

Minutes of the Pre-bid meeting for 'Procurement of (1) set of drone and related payload and other items for Encroachment Monitoring.'

Date: 30.08.2024

Time: 3:00 PM

Venue: Wildlife Conference Hall, Aranya Bhawan

IFB No. APFBC/PMU/Phase-II/PD/2023/326/Part-I/5, dated 14th August 2024.

The following APFBCS officials and prospective vendor representatives were present at the pre-bid meeting:

Officials of the APFBCS:

1. Shri Sandeep Kumar, IFS : PCCF (Wildlife) & CWLW, Assam and Project Director (PD), APFBCS
2. Shri Prashant Dhanda, IFS : Activity Director (IT & GIS), O/o the PCCF & HoFF, Assam
3. Smt. Rehena Sultana : Procurement Executive, PMU, APFBCS

Representative of the Firm (Physically Present):

1. Shri Ramanjeet Singh : M/s ideaForge Technology Ltd.

Representative of the Firm (Virtually Present):

1. Shri Sabharinath Sadasivam : M/s Akash Aerospace

Attendance sheet of the meeting is enclosed at Annex-1.

1. The Project Director welcomed all participants to the pre-bid meeting and briefly outlined the purpose of inviting vendors to participate in the procurement process for drones and related items.
2. During the meeting, APFBCS officials addressed queries from the representatives of the attending firms. Responses to the questions raised during the meeting, as well as those received via email, have been included in the minutes, which are enclosed as Annex-2.

Minutes approved

**Sd/-
Project Director, PMU, APFBCS**

Memo No: APFBC/PMU/Phase-II/PD/2023/326/Part-I/69

Dated Guwahati the 23rd September, 2024

Copy to:

1. All concerned officials of the APFBCS joined the meeting.
2. Email to the Bidders: (1) M/s ideaForge Technology Ltd., Email: tenders@ideaforgetech.com; ramanjeet.singh@ideaforgetech.com; clarence.beecham@ideaforgetech.com; richa.chaudhary@ideaforgetech.com; sushma.nanaware@ideaforgetech.com; mukul.tiwari@ideaforgetech.com; nitin.sharma@ideaforgetech.com, (2) M/s Garuda Aerospace Private Limited, Email: tender@garudaaerospace.com; sathishg@garudaaerospace.com; tender@garudaaerospace.com, (3) Pan India Consultants Pvt. Ltd.; Email: navpreetkaur@panindiagroup.com; vivekbansal@panindiagroup.com; vibhorgoel@panindiagroup.com; kailashsingh@panindiagroup.com; ambrishupadhyay@panindiagroup.com, (4) M/s Asteria Aerospace Limited; Email: sonam.saroha@asteria.co.in; vivek.sharma@asteria.co.in, (5) M/s Aakash Aerospace; Email: sabharinath@akashaerospace.com; saravanan@akashaerospace.com; akshaya@akashaerospace.com, (6) M/s Indo Wings Private Limited; Email: tenders@indowings.com; (7) M/s Tunga Aerospace Industries (P) Ltd, Email: ajit.keshav@tungasystems.com; ramesh.madhavan@tungasystems.com.

Annexe-1

Attendance Sheet for the Pre-Bid Meeting on 'Procurement of (1) set of drone and related payload and other items for Encroachment Monitoring'.

Date: 30th August 2024

Time: 3.00 PM

Venue: Wildlife Conference Hall, Aranya Bhawan

Sl.	Name of the Attendant	Designation & Organization	Email ID & Contact no.	Signature
1.	Sandeep Kumar, IFS	Project Director, APFBC Society	pd@apfbc.in	
2.	Prashant Dhanda, IFS	Activity Director (IT & GIS) O/o PPCF & HoFF, Assam	prashant.dhanda@gmail.com	
3.	Ramanjeet Singh AGM	AGM / Ideaforge Technology	ramanjeet.singh@ideaforgetech.com	
4.	Sabharinath S	Akash Aerospace	sabharinath@akashaaerospace.com	Joined online
5.	Rehema Sultana	PE, APFBC Society	-	 30/08/24
6.				
7.				
8.				
9.				
10.				
11.				
12.				

Annexure-2

Queries and Responses on the APFBC/PMU/Phase-II/PD/2023/326/Part-I/5, Dated Guwahati the 14th August 2024 for 'Procurement of (1) set of drone and related payload and other items for Encroachment Monitoring'.

#	Reference	Existing Clause	Queries	PMU's Responses				
1.	Invitation for Bid (Detailed), Page no. 3	<div>Sl. 5: Bid must be delivered to the above office on or before 14:00 Hours IST on 16th September 2024 and must be accompanied by Bid Security of the sum as under:</div> <table><tr><th>Sl.</th><th>Bid Security Amount in Indian Rupees</th></tr><tr><td>1.</td><td>INR 0.06 Million</td></tr></table>	Sl.	Bid Security Amount in Indian Rupees	1.	INR 0.06 Million	We request you to confirm us Bid Security Amount as attached below which is mentioned in the tender document.	Confirmed.
Sl.	Bid Security Amount in Indian Rupees							
1.	INR 0.06 Million							
2.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	2: Endurance- Minimum 60 minutes or more with either Day/Thermal/Mapping payload (up to 1000 m (3280 ft.) AMSL Take-off)	It is requested to kindly consider Endurance for a Minimum of 40 minutes.	No Change				
3.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	3: Range of live transmission (LOS) (un-obstructed & interference free)-10 km (6.2 miles) or more up to 1000m AMSL up to 800m AGL	It is requested to kindly consider the Range of Live Transmission up to 5 km.	The range of live transmission is up to the radial distance of 5kms and not 10 kms.				
4.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	5: IP Rating-IP54 rating or better	It is requested to kindly consider the IP Rating as IP53.	Accepted.				
5.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	2: Endurance- Minimum 60 minutes or more with either Day/Thermal/Mapping payload (up to 1000 m (3280 ft.) AMSL Take-off)	AAL request you to amend this requirement to 40 Kms	No change.				
6.	Section VII – Schedule of Requirements; 2. Technical	3: Range of live transmission (LOS) (un-obstructed & interference free)-10 km (6.2	AAL request you to amend this requirement to 5 Kms	The range of live transmission is up to the radial distance of 5kms and not 10				

#	Reference	Existing Clause	Queries	PMU's Responses
	Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	miles) or more up to 1000m AMSL up to 800m AGL		kms.
7.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	5: IP Rating-IP54 rating or better	AAL drones and packaging are certified for IP53 which protect them from dust and drizzle. Your requirement can suffice with IP53. We request you to amend the IP rating requirement for both specifications to IP53	Accepted
8.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	15: Packaging and Storage: Waterproof Backpacks to carry all mission critical components with IP66 or better rating for dust and drizzle protection		No Change
9.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 54	23: 3D Maps Switchable between 2D/3D map views, capability to tilt/rotate 3D maps as per user input-Yes	Please keep 3D maps availability as Desirable requirements.	No Change
10.	Section VII – Schedule of Requirements; 2. Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 56	61: Auto Tracking Comm Box-Auto tracking directional antenna	Please remove this requirement	No Change
11.	Section VII – Schedule of Requirements; Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 55	30: Maps-3D Maps: Capability to integrate SRTM and DTED based elevation data	Please remove this requirement	No Change
12.	Section VII – Schedule of Requirements; Technical Specifications and Product Demonstration; 3. General Specifications of Drone;	34: Free Hand Annotation: Capability to annotate a desired location on the map screen	AAL request the department to give the clarity on this requirement.	Free Hand Annotation is the feature required in the GCS software. It's useful for marking locations (geotag) using point or polygon tool on map. It's primarily used for diverting the drone to

#	Reference	Existing Clause	Queries	PMU's Responses
	Page no. 55			the marked location and/or marking locations just for reference which can be referred latter for study especially in surveillance use case.
13.	Section VII – Schedule of Requirements; Technical Specifications and Product Demonstration; 3. General Specifications of Drone; Page no. 55	38: Weather Forecast: Capable to provide information about the weather condition of the HOME location to the users based on the weather forecast of a given day and time.	Please remove this requirement	Accepted
14.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration: 3. General Specifications of Drone, Page no. 55	34. Free Hand Annotation: Capability to annotate a desired location on the map screen	Minimum or maximum distance to be covered by the drone when operated by Free Hand Annotation mode	Free hand annotation is a feature in GCS software to mark (geotag) locations on map. This feature can be used to divert drone to marked location and/or marked as a reference which can be referred latter for study especially in surveillance use case. The free had annotation is not a flight mode, the minimum distance can be any distance defined by the drone operator and maximum distance would be governed by the endurance of the drone.
15.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration: 3. General Specifications of Drone, Page no. 54	2. Endurance: Minimum 60 minutes or more with either Day/Thermal/Mapping payload (up to 1000 m (3280 ft.) AMSL Take-off)	Minimum Endurance requirement of 60 minutes is to be tested in operational altitude or maximum Altitude (120meter) and in normal wind speed or at adverse or maximum wind resistance (10 m/s). Is there any relaxation for endurance when operating with maximum payload, maximum Altitude.	No change.
16.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration: 1. Key Considerations for Drones, Page no. 53	5. Payload Capacity Adequate payload capacity for carrying additional sensors or equipment like loudspeaker, laser devices.	Can the sensors and payloads be interchangeable and selected based on the mission requirements or to be integrated permanently?	The payload should be Interchangeable.
17.	Section VII – Schedule of Requirements; 2. Technical Specifications and product	Mapping Coverage @120m (393.7 ft) AGL, 80/70 Overlap: Minimum 1.5 sq. km (upto 1000m AMSL)	In Encroachment Monitoring drone, minimum survey area of 1.5 Sq Km is to be covered in single flight or to be covered in 2 flights with	Single Flight.

#	Reference	Existing Clause	Queries	PMU's Responses
	demonstration: 4. Payload Specifications, Page no. 57		exchange of battery	
18.	Section III –Evaluation and Qualification Criteria; Pre-Qualification Criteria, Page no. 26 & 27	3.2 Minimum Annual Turnover from supply of goods & 4.1 Similar Experience	Is there any relaxation for a startup regarding prior experience of handling drone projects and 3 years annual turnovers	No Change
19.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration: 6. Product demonstration and evaluation checklist, Page no. 58	2. DGCA type certification	Is Type Certificate mandatory for the drone or any exemption for a startup or when Type Certificate Application is in process?	No change.
20.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration, Page no. 53	1. Key Considerations for Drones: Battery Life and Swappability • Lithium-polymer (LiPo) batteries with sufficient capacity for extended flights.	As the batteries composition from Li-Po to Li-ion vary OEM to OEM based on their design and research, we request to give option to offer either Li-Po or Li-ion based battery as OEM standards	Both are acceptable. Bidders are expected to meet the performance standards set forth in the tender.
21.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration: 3. General Specifications of Drone, Page no. 56	Remote Video Terminal (RVT) Characteristics-63. Remote Video capability with payload and NAV controls and integration to Command Control station-Live feed Integration/display on screen, phone and tablet; Receiving live video from UAV at a distance of 5 Km (3.1 miles) (un-obstructed & interference free); Capability to display video, map and OSD (On screen display) similar to GCS; Capability to record, playback and freeze the imagery received from UAV.; Capability to control the payload and UAV navigation	Since the requirement is for mapping rather than surveillance, and mapping does not involve remote video capabilities or navigation controls, it is requested that this clause be deleted. The inclusion of remote video and NAV controls is not relevant to the mapping objectives and therefore does not align with the project's needs.	Accepted
22.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration: 6. Product demonstration and evaluation checklist, Page no. 58	13. Wherever required, is able to live stream the Drone footage and possesses the ability to integrate with the Dashboard	Given that the primary requirement is mapping rather than surveillance, we kindly request the omission of this clause from the tender. This adjustment will better align the specifications with the core objectives of the project, ensuring that the focus remains on achieving optimal mapping results	Accepted

#	Reference	Existing Clause	Queries	PMU's Responses				
23.	Invitation for Bid (IFB), Page no. 3	3. A complete set of Bidding Document may be purchased by interested Bidders on submission of a written application to the above and upon payment of a non-refundable fee of INR 3,540/- (Fee INR 3,000/- plus GST INR 540/-) only in the form of Demand Draft in favour of the "Assam Project on Forest and Biodiversity Conservation- Phase II" payable at Guwahati, Assam. Bidding Document may also be downloaded free of cost from the website of APFBCS viz. www.apfbcn.in. In case the Bidding Document is downloaded from website, the non-refundable fee is not required.	As per government MSME or NSIC registered company can be exempt for purchase of document. Request you to please confirm?	No Change				
24.	Invitation for Bid (IFB), Page no. 3	5: Bid must be delivered to the above office on or before 14:00 Hours IST on 16th September 2024 and must be accompanied by Bid Security of the sum as under: <table><tr><th>Sl.</th><th>Bid Security Amount in Indian Rupees</th></tr><tr><td>1.</td><td>INR 0.06 Million</td></tr></table>	Sl.	Bid Security Amount in Indian Rupees	1.	INR 0.06 Million	As per government MSME or NSIC registered company can be exempt for a bid security. Request you to please confirm	As per AFD, Feb 2024 Procurement Guidelines (3.2.8 Bid securities), states, "It is recommended to request a bid security for the procurement of works, plants, equipment or goods. It is not recommended in the case of Contracts for consulting services. Instead of a bid security, the Contracting Authority may require Bidders to sign a declaration acknowledging that if they (i) withdraw or modify their Bids during the validity period, or (ii) if awarded the Contract, fail to sign it, or fail to submit the performance security in a timely manner, then the Bidder shall be considered ineligible to bid for any Contract with the Contracting Authority for the period specified in the Procurement Documents." This is also corroborated by Rule 170 of GFR.
Sl.	Bid Security Amount in Indian Rupees							
1.	INR 0.06 Million							

#	Reference	Existing Clause	Queries	PMU's Responses
25.	Section VII – Schedule of Requirements; 2. Technical Specifications and product demonstration: 3. General Specifications of Drone, Page no. 56	51. Drone output: Photo (JPEG/PNG)/orthomosaic (geotiff)/3D point cloud (LAS) / Digital Terrain Model (geotiff) / Digital Surface Model (geotiff)	For the video and photo output we can able to give it to you but for generating the Orthomosaic / DTM / DSM output, there is special post-processing software with paid license subscription. Please confirm whether we need to provide the software with the license and subscription as well with the Aerial Vehicle Systems.	Photogrammetry post processing software is not required.

Sd/-
Project Director, PMU, APFBC