

पुलिस महानिदेशक का कार्यालय, बिहार, पटना।

पटना,दिनांक- 19-11-15

सेवा में,


निदेशक,
सूचना एवं जनसम्पर्क विभाग,
बिहार, पटना।

विषय- निविदा आमंत्रण सूचना सं0-35/2015-16 के प्रकाशन के संबंध में।

निदेशानुसार उपर्युक्त विषय के संबंध में निविदा आमंत्रण सूचना सं0-35/2015-16 की पाँच प्रतियाँ (सी0डी0 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 पी0आर0डी0 वेबसाइट पर भी प्रसारित करने की कृपा की जाय। उक्त निविदा का प्रकाशन Indian Trade Journal, Kolkata के संस्करण में भी अनिवार्य रूप से कराया जाय, जिसका पता निम्न है :-

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

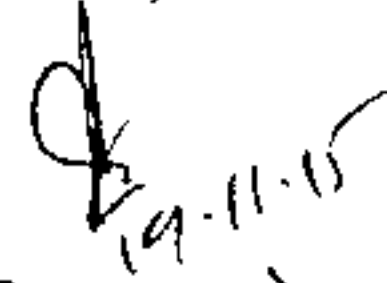
इस निविदा आमंत्रण सूचना का प्रकाशन किन-किन समाचार पत्रों में किया गया इसकी सूचना देने की कृपा की जाय।
अनु0-यथोपरि।


पुलिस महानिरीक्षक के सहायक (क्यू0),
बिहार, पटना।

प्रतिलिपि:-

1. आई0टी0 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 पते पर 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 (क्यू0),
बिहार, पटना।

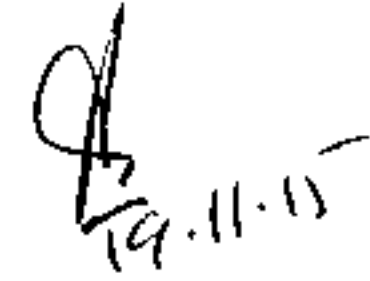
Police Headquarters, Bihar, Patna
Notice Inviting Tender No.35/2015-16

1. Name of the Department : Office of Director General of Police, Bihar, Patna.
2. Last date & time for the acceptance of the Tender : 14/12/2015, Till 11:00 HRS.
3. Date & time fixed for the opening of the Tender : 14/12/2015 At 15:00HRS.
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	Breath Analyzer (with printer)	85
2	Global Positioning System (GPS)	227

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.org or www.biharpolice.bih.nic.in.

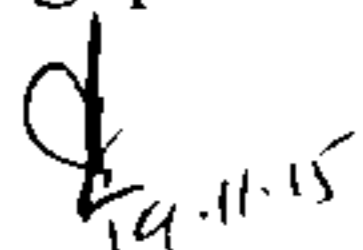

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Bihar, Patna

Terms & Conditions Of Tender No. 35/2015-16

10

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/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 Tender No-35/2015-16 (Technical Bid) and Tender No-35/15-16 (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-35/2015-16. This envelope should not bear the name and address of the firm.
11. Up-to-date Income Tax Returns, Turn Over of last three financial years and a photocopy of PAN of the participating firm 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 2014-15 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 the 2014-15 financial year, 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.
13. If there is some discount in the price of any item, it should be deducted from price itself and 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 a competent authority within last one year should be attached with the technical bid.

16. In case of BP/BR 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 in the form of Bank Draft duly pledged in favour of the undersigned along with the quotations.
21. Technical Bids will be opened on schedule 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 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 compulsory 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.


14.11.15
A I G (Q)
Bihar, Police

SPECIFICATIONS OF ALCOHOL BREATH ANALYZER

1. It should be based on Electrochemical Fuel Cell Technology, mainstream technology and not on side stream technology, where in the whole breath sample is sent to the sensor.
2. It should be ergonomically designed that the exhaled breath from the subject is not directed to the testing officer but routed back towards the subject so as to avoid passing on air borne infection to the testing officer.
3. In the presence of the person under intoxication or while talking with the person under intoxication the presence of Alcohol should be displayed in the machine during passive test. There should be a provision to detect even though the person is under intoxication not cooperating for breath test.
4. LCD display showing the test result with memory location number with date and time.
5. Accuracy range should be + or - 5mg/100ml at 100mg/100ml or + or - 0.005 BAC at 100 BAC at 100 BAC.
6. Working temperature is between -10 to +50 Celsius Ambient Temperature.
7. Duration of sample taking should be less than 5 seconds.
8. It should have a measurement range of 0-500 mg/100 ml BAC and 0-2-5 mg/BrAC
9. It should have a memory of at least 10000 measured values with date and time.
10. It should be handy, portable, user friendly and easy to operate.
11. The recovery time should be 5 to 30 seconds for a negative test and around 45 seconds for a positive test at 200mg/dl of BAC.
12. It should be possible to detect in non-cooperative suspects instantly using passive test, so as to randomly screen suspects before subjecting them to active breath alcohol testing.
13. It should be able to run on inexpensive LI-ION rechargeable batteries, which last for at least 200 tests on a single charge.
14. It should have power save mode.
15. The device should be capable of transferring data to Printer or PC through USB.
16. It should give accurate result in extreme Humid conditions as well.
17. Safety and quality standards –US FDA or European CE certification to MDD.
19. Warranty for 2 years and AMC/CMC for next 05 years

F. No. IV-21011/36/2009-Prov.I
 Bharat Sarkar/Government of India
 Griha Mantralaya/Ministry of Home Affairs
 PM Division/Prov. I Desk

26, Man Singh Road, Jaisalmer
 New Delhi, Dated: 15 November, 2009

To: DsG : AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR

Subject: Trial Directives for Global Positioning System

The Trial Directives in respect of Global Positioning System as per Annexure have been accepted by the Competent Authority in MHA

2. Henceforth, all the CAPFs should trial evaluate the above items strictly per the laid down Trial Directive and Technical Specifications/QRs.

Yours faithfully



(S. B. Na)
 Under Secretary to the Govt. of India
 Tel : 2338

Copy forwarded for necessary action to :-


- (i) Director, NIC, MHA : It is requested to host the Trial Directives (soft attached) on the MHA website (under the page of Organisational Security Police Modernisation Division- Qualitative Requirements)




(Ritesh Kur)
 Section Officer (Procurement)

Copy to : Director (Procurement), MHA.
 Copy for information to : PS to JS (PM)

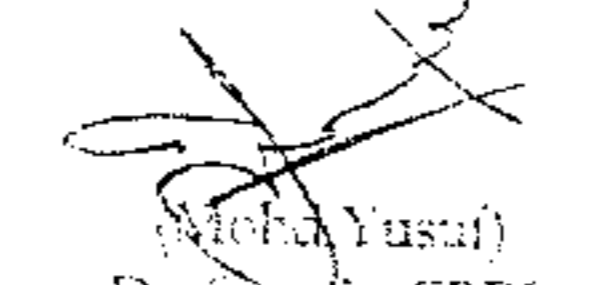
(g) Physical	
(i) Weight	Max 300 grams with batteries.
(ii) Display	High contrast color display with backlighting of display
(iii) Keyboard	Should have keys or multi-function keys for easy & quick operations like navigation, setup, illumination, Goto, point logging and marking.
(iv) Case	Ruggedised and water proof
(h) Temperature Range	-10 degree C to +60 degree C
(i) Memory	Minimum 1 GB additional memory through SD card should be provided with the unit.
(k) Warranty	Free warranty for 12 months with spares


 (Dr. Mrs. Indu Gupta)
 Addl Director, DRDO


 (A K Gupta)
 Dy Director, DCIPW

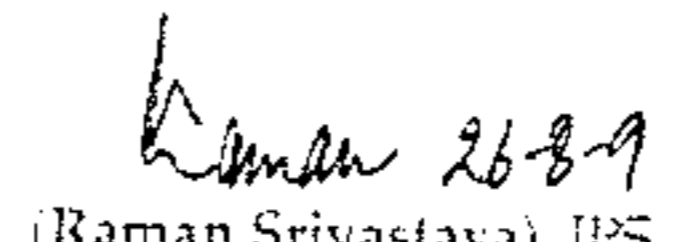

 (Vanita Yadav)
 SSO(E), BPR&D


 (Lt Col Rajan Talwar)
 HQ DGQA
 Joint Director


 (Mohd Yusuf)
 Dy Comdt, CRPF


 (Priyaranjan Kumar)
 Dy Comdt, SIW, BSF

~~APPROVED / NOT APPROVED~~


 (Raman Srivastava), IPS
 Director General
 Border Security Force

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**TRIAL DIRECTIVE
FOR
GLOBAL POSITIONING SYSTEM
(GPS)**

CONTENTS

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INTRODUCTION:-

One should be able to determine ones position accurately, at any point on the earth's surface, at any time, in any weather conditions. GPS is a satellite-based system that uses a constellation of 24 satellites to give a user an accurate position

All GPS positions are based on measuring the distance from the satellites to the GPS receiver on the earth. This distance to each satellite can be determined by the GPS receiver. The basic idea is that of resection, which many surveyors use in their daily work. If you know the distance to three points relative to your own position, you can determine your own position relative to those three points. From the distance to one satellite we know that the position of the receiver must be at some point on the surface of an imaginary sphere which has its origin at the satellite. By intersecting three imaginary spheres the receiver position can be determined.

GPS is a multi channel receiver which receives the signal from the satellites and calculates the positional data in user defined co-ordinates at a defined Map Datum. It gives own position Co-ordinates in Military Grid Reference system i.e. in metric system in reference to Easting & Northing grid lines. GPS is used to get the own position as well as for navigation to any unknown place whose co-ordinates are known. It gives the accuracy of less than 10 meters.

AIM:-

To frame trial directives to facilitate BOOs to carry out physical evaluation of Tender sample of Global Positioning System (GPS) at the time of procurement.

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GENERAL INSTRUCTIONS-

1. This trial directive is issued to assist and guide the evaluation committee. Nothing in this trial directive absolves the Board of officers from their responsibility to ensure that the evaluation is carried out strictly as per the specifications in every respect.
2. The Evaluation committee may carry out additional test which they consider necessary after seeking approval of competent authority, to verify the quality of the tender sample with the specifications.
3. The Evaluation committee should ensure proper safety of man and equipment during evaluation to avoid any damage.
4. Trial / evaluation will be conducted in presence of firm representative only.

COMPOSITION OF THE BOARD:-

The physical evaluation of the tender samples of Global Positioning System (GPS) will be carried out by the Board of Officers detailed by the competent authority as per the value of the total stores.

GENERAL REQUIREMENT:

Following test instruments should be available during the trial:

- (a) Weighing Machine.
- (b) Measuring Tape and Scale.
- (c) Multimeter.
- (d) Desktop Personal Computer & Laptop.
- (e) CD of Survey of India (Military map) of an area in format available with CAPFs.
- (f) Detailed area map (military map) of the place of trial.
- (g) 02 No's of GPS as tender sample per firm for evaluation.

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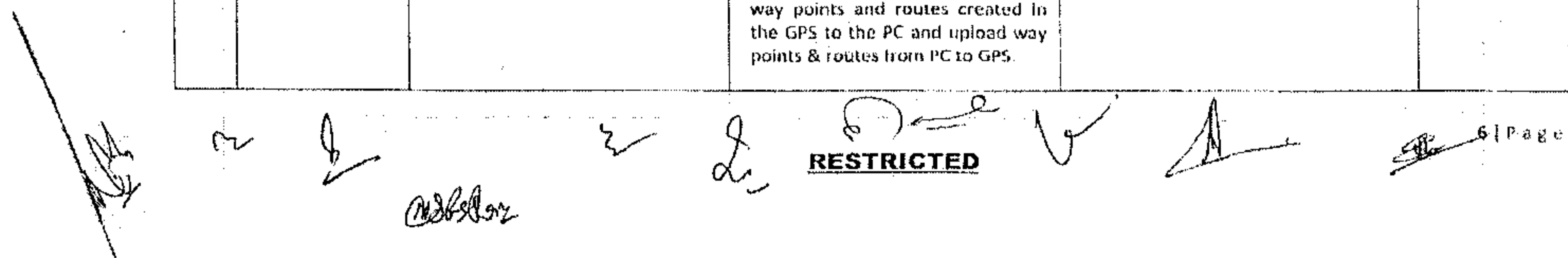
TRIAL DIRECTIVE FOR GLOBAL POSITIONING SYSTEM (GPS)

S No	PARAMETER	SPECIFICATION	Trial procedure suggested for Board of officers	Result expected / desired	Complied / Not Complied
A	Navigation features:				
a)	Display	LCD Display size 2.6" minimum diagonal.	Measure the LCD Display size diagonally with the help of scale or measuring tape.	The size of the LCD Display must be minimum 2.6".	
b)	Routes	Minimum 200 routes with compatible SD memory card.	Switch 'ON' the GPS and create 200 routes.	The GPS must have the memory to save minimum 200 routes with compatible SD memory card.	
	Way points	Unit must have capacity to store 2000 way points.	Switch 'ON' the GPS and save 2000 way points.	The GPS must have capacity to store 2000 way points.	
c)	Tracks	Must be able to store 10,000 track points and 200 tracks.	<ul style="list-style-type: none"> ➤ Check the storage capacity of GPS through its hardware characteristics by creating a route and track it physically. ➤ The firm's rep will show the storage of 10,000 track points and 200 tracks physically in GPS or by unloading from PC. 	➤ The system must be able to store 10,000 track points and 200 tracks.	
d)	Track back	Storage of track log files should be provided.	Create a route and then activate it after reaching destination, check the back track log in the GPS as per the procedure provided in the GPS.	Storage of track log files of Track back must be provided.	
e)	Map Datum's	Should have the facility for user-defined datum with inbuilt standard datum's including Indian datum.	Check the GPS for standard Map datum's including Indian datum, WGS 84 & user defined datum provided in the system.	The system must have the facility for user-defined datum with inbuilt standard datum's including Indian datum.	
f)	Coordinates	Lat/ Lon, UTM, MGRS (Indian GR system with facility of selecting any	Check the GPS for Co-ordinate system including Lat/Lon, UTM,	The GPS must have coordinate system including Lat/ Lon, UTM, MGRS (Indian	


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		of the Indian Zones) and other grid based on user defined requirements.	MGRS (Indian GR system) and other grid based on user defined requirements. Check the facility of selecting Indian GR system including options of pre loaded nine zones of Indian grid reference coordinate system.	GR system with facility of selecting any of the Indian Zones) and other grid based on user defined requirements.	
g)	Navigation screens	Should display battery status, own position, altitude, compass, graphical plot, speed and time, total distance covered and cross track error.	<ul style="list-style-type: none"> ➤ Switch 'ON' the GPS and check the display screens for battery status, own position coordinates, altitude, compass, graphical plot, speed & time and verify its functionality. ➤ Set the GPS to navigate a way point far away (≥200 meters) from the own position and start navigation. Check the total distance covered and cross track error display screen during the navigation. 	The system must have display screens of battery status, own position, altitude, compass, graphical plot, speed & time, total distance covered and cross track error.	
h)	PC Interface	Should provide cable with software to upload and down load data with high speed USB Port.	Store 5 to 10 way points and create two routes having 3 to 4 legs in the GPS. Install the software in the PC and connect the GPS with the help of cable provided through USB port. Create & store 5 to 10 way points and two routes having 3 to 4 legs in the PC. Down load the way points and routes created in the GPS to the PC and upload way points & routes from PC to GPS.	GPS must have a cable & software to interface it with the PC through high speed USB port for uploading and downloading the data from GPS to PC & vice versa.	


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i)	Alarm	Off track visual indication and arrival audio alarm.	Switch 'ON' the GPS and navigate to a way point ≥ 200 meters away. Check the GPS navigation screen for 'OFF track' visual indication and arrival at destination audio alarm.	GPS must have Off track visual indication and arrival audio alarm.
j)	Way point icons	Should be provided	Switch 'ON' the GPS and store 10 way points by allotting icons from the icon bank provided in the database of GPS.	GPS must have way point icon bank to allocate an icon to the way point during storing.
k)	Compass	Should have built in 3 axis electronic compass for real time direction indication without GPS fix.	Check the GPS for built in 3 axis electronic compass for real time direction indication without GPS fix i.e. inside a building where the satellite signals are not accessible.	GPS must have built in 3 axis electronic compass for real time direction indication without GPS fix.
l)	Radio-Comn. Interface	Optional (to be defined by the user) if required.	The facilities of Radio communication interface should be checked as per the user requirement.	As per the user requirements.
B. Performance				
i)	Receiver	Min 12 Parallel channel receiver.	Check the receiver channel available in the GPS by switching 'ON' it under open sky.	The GPS receiver must be able to receive the data from minimum 12 satellites at the same time.
ii)	Acquisition	≤ 20 second hot, ≤ 60 seconds warm and 3 minutes cold.	Insert the battery or cells in the GPS and switch it 'ON'. Count the time taken to fix the position by the GPS during following conditions: <ul style="list-style-type: none"> > When GPS is in switched 'OFF' condition from last 3 to 4 days. > When GPS is in switched 'OFF' 	The acquisition time taken by the GPS to fix the position must be as under: <ul style="list-style-type: none"> > 3 minutes in cold. > ≤ 60 seconds in warm

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			condition from last 3 to 4 hours. <ul style="list-style-type: none"> > While walking on ground in open space with GPS position fixed and pass through a overhead obstacle (where satellite signal is not accessible) then move again to the open space (count the time from crossing the Overhead obstacles to open space till GPS fix). 	<ul style="list-style-type: none"> > ≤ 20 second hot
iii)	Mapping units and software	Loading of maps of user specific format in the GPS unit along with map loading software should be provided. Also a option to load satellite images into GPS unit.	<ul style="list-style-type: none"> > Check the GPS display with map in background by loading military map in the system with the help of map loading software (if required) provided with the GPS. > Check the GPS by loading satellite map images from web site into the system through PC. <p>Note: user must know about the specific format of the maps available with the concerned CAPFs and provide a soft copy of an area as a sample to Board at the time of evaluation. So that firm may arrange demonstration to load the map in the GPS.</p>	<ul style="list-style-type: none"> > The GPS must have the map loading software to load the map of user specific format in the system. > It must also have option to load satellite images in to the unit.
iv)	Unit to Unit transfer	Data can be transferred from one unit to another unit.	Create limited data base of way points and routes in two GPS. Transfer the data (from data base) from one system to another and vice versa. <p>Note: 02 GPS to be provided by the firm as tender sample for evaluation.</p>	The GPS must have the facility to transfer the data from one unit to another unit.

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H.	Temperature	-10° C to +60° C	The firm has to submit National / international accredited Lab report / certificate in respect of the same.	<ul style="list-style-type: none"> > The GPS must be able to work in the temperature range of -10° C to +60° C. > Check the national/ international accredited lab test report for the same. In case of any doubt in the test report, the veracity of the same may be checked from the concerned lab.
J.	Memory Backup	Minimum 1 GB inbuilt memory must be provided along with additional memory of 2 GB through SD card should be provided with the unit.	Check the inbuilt memory of the GPS and additional memory through SD card.	GPS must have minimum 1 GB inbuilt memory along with additional memory of 2 GB through SD card.
K.	Warranty	The vendor will provide the AMC (including spare part if required) by the user for 05 years after expiry of warranty. Free warranty for 12 months with spares.	Not applicable at the time of physical evaluation as it is a commercial issue.	-NA-
L.	Spares			
l)	Battery	One set spare battery should be provide as mentioned in Para E.	Not applicable at the time of physical evaluation	-NA-

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M.	Engineering Support Package:		
	<ol style="list-style-type: none"> 1. Technical literature. 2. Training manual and user hand book. 3. Illustrated spare part list duly priced. 4. Repair and maintenance training should be arranged for about 10 working days to minimum 20 Technicians and operational training to 100 users. 	Not applicable at the time of physical evaluation.	-NA-

[Signatures and names of officials]
 (Lt Col S K Ahluwalia) Jt Director (AVL), DGQA(L)
 (R S Chandel) Sqn Cdr, 2IC, TSG, NSG
 (Uma Kant) 2IC, ITBP
 (N K Nayyar) Dy Director, DRDO
 (S K Atri) DC (SIW), BSF
 (Til Bindu Kumar Singh) AC, SSB
 (A K Shukla) AC(Tech), CISF
 (N S Raghav) Trg JCO, 52 (SAG), NSG
 (Pradeep Sharma) SI(Tech), SIW BSF
 (Nedra Kumar) Trg NCO, 52 (SAG), NSG

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C.	Update rate	One per second continuous.	Check the GPS positional data update rate in the system.	The GPS must update the position after receiving the data from satellite at the rate of one per second continuous.
D.	Accuracy	< 10 meters.	Select a prominent point whose GR is known. Take the GPS to the point and check the positional data of that positional point through GPS. Compare both the values.	The accuracy of the GPS in showing positional data must be less than 10 meters.
E.	Power (Source)	Rechargeable Batteries (Ni-MH or Lithium) and compatible Battery charger with option of standard 'AA' batteries. The battery should function for 15 hours minimum in operational mode and 48 hours minimum in standby mode.	<ul style="list-style-type: none"> ➤ Check the type & size of rechargeable battery provided. ➤ Check the battery charger for compatibility & suitability with the cells/battery provided. ➤ Check the GPS for the operational & standby mode. ➤ Switch 'ON' the GPS in operational mode with the fully charged cells/battery provided. Note down the running hours of the cells/battery till GPS remains fully functional. ➤ Similarly, Switch 'ON' the GPS in standby mode with the fully charged cells/battery provided. Note down the running hours of the cells/battery till GPS remains fully functional. 	<ul style="list-style-type: none"> ➤ The rechargeable batteries must be 'AA' size & Ni-MH or Lithium. ➤ A compatible battery charger with option of standard 'AA' cells /batteries must be provided with the GPS. ➤ The GPS must have operational & standby mode. ➤ Provided cells/battery must run the GPS for minimum 15 hrs. continuously in operational mode on single charge. ➤ Provided cells/battery must run the GPS for minimum 48 hrs. continuously in standby mode on single charge
F.	Operating system	The GPS software should be compatible with MS Windows operating system 2000 onwards	➤ Check the compatibility of GPS software with Microsoft Windows OS 2000 onwards by	➤ The GPS software must be compatible with MS Windows operating system 2000 onwards that

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		that normal Personal Computer and Laptop use.	installing on Desktop & Laptop and transferring the GPS data from PC to GPS & vice versa. ➤ In addition, an assurance certificate in r/o the same should also be obtained from the OEM.	normal Personal Computer and Laptop use supported with the assurance certificate.
G.	Physical			
i)	Weight	Max 350 grams with batteries.	Measure the weight of the GPS with cells or battery on weighing machine.	The weight of the GPS must be Max. 350 Gms with batteries.
ii)	Display	High contrast colour display with backlighting of display.	Check the display of the GPS for high contrast colour and backlighting of display.	<ul style="list-style-type: none"> ➤ Display of the GPS must be high contrast colour display with backlighting of display. ➤ The map details on display must be readable.
iii)	Keyboard	Should have keys or multi function keys for easy & quick operations like navigation, set up, illumination, Goto, point logging and marking.	Check the GPS for the operations like navigation, set up, illumination, Goto, point logging and marking through keys or multi function keys.	GPS must have keys or multi function keys for easy & quick operations like navigation, set up, illumination, Goto, point logging and marking.
iv)	Case	Ruggedized and water proof.	<ul style="list-style-type: none"> ➤ Immerse GPS in water up to a depth of 3 feet for 30 minutes. ➤ The firm has to submit National / international accredited lab report / certificate in respect of ruggedness. 	<ul style="list-style-type: none"> ➤ The case of the GPS must be water proof. Water contents must not ingress in the GPS after immersion test. GPS must function properly after the immersion test. ➤ Check the national/ international accredited lab test report for the same. In case of any doubt in the test report, the veracity of the same may be checked from the concerned lab

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