

**Response to Pre-bid Queries**

**04.12.2017**

**Bid for Purchase of Differential Global Positioning System (DGPS) on behalf of Gujarat State Lion Conservation Society,  
Junagadh.Tender No. HWT031017464**

Sr. No.	Tender Reference		Query / Clarification / Suggestions from the Venders	Responses to Vendors
	Page No./Section No./ Clause No.	Tender Description		
1	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/Measurements Specification	Satellite Tracking:Should be Capable of tracking GPS L1 C/A Code, L1/L2 full cycle carrier and GLONASS,L1C/A L1 and L2 (optional)	GPS: L1C/A, L1C, L2C, L2P, L5 GLONASS: L1C/A, L2C, L2P, L5 Galileo: E1, E5 AltBOC, E5a, E5b, E6 BeiDou:B1, B2, B3 IRNSS:L5 SBAS:L1, L5 QZSS:L1C/A, L1C, L2C, L5, L6 LBand:up to 5 channels	Pls. see the revised bid document
2	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/GNSS Antenna	GNSS Antenna:Multi frequency, high gain External antenna with Sub-mm phase center repeatability and 25 to 30 db antenna gain	External Antenna or Integrated Antenna	Pls. see the revised bid document
3	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/Controller	Operating System:Windows mobile 6.0 Operating system or higher	Windows mobile 6.0 operating system or Android 4.4.2 or higher	Pls. see the revised bid document
4	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/Controller Specification	Keyboard:Full Alphanumeric hard QWERTY with color graphic display with Windows mobile platform.	Full Aphanumeric hard Qwerty Or Vertual Full Alphanumeric Qwerty with Color Graphic We offer a tablet controller so its vertual qwerty keypad on screen!	Pls. see the revised bid document
5	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/General Specification	Power consumption:Power consumption for satellite receiver, external antenna including internal radio a should be less than 6W in RTK mode	External Antenna or Integrated Antenna	Pls. see the revised bid document
6	Page No.13/TECHNICAL MINIMUM SPECIFICATIONS/General Specification	Antenna Cable:10 meter antenna cable should be provided for Base.	For External Antenna only if integrated not required	Pls. see the revised bid document
7	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/Radio Modem/External Base Transmitter	Output power:35 watt	WPC License Required for High Power Radio	Pls. see the revised bid document
8	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/Radio Modem/External Base Transmitter	Two selectable power output of 2 watt and 35 watt		

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9	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Measurements Specification	Satellite Tracking: Should be Capable of tracking capable of tracking,GPS LIC/A Code, L1/L2 Full cycle Carrier and GLONASS L1 and L2 (optional)	GPS: L1C/A, L1C, L2C, L2P, L5 GLONASS: L1C/A, L2C, L2P, L5 Galileo: E1, E5 AltBOC, E5a, E5b, E6 BeiDou: B1, B2, B3 IRNSS: L5 SBAS: L1, L5 QZSS: L1C/A, L1C, L2C, L5, L6 LBand: up to 5 channels	Pls. see the revised bid document
10	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Measurements Specification	No. of Channel: 72 or higher channels WAAS /EGNOS capable.	400 channels or more	Pls. see the revised bid document
11	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Measurements Specification	Min. 30 KM under normal condition with signal from base.	Min 12-15 Km	Pls. see the revised bid document
12	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Controller Specification	operating System: Windows M4obile 6.0 Operating system or higher	Windows mobile 6.0 operating system or Android 4.4.2 or higher	Pls. see the revised bid document
13	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Controller Specification	Full Alphanumeric QWERTY Keyboard	Full Aphanumeric Qwerty keyboard Or Vertual Full Alphanumeric Qwerty with Color GraphicWe offer a tablet controller so its vertual qwerty keypad on screen!	Pls. see the revised bid document
14	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Power Consumption: Power consumption for satellite receiver and antenna including internal radio should be less than 3.5 W in RTK mode.	4.5 W	Pls. see the revised bid document
15	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Drops: Withstands pole drop onto concrete or hard surface (2m minimum)	1m	Pls. see the revised bid document

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16	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/Measurements Specification	Satellite Tracking: Should be Capable of tracking GPS L1 C/A Code, L1/L2 full cycle carrier and GLONASS L1C/A L1 and L2 (optional)	Should be Capable of tracking – — GPS: L1C/A, L1C, L2C — GLONASS: L1C/A, L1P, L2C/A, L2P, — SBAS: GAGAN —Upgradable to GPS L5, Glonass L3, Galileo: E1, E5A, E5B , BeiDou (COMPASS): B1, B2	Pls. see the revised bid document
17	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/Accuracy	Static	High Precision Static	No Changes
18	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/Controller Specification	Communion:Bluetooth, serial port/USB port WiFi	Add : Integrated 5 MP camera and GPS	Pls. see the revised bid document
19	Page No.12/TECHNICAL MINIMUM SPECIFICATIONS/General Specification	Power consumption:Power consumption for satellite receiver, external antenna including internal radio a should be less than 6W in RTK mode	Power consumption for satellite receiver, external antenna should be less than 8.5W in RTK mode	Pls. see the revised bid document
20	Page No.13/TECHNICAL MINIMUM SPECIFICATIONS/General Specification	Weight:The Entire RTK rover including internal batteries, range pole controller and bracket should not weigh more than 4.5 kg.	The Entire RTK Base including internal batteries, controller and bracket should not weigh more than 4.5 kg.	Pls. see the revised bid document
21	Page No.13/TECHNICAL MINIMUM SPECIFICATIONS/General Specification	RTK Data Formats for Transmission and reception:RTCM Versions 2.x. RTCM 3. X. CMR + input/output	Remove reception. RTCM Versions 2.x. RTCM 3. X. CMR + output	No Changes
22	Page No.13/TECHNICAL MINIMUM SPECIFICATIONS/General Specification	Memory: Internal or Removable memory(flash or SD card) of minimum 8 GB	Internal or Removable memory(flash or SD card) of minimum 8GB In receiver/ controller	No Changes
23	Page No.13/TECHNICAL MINIMUM SPECIFICATIONS/Radio Modem/External Base Transmitter	Output power: 35 watt	Remove and ADD GPRS RTK	No Changes
24	Page No.13/TECHNICAL MINIMUM SPECIFICATIONS/Radio Modem/External Base Transmitter	Selectable channel: Two selectable power output of 2 watt and 35 watt.	Remove and ADD GPRS RTK	No Changes

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25	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Measurements Specification	Satellite Tracking:Should be Capable of tracking capable of tracking GPS L1C/A Code, L1/L2 Full cycle Carrier and GLONASS L1 and L2 (optional)	Should be Capable of tracking – — GPS: L1C/A, L1C, L2C — GLONASS: L1C/A, L1P, L2C/A, L2P, — SBAS: L1C/A, L5 —Upgradable to GPS L5, Glonass L3, Galileo: E1, E5A, E5B , BeiDou (COMPASS): B1, B2	Pls. see the revised bid document
26	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Accuracy	Static:Horizontal:3 mm + 0.1ppm,Vertical:should be twice the horizontal accuracy.	High Precision Static	No Changes
27	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Controller Specification	Keyboard:Full Alphanumeric QWERTY Keyboard	Full Alphanumeric Hard QWERTY Keyboard	Pls. see the revised bid document
28	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Controller Specification	Communion:Bluetooth, serial port/USB port Wi-Fi	ADD : Integrated 5 MP camera and GPS	Pls. see the revised bid document
29	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Power Port:1 No power port with input voltage of 12V DC external power input with over-voltage protection.	Remove	No Changes
30	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Power Consumption:Power consumption for satellite receiver and antenna including internal radio should be less than 3.5 W in RTK mode.	Power consumption for satellite receiver and antenna should be less than 4.5 W in RTK mode.	Pls. see the revised bid document
31	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Initialization Time:Typically less than 25 to 30 seconds.	Typically less then 10 Sec	Pls. see the revised bid document

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32	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	RTK data formats for transmission and reception:RTCM Versions 2.x. RTCM 3.x. CMR+ input/output.	Remove Transmission. RTCM Versions 2.x. RTCM 3.x. CMR+ input	No Changes
33	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Memory:Memory 8GB minimum	Memory 8GB minimum in receiver / controller	Pls. see the revised bid document
34	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Radio Modem (Rover)	Integrated:Rover Radio Modem should be integrated in the single housing.	Remove	No Changes
35	Page No.16/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/OFFICE POST PROCESSING SOFTWARE	Importing Raw Data:Should be able to import Raw data from the GPS/GLONASS receiver as well as RINEX data. Also should be able to import raw data as well as precise ephemeris data via internet IGS data from net. Capable of Exporting the data in RINEX format as well in CAD Format.	Should be able to import Raw data from the all present GNSS Constallation and frequency as well as RINEX data. Also should be able to import raw data as well as precise ephemeris data via internet IGS data from net. Capable of Exporting the data in RINEX format as well in CAD Format.	Pls. see the revised bid document
36	Page No.16/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/OFFICE POST PROCESSING SOFTWARE	Baseline Processing:Should be capable of processing GPS L1 and L2 as well as GLONASS raw data.	Should be capable of processing all present GNSS Constallation and frequency raw data.	Pls. see the revised bid document
37	Suggesution	GNSS RTK CORRECTION S/W	GNSS Correction software should have the functionality of using GNSS equipment to build direct IP RTK corrections server for more than 8-10 rovers in field. The software will collect corrections sent by a GNSS base station and act as a gateway to make them available to any rover that connects to the software. It should be a PC software allowing communication between one base and many rovers. The base can be run on a permanent location ( with a direct local connection to Server ) or at remote locations ( connected to Server through GPRS ). The supplied GNSS receivers should be able to act as base for longer duration with the help of external battery.	No Changes

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38	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Measurements Specification	No. of Channel:In tender specification Base 400 Rover 72 channel	200 channels or more for both (base & rover)	Pls. see the revised bid document
39	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/Accuracy	Static vertical accuracy:Should be twice the horizontal accuracy	Define vertical accuracy in numeric value.	No Changes
40	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/GNSS Antenna	GNSS Antenna:Multi frequency, high gain External antenna with sub-mm phase center repeatability and 25 to 35 db antenna gain	Single housing integrated unit.	Pls. see the revised bid document
41	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Power consumption:Power consumption for satellite receiver, external antenna including internal radio a should be less than 6W in base in rtk mode (Rover 3.5W radio)	Radio frequency is not mentioned. License free frequency is 865MHz to 867 MHz upto 1 Watt. As per Wireless Planning & Coordination Wing India (WPC), all internal radio data transmit on 410 to 470 MHz. For this frequency, license is required.	Pls. see the revised bid document
42	Page No.14/TECHNICAL MINIMUM SPECIFICATIONS/Radio Modem	Radio Modem External base transmitter:Output 35 Watt with two selectable power 2Watt & 35 Watt	Kindly mention Radio frequency in tender document.	Pls. see the revised bid document
43	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SPECIFICATION FOR ROVER/General Specification	Power consumption:Power consumption 3.5 W	Please remove 3.5w, from specification. Every company have own configuration of Rover & its power consumption capacity, it does not effect its working capacity.	Pls. see the revised bid document
44	Page No.15/TECHNICAL MINIMUM SPECIFICATIONS/SController Specification	keyboard- controller – Alphanumeric QWERTY keypad	Please give optional either Alphanumeric or QWERTY, both are same. Some company have Alphanumeric , some have QWERTY,	Pls. see the revised bid document