

सेवा में,

निदेशक,
सूचना एवं जनसम्पर्क विभाग,
बिहार, पटना।

विषय- अल्पकालीन निविदा आमंत्रण सूचना सं०-43/2016-17 के प्रकाशन के संबंध में।

निदेशानुसार उपर्युक्त विषय के संबंध में अल्पकालीन निविदा आमंत्रण सूचना सं०-43/2016-17 की पाँच प्रतियाँ (सी०डी० सहित) संलग्न करते हुए अनुरोध है कि इसे राज्य एवं राज्य से बाहर के प्रमुख समाचार पत्रों में (अंग्रेजी एवं हिन्दी) के अगले दो संस्करणों में प्रकाशित कराने की कृपा की जाय साथ ही पी०आर०डी० वेबसाइट पर भी प्रसारित करने की कृपा की जाय।

इस निविदा आमंत्रण सूचना का प्रकाशन किन-किन समाचार पत्रों में किया गया इसकी सूचना देने की कृपा की जाय।

अनु०-यथोपरि। (7 पृष्ठ)

पुलिस महानिरीक्षक के सहायक (क्यू०),
बिहार, पटना।

प्रतिलिपि:-

1. आई०टी० मैनेजर, पुलिस महानिदेशक का कार्यालय, बिहार, पटना को कृपया सूचनार्थ। कृपया इसे आज ही वेबसाइट पर अपलोड किया जाय। साथ ही Indian Trade Journal, Kolkata के अंक में प्रकाशन हेतु Government of India, the Controller of Publications, Civil Lines, Delhi : 110 054, (Tel No. 011-23812527, FAX : 011-23817846), Email Id- sk.mondal.dgcis@nic.in के पतेपर भी अनिवार्य रूप से भेजा जाय।
2. Government of India, the Controller of Publications, Civil Lines, Delhi : 110 054, (Tel No. 011-23812527, FAX : 011-23817846), Email Id- sk.mondal.dgcis@nic.in को कृपया सूचनार्थ एवं आवश्यक क्रियार्थ प्रेषित। अनुरोध है कि उक्त निविदा का प्रकाशन Indian Trade Journal, Kolkata के अंक में करने की कृपा की जाय।

पुलिस महानिरीक्षक के सहायक (क्यू०),
बिहार, पटना।

Police Headquarters, Bihar, Patna
Notice Inviting Short Tender No.43/2016-17

1. Name of the Department : Office of Director General of Police, Bihar, Patna.
2. Last date & time for the acceptance of the short tender : 11 / 11 / 2016, Till 11:00 AM
3. Date & time fixed for the opening of the short tender : 11 / 11 / 2016 At 11:00 AM
4. Place fixed for receiving & opening the tender : Office of Director General of Police, Bihar, Patna.
5. Details of Job :

S.N.	Item name	Quantity
1	UAV (DRONE)	01

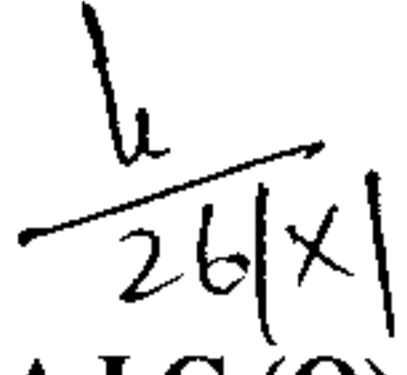
Specifications and other terms & conditions of the tender may be obtained in person from this office or may be downloaded from the website www.prdbihar.gov.in or www.biharpolice.bih.nic.in.

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26/11
AIG (Q)
Bihar, Patna.

Terms & Conditions Of Short Tender No.-43/2016-17

1. Tender of the firm will be accepted only on the condition that if their tenders are approved, the firm shall get registered with the Commercial Tax Department, Bihar, before the purchase order is issued.
2. The tender should be submitted in two parts : (i) Technical Bid and (ii) Financial Bid, duly sealed in two separate envelopes super-scribed as "Technical Bid" and "Financial Bid".
3. All relevant papers/ E.M.D./certificates/specifications etc. of items should be enclosed in the Technical Bid.
4. The rates of the items shall be quoted in the Financial Bid only.
5. All charges like BST/CST/Service Tax /VAT etc. shall be clearly mentioned in the Financial Bid and the net rate (in figures and words) including all taxes and duties must also be quoted. Vague offers like indicating taxes "as applicable" will not be accepted.
6. The rates of the items shall be quoted in the Financial Bid in two parts : (i) With AMC (Annual Maintenance Contract) and (ii) Without AMC
7. There should be no cutting, over writing or correction on the rates.
8. The technical and financial bids for each item should be submitted separately in separate envelopes. The technical and financial bids for more than one items submitted together in the same envelope shall not be accepted.
9. If the financial bid is submitted in the same envelope containing the technical bid then also it shall be summarily rejected.
10. The technical and financial bids should be put in two separate sealed envelopes and the envelopes should be marked short Tender No-43/2016-17 (Technical Bid) and short Tender No-43/2016-17 (Financial Bid) along with the name and address of the firm. The sealed envelopes containing the technical and the financial bids should be sent in another sealed envelope which should be marked as short Tender No-43/2016-17. This envelope should not bear the name and address of the firm.
11. Income Tax Returns of last three years, a photocopy of PAN of the participating firm and turn-over of any two of the previous three financial years should be submitted with the technical bid. It should be specifically mentioned whether IT return has been filed manually or electronically.
12. The turn over of the firm for the last reported financial year should be at least double the amount of the supply order which is being issued. A copy of the profit and loss Account of the firm for any two of the previous three financial years, certified by a Chartered Accountant should be submitted along with the tender. If the tenderer is authorized dealer or authorized supplier of manufacturing firm, then the certified details of the turnover of authorizing firm may be accepted. Tender specific authorization from the OEM must be submitted, but in certain cases where authorization from OEM is not required, the Technical-cum-User committee (T.U.C.) shall decide about exemption (if any) on a case-by-case basis; citing appropriate reasons for the same.
13. If there is some discount in the price of any item, it should be deducted from price itself and such discounts should not be quoted separately.
14. If the product is available on DGS & D rate contract, then a copy of the contract must be attached and pricing be done including all taxes.
15. A copy of the test report for the product issued by any established and recognized private Laboratory or by agency accredited by the Government should be attached with the technical bid. However if required, the Technical-cum-User committee (T.U.C.) can take decision regarding exemptions/relaxations (if any), citing appropriate reasons.

- 16. In case of Bullet Proof/Bullet Resistant items, test report of TBRL is compulsory.
- 17. Firms participating in this tender shall also submit duly sworn affidavit to the effect that " this firm has not been black listed/debarred by any Government or Semi Government or Private Agency and no sister concern of this firm is participating in this tender."
- 18. Firms participating in this tender shall also submit the self attested list of users of its equipments.
- 19. All items shall be received at Central Clothing Store, Patna, therefore price should be quoted FOR Central Clothing Store, Phulwari Sharif, Patna.
- 20. Firms will have to deposit a sum of Rs.50,000/- (Fifty Thousand) only as an earnest money deposit in the form of Bank Draft duly pledged in favour of the undersigned along with the quotations. The small scale units located in Bihar shall not be liable to deposit earnest money. Exemption from submitting E.M.D. will also be available to those who are registered with the Central Purchase Organisation/State Purchase Organisation and National Small Industries Corporation (NSIC).
- 21. Technical Bids will be opened on scheduled date and time in the office chamber of Police Headquarter. Representatives of the firms competing in the tender may remain present at the time of opening of the technical bid.
- 22. The technical bids will be opened first and placed before the Technical Committee of the Police Headquarters, Bihar. If the technical bids are found satisfactory as per tender conditions, it will be put before Central Purchase Committee of the Police Headquarters, Bihar. The firms may be required to participate in the demonstrations of the quoted product and discussions with this committee.
- 23. Any paper/document will not be accepted after opening the tender.
- 24. Successful firm will have to enter into an agreement after depositing a sum of 5% of the total value of the order as security money in the form of Bank Guarantee duly pledged in favor of undersigned.
- 25. The firm will be required to provide satisfactory after-sales service after the delivery of the product.
- 26. The firm will be required to supply all the items within the stipulated time frame as mentioned in the purchase order.
- 27. Payment for the delivered items will be made only after the acceptance report of the Inspection Committee of the Police Headquarters, Bihar.
- 28. The firm whose quotation is approved by the Central Purchase Committee of the Police Headquarters, Bihar, shall be invited to enter into an agreement with the undersigned.
- 29. It is expected to submit the duly filled chart attached herewith, along with the technical bid.
- 30. Indexing of the requisite documents must be done and submitted along with the technical bid.
- 31. Hands on training of the equipment must be imparted to the user group by the firm.
- 32. Director General of Police Bihar, Patna reserves the right to reject any or all the quotations partially or fully, without assigning any reason thereof.
- 33. The Quantity indicated may increase or decrease at the time of issuing purchase order.


A I G (Q)
Bihar, Police.

Only firms holding Industrial License for manufacturing UAVs can apply

1.	Physical Characteristics	Specification/Remarks
a.	UAV Weight with battery and	< 6 Kg
b.	UAV Size with propellers	< 150 cm x 150 cm
2.	UAV Performance Characteristics	Specification/Remarks
a.	Endurance	Minimum 40 minutes with either payload @ MSL <i>For every 1000m increase in takeoff altitude, endurance reduction of 10%. Endurance to be tested at ISA +20°C temperature</i>
b.	Range	Minimum 3.0 km LOS (Line-of-sight)
c.	Maximum launch altitude	1500m AMSL (Above Mean Sea Level) or more
d.	Maximum operating altitude	450m AGL (Above Ground Level) or more
e.	Functional Temperature Range	-10°C to +50°C (Test results from any recognized/accredited Lab to be submitted)
f.	Dust & Drizzle Resistance	IP53 rating or better (Test results from any recognized/accredited Lab to be submitted)
g.	Wind Resistance	16 knots or more
h.	Aural Signature	Nil aural signature at slant range of 300m (Test results from any recognized/accredited Lab to be submitted)
i.	Technical Life of UAV	Minimum 500 landings (Test results from any recognized/accredited Lab to be submitted)
3.	Operational Characteristics	Specification/Remarks
a.	Launch & Recovery	Autonomous Vertical Take-Off & Landing (VTOL)
b.	Maximum space required for recovery	25m x 25m open area
c.	Flight Modes	<ul style="list-style-type: none"> Fully autonomous from Take-off to Landing without using any R/C controller Altitude Hold Hover at a defined waypoint Autonomous Waypoint Navigation (predefined as well as dynamically adjustable waypoints during flight) Remotely Piloted mode for video' based navigation (RPV Mode)
d.	Deployment Time (from fully packed state to UAV Take-off)	< 10 minutes
e.	Packing Time (after UAV landing to fully packed state)	< 10 minutes
f.	Failsafe features	<ul style="list-style-type: none"> Return to Home on communication failure Return to Home/Land on low battery Multiple GPS on-board for GPS failure redundancy Return to Home in higher wind conditions
g.	Packaging and Storage	<ul style="list-style-type: none"> Waterproof Backpack that houses all the subsystems which allows the complete system to be carried and operated on field by the crew Hard cases for transportation & storage
h.	Operating Crew	Maximum 2

4.	Payload Characteristics	Specification/Remarks
a.	Payloads	<ul style="list-style-type: none">• Colour Electro Optic (EO) for day• Thermal Imager (TI) for night
b.	Payload Replacement Time	< 2 minutes
c.	Payload Freedom (in flight)	<ul style="list-style-type: none">• Pan: 360° continuous• Tilt: 90°
d.	Daylight Payload	<ul style="list-style-type: none">• Resolution : Minimum 720x480" Zoom: 30x Optical
e.	Night Payload	<ul style="list-style-type: none">• Resolution : Minimum 320x240• Zoom- 4x Digital• Modes: White Hot & Black Hot
f.	Target Detection Slant Range (Human Size Target)	<ul style="list-style-type: none">• Daylight: Minimum 600m• Thermal: Minimum 300m
g.	Stabilization	<ul style="list-style-type: none">• Gimbal stabilisation of both payloads :• Electronic stabilisation of video output at all zoom levels in real-time.
h.	Target Tracking	<ul style="list-style-type: none">• Vision based Autonomous Target Tracking• Real-time tracking of Static and Moving targets
i.	Night Recovery Beacon	Switchable (from GCS) LED light when operating with Night Payload
5.	Communication link Characteristics	Specification/Remarks
a.	Communication link capability	<ul style="list-style-type: none">• Transmit control commands from GCS to UAV• Transmit telemetry data from UAV to GCS• Transmit day and night video from UAV to GCS
b.	Video Link	Digital and Encrypted
c.	Frequency Band	2.4GHz or 5GHz band up-link and down-link
d.	Number of Channels/ Number of UAVs that can be operated in same vicinity	<ul style="list-style-type: none">• Minimum 4 Channels (User Selectable)• Minimum 2 UAVs to be operated in the same vicinity

6.	Ground Control Station (GCS) Characteristics	Specification/Remarks
a.	Computing Hardware	<ul style="list-style-type: none"> • 20" LCD monitor for video feeds. • Ruggedized Laptop / Tablet for flight control. • Test results from any recognized/ accredited Lab to be submitted. • Sunlight Viewable Display • Single Screen with Touch Screen Control for complete GCS operation including Map Display and Real-Time Video Display. • Battery operation : Minimum 2 full endurance flights in one battery charge.
b.	GUI Display parameters	<ul style="list-style-type: none"> • Geographic Map along with UAV location, UAV trajectory, camera view polygon, waypoints and flight plan. • Real-Time video from the UAV with on-screen display of important parameters like UAV co-ordinates, target (payload) co-ordinates and range from UAV, true North indication, Distance from Home etc. • Real-Time video should be displayed at all times during the flight. • Artificial Horizon indicating UAV attitude.
c.	Maps	<ul style="list-style-type: none"> • Capability to work with Google Maps and /or other available open source maps. Application should have the capability to download maps automatically after specifying location GPS co-ordinates. • Capability to integrate geo-referenced raster maps provided in at least one of the commonly used digital map formats (gif, tiff etc.)
d.	User Controls	<ul style="list-style-type: none"> • One click Take-off / Land / Hover • Set altitude of the UAV • Waypoint navigation • Dynamic flight plan adjustment • Point payload to ground co-ordinate function • RPV Mode which allows UAV to be flown in semi-autonomous mode by looking at the on-board video. • Switch on/off Night Recovery Beacon
e.	Joystick Controls	<ul style="list-style-type: none"> • Full camera controls • Pan / Tilt • Zoom in / Out • Black/White Hot • RPV Mode • Altitude control
f.	Video	<ul style="list-style-type: none"> • Video should be recorded in commonly portable video format (AVI/MP4 etc.) on the GCS. The UAV should not do any on-board recording. • Video of the full flight should be recorded by default

		with option to turn recording off. <ul style="list-style-type: none">• Capability to take image snapshots with on screen display. parameters at any time during flight.
g.	Pre-flight checks	<ul style="list-style-type: none">• Capability to perform pre-flight checks of the complete system before every flight for confirming the suitability of flightworthiness.
h.	Others	<ul style="list-style-type: none">• Essential telemetry data logging• Export of flight path in kml format for reviewing in Google Earth.• Port for data / video transfer to external storage devices.
7.	General Requirements	Specification / Remarks
a.	System configuration	<ul style="list-style-type: none">• One UAV with 4 batteries• One Daylight Payload• One Thermal Payload• One GCS with Communications System and its accessories• One Field repairs kit• One set of spare propellers and landing gears each• Waterproof Backpack• Hard Carrying Case• Battery Charger(s)
b.	Weight	<ul style="list-style-type: none">• Weight of complete system as defined in 7a. excluding Hard Carrying Case and Battery Charger(s) must not exceed 18 kg.