



## CSIR-INSTITUTE OF HIMALAYAN BIORESOURCE TECHNOLOGY

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CSIR-Institute of Himalayan Bioresource Technology, Palampur (HP) is premier R&D Institute of Council of Scientific & Industrial Research (CSIR), intends to procure the item herein under. In this regard, a Pre-Indent Conference (PIC) is being organized to finalize the broad technical specifications of the required items as mentioned below. Prospective OEM/Distributors/ having capabilities to supply, installation, commissioning and maintenance of such required item/system are invited to make technical presentations during the PIC followed by discussions on technology, design, features, utility, technical parameters, warranty, AMC and other related Techno-commercial issues. Schedule of Pre-Indent Conference is as follows:-

Sr. No.	TENDER No.	Item(s)	Date & Time	Venue
1.	02/2018 Ref.4/5(255)18-Pur	Unmanned Aerial Vehicle (Drone)	04.09.2018 (11.00am)	Director's Conference Room

### Brief details

**Unmanned Aerial Vehicle (UAV) is required for Hyperspectral Imaging and LiDAR Sensors** already available with the Institute. The complete installation, good quality air borne data acquisition using above sensors at CSIR-IHBT campus and complete training on UAV operation will be vendor's responsibility. The details of sensors to be mounted on the UAV by the vendors are as follows:

**Sensor 1 (Hyperspectral sensor):** Model HySpex VNIR-1800 (Hypex, NEO, Norway); Wavelength range: 400 — 1000 nm; Power consumption: 30 W; Dimensions (l-w-h): 39-9.9-15 cm; Weight 5.0 kg.

**Sensor 2 (Hyperspectral sensor)::** Model HySpex SWIR-384 (Hypex, NEO, Norway); Wavelength range: 930-2500 nm; Power consumption: 30 W; Dimensions (l-w-h): 38-12-17.5 cm; Weight: 5.7kg.

**Sensor 3 (LiDAR sensor):** Model 3DT Scanfly LiDAR (3D TARGET SRL, Italy); Power consumption: 33 W; Dimensions (l-w-h): 22.4-12.8-11 cm; Weight: =1.5 kg.

In addition, vendor should also provide one optical camera with excellent resolution for aerial image acquisition. The overall payload will also be comprised of batteries, GPS/IMU, on-board data storage or any other parts required (as applicable) for smooth operation of supplied UAV. There should be a scope of additional payloads for the mounting of few other sensors on the UAV in the future. It should have automated and manual control with safety features (e.g., automated landing in case of any failure, obstacle avoidance mechanism, etc.).

The detailed specifications of UAV will be prepared after Pre-Indent Conference meeting.

Prospective Supplier/Manufacturers/OEM/Distributors/Authorized Agent, who are willing to participate in the PIC process may depute their authorized representative(s) who is/are techno-commercially competent to present their product/solution, discuss with the technical committee and provide supporting document/information on scheduled date and time.

The credentials, technical capability, financial standing & track record of the parties, will be evaluated based upon discussions during PIC and documents submitted by the interested firms who attend PIC. Equipment's specifications will be finalized after discussion/technical presentation by the prospective bidders and on the basis of Research and Development requirement of the Institute.

**Controller of Stores & Purchase**