

**Amendment to “RFP for procurement of Automatic Weather Stations for the Long-Term Ecological Observatories programme from domestic (India based) vendors. (23/04/2021)”**

<b>Section</b>	<b>Clause</b>	<b>Pages</b>	<b>Amendment</b>
I		6	Tender Enquiry Number: CES/ENQ/RS/AWS/01/21-22. Dr. 18/06/2021
I	8	7	Both the Technical and Commercial bid should be put in separate sealed envelopes, and put together in another cover stating “Quotation for Automatic Weather Stations” and should reach us on or before <b>5:00 PM, 7 July 2021</b> .
II	7.1	11	There is no specific format for the Manufacturer Authorization Letter. However, all the terms and conditions should be clearly mentioned in the joint letter and duly signed (in original) by authorized officials from both parties.
II	8.3	11	Following Government of India memorandum (No: F.9/4/2020-PPD), Performance Security Deposit is 3% of the total value of the contract.
II	8.5	11	Following Government of India memorandum (No: F.9/4/2020-PPD), Performance Security Deposit is 3% of the total value of the CAMC.
II	12	12	The Seller shall be bound to furnish a clear written warranty regarding the same. The Seller will be required to replace them free of cost inclusive of all freight and handling charges. Alternatively, at the Purchaser’s discretion, the Seller may repair the part provided a replacement part is installed thereby ensuring that there is no data loss (as per warranty terms & conditions). The supplier shall provide warranty certificate from the OEM for the goods along with date of manufacturing of stores/products.
II	Annexure III	22-23	Quantity <b>25</b> (AWS/sets/items) instead of 30. This change applies everywhere in the RFP. The Purchaser reserves the right at the time of Contract award to increase or decrease the quantity of goods and services without any change in unit price of other terms and conditions Further, at the discretion of the purchaser, the quantities in the contract may be enhanced or decreased by 25% within the delivery period.
II	Annexure III	22	A 10 m tower made of aluminum alloy 6061/63400 grade can be used in place of a tilttable mast provided the sensors are lowerable for maintenance.
II	Annexure IV	25-28	The Integrity Pact must be on the company’s official letterhead.
III	2.1	29-30	Purchaser’s scope: <ul style="list-style-type: none"> <li>• Windows server having a static IP address that is used to receive data, which will be installed in IISc.</li> <li>• Maintenance of server hardware and operating system.</li> <li>• Maintenance of server network access.</li> <li>• Enabling remote access to server.</li> </ul> Bidder’s scope: <ul style="list-style-type: none"> <li>• Installation and maintenance of Data Management Software running on the server.</li> </ul>

			<ul style="list-style-type: none"> <li>• <b>Obtaining SIM cards and paying any associated recurring charges.</b></li> </ul>
III	2.1	29	<p>Clarification:</p> <ul style="list-style-type: none"> <li>• FTP is used to upload CSV (comma separated values) file from DAS to IISc server.</li> <li>• Email is used to send CSV file from DAS to a designated email address.</li> <li>• SMS is used to send configuration data/commands from IISc server, smartphone or other device to DAS.</li> </ul> <p>This clarification also applies to Section III, Clause 6.19 (p 36).</p>
III	2.1	29-30	Data must only be stored on the DAS or IISc server and not anywhere else.
III	3.4	30	IP-67 (NEMA 6 ratings) enclosures are acceptable.
III	3.5	30	Channels for additional sensors are not in the scope of present bid. However, if in the future a sensor is required to be added it should be possible to do so easily.
III	3.2	30	<p>The data logger output in CSV (comma separated values) format, in the form of data packets having, at a minimum, the following columns:</p> <ul style="list-style-type: none"> <li>• Date in YYYY-MM-DD format</li> <li>• Time in HH:MM:SS format</li> <li>• Temperature in degrees Celsius</li> <li>• Relative humidity in %</li> <li>• Wind speed in m/s</li> <li>• Wind direction in degrees from North</li> <li>• Global irradiance in W/m<sup>2</sup></li> <li>• Battery status</li> <li>• Good/bad/warning status for <i>each sensor column</i></li> </ul> <p>There are no other restrictions on the format of the data.</p>
III	3.1	30	Other battery types such as lithium and lithium pyrophosphate may be used so long as their capacity is sufficient to keep the AWS operational on full load under inclement weather conditions for 20 days. The Supplier must attach a detailed <b>POWER BUDGET CALCULATION</b> taking care of solar panel and battery efficiency and sufficient safety factor of the system supported with documentary proof in technical bid for power consumption of the AWS station so that AWS should run for minimum of 20 days during cloudy days or without charging the battery. The detailed power consumption of each component of the AWS system must be clearly mentioned in the technical brochures to support successful bidder's statement.
III	3.12	30-31	The demonstration can be conducted on a 3 m tripod.
III	3.12	30-31	The demonstration is required prior to the award of contract. Shortlisted bidders will be contacted and given 4 weeks to provide a demonstration at IISc, Bengaluru.
III	4.4	33	Radiation sensor is only required to measure global irradiance. It need not differentiate between diffuse and direct irradiance.
III	4.4 (e)	33	Irradiance range: 0 to 2000 W/m <sup>2</sup> or greater.

III	6.8	34	The DAS should have adequate and optimum number of high-performance analog and digital channels. Additional channels for the sensors are not on the present scope of tender.
III	6.9	34	If the vendor provides a full IoT-based AWS, a cloud app hosted on the IISc server is required for data validation, Quality Control checks for online data, and data transmission. The cloud app for prediction, simulation etc is not in the scope of this tender.
III	6.17	35	Internal memory should be at least 1 GB or adequate to store data from all channels and logs for at least 6 months.
III	6.19	36	The default communication format is SMS.
III	7.5	37	Only one wind sensor installed at 10 m height is required. There is no “second wind sensor” required.
III	8.1	37	Limitation of liability: <ul style="list-style-type: none"> <li>• Bidder shall not be liable for data transmission stoppage either due to cellular network provider issues at the AWS site or network or hardware issues at the server site. However, data must be stored for the period of network outage (not exceeding 6 months) and transmitted to the server as soon as network coverage is restored.</li> <li>• Bidder shall not be liable for damages to AWS parts due to theft or vandalism once the AWS has been installed at the site.</li> </ul>
III	11	39	The revised delivery schedule in view of the current COVID-19 pandemic situation is as follows: Delivery of all equipment and accessories shall be done at respective sites in three consignments within eight months from the date of placement of supply order. <ul style="list-style-type: none"> <li>• 1st Consignment: 10 AWS System within four months from the date of placement of supply order.</li> <li>• 2nd Consignment: 10 AWS System and within two months after delivery of first consignment of 10 AWS systems.</li> <li>• 3rd Consignment: 10 AWS System and within two months after delivery of second consignment of 10 AWS systems.</li> </ul>
III	14	40	<ul style="list-style-type: none"> <li>• The bidder should have a minimum annual turnover of INR 5 Crores for the past three years ending either on 31.03.2021 or on 31.03.2020 (i.e., excluding COVID-19 pandemic period).</li> <li>• For Indian subsidiaries for foreign firms, at least two years of this three-year period should be for the Indian subsidiary and the remaining one year may be for the foreign parent company.</li> </ul>
III	14	40	User satisfaction certificates issued to OEM/international offices are acceptable.
III	14	40	The bidder/manufacturer should have a minimum two years’ experience in successful installation, maintenance, calibration of GSM/GPRS/Satellite based AWS or automatic rain gauge (ARG) network of 50 Nos. for any government/public sector/ internationally or nationally recognized institutes or sectors.

			A certificate in this regard from a minimum of five users about satisfactory and proven performance of the networks of the system must be enclosed with the technical bid. Satisfactory performance certificates from a minimum of two users shall be accepted provided the bidder provides contact details (name, designation, phone number, and email address) of three additional users who will be contacted by the Purchaser.
III	Annexure VII	43	Length of angle shall be 2 meters (1.5 meters from ground level).
III	Annexure VII	43	The mast shall be 10 m height and tiltable which is made of anodized aluminum alloy 6061/63400 grade.
III	Annexure IX	46-47	Turnaround time in plain areas is three days. Turnaround time in Himalayan region is six days.
III	Annexure X	48	This change applies wherever the GPRS modem is referenced in the RFP: The GPRS modem must also be compatible with 2G. Communications should fall back to 2G when 4G/3G network is unavailable.

Some requirements may have been mentioned in more than one Sections/Clauses/Pages in the RFP. In such cases, the Amendment may reference only one Section/Clause/Page but is considered applicable throughout the RFP.

For clarifications, please email [Lteoscience.ces@iisc.ac.in](mailto:Lteoscience.ces@iisc.ac.in) with copy to [Lteochair.ces@iisc.ac.in](mailto:Lteochair.ces@iisc.ac.in).