

पत्रांक संख्या/आपूर्ति/95-1-6-2020)/.....634.....

बिहार पुलिस मुख्यालय,
(आधुनिकीकरण, अपराध अभिलेख एवं प्रोविजन प्रभाग)

पटना, दिनांक- 02/09/20

सेवा में,

निदेशक,

सूचना एवं जनसम्पर्क विभाग,

बिहार, पटना।

विषय— निविदा आमंत्रण सूचना सं०-05/2020-21 के प्रकाशन के संबंध में।

निदेशानुसार उपर्युक्त विषय के संबंध में निविदा आमंत्रण सूचना सं०-05/2020-21 की प्रतियाँ भेजते 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।

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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।

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पुलिस महानिरीक्षक के सहायक (क्यू०),
बिहार, पटना

Police Headquarters, Bihar, Patna
Notice Inviting Tender No.-05/2020-21

1. Name of the Department: Office of Director General of Police, Bihar, Patna.
2. Last date & time for the acceptance of the tender : 25/09/2020, Till 02:00 PM
3. Date & time fixed for the opening of the tender : 25/09/2020, At 04:00 PM
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	Bollard	05 Set
2	UVSS	01
3	Baggage Scanner	01
4	Boom Barrier	04

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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Bihar, Patna

Terms & Conditions of Tender No.-05/2020-21

1. 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".
2. All relevant papers/ E.M.D./certificates/specifications etc. of items should be enclosed in the Technical Bid.
3. The rates of the items shall be quoted in the Financial Bid only.
4. All charges like IGST/CGST/SGST 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.
5. 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
6. There should be no cutting, over writing or correction on the rates.
7. 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.
8. If the financial bid is submitted in the same envelope containing the technical bid then also it shall be summarily rejected.
9. The technical and financial bids should be put in two separate sealed envelopes and the envelopes should be marked Tender No-05/2020-21 (Technical Bid) and Tender No-05/2020-21 (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 Tender No-05/2020-21. **This envelope should not bear the name and address of the firm.**
10. Income Tax Returns of last three years, a photocopy of GST registration number 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.
11. The turnover of the firm for the last reported financial year should be at least equal to 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.
12. 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.
13. 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.
14. 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.
15. In case of Bullet Proof/Bullet Resistant items, test report of TBRL or any Government Approved/Recognized Laboratory is compulsory.

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16. 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."
 17. Firms participating in this tender shall also submit the self attested list of users of its equipments.
 18. All items shall be received at Central Clothing Store, Patna; therefore price should be quoted FOR Central Clothing Store, Phulwari Sharif, Patna.
 19. 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 favor 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 Organization/State Purchase Organization and National Small Industries Corporation (NSIC).
 20. 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.
 21. 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.
 22. Any paper/document will not be accepted after opening the tender.
 23. 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.
 24. The firm will be required to provide satisfactory after-sales service after the delivery of the product.
 25. The firm will be required to supply all the items within the stipulated time frame as mentioned in the purchase order.
 26. Payment for the delivered items will be made only after the acceptance report of the Inspection Committee of the Police Headquarters, Bihar.
 27. 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.
 28. It is expected to submit the duly filled chart attached herewith, along with the technical bid if not the tender shall be summarily rejected.
 29. Indexing of the requisite documents must be done and submitted along with the technical bid.
 30. Hands on training for 3 weeks of the equipment must be imparted to the user group by the firm after successful installation.
 31. Director General of Police Bihar, Patna reserves the right to reject any or all the quotations partially or fully, without assigning any reason thereof.
 32. The Quantity indicated may increase or decrease at the time of issuing purchase order.
 33. The bids must be include the data sheet of individual item.

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Bihar, Police.

BOLLARDS : SPECIFICATION

- **5-FOLD – K4 Rated – 1 Sets**

The bollards cover a static impact load of 350 kN which corresponds to 7.5 tons at a speed of 48km/h, exceeding old DOS norm K4.

Blocking height above ground: 800 mm

Bollard diameter: 275 mm

Installation depth: approx. 1450mm

Wheel load: 100 kN

Impact load resistance:350 kN static load

Raising time: approx. 10 - 12 sec.

lowering time: approx. 9 - 10 sec.

Hydraulically locked in raised and lowered positions

At the lowest point of the bollard guiding tubes there are drainage sleeves for connection of drainage pipes.

Electrical Control and Control Elements:

The electrical PLC-control with all necessary switching elements for the bollards is located within the lockable outdoor steel casing together with the electro-hydraulic drive unit.

Raising and lowering of the 5-fold blocking bollard unit via 1 no. guard house push button set "Raise-Lower". The bollards can also be operated with any third-party devices.

Emergency operation (raise and lower) in case of power failure via integrated hand pump.

Long-Term Corrosion Protection:

Steel surfaces galvanized and plastic coated 4S-Coating.

Colour of plastic coating: RAL 3000 "Flame red"

Technical Characteristics:

Drive Unit: Electro-hydraulic

Electric motor capacity: Approx. 4 kW, 3-phase, 50/60 Hz, 400 V

Protection class: IP 55

Dimension of outdoor cabinet to be fixed to concrete plinth: approx. 1380 x 800 x 600 mm (H x W x D)

Static impact load: 350 kN horizontally

Wheel load: 100 kN vertically

Hydraulic fluid: Biodegradable or Mineral fluid

Operation temperature range: - 10 / + 60°C, other range on request

Power failure/ emergency operation: by integrated hydraulic hand pump Electric controls, inside outdoor cabinet: Steel cabinet, IP55

The Product & Technology of Under Vehicle Scanning System

The UVSS is a Computer-vision technology-based Under-Vehicle Scanning System (UVSS) using high end electro-mechanicals and camera based assembly to capture static image of the complete underside of any moving vehicle. The visual information captured by the system is synthesized by the system software and subsequently stitched seamlessly to produce a composite image of the entire underside of the vehicle, which facilitates efficient viewing to detect presence of any potentially dangerous objects. The system can be further integrated with any other security devices like Bollards, Boom Barriers, Tyre Killers, Spikes; Smart Card/ RFID based access control systems, etc. so as to provide a complete premise security solution.

UVSS Advantages

FEATURE	BENEFIT
<p><u>(1) Reliable & Accurate</u></p> <p>Provides a real-time high resolutions image of the entire underside of the vehicles, and can scan vehicles of all categories & sizes.</p>	<p>Efficient viewing for quick detection of hidden objects e.g. explosives, arm etc.</p>
<p><u>(2) Interruption Free Process</u></p> <p>Instantaneously scans any moving vehicle (upto a speed of 20 Kmph) without any blurring or loss of quality of the image.</p>	<p>Facilitates Peak-hour inspection when stopping each & every vehicle is not practical, and hence saves time – w/o any compromise</p>
<p><u>(3) Current-v/s-Previous Image Comparison</u></p> <p>Facilitates intelligent comparison of the current underside image with the very previous one the same vehicle.</p>	<p>Detects any unusual modification, thus reducing chances of missing out any kind of disguised modifications carried out at the underside.</p>
<p><u>(4) State-of-the-Art Software</u></p> <p>User-friendly interaction with the system by anyone, even if illiterate.</p> <p>Also, can be networked with any centralized monitoring & database management system.</p>	<p>Easier to train to navigate the system.</p> <p>Multi-level + Multi-point access and monitoring is possible.</p>
<p><u>(5) Data Logging, Remote Access & Reporting</u></p> <p>Search function & Report Generation facilities for all vehicles' data. e.g. date/time wise underside images, frontal views, License plate etc.</p>	<p>Generates any MIS related reports, and also facilitates any post-event analysis.</p>
<p><u>(6) Automatic Vehicle Number Plate Reading</u></p> <p>Automatically records & stores upto 1.5 L vehicle data including underside images, Front view, OCR based ANPR system tuned to Indian No. plates.</p>	<p>Optional feature to read with very high accuracy level on Indian license plate or High Standard Number Plate.</p>
<p><u>(7) Integration with other Security Systems</u></p> <p>Can be seamlessly integrated with other security access control systems e.g. Boom Barriers, Spikes, boulders, Tyre killers, RF tags & Smart Cards etc.</p>	<p>Can serve as a Single-point terminal for multiple point vehicle entry controls.</p>
<p><u>(8) Driver Image Capture</u></p> <p>It can also capture the driver photo so that person can see who is driving the card.</p>	<p>Can capture the driver photo and store in the database for future reference</p>

Technical Specifications_3D UVSS

Sl no	Specifications of item	
	Technical Specification	
	Supply & installation of Under Vehicle Scanning System, to enable inspection of any vehicle's underside through a static composite image of the vehicle, as per the details given below:-	
1	The UVSS must be of Indian origin, with regards to its design, development, and manufacturing, and the original equipment manufacturer (OEM) should preferably be an Indian ISO-9001 certified company. The quoted OEM's UVSS brand installed directly or through its partner should have at least fifty (50) or more such references anywhere within India. A list of such references must be furnished. Copy of supply orders at least three organization to be furnished before acceptance of proposal from vendor.	
2	The UVSS should produce multiple angular views of high resolution 3D COLOR images of the complete underbody of any vehicle passing over it using dual Area-scan based technology.	
3	The UVSS should be capable of handling vehicles moving at different speeds ranging from Zero (0) to 25 Km/hr, while the morphed composite images so Captured by it should be automatically and dynamically adjusted according to the speed of the vehicle using multiple induction loop based sensors.	
4	Each of the dual imaging cameras should be of high resolution Area-scan, GigE type with XGA resolution of (1920 x 1600) or above.	
5	The UVSS should be capable of producing a clear and undistorted image of the vehicle underside, even when a vehicle completely stops / halts over the scanning unit, i.e. it must be able to produce seamless and perfect composite images of the underside irrespective of stoppage or non-uniform motion of the vehicle over the scanner.	
i	Camera Type	Gigabit Ethernet progressive camera
ii	Sensor	CMOS XGA resolution (1920 x 1600) or better
iii	Field of View	> 135
iv	Format	Giga bit Vision compliant specifications
v	Composite Image resolution of the underside	4 megapixel
vi	Camera certification	CE
vii	Camera casing ingress protection rating	IP 67 or better, duly certified by NABL accredited lab
viii	Load bearing capacity (environmental protection)	40 tons or above
6	The UVSS should not use either a digital Line-Scan camera based technology or any type of analog cameras to form composite image without any distortions or Fisheye effect.	
7	The UVSS should produce a fully scanned pre-processed ready to use 3D footprint model of the vehicle's undercarriage.	
8	The UVSS should enable detection of suspicious objects that are hard to see via single view scanning systems, including visual access to cavities and niches, areas around	

	suspensions, below the engine areas, side wall of fuel tanks & exhaust pipes etc.	
9	The UVSS must have a dynamic multi-view feature and it can be dynamically controlled by the user. (the operator should be able to view the underside by hovering the mouse from left to right of the image)	
10	The UVSS must also provide a 3D video of the complete underside of any vehicle.	
11	If found anything suspicious, the UVSS should have a feature to view 3D video from left & right image in order to minimize the threat.	
12	The UVSS should have a feature to magnify (zoom) the composite image (left & right) and 3D video up to 24 x in order to facilitate a closer view of any part of the composite image and 3D video.	
13	The UVSS should have a feature to play any particular/specific zoom area of 3D video.	
14	The UVSS should compare both (left & right) view with the help of license plate/type database of underside images.	
15	The underside illumination must be adequate and obtained through a dual array of long life, LED lighting modules. Halogen or CFL based array of lighting elements for the purpose of illumination of the underside will not be accepted.	
16	The UVSS should also provide a feature to capture the image of the driver of all RHS driven vehicles, captured through a suitable driver view camera.	
17	The system should have an Automated Number Plate Reading System (ANPRS) tuned to the Indian license plates, i.e. it should be able to automatically read and record a wide range of vehicle registration number plates' alpha-numeric characters, written in English. Also, the frontal image view of the vehicle to be provided in the GUI, to facilitate manual viewing of the license plate image. It should be capable of reading and analyzing Military BA Number license plate too.	
	The Number Plate & Driver Image view cameras must have the following minimum specifications	
	Camera Specification	
i	Effective Range	4 to 5 meters for Frontal camera & minimum 4 meter for Driver camera
ii	Camera Resolution	25fps @ 4 megapixel or higher
iii	Camera gain and shutter	Adjustable 1/100 to 1/10000 sec
iv	Lens	10-40 mm Varifocal
v	Power Consumption	<12W
vi	Power Supply	12 V DC
vii	Operating Temperature	0°C to +50°C
	B. Software Specification	
i	Supported OS	Windows/Linux
ii	Type of Plates	Recognition for English, Hindi or any regional fonts
18	The UVSS must give output of all the data simultaneously i.e. the composite images, driver photos, vehicle's frontal image and its number display -all should be displayed on the monitor almost instantaneously after the vehicle cross the unit. Also, the system should have a facility to view the composite image, off-line also, for all vehicles.	
19	The UVSS applications & operating software should preferably be based on open architecture on Linux or Windows platform. It must have a user friendly Graphical User Interface (GUI) with provision for multiple users logging of events and search	

	facility.
20	The UVSS system must have a facility to take back-up of all the transactions to storage media.
21	The overall UVSS must be CE Certified. A certificate issued by a competent certifying agency, must be attached with the tender.
22	The underground cameras & lighting units of the UVSS must be enclosed in a suitable all-weather- proof housing of IP 67 equivalent or higher standard. A valid certificate in this regard, after requisite testing carried out, issued by a Govt. / NABL accredited laboratory in India, must be attached with the tender, without which the bid is liable to be rejected.
23	The overall installed unit should be properly designed, and its structure should be able to withstand a vehicle axle-load up to 40-Tons at any point over the structure, so as not to suffer any accidental physical damage to the unit and the components under the pit cover.
24	The UVSS must be aesthetically designed so that it must blend seamlessly with the landscape, forming a natural look with no discomfort for the driver / passengers of the vehicle being scanned.
25	The bidder should be able to show a live working demo of the system in India at any actual equipment user's premises.

Boom Barrier

Sr. No	Item	Description
1	Clear Passage (in mm)	6000
2	Application	Outdoor
3	Drive	Electro-Mechanical Drive
4	Version	Left-Handed (Changeable to Right Hand)
5	Logic Control	Included
6	Intelligence	24 VDC Operator with Microprocessor based controller
7	Power Supply	230 +/- 10 % VAC, 50 Hz.
9	Finish	Control Unit: Powder Coated in a suitable color. Boom: AL powder Coated with reflective strips.
10	Boom Specifications	Rectangular section aluminum bar 90 x 32 mm.
11	Housing Dimension	W:400 mm., D:400 mm., H:1065mm. Approx.
12	Protection Rating	IP54
13	Opening & Closing time	2-4 sec
14	Power off	Manual Opening Possible

15	Safety	1.Optical Sensor: It will not allow the boom to come down until there is a presence of vehicle underneath it and safety rubber pad on top & lower of boom to prevent from major damage in case of boom falling	
16	Duty Cycle	Intensive Use	
17	Operating Temperature	-20 to +55	
18	Integration	Shall Function in integration with smart Cards, proximity reader-based access control systems.	
19	Power Consumption	200 Watts	
20	MCBF	5 Million Cycle	

Technical Specifications - X-Ray Baggage Scanner

1. X Ray baggage Scanner Technology should be based on Dual energy based isometric X-Ray imaging.
 2. The Baggage scanner should produce isometric view (virtual 3D view) of the objects scanned to have more detailed information, which are not visible in traditional single view baggage scanners, which generates only the top or bottom (2D) view of the scanned objects.
 3. Machine should generate the images in such a way that the depth of any scanned object can be visualized appropriately to further analyze the details of the object inside a baggage for better identification of harmful objects like Gun/Knife etc..
1. Tunnel Size - Minimum 60 cm W (width) x Minimum 40 cm H (Height)
 2. Conveyor belt speed should be between 0.2 and 0.3 meter per second. Conveyor movement bi-directional
 3. All machines should operate on 230 VAC, 50 Hz power supply
 4. Conveyor Capacity - 160 kg evenly distributed
 5. Through put should be 500 bags per hour
 6. Tube Voltage : Maximum 160 kVA
 7. Tube Current 0.3 to 1.2 mA (Must be Adjustable)
 8. Duty Cycle - 100%
 9. The X-ray beam divergence should be such that the complete image at maximum size of bag is displayed without corner cuts.
 10. The radiation level should not exceed accepted health standard (0.1m R/Hr at a distance of 5 CM from external housing). Relevant certificate from AERB.
 11. The operating temperature should be -5° to 50° C (Test Certificate from NABL accredited Lab to be submitted at the time of bidding)
 12. Storage temperature - 20° to 60° C (Test Certificate from NABL accredited Lab to be submitted at the time of bidding)
 13. Relative Humidity- 10 to 95% non-condensing
 14. Resolution: The machine should be able to display single un-insulated tinned copper wire of 42-SWG or 38-AWG
 15. Steel penetration: 30 mm or above
 16. Sensors > 1000 diodes, L-shaped detector (folded array type)
 17. Video display - 17" or better LCD Monitor High resolution, low radiation, flicker free, resolution at least 1280x1024, 24 bit true color real time processing
 18. **Health & Safety** - The machine must comply with requirements of health and safety regulations with regards to mechanical, Electrical and radiation hazards. The supplier/manufactures should furnish Test Certificate from Atomic Energy Regulatory Board of India regarding radiation safety.
 19. **Computer Specifications** -
 - Processor: Intel i3 or better
 - Memory: 4GB RAM
 - Storage: 160GB HDD
 - Video Card: 512MB Graphic card
 - Platform: LINUX
 - Backup: UPS (10 Min) for Computer
 22. **Other Features**
 - Multi energy imaging (4 color palette)
 - Crystal clear images

- Black & white viewing
- Organic/ inorganic stripping
- High penetration
- Variable edge enhancement
- Zoom 32 X or more
- Facility to view previous bag
- Manual image archive
- Configurable image processing keys
- Facility to count baggage
- Date /time display
- Have search indicator
- Have facility of high density alert (HDA)
- Manual Scan facility
- Automatic image archiving

23. Equipment manufacturer should have ISO 9001 certified factory in India. Certificate to be submitted.

24. Production license from AERB should be submitted.

25. **Film Safety:** Guaranteed safety for high-speed films up to ISO1600. The machines should be film safe.

In other words photographic films must not be damaged due to x-ray examination

26. Preference for equipment manufactured by MSME registered OEM.

27. **Optional Features**

- Threat image projection (TIP)
- Network Supervisory workstation (optional), capable of connecting multiple machines to one supervisory console.
- The X-Ray Baggage Scanner should have four cameras to image the person who has kept the bag and the bag video at both sides of the machine. This video should be recorded and should be available for post event analysis.
- Conveyor Accessories (Input/ Output Rollers) - 0.5 mtr length