Minutes of Pre-bid Conference

Tender no.:	OT-65/MNNIT/GIS CELL/GNSS RECEIVER SET (BASE & ROVER) dt: 13.06.2014
For :	Procurement of GNSS RECEIVER SET (BASE & ROVER)
Date & time:	01.07.2014 at 12.00 Hrs.
Venue:	Conference Room, MNNIT (adjacent to Purchase Office)

The following participants attended the conference:

Representatives of MNNIT:

1) Chairman, GIS CELL
2) Prof. V. K. Srivastava
3) Mr. Ramji Dwivedi
4) Dy. Registrar (Accounts)
5) Faculty In-charge (Purchase)

Representatives of Prospective Bidder's:

Sl. No.	Name of Firm	Represented by
1	M/s Elcome Technologies Pvt .Ltd. Mumbai	
2	M/s K. K. Geosystems Pvt. Ltd. Ahmedabad	
3	M/s Aimil Ltd. New Delhi	
4	M/s Geo System & Survey Software Pvt. Ltd. Ghaziabad	

Opening Remarks

(i) The Faculty In-charge (Purchase) had conducted the Pre-Bid Conference and at the beginning welcomed to everybody attending the Pre-Bid Conference for the aforesaid open tender.

(ii) It was explained that purpose of Pre-Bid Conference is to explain the various important provisions of the bidding documents to the prospective bidders and to clarify any queries that the bidders may have in the subject bidding documents.

(iii) The indenter discussed a brief description about the equipment, as per *Annexure-A, B & C* of the Tender document, before the audience.

(iv) The members representing the bidders were asked to furnish their queries in written format so that the replies to the same can provided by the purchaser. Replies to the queries are presented in *Table-1.*

(v) The Faculty-in-charge (Purchase) expressed his profound gratitude to the participants for their active involvement.

(vi) The meeting ended with a vote of thanks to the chair.

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Table-1
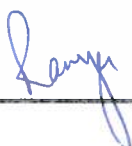### Minutes of Pre-bid Conference

S. No.	FIRM	RFP Reference(s) (Section, Page)	Offered Specifications	Points of Clarification required/ Query/Remarks (Bidders)	Resolution
1.	M/s Geo Systems & Softwares, Vaishali, Ghaziabad	Under the heading of **Radio Modem Rover Receiver**	Fully integrated	RTK operation should be based on GSM instead of UHF	The department need UHF RTK system with all accessories as GSM/GPRS signals are not available in all areas where UHF would be used for the communications between base and rover.

		Under the heading of **Real time Kinematic**	Real time Kinematic **Horizontal** ±8 mm + 1 ppm or better **Vertical** ±15 mm + 1 ppm or better	Real time Kinematic Horizontal ±10 mm + 1 ppm or better Vertical ±20 mm + 1 ppm or better	RTK accuracies required are Hz: 8mm+1ppm or better and Vz: 15mm+1ppm or better. Many manufactures are offering better accuracies in RTK mode nowadays
		Under the heading of **General specification**	Memory: Internal memory of 10Mb or higher	The 10MB of memory will not sufficient for logging of data more than 4hours with 10Hz of update so please enhance the memory to 32MB for use of the equipment in Static PP since it is asked for Static applications also. **Remark:** Internal Memory/SD card	We have asked for the memory in controller for larger data storage. The department will prefer to store data in the control unit for the convenience.
2.	M/s Elcome Technologies Pvt. Ltd., Navi Mumbai	Under the heading of **Measurements Specification**	No. of channel: 72 channels with 4 SBAS WASS/EGNOS capable.	Since Bideou is already active so please enhance the number of channels to be more than 100 also include the tracking os constellations like GLONASS and COMPASS **Remark:** 120 channels with GPS, GLONASS and COMPASS	Specifications formed keeping in view a midrange GPS required for conducting the practicals etc. **Amended as minimum 72 channels with 4 SBAS WASS/EGNOS capable.**
		Under the heading of **Measurements Specification**	Position Update Rate: 10Hz or higher	The 10Hz of update rate is proprietary and obsolete update since most of the receivers in market are with 20Hz update so please enhance the update rate to 20Hz. Higher update rate means more data recording per second hence lesser observation time and better RTK performance. **Remark:** 20Hz	The logging rate of 10Hz is sufficient for most of the survey work. However more than 10Hz receiver will also be acceptable.
		Under the heading of **Measurements Specification**	Memory: Internal memory of 10MB or higher	The 10MB of memory will not sufficient for logging of data more than 4hours with 10Hz of update so please enhance the memory to 32MB for use of the equipment in Static PP since it is asked for Static applications also. **Remark:** 32MB or higher	More memory has been asked in the control unit which will be used for the purpose of survey data storage. However more than 10MB receiver will also be acceptable.
		Under the heading of **Measurements**	Chargers: Internal/External chargers	The internal chargers can affect the performance of the receiver	Both internal as well external power

		Specification	to charge all the batteries at the same time should be provided	since whole of the receiver needs to be near to the charging point and any damage to internal chargers will render the whole equipment dysfunctional. **Remark: External chargers**	sources should be considered.
		Under the heading of **Radio Modem External Base Transmitter**	Selectable Channel: Two selectable power output of 2watt and 35 watt	Since it will be difficult to get the UHF license from concerned immediately so please add both UHF and GSM in the receiver. **Remark:** UHF and GSM in the receiver	UHF RTK will be used in remote areas where GSM/GPRS signals are not available.
3.	M/s Skipper Technologies India Pvt. Ltd., Noida	Under the heading of **Real time Kinematic**	Real time Kinematic Horizontal ±8 mm + 1 ppm or better Vertical ±15 mm + 1 ppm or better	Real time Kinematic Horizontal ±10 mm + 1 ppm or better Vertical ±20 mm + 1 ppm or better	RTK accuracies required are Hz: 8mm+1ppm or better and Vz: 15mm+1ppm or better. Many manufactures are offering better accuracies in RTK mode nowadays
		Under the heading of **Code Accuracy**	Code Accuracy: Horizontal 25cm + 1ppm	<0.5m	Code accuracy is essentially required. Considering our future aspects, less than .5m is sufficient.
		Under the heading of **Controller Specification**	Operating System: Windows Mobile 6.0 Operating System or higher, Controller with full QWERTY Hard Keyboard and inbuilt radio for robotic survey, 5 MP camera, 800MHz Processor, 256 MB RAM, 8GB Flash internal and full VGA display. With inbuilt Compass,accelerometer and Integrated GPS	Windows Mobile 6.0 Operating System or higher, Controller with full QWERTY Hard Keyboard and inbuilt radio for robotic survey, 5 MP camera, 624MHz Processor, 256 MB RAM, 2GB Flash internal and QVGA display.	It is required that the controlled operating instrument of the system should be at least with 800MHz Processor & 8GB Flash internal memory.
		Under the heading of **General Specifications**	Internal Batteries: The GNSS receiver and controller should be operable with internal batteries long enough to last at least 8hours of field operation.	The GNSS receiver and controller should operate with internal batteries long enough to last more than 7.5hours of field operation.	The instrument should work long enough without external power source. Hence 8hours for field operation is well justified.

		Under the heading of **General Specifications**	Internal Memory: Internal memory of 10Mb or higher	Internal memory or expandable through SD card (2GB or Higher)	It is entitled for internal memory to be 10MB or higher. Hence, more than 10MB are also acceptable.