भारतीय उष्णदेशीय मौसम विज्ञान संस्थान INDIAN INSTITUTE OF TROPICAL METEOROLOGY (पृथ्वी विज्ञान मंत्रालय, भारत सरकार का एक स्वायत्त संस्थान) (An autonomous Institute under the Ministry of Earth Sciences, Govt. of India) पाषाण, पुणे – 411 008 PASHAN, PUNE - 411008

वैश्विक निविदा सुचना शुद्धिपत्र / CORRIGENDUM TO GLOBAL TENDER NOTICE

निम्नलिखित तालिका में विनिर्दिष्ट समसंख्यक निविदा सूचना द्वारा प्रकाशित विवरण हेतु निविदा प्रस्तुत करने की निर्धारित तारीख को बढ़ाया जा रहा है| The last date of submission of bids for purchase of "items / description" published vide even number of Tender Notice is extended as tabulated below

क्रम सं.	निविदा सूचना सं.	विवरण/Description	ऑनलाइन बोलियाँ प्रस्तुत करने की बढ़ाई गयी समय सीमा			
S. N.	lender Notice No.		Extended timeline for submission of bids online			
01.	पीएस /125 /19/ 2019	सिलोमीटर की आपूर्ति, स्थापना और	28th फरवरी 2020 1500 तक			
	PS/125/19/2019	कमिशनींग - मात्रा ०४ सेट्स	28^{th} February, 2020 1500 hrs.			
		Supply, Installation and				
		Commissioning of "Ceilometer" – Qty				
		04 Sets.				
उपरोक्त निविदा के लिए तकनीकी बोलियाँ 28 th फरवरी 20 20 को 1530 बजे खोली जाएंगी।						
Technical Bids (only) for aforesaid tender will be opened on 28 $^{ m th}$ February, 2020 at 1530 hrs.						

दिनांक 08 जनवरी, 2020 को हुई निविदा-पूर्व बैठक का अंतिम कार्यवृत्त भी नीचे विनिर्दिष्ट वेबसाइट पर उपलब्ध है| अन्य निबंधन एवं शर्तें यथावत रहेंगी। विस्तृत विवरण एवं बोलियों के प्रस्तुतीकरण हेतु कृपया वेबसाइट <u>https://moes.euniwizarde.com देखें। संभावित बोलीदाताओं की</u> जानकारी के लिए, निविदा विवरण भी इस संस्थान की वेबसाइट <u>http://www.tropmet.res.in</u> एवं सरकार के सेंट्रल प्रोक्यूरमेंट पोर्टल (सीपीपी) <u>http://www.eprocure.gov.in. पर भी उपलब्ध है।</u> संस्थान किसी भी स्तर पर बिना किसी कारण बताए निविदा को पूरा या आंशिक रद्द करने का अधिकार सुरक्षित रखता है।

Also final minutes of Pre-Bid meeting held on 08th January, 2020 are available on websites as stated below. All other terms & condition shall remain unchanged. For details and submission of bids please visit website <u>https://moes.euniwizarde.com.</u> For the information of the prospective bidders, the tender details are also available on this Institute's Website: <u>http://www.tropmet.res.in</u> and Government's Central Procurement Portal (CPP) <u>http://www.eprocure.gov.in.</u> The Institute reserves the right to cancel the tender at any stage either in full or part as the case may be without assigning any reason thereof.

ह/Sd-प्रशासनिक अधिकारी, कृते निदेशक Administrative Officer, for Director ईमेल/Email :psu.iitm@tropmet.res.in

Sub: Pre-bid meeting minutes for the supply, installation and commissioning of Ceilometer Qty 4 sets. (PS/125/19/2019)

Pre-bid Meeting for Procurement of "Laser Ceilometer" Qty-04 Sets, scheduled on 8th January, 2020 at 11.00 hr at IITM Pune was attended by following bidder :-

- 1) Electro Mechanical Enterprises,
- 2) SGS Weather
- 3) Environemental Systems pvt.ltd
- 4) MeaTech Solutions and BKC Weather Sys Pvt. Ltd.

The queries raised by them in the meeting followed by emails are responded as follows.

Parameters	Specifications	OUR OBSERVATIONS AND OUERIES REQUEST.	Reply of IITM
Wave length	900 to 1100 nm	Should be broad based to meet all suppliers such as 905 or 910 etc. or (905+/- 5%)	No Change as per RFP
Transmitter/receiver	Monostatic	Some manufacturers use dual lens design which is as good as single lens/ monostatic design to detect and report low altitude clouds. Whereas other manufacturers tried to convince that single lens is necessary in order to measure clouds back scatter fog, mixing layer etc at very low altitudes. However this is not the case and in fact it is almost the opposite depending on how you design the Ceilometer. With our design the sender and receiver will "see" each other at 75 ft, or about 25 meters. However there is no problem to detect clouds in the range from 0 - 25 meters regardless since there are multiple secondary reflections on the water drops and it can easily be detected. Instead actually using a two lens design the receiver to be always on and sample and not flooded by the transmitter. This is what is known as cross-talk and is a problem with single lens design in the very low altitudes (typically 0 - 25 meters depending on pulse length.	The system is meant to measure not only cloud heights but also backscattering coefficient from a possible minimum height with reasonable accuracy. Changed specification to bi- static to allow competition.
		We can and do detect clouds at very	

Electro Mechanical Enterprises

		1	1 11 1 / 1 10 0 1 1 1 1 1	ı
			low altitudes (virtually 0 m) with dual	
			lens. However, "clouds" at these	
			altitudes are normally considered	
			"fog" and is reported as vertical	
			visibility.	
			J	
			Our Principals M/s. Eliasson have	
			delivered about 2400 ceilometers	
			world-wide as of today and are	
			working satisfactorily even on the	
			moving shins. We definitely do	
			detect law altitude alanda at wirtually	
			detect low attitude clouds at virtually	
			0 m.	
			(The lowest reported cloud height is 10	
			meters, but it includes any clouds below	
			this altitude as well.)	
			For similarly specified tenders	
			globally buyers have normally made	
			specifications broad based or directly	
			approved both types of design since it	
			is the function of the ceilometer (i.e.	
			detect clouds or fog etc. at very low	
			height i.e. directly on the ground) that	
			is important and not how it is	
			technically solved	
			Hone you will consider cooportion	
			more you will consider economics,	
			maintenance and the significance of	
			data acquired which may be used for	
			research /prediction of meteorological	
			parameters vis cost and technology.	
			For your information in India IMD,	
			ISRO, PUNE University etc have used	
			Eliasson ceilometers. Hence, we	
			request that either single lens or	
			dual lens should be acceptable.	
Sampling rate		at least 100 MHz	Please elaborate in regard to the	Deleted now
			sampling rate requirement?	
			It is noted from the specifications that	
			a resolution of 10 m yields 15 MHz	
			sampling rate and a resolution of 5 m	
			vields 30 MHz sampling rate so why	
			100 MHz is desired. This specification	
			should be deleted	
			or should meet some criteria with	
			resolution	
Raw	Data	Ascii/binary/NetCDF:	Whether you need all formats as raw	Ascii and NetCDF
type/resolution	Dutu	resolution less than or	data at same time from the device	are essential but not
JPC/10000000		equal to 10 m and ite	itself or any of the format such as	binary. Ceilometer
		multiples (selectable)	ASCII Binary or NetCDEetc is	should have a data
		muniples (selectable)	acceptable in the DC I anton or data	acquisition system,
			acceptable in the rC, Laptop of data	compatible to
			whather the date format here refers to	configure ceilometer,
			whether the data formation here refers to	real time
			naroware/ firmware feature as digital	visualization and data
			output format or software in PC.	storage.
			where formats of	
			raw data can be interchanged in case	
			you need Net CDF please define	
			character and bit integer such as 32 or	
			64.	

Software for real	Suitable GUI to	Please clarify maximum and	Maximum height for
time and offline	visualize all	minimum height for accurate	mixed layer height
visualization	parameters like	depiction/Indication of mixed layer	depiction is 4 km
	time-	with respect measuring range of 15	with an accuracy of
	heightaerosol	Kilometers. In case you have already	+/- 10 m. Minimum
	back-scatter in	got good results while using similar	height 10m.
	absolute units	instrumentation please state the	Suitable software for Bool time and offline
	(sr- 1m-1)	accuracy and range otherwise delete	(both) visualization
	aerosol back-	it. Also please specify what	and saving of images
	scatter profiles	parameters you need to visualize real	of 1) time-height
	with selectable	time and parametersoffline.	aerosol back-
	average time		scattering coefficient
	and height		in absolute units (sr-
	interval,		1m-1),
	depiction of		2) aerosol back-
	Mixed layerand		scatter profiles with
	cloud heights, etc.		selectable average
	-		time interval and
			height range,
			3) depiction of Mixed
			layer neights and
			cloud neights

Query:- Reporting interval : it should be 15 to 120 seconds for better and significant results. Reply: Please refer new specification

Query:-Measurement interval : it should correspond to the sampling rate as wellas to reporting interval. Lowest sampling time should be 15 Secondscorresponding to reporting interval for better results.

Reply: No change, as per RFP

Query :-Accuracy: It should also correspond to Range resolution if it is 5 Meterthen it should be +/- 5 meter if it is 10 meter then it should be +/-10meter . Reply: Accuracy of +/- 10 m accentable

Reply: Accuracy of +/- 10 m acceptable

SGS WEATHER & ENVIRONEMENTAL SYSTEMS PVT. LTD

Query :-The present requirement of "Reporting interval is defined as 2sec... 600sec in the tender specifications. We request your office to kindly amend the specification of Reporting Interval as 6sec...120sec or polling. This is the standard in all the commercially available Ceilometers. We look forward to your positive reply in order to submit a fully complied bid. Reply: 6 sec or its multiples, selectable

MeaTech Solutions

1. Page 36, 4.5, we request you to increase the downtime callattendance from 24 hrs. to 72 hrs.

Reply: No change, as per RFP

2. Page 36, 4.4, kindly specify the exact locations of installations. Reply: Two ceilometers should be in Delhi and the other two should be in Bhopal

3. Page 59, Technical Specifications: Kindly relax the measurementlength from 0-15 km to 0-8/10 Km so we can also participate in this tenderor you can relax it like 0-10 or more. Reply: No Change, as per RFP

4. How we are going to log the data from the ceilometer because there is no mention of any datalogger. Kindly clarify.

Reply: Real time visualization of parameters as well as storage of all data should be provided through dedicated laptop. Laptop specs included

5. Page 59, Technical Specifications: Wave Length range is from 900 to1100nm but our product has the wavelength range of 912nm, Class1M. Do itcomply to your requirement? Kindly clarify.

Reply: Any wavelength from 900 nm to 1100 nm is acceptable

BKC WeatherSysPvt. Ltd.

1. Installation sites for 4 Ceilometers

Reply: Two ceilometers should be in Delhi and the other two should be in Bhopal

2. Tender document does not mention exemption from bid security for MSMEs in terms of Public Procurement policy (PPP) for Micro & Small Enterprises (MSEs) Order, 2012 issued vide Gazette Notification dated 23.03.2012 given the fact that though this item is not manufactured in India and services such as installation, training and AMC for 4 years after warranty for forms large part of the bid value

Reply :- please refer RFP clause no. 1.15.7

3. Instead of seeking certification form private organizations like MIRA INFORM PRIVATE LIMITED, Dun & Bradstreet, a certificate of solvency from a nationalized bank should be allowed **Reply :- No change, as per tender document.**