



भारतीय राष्ट्र महासागर सूचना सेवा केंद्र (इंकॉइस) Indian Nation Center for Ocean Information Services (INCOIS)

संदर्भ: इंकॉइस: पीयूआर 25/2024 Ref: INCOIS: PUR. 25/2024

अक्टूबर 10,2024 October 10, 2024

अंडमान और निकोबार द्वीप समूह में संपूर्णआधार पर सबमरीन केबल मल्टी-पैरामीटर वेधशाला की स्थापना के लिए रुचि की अभिव्यक्ति (ईओआई)

Expression of Interest (EOI) for Establishment of Submarine Cable Multi - Parameter Observatory in Andaman and Nicobar Islands on turn key basis

भारतीय राष्ट्र महासागर सूचना सेवा केंद्र (इंकॉइस)विभिन्न माहासागर संबंधी सेवाएं वृहद रूप मे हितधारकों को प्रदान करता है।इंकॉइससबमरीन केबल्ड मल्टी-पैरामीटर वेधशाला (आई.एस.सी.ओ)जलवायु अनुसंधान के साथ-साथ सुनामी और तूफान की पूर्व चेतावनी से संबंधित परिचालन अनुप्रयोगों के लिए पृथ्वी विज्ञान मंत्रालय द्वारा डीप ओशन मिशन के तहत एक अग्रणी पहल है।

Indian National Centre for Ocean Information Services (INCOIS), provides various ocean-related services to a range of stakeholders. INCOIS Submarine Cabled Multi-Parameter Observatory (ISCO) is a pioneering initiativeundertheDeepOceanMissionbytheMinistryofEarthSciences(MoES)forclimate researchaswellasoperationalapplicationsrelatedtotsunamiandstormsurgeearlywarning.

इंकॉइस ने संपूर्ण आधार पर अंडमान और निकोबार द्वीप समूह में सबमरीन केबल मल्टी-पैरामीटर वेधशाला की स्थापना के लिए रुचि की अभिव्यक्ति (अप्रतिबंध / गैर-प्रतिबद्ध) आमंत्रित की है। कार्य का वृस्तृत विवरण अक्टूबर 11, 2024 से निविदा कॉलम के तहत <u>www.incois.gov.in</u> से डाउनलोड किया जा सकता है।रुचि की अभिव्यक्ति के अनुरोध में निर्देशित पूर्व-योग्यता मानदंडों को पूरा करने वाले इच्छुक बोलीदाता इस प्रक्रिया में भाग ले सकते हैं।

INCOIS invites Expression of Interest (EOI) (Non – Committal) for Establishment of Submarine Cable Multi-Parameter Observatory in Andaman and Nicobar Islands on turnkey basis. Broad scope of work can be downloaded from www.incois.gov.in under tender column from October 11, 2024. Interested bidders fulfilling pre-qualification criteria as stated in the request for EOI may participate in this process.

निर्धारित प्रारूप में आप अपने प्रस्ताव,नवम्बर 12,2024 को 15:00 बजे या उससे पहले नीचे दिए गए पते पर संदर्भ संख्या और नियत तिथि अंकित सीलबंद लिफाफे में डाक के माध्यम से या हाथों द्वारा भेज सकते है।

The offers/proposals in the prescribed format shall be submitted in sealed covers superscribed the reference number and the due date to the below address through post or by hand on or before 15:00 Hrs of November 12, 2024.

	Postal Address	Location Address
0000 Fax 100:040-23072710	Services (INCOIS), Ministry of Earth Science Govt. of India, "Ocean Valley", Pragathi 1	lation Indian National Centre for Ocean Information ences, Services (INCOIS), Ministry of Earth Sciences,

क्रय एवं भंडार अधिकारी, इंकॉडस

Purchase and Stores Officer, INCOIS





INCOIS:PUR:25/2024 October 10, 2024

Request of Proposal towards Non-committal expression of interest (EOI) for prequalification of bidders towards "Establishment of Submarine Cabled Multi-Parameter Observatory in Andaman & Nicobar Islands on Turn- key basis"

Dear Sirs,

On behalf of Director, INCOIS proposals towards expression of interest are invited in "Two stage bidding System" from Contractors with appropriate setup having adequate resources and setup for Submarine Cabled Multi Parameter Observatory. The offers/proposals in the prescribed format, shall be submitted in sealed covers superscribed the enquiry number and due date. The project information and the broad scope of work are detailed in this document. Interested bidders fulfilling the pre-qualification criteria as stated in the request for EOI may participate in this process.

QUOTATIONS NOT SUBMITTED IN SEALED COVERS AND NOT SUPERSCRIBED THE ENQUIRY NUMBER AND DUE DATE WILL NOT BE ACCEPTED UNDER ANY CIRCUMSTANCE

1.	Name of the work	:	Establishment of Submarine Cabled Multi-Parameter Observatory in Andaman & Nicobar Islands on Turn-key basis	
2.	EOI/Proposal Reference No.	:	INCOIS:PUR: 25/2024	
3.	Submission of Proposal/EOI	:	The offers/proposals in the prescribed format, shall be submitted in sealed covers superscribed the enquiry number and due date.	
4.	Last date for seeking the clarifications	:	On or before 09 00Hrs of October 17, 2024	
5.	Pre - Proposal Meeting at INCOIS, Hyderabad	:	On 11 00 Hrs of October 23, 2024	
6.	Proposal/EOI submission due date online	;	On or before 15 00 Hrs of November 12, 2024	
7.	Proposal/EOI opening date	1:	After 15 30 Hrs of November 12, 2024	

Technical presentation by shortlisted EOIs/Proposals will be intimated separately.

For Further Clarifications if any, the following personnel may also be contacted: Mr. Devendra Kumar (email: devendra.kumar@incois.gov.in; Phone No. 040 23886074) /Mr. R.V Giridhar (email: rvgiridhar@incois.gov.in Phone No. 040-23886055)

INCOIS may, at its discretion, extend the deadline for submission of proposal by issuing a corrigendum, in which case all rights and obligations of the owner and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

Postal Address	Location Address	
Indian National Centre for Ocean	Indian National Centre for Ocean Information Services	
Information Services (INCOIS), Ministry of	(INCOIS), Ministry of Earth Sciences, Govt. of India,	
	"Ocean Valley", Survey No.342/3, Beside ALEAP, Near	
	Pragathi Nagar, Opp. JNTU-Kukatpally, Hyderabad 500	
(SO), Hyderabad - 500 090	090, Ph.No.040-2388 6000 , Fax No.040-23892910	

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1. Introduction

The Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, an autonomous body under Ministry of Earth Sciences (MoES), Govt. of India is engaged in providing ocean information and advisory services. The mandate of INCOIS is to provide the best possible ocean information and advisory services to the society, industry, government and scientific community through sustained ocean observations, and focused research in modelling. INCOIS deals with the projects related to marine fishery advisory services, tsunami early warning system, ocean state forecast, ocean observing systems, ocean modelling, satellite oceanography, coastal geospatial applications, ocean data and information management and web-based services relevant to societal needs. INCOIS is a nodal agency for providing ocean information services on an operational basis to the various stakeholders of the country.

The proposed INCOIS Submarine Cabled Multi-Parameter Observatory (ISCO) is a pioneering initiative under the Deep Ocean Mission by the Ministry of Earth Sciences (MoES) with an aim to undertake long-term observation of various oceanographic and geophysical parameters for climate research as well as operational applications related to tsunami and storm surge early warning. This ISCO comprises of (i) submarine cable of about 150 km length west of Wandoor in Andaman and Nicobar Is., (ii) two science nodes along the cable with oceanographic and geophysical sensors at water depths of around 2000 to 2500 m, (iii) landing station infrastructure at INCOIS observatory at Wandoor, A&N Is. and (iv) control centre software and hardware at INCOIS, Hyderabad for real-time data acquisition and monitoring. The proposed observatory should be capable of expanding to 50 scientific nodes over a cable length of 2000 km in future.

- 2. Scope of Work: Design, supply, integration, testing, commissioning, and maintenance of submarine multiparameter cabled observatory at Andaman and Nicobar Islands on turnkey basis.
 - 2.1. Desk Study
 - Desk study to identify suitable cable (fiber optic or SMART), sensors, identification of optimum route and submarine configuration of the multi-parameter cables observatory, based on INCOIS requirements, and data / reports obtained from bathymetry and geophysical surveys (subbottom profiling, soil characteristics etc.).
 - 2.2. Fiber optic / SMART Cable
 - Laying a globally certified submarine fiber optic / SMART cable of approximately 150 km west
 of Wandoor in Andaman and Nicobar Is. including mobilization / de- mobilization of survey
 vessel, burying of cable to a suitable depth at the coast, shelf.
 - The submarine cable must provide a service life of 25 years with stable optical and electrical performance and amenable for extension of additional nodes, sensors and easy maintenance.
 - The cable should withstand environmental conditions on the seabed such as hydrostatic pressure, abrasion and mechanical crush.
 - The cable should be capable of extending to 2000 km in future with capability to accommodate 50 science nodes.

2.3. Science nodes and sensors



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The cable should have two science nodes comprising of following sensors, rated for 5000m depth, with a capability to be remotely configured.

Sl.	Sensors	Specifications	
Prima	ry		
1.	Accelerometers	Dynamic range: > 160 dB Frequency Response: DC to 200 Hz Self-noise level: Below ALNM 1 to 40 Hz and below AHNM DC to	
		100 Hz or < -145 dB relative to 1 (m/s ²) ² /Hz at 10 Hz	
2.	Bottom Pressure Recorder	Measuring Sensitivity: less than 1 mm in 5000 m Sampling Interval: 15 sec, 60 sec and 15 min Frequency: Low mid frequency (LMF)	
		Pressure sensor: 0-10000 psi	
3.	Clinometers	Sampling rate: 100 Hz	
4.	Temperature	-5 Deg C to 40Deg C, accuracy of +/-0.002Deg C.	
Comp	atibility for additional sensors		
5.	Ocean Bottom Seismometers	Dynamic range: > 160 dB	
	and Ambient noise	Frequency Response: Flat velocity response between 0.0083 Hz (120 seconds) and 50 Hz	
		Self-noise level: Below NLNM between 0.0066 Hz (150 seconds) and 10	
7.5		Hz or <-165 dB at1Hz	
6.	Acoustic Doppler Current Profiler	1000m current profiling range, stand alone and online application to observe the deep-ocean profiles.	

2.4. Landing station

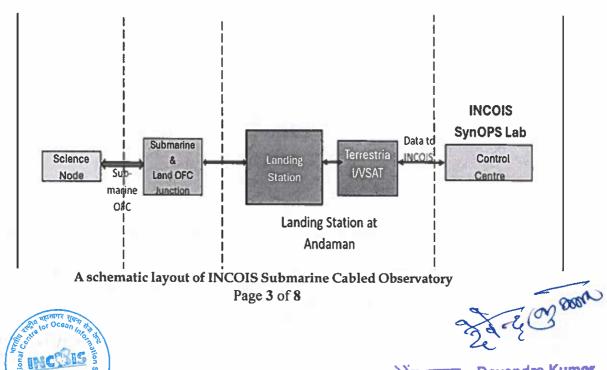
- The cable should be terminated at a landing station at the INCOIS observatory in Wandoor by providing necessary technical support infrastructure (UPS, networking, etc.) to power the science nodes and receive the data from the science nodes.
- The data should be routed in real-time through terrestrial / VSAT link to INCOIS control centre in Hyderabad.

2.5. Control centre

The required software / hardware at the INCOIS control centre for data reception, network health monitoring and data scientific data analysis.

2.6. Miscellaneous

- Liasoning with the local administrative authorities to obtain necessary approval for the execution of the project such as statutory clearances - Defense, Coastal Regulation Zone (A&N administration, MoEF & CC), Department of Telecommunications.
- All civil, mechanical, electrical, communication etc. works as required.





देवेंद्र कुणार Devendra Kumar

3. Deliverables

INCOIS Submarine Cabled Multi-Parameter Observatory with all specified sensors, submarine cable, landing station at A&N and control Centre at INCOIS with hardware/software as per scope of work.

4. Instructions to the Bidders

- 4.1. Expression of Interest (EOI)
 - 4.1.1. INCOIS invites interested bidders to submit their EOI for undertaking project on "Establishment of Submarine Cabled Multi-parameter Observatory in Andaman & Nicobar Islands".
 - 4.1.2. The EOI is not an offer and is issued with no commitment to INCOIS
 - 4.1.3. INCOIS reserves the right to withdraw the EOI and change or vary any part thereof at any stage.
- 4.2. Completeness of EOI
 - 4.2.1. Bidders are advised to study all instructions, requirements, and other information in the EOI documents carefully.
 - 4.2.2. Submission of EOI shall be deemed to have been done after careful study and examination of the EOI document with full understanding of the scope of the work.
 - 4.2.3. The EOI should be full and complete in all respects
- 4.3. Failure to furnish all information required by the EOI document or submission of EOI which is not substantially responsive (For purposes of this clause, a substantive responsive bid is one, which conforms to all terms and condition of the bidding documents without material deviations, reservations or omissions.) to this document will be at the bidder's risk and may result in rejection.
- 4.4. Consortium is allowed. In case of consortium, name of the prime bidder should be clearly indicated in the bid. A copy of Letter-of-Support between the parties should be submitted by the prime bidder along with EOI.
- 4.5. Pre Proposal Meeting (In-person and/or virtual/hybrid)
 - 4.5.1. INCOIS will organize a pre-proposal meeting with all the bidders at INCOIS, Hyderabad.
 - 4.5.2. The purpose of the meeting is to provide bidders with any clarifications related to the project and especially to the written queries submitted by bidders before the deadline.
 - 4.5.3. It is mandatory that the representatives of the interested bidders attend the meeting and collect the participation certificate issued by INCOIS which is to be duly attached along with EOI.
 - 4.5.4. The bidders should participate in this meeting at their own cost.
 - 4.5.5. Bidders are requested to send their clarifications, if any well in advance of the Preproposal meeting.
 - 4.5.6. Below is the virtual /hybrid meeting link: Link will be provided.

4.6. Submission of responses

- 4.6.1. EOI, in its complete form in all respects must be submitted before the due date at INCOIS.
- 4.6.2. In exceptional circumstances and at its discretion, INCOIS may extend the deadline for submission by issuing an amendment / corrigendum, in which case all rights and obligations of INCOIS and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

- 4.6.3. The EOI shall be valid for a period of six (06) months initially which may be extended further, if required by INCOIS.
- 4.7. Technical Clarification: If firms require clarifications on certain points in this Document may be submitted (via e-mail) on or before 09 00 Hrs of October 17, 2024 Note: Firms may submit a consolidated query only once. e-mail: anessh@incois.gov.in, E-mail subject should be mentioned as "Queries on Establishment of Submarine Cabled Multi-Parameter Observatory in Andaman & Nicobar Islands on Turn-key basis".

5. Contents of EOI

Bidders are requested to submit their EOI with documentary proof for Part A (Pre – Qualification Criteria) and Part B (Technical Criteria) as per the below.

Part A: Pre - Qualification Criteria

S No	Description	Supporting document(s) duly attested by the Authorized Signatory	Page Nos where the required supporting documents are attached.
1.	Name of the Bidder:		
2.	The bidder is a 1) Registered Indian under Indian Company Act 1956 / 2) Foreign firm /3) OEM/(s) / 4) Consortium 5) System Integrator		
3.	Bidder Address and contact details like E Mail , Phone etc.,		
4.	The bidder shall be registered under the Indian Companies Act, 1956/Partnership Firm/Proprietor and should have their registered office in India. If foreign firm intends to participate, the certificate of incorporation is to be attached.	Copy of Certificate of incorporation/ Registration Certificate	
5.	For Indian vendors Company profile, Organizational Hierarchy, Registration of company with PAN, GST etc For Foreign vendors Company profile Organizational Hierarchy, Registration of company	Relevant documents to be attached.	
6.	The bidder should be in the business of executing the orders of similar projects for at least 05 years as on bid submission date.	Certificate by the Bidder's client's organization together with copies of the executed orders and satisfactory completion certificates	
7.	The Bidder should have an average annual financial turnover of Rs. 25.00 Cr or more in any three years during last five years ending March 31, 2023. Proof of	Statutory Auditor/CA certified document with name of CA registration number, signature, and stamp	
	turnover certificate issued by the chartered accountant to be submitted. Financial year Details of Turnover 2022-23 2021-22 2020-21		



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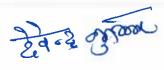
	2019-20 2018-19	THE	
8.	The bidder should possess the essential infrastructure, facilities, and technical expertise. Details about total staff and technical skilled persons on its payroll to be provided.	Necessary proofs such as Letter from HR/Authorized Signatory should be submitted.	
9.	The bidder should not be blacklisted by any Central Govt. / State Govt. / PSU/Govt. Bodies/Concerned authority	Undertaking/ Certificate signed by the Authorized signatory.	Attack consists

Part B: Technical Criteria.

- Technical proposals should comprise the following sections
 - o Company profile (technical capabilities and financial turnover) of the bidder(s)
 - O Details of similar projects executed with project cost
 - O Technical solution(s) to meet the scope of work of INCOIS the bidder may propose multiple options.
 - Methodology for implementation of the proposed solution(s)
 - O Detailed bill of quantities for each solution(s) indicating make and model
 - o Major milestone and timeline for execution
 - O Details of the project team
 - O Details of infrastructure available for implementation of the solution
- Evaluation of the responses submitted against the request for EOI Screening / scrutiny of responses shall be carried out in two stages.
 - Stage-1: Based on Pre qualification criteria (Part A) mentioned at Section 5 through review /
 evaluation of documentation submitted. INCOIS shall invite bids from all those bidders
 whose bids at the first stage were not rejected, to present final bid with bid prices in
 response to a revised set of terms and conditions of the procurement.
 - Non-committal EOI- Director, INCOIS/NIT authority reserves the right to float a normal OTE/GTE during second stage of bidding if required. Bidders do not have any right of claim ,whatsoever, in this regard.
 - Stage-2: Based on the evaluation of Technical Proposals submitted as per the format mentioned at section 5 and presentations by the bidders ranked as per the following criteria.

SI.	Description	Max. Marks
1	Company profile (technical capabilities and financial turnover) of the bidder(s)	10
2	Details of similar projects executed with project cost	10
3	Technical solution(s) to meet the scope of work of INCOIS – the bidder may propose multiple options.	20
4	Methodology for implementation of the proposed solution(s)	20
5	Detailed bill of quantities for each solution(s)	05
6	Major milestone and timeline for execution	05
7	Details of the project team	10
8	Details of infrastructure available for implementation of the solution	20





Note:

- The decision of INCOIS in ascertaining "similar nature" and "similar project" will be final.
- Incomplete EOI or those not conforming to any of the instructions provided would be summarily rejected. Hence, we request bidders to study the document very carefully and provide all the information including documentary evidence wherever required
- The bidders shortlisted after evaluation of their EoI will only be issued with tender document for submitting their bids.
- INCOIS shall have the right to cancel/alter the EoI process without assigning reason/s thereof.
- Director, INCOIS reserves the right to take a final decision in all regards with respect to this EOI.
- In case the documents are incomplete INCOIS may obtain further clarifications/additional documents as deemed appropriate.

7. General terms and Conditions

Point No.	Details
1.	Quotation: The EOI in the prescribed format, shall be submitted in sealed covers superscribed the enquiry number and due date as specified above.
2.	The EoI should be submitted in sealed envelope and superscribed with "EOI proposal for Establishment of Submarine Cabled Multi-Parameter Observatory in Andaman & Nicobar Islands on Turn-key basis in response to EOI Notice No. INCOIS: PUR: 25/2024".
3.	The proposals complete in all respect should be submitted to the Director, Indian National Centre for Ocean Information Services (INCOIS), Ministry of Earth Sciences, Govt. of India, "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad - 500 090, Telangana latest by 1500 Hrs of November 12, 2024
4.	Validity of the EOI: The EOI shall be valid initially for a period of six (6) months initially which may be extended further.
5.	 EOI Preparation Cost a) The bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings / discussions / presentations, preparation of EOI, in providing any additional information required by INCOIS to facilitate the evaluation process. b) INCOIS, in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
6.	Confirmation/undertaking on the letter head of the Bidder& individual partners of the consortium if any, needs to submit duly signed and stamped by the authorised signatory towards the supply of tendered materials/items (make and model) are invariably not from the land border sharing countries with India as per Ministry of Finance Department of Expenditure Office Memorandum No. 6/18/2019-PPD DT. 23.07.2020 and F.18/37/2020-PPD, dt. 08.02.2021.
7.	Proof for fulfilment of eligibility criteria mentioned above should be submitted along with the proposal. If the proposal is submitted without valid documents, INCOIS shall not consider the bid offered as responsive. Proposals received without proof of eligibility criteria will be rejected
8.	The proposals shall be submitted only after signed by a duly authorized officer of the firm which is bidding for is proposal tendered requirement, and in the case of a Corporation, seal, or otherwise appropriately executed under seal.
9.	The acceptance of proposal will solely rest with Director, INCOIS who does not bind himself to accept the lowest or any other proposal. No reasons will be furnished for acceptance or rejection of any proposal.
10.	Director, INCOIS reserves the right to cancel the request for proposal at any stage due to any technical /administrative reasons. The Bidder shall not have any claim under what so ever reasons.



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11.	Canvassing in connection with proposal is strictly prohibited and any canvassing will render the bid of such proposals ineligible.
12.	INCOIS reserves the right to alter the scope/or reduce quantum of work, before/after issue of tender and proposal shall not have any claim whatsoever on this account.
13.	In case of any un resolved dispute or differences arising at any time between this Institute and the firm holding the contract, these shall be resolved in terms of the Arbitration and Conciliation Act 1996 and held at Hyderabad, Telangana, India only. Further, this contract is subject to laws of India alone

Declaration: I,	son/daughter of	aged	years and
residing at	State and	d sole proprietor /mana	ging partner
/director of	, after having read and understood t	he EOI No	
dated floated by th	ne Institute, hereby undertake that I agree	to and shall abide by t	he terms and
conditions prescribed in the sa	aid EOI for "Establishment of Submarine C	Cabled Multi-Parameter O)bservatory in
Andaman & Nicobar Islands	s on Turn-key basis".		

Signature of the Bidder/Authorised Signatory & date

Name

OFFICE SEAL,

Address

Note: The bidder/tenderer has to sign & stamp on all pages of tender document and upload the same

देवेंद्र कुमार Devendra Kumar

प्रशासनिक अधिकारी (एस एवं पी) Administrative Officer (S & P)