

**Supply, installation and commissioning of the Total Organic Carbon (TOC) analyzer**

**Technical and Financial Evaluation (TFE) Committee meeting**

(INCOIS Office Order No. 140/2025 dt 03/07/2025)

तारीख / Date	मार्च / March 04, 2026	समय / Time	-
सुविधा / Facilitator	आई.एन.सी.ओ.आ.ई.एस. / INCOIS	माध्यम / Mode	प्रसार / Circulation
अभिलेखपाल / Scribe	एस शिवप्रसाद (सदस्य सचिव) S Shivaprasad (Member-Secretary)		
उद्देश्य / Purpose	बोली-पूर्व बैठक के दौरान संभावित बोलीदाताओं द्वारा उठाए गए प्रश्नों का उत्तर देना। To provide response to the queries raised by the potential bidders during the pre-bid meeting.		
सहभागी / Attendees	क्र./ Sl.	प्रतिभागियों (प्रो./डॉ./श्रीमान/सुश्री) / Participants (Prof/Dr/Mr/Ms)	भूमिका / Role
	1.	सरमा वी वी एस एस, मुख्य वैज्ञानिक, सीएसआर - राष्ट्रीय समुद्र विज्ञान संस्थान (सीएसआईआर - एनआईओ) Sarma V V S S, Chief Scientist, CSR – National Institute of Oceanography (CSIR-NIO)	अध्यक्ष Chairman
	2.	संजीव कुमार, भौतिक अनुसंधान प्रयोगशाला, अहमदाबाद Sanjeev Kumar, Physical Research Laboratory, Ahmedabad	सदस्य Member
	3.	राजदीप रॉय, वैज्ञानिक/इंजीनियर - एस एफ, क्षेत्रीय रिमोट सेंसिंग केंद्र - पूर्व, कोलकाता (आरआरएससी, डी ओ एस, भारत सरकार) Rajdeep Roy, Sci/Eng - SF, Regional Remote Sensing Centre - East, Kolkata (RRSC, DOS, GOI)	सदस्य Member
	4.	संजीबा कुमार बलियारसिंह, वैज्ञानिक-सी, आई.एन.सी.ओ.आई.एस. Sanjiba Kumar Baliarsingh, Scientist-C, INCOIS	सदस्य Member
	5.	बी जगन्नाथा आचार्युलु, सेवानिवृत्त, उप. एफ एंड ए, सीएसआईआर B Jagannadha Acharyulu, Retd. Dy. F & A, CSIR	सदस्य Member
	6.	वी सुब्रमण्यम, प्रशासनिक अधिकारी (खरीद), आई.एन.सी.ओ.आई.एस. V Subramanyam, Administrative Officer (Purchase), INCOIS	सदस्य Member
	7.	एस शिवप्रसाद, वैज्ञानिक-ई, आई.एन.सी.ओ.आई.एस. S Shivaprasad, Scientist-E, INCOIS	सदस्य सचिव Member-Secretary
	8.	अनीश ए लोटलिकर, वैज्ञानिक-एफ, आई.एन.सी.ओ.आई.एस. Aneesh A Lotliker, Scientist-F, INCOIS	आमंत्रित Invitee
	9.	एस नागेश्वर राव, वरिष्ठ खाता अधिकारी एवं प्रमुख ईएसएस (अतिरिक्त प्रभार), आई.एन.सी.ओ.आई.एस. S Nageswara Rao, Sr. Account Officer & Head ESS (Addl. Charge), INCOIS	आमंत्रित Invitee
10.	देवेंद्र कुमार, वित्त एवं लेखा अधिकारी, आई.एन.सी.ओ.आई.एस. Devendra Kumar, Finance & Accounts Officer, INCOIS	आमंत्रित Invitee	
1. परिप्रेक्ष्य / Background			
The Indian National Centre for Ocean Information Services (INCOIS) is moving its research towards the Improving Primary Productivity Measurements, which rely on both dissolved and			

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particulate organic carbon. A Total Organic Carbon (TOC) analyser allows the direct quantification of organic matter, improving the accuracy of primary productivity estimates crucial for predicting ecosystem health and biological carbon uptake. Hence, it was proposed to procure a TOC analyser for analysis of organic matter variability, which is particularly relevant to coastal monitoring programs and ecosystem studies. Subsequently, Director, INCOIS, constituted the Technical and Financial Evaluation (TFE) Committee for Supply, installation and commissioning of the TOC analyzer along with a one-year standard warranty and three years of AMC as per the recommendation of 110<sup>th</sup> Standing Committee on Purchase and Stores (SC-P&S) (Ref: Office Order No. 140/2025 dated 03.07.2025).

**2. संक्षिप्त जानकारी / Briefing**

Shri S Shivaprasad, Scientist-E, INCOIS and Member-Secretary, TFEC, briefed the committee on the pre-bid meeting and queries raised by the potential bidders.

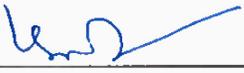
**3. चर्चा और सिफारिशें / Discussion and Recommendations**

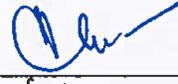
टी एफ ई ने निम्नलिखित नोट किया। / **The TFE noted the following:**

- A pre-bid meeting for "Supply, Installation and Commissioning of 01 No of Total Organic Carbon (TOC) analyzer along with one-year standard warranty and three years of AMC" was convened on 03<sup>rd</sup> March 2026 at 11:00 hrs as per the GeM tender (GEM/2026/B/7252840 dated 17.02.2026).
- Two bidders, namely M/s Swan Environmental Pvt. Ltd. and M/s Elementar India Pvt. Ltd. participated in the pre-bid.
- M/s Analytik Jena India Pvt. Ltd. and M/s Swan Environmental Pvt. Ltd. submitted their queries related to the GeM tender.
- The queries were reviewed and the appropriate responses were provided (Annexure-1).

टी एफ ई ने निम्नलिखित की सिफारिश की। / **The TFE recommended the following:**

- *The responses to the queries to be communicated to the bidders.*
- *Issue of corrigendum as specified in the Annexure-1.*
- *Extending the bid submission date till 22<sup>nd</sup> March 2026.*

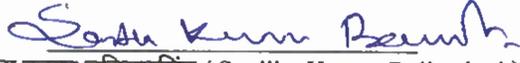
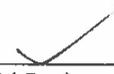
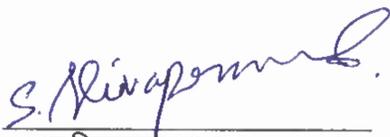
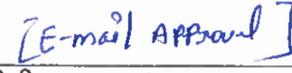
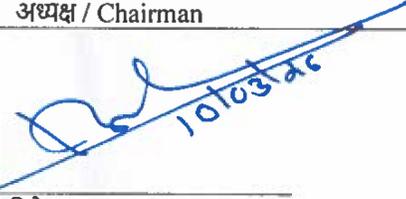
  
(वी सुब्रमण्यम / V Subramanyam)  
सदस्य / Member

  
(बी जगन्नाथा आचार्युलु / B Jagannadha Acharyulu)  
सदस्य / Member

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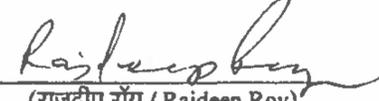
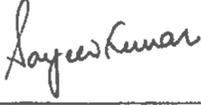
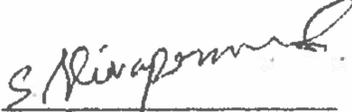
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 (संजीव कुमार / Sanjeev Kumar) सदस्य / Member	 (एस शिवप्रसाद / S Shivaprasad) सदस्य सचिव / Member-Secretary
 [E-mail Approval] (सरमा वी वी एस एस / Sarma V V S S) अध्यक्ष / Chairman	
कृपया स्वीकृति दें / For Kind Approval	
 (निदेशक / Director)	

Sl. No of Technical specifications	Specifications	Descriptions	Change in the specifications requested (Request/query)	Responses
<b>M/s Analytik Jena India Pvt. Ltd.</b>				
3	Autosampler	60 positions or more for solid	48 positions or more for solid	The requirement is project specific. <i>The tender specification stands.</i>
4	Measurement range	TOC(Liquid): 6ppb to 50,000 ppm carbon or more even without sample dilution	Change 4 ppb-30000 ppm carbon	The requirement is as per the analytical protocol to ensure wide range dynamic variability. <i>The tender specification stands</i>
5	Sample injection volume	0.2 to 2ml or better	0.2 to 1 ml or better	The requirement is as per the analytical protocol to ensure better representation of the heterogenous samples, reduce impact of syringe/injection errors, improve sensitivity and precision. <i>The tender specification stands</i>
13	Nitrogen Detector	Nitrogen detector is mentioned in the warranty clause	But Nitrogen requirement is missing in the specification	The text remained due to the typographic error and hence will be removed. <i>An appropriate corrigendum to be issued.</i>
13	Detector warranty	10 years	To be 5 years	The detector should have a minimum of 3-year free replaceable warranty for NDIR detector and furnace. <i>An appropriate corrigendum to be issued.</i>
12	Furnace warranty	10 years	To be 5 years	The detector should have a minimum of 3-year free

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कृपया स्वीकृति दें / For Kind Approval	
 (निदेशक / Director)	

## Shivaprasad S.

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**From:** Sarma VVSS <sarmav@nio.res.in>  
**Sent:** 09 March 2026 17:23  
**To:** Shivaprasad S.  
**Cc:** sarmav@nio.org  
**Subject:** Re: MoM TFEC of TOC

Approved

regards  
sarma

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**From:** Shivaprasad S. <shivaprasad.s@incois.gov.in>  
**To:** "Sarma VVSS" <sarmav@nio.res.in>, "sarmav@nio.org" <sarmav@nio.org>  
**Date:** Mon, 09 Mar 2026 12:47:28 +0530  
**Subject:** MoM TFEC of TOC

Dear Sir,  
Please find attached MoM signed by all members, requested to sign and send back for further process.  
Tender is ending on 10th march, 2026 (tomorrow).  
Regards  
Shivaprasad

-----Original Message-----

**From:** Sanjeev Kumar <sanjeev@prl.res.in>  
**Sent:** 09 March 2026 12:44  
**To:** Shivaprasad S. <shivaprasad.s@incois.gov.in>  
**Subject:** RE: TFE

Dear Shivaprasad,

Attached pl. find the document.

Sanjeev

> Dear Sir,  
> Please find attached MoM signed by other members, requested to sign  
> and send back for further process.  
> Tender is ending on 10th march, 2026 (tomorrow) Regards Shivaprasad  
>  
>  
>  
> **From:** Shivaprasad S. <shivaprasad.s@incois.gov.in>  
> **Sent:** 06 March 2026 18:31  
> **To:** Sanjeev Kumar <sanjeev@prl.res.in>  
> **Subject:** Fw: TFE  
>

				replaceable warranty for NDIR detector and furnace. <i>An appropriate corrigendum to be issued.</i>
17	Dimensions	Dimensions mentioned	Dimensions should be as per the manufacturer's design	The specified dimensions are intended to ensure system compactness and placement in the existing analytical laboratory. <i>The tender specification stands</i>
<b>M/s Swan Environmental Pvt. Ltd.</b>				
01	<b>Operating Principle:</b> High temperature combustion at minimum 900 °C and up to 1200 °C or more to ensure complete combustion of all type of sample matrix including high salt containing samples.	<b>Operating Principle:</b> High temperature combustion at minimum 900 °C and up to 1200 °C or more to ensure complete combustion of all type of sample matrix including high salt containing samples.	<b>Request:</b> We request you to please amend temperature to 680°C for liquids and 900°C for solids.	The requirement is as per the analytical protocol to ensure improved recovery and stability reducing analysis time with higher temperatures. <i>The tender specification stands</i>
3	<b>Auto sampler:</b> Should provide an auto sampler unit for both liquid & Solid mode with 30 positions or more for liquids and	<b>Auto sampler:</b> Should provide an auto sampler unit for both liquid & Solid mode with 30 positions or more for liquids and 60 positions or more for solids.	We request you to please check on the Solids auto sampler requirement as it has a limited applicability and inflates the costs and maintenance issues. Most Protocols like EPA allow reliable manual	The requirement is project specific. <i>The tender specification stands.</i>

	60 positions or more for solids.		solid preparation without automation avoiding carryover risks. Also, the overhead costs are more than 35% of instrument costs for solids auto sampler and require frequent cleaning and increased downtime.	
4	TOC (Liquid): 6ppb-50,000ppm Carbon or above even without sample dilution	TOC (Liquid): 6ppb-50,000ppm Carbon or above even without sample dilution	Request you to please amend the range to 6ppb-35,000ppm for all parameters TC, IC, TOC as this is sufficient all kind of applications.	The requirement is as per the analytical protocol to ensure accuracy and faster analysis with wider measuring-range to analyze samples with unknown and high organic load directly without dilution. <i>The tender specification stands.</i>
12	Minimum 3 year free replaceable warranty for NDIR detector & Furnace. High Sensitive IR detection, chemiluminescence, IR or electrochemical detection (NO)	Minimum 3 year free replaceable warranty for NDIR detector & Furnace. High Sensitive IR detection, chemiluminescence, IR or electrochemical detection (NO)	Request you to please confirm the requirement of TN. If required we request you to please allow only Chemiluminescence detection for Total Nitrogen measurement as the electrochemical life is <2 years and to be replaced continuously being electrochemical limitation and also the accuracy and reliability is lesser compared to chemiluminescence method which is based	The text "TN, the Nitrogen by chemiluminescence, IR or electrochemical detection (NO)" remained due to the typographic error and hence will be removed. <i>An appropriate corrigendum to be issued.</i>

Others	<p>Dimensions (WxDxH) &lt;(50cmx55cmx57cm) with autosampler: (&lt;50cm x 55cm x76cm), Weight &lt;50kg</p>	<p>Dimensions (WxDxH) &lt;(50cmx55cmx57cm) with autosampler: (&lt;50cm x 55cm x76cm), Weight &lt;50kg</p>	<p>on reference methods (EN 12260 / ASTM 8083-16). This will aid in providing a better technology, warranty on CLM detector to serve your valuable research application with reliable technology.</p> <p>The dimensions of manufacturer vary and please amend to remove this specification.</p>	<p>The specified dimensions are intended to ensure system compactness and placement in the existing analytical laboratory.</p> <p><i>The tender specification stands</i></p>
<p>17 of additional requirements</p>	<p>Evident Minimum Numbers of TOC installations (Same or Equivalent) model in last 5 financial years.</p>	<p>Evident of Minimum 3 Numbers of TOC installations (Same or Equivalent) model in last 5 financial years.</p>	<p>We request you to also please include to ask performance certificates especially from research organisations who are into same analysis of sea water/sediment applications so your esteemed organisation can know the quoted make/model is satisfactorily working and operated by existing customers.</p>	<p><i>The tender specification stands</i></p>