# Clarifications and modification in the query letter for Hand Held GPS, Single Freq. GPS and Total Station

23 August 2013

In view of several clarifications/suggestions by vendors the following changes are being made in the tender.

Tender Notice Number: CE/GI/LTAS/02/2013-2014 of 14 Aug. 2013 Quotation for GPS and Total Station

Please add following specifications on top of what has already been stated:

## 1. For Hand Held GPS with Complete Accessories

- a. Accuracy requirement is 1 meter or less in in post processing.
- b. Rugged IP4 rating for outdoor environments
- c. Inbuilt camera with at least 4.0mp
- d. Cellular connection possibility is desirable but not essential
- e. Should support Bluetooth and wireless
- f. Proven sunlight readable screen
- g. Compatibility with GIS software ESRI ARC PAD 6.0 or higher is required but a GIS software need not necessarily be in the hand held system.
- h. Software to be included with this package should contain 20 licenses of software for purposes like (1) GNSS post-processing tools with differential correction to generate GIS information (2) Integrating GNSS with ArcPad from ESRI (3) Field GIS data collection software. Any additional software for field data collection, operation of hand held, and integrating hand held with ESRI Arc Pad is welcome.

### 2. For GPS System and complete Accessories

- a. Presence of 12 channels of L1 GLONASS along with 12 channels L1 GPS for code and phase tracking will be preferred, though not necessary.
- b. Operational temperature range -20C to +50C
- c. IP6X compatibility for dust and sand and IPX7 moisture protection is must

#### 3. For Total Station with complete Accessories

- a. Range in reflector-less mode under varying reflective targets in normal condition 250m to 400m
- b. Measurement interval should be less than 1.8s
- c. Resolving power of telescope should better than 3.5"
- d. Memory 128MB RAM and 128MB Flash memory or equivalent to store 40,000 records of observations.

- e. The prism-reflector should be tiltable and at least 60mm large in size
- f. Rod to be at least 2.5m long with telescopic mode and made of aluminum
- g. Tripod to be supplied with Total Station has to be Heavy Duty with stability that it can also be used with existing Servo Total Stations
- h. Display QVGA touch screen
- i. Onboard software specially for COGO, staking, control survey, topographic survey, graphical staking of point, line and arc features should be inbuilt in the software
- j. Dual face display
- k. Two batteries hot swappable with total time of 24 hours minimum
- I. Windows CE 6.0 to be embedded
- m. Operational temperature range -20C to +50C
- n. IP66 compatibility for dust and moisture protection is must

#### Additional items:

- 1. A vendor should be able to provide certification for specifications or IPXX compatibility
- 2. The purchase will be preferred in foreign currency through a Letter of Credit. However, you may give the quotation in INR and foreign currency both.
- 3. The cost should include everything including supply up to IIT Kanpur. Any unforeseen cost should be also mentioned.
- 4. IIT Kanpur will utilize the custom tax benefits that are available to it being an educational institution.
- 5. The academic institute discount should be clearly mentioned against each item.
- 6. The agent commission, if applicable, should be also mentioned in the quotation.
- 7. Please specify specifically against each item if you comply or not in the quotation document.
- 8. Quotations not complete in any respect, including the point 7 above, will be rejected.

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