerance	:	9 m/s	
G. Accessories				
56.	Generator for Batteries Charging	:	Compatible Generator with the vendor's Battery specifications to charge 4 batteries at a time.	
57.	Battery Charger	:	Compatible with Generator and the vendor's Battery specifications	

Signature of the authorized person

List of documents provided as proof of technical specifications indicated above:

- 1.
- 2.
- 3.

....(Enclose Copy of the attachments wherever required)\

Signature of the authorized person

EMPANELMENT TERMS AND CONDITIONS ACCEPTANCE LETTER

(To be given on Firm Letter Head)

Date:

To

The Special Commissioner of Agriculture,
AP, Ground Floor, SAMETI office,
IHC Corporate, Mangalagiri,
Guntur district- 522503.

Sub: Acceptance of Terms & Conditions of Drone empanelment document - Reg

Ref : Notification No: AGC02-19021/17/2023-FM-AGRHO, Date: 12.05.2023 &
published on 15-05-2023

Dear Sir,

With reference to your advertisement given in the above reference,

1. I/We have downloaded / obtained the empanelment document for Kisan Drone Manufacturers/Suppliers empanelment from your organization for supply in Andhra Pradesh State Department of Agriculture under subsidy schemes.
2. I/ We hereby certify that I / we have read entire terms and conditions of the empanelment documents which form the part of empanelment and I/we shall abide hereby the Government Rules, Guidelines, terms and conditions mentioned in the empanelment document.
3. The addendum /corrigendum(s) issued from time to time by your organization is taken into consideration, while submitting this acceptance letter.
4. I/ We hereby unconditionally accept the empanelment conditions in its totality / entirety.
5. I / We accepted to pay EMD & submit Bank Guarantee as a security check as stipulated by the competent authority to the Dept of Agriculture, AP if we are empaneled.
6. I / We accepted to enter into an agreement with the Dept of Agriculture as per the terms and conditions stipulated by the Dept of Agriculture, AP if we are empaneled.
7. The empanelment form along with all documents and annexures are submitted in physical form with duly signed/ self-attested wherever required.
8. I/we certify that, I/we are the Manufacturers of the Kisan Drone and have Type Certification from DGCA.

9. I/we certify that we have been not blacklisted now or before or adversely mentioned by any Government Department in India.
10. The information/documents furnished along with the empanelment document are true and authentic to the best of my/our knowledge and belief. I/we am/ are aware of the fact that furnishing of any false information/fabricated document would lead to rejection of our empanelment at any stage besides liabilities towards any penal action.
11. I/We have gone through terms and conditions governing this empanelment thoroughly and prices have been quoted without any ambiguity. I/We would abide by the terms and conditions governing this empanelment. I/We ensure the supply of the Drones as per terms and conditions governing this empanelment.
12. In case any provisions of this empanelment are found violated, your organization/ department shall be at liberty to reject/remove from the empanelment including penal action and we shall not have any claim/right against Department of Agriculture in satisfaction of this condition.

Yours Faithfully,

(Signature & Name of the authorized
person, with Official Firm Seal)

DECLARATION OF SERVICE SUPPORT FROM THE MANUFACTURER

(On Manufacturer's Letter head)

1. I,.....Son/Daughter/Wife of Shri.....Proprietor/Director/authorized signatory of M/s..... mentioned above, is competent to sign this Certificate and Declaration and execute this on behalf of our firm.
2. Certified and declared that on request and demand by the beneficiaries/ farmers we shall provide suitable support and train the Drone Pilots for trouble free running of the supplied Kisan Drone and its maintenance so that the Drone can be operated by the user's pilot hassle-free.
3. Certified that we shall provide service support in the Andhra Pradesh state to provide after sales support, training, repair & maintenance etc. to the customers at the Service Centre/s mentioned below and further any change in the Service Centre mentioned will be intimated to the Department.
4. Certified that we shall arrange third party insurance for the Agriculture Drones supplied as per the provisions made in the Drone Rules-2021 at the cost of the manufacturer covering compensation to the persons or property in case of damage.
5. Certified that we shall attend to the repairs / replacements at free of cost the warranty period..
6. Certified that we shall arrange repair or replace any components /items of the Drone System free of cost within **05 days** of receiving the complaint from the buyer without any demure or dispute if they are found to have manufacturing defects or workmanship defects after the Drone starts operating during the warranty/Guarantee period.
7. Certified that we shall be responsible for any dispute arising from the supply of the Drone directly or through their authorized entity.

Signature of authorized

person Full Name:

Place:

Seal

CHECK LIST OF DOCUMENTS SUBMITTED FOR EMPANELMENT

Sl.No	Items	Details (Enclosed/ Not Enclosed)
1.	Empanelment Request Letter on the letter head of the company	
2.	Price offered on the letter head of company along with warranty details	
3.	Declaration on Rs. 100/- Non Judicial Bond Paper Notarized	
4.	Empanelment terms and conditions acceptance letter	
5.	Declaration of Service Support from Manufacturer	
6.	Manufacturer Profile	
7.	Technical Specifications of Drone offered for empanelment	
8.	List of Authorized dealers in 26 districts of the state	
9.	Proof showing the location of Registered office	
10.	Proof showing the location of Manufacturing Unit	
11.	Proof showing the location of Godown	
12.	RPTO certificate	
13.	RPTO location proof	
14.	Certificate of Registration of the Firm/Company	
15.	Manufacturing Address of the Manufacturer (if different from registration address of the Firm)	
16.	Import/Export licence in case of imported parts	
17.	3 rd Party Insurance certificate	
18.	GST Certificate of the Manufacturer	
19.	Latest GST paid copy of the Manufacturer	
20.	PAN Copy of the Manufacturer	
21.	DIN/PAN of the Directors/Proprietor of the Manufacturer	
22.	Aadhaar Copy of the MD/Director/Proprietor	
23.	Audited Statement and IT returns of the Manufacturer for 3 years or from the date of establishment which ever is applicable	
24.	Type Certificates of the Drone issued by DGCA	
25.	self attested copies of all Technical compliances/ documents submitted to MoCA and DGCA while getting the Type Certificate	

Sl.No	Items	Details (Enclosed/ Not Enclosed)
26.	Operating manual of drones offered for empanelment	
27.	The operational Photos or Still photos of the Drone along with the soft copy in a pen drive	
28.	Broachers/leaflets/handouts /booklets etc. of the Drone and its components	
29.	List of staff employed in Office and Production unit	
30.	Photographs of the Production unit	
31.	Photographs of the Drone, Drone in operation	
32.	Photographs of RPTO	
33.	Any others (specify)	

(Signature & Name of the authorized person,