

भारतीय राष्ट्रीय महासागर सूचना सेवा केंद्र
पृथ्वी विज्ञान मंत्रालय, भारत सरकार "ओशियन वैली",
प्रगति नगर (बी. ओ), निज़ामपेट (एस. ओ), हैदराबाद - 500 090
दूरभाष सं. 040-2388 6002 / 23886074 फ़ैक्स : 040-2389 2910 / 2389 5001
INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION SERVICES
Ministry of Earth Sciences, Government of India
"Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad - 500 090
Phone No.040-2388 6002/23886074 Fax: 040-2389 2910/2389 5001

संदर्भ: ईकोईस:क्रय: 56/2026
Ref. INCOIS: PUR: 56/2026

दिनांक: 02.09.2026
Date: 02.09.2026

**GLOBAL EXPRESSION OF INTEREST CUM MARKET CONSULTATION Enquiry
through eprocure.gov.in/procure/app**

भारतीय राष्ट्रीय महासागर सूचना सेवा केंद्र, हैदराबाद भारत सरकार के पृथ्वी विज्ञान मंत्रालय के अंतर्गत एक स्वायत्त निकाय है।
Indian National Centre for Ocean Information Services (INCOIS), Hyderabad is an autonomous body under Ministry of Earth Sciences, Government of India.

ग्लोबल एक्सप्रेसन ऑफ़ इंटरैस्ट (EOI) और मार्केट कंसल्टेशन: eprocure.gov.in/procure पर रजिस्टर्ड वेंडर्स से नीचे दी गई चीज़ों के लिए पूछताछ/प्रस्ताव आमंत्रित किए जाते हैं। EOI को सिर्फ़ <http://eprocure.gov.in/procure/app> के ज़रिए ऑनलाइन जमा करना होगा। EOI की संक्षिप्त जानकारी नीचे दी गई है।

GLOBAL EXPRESSION OF INTEREST CUM MARKET CONSULTATION Enquiries are invited from registered vendors of eprocure.gov.in/procure for the following items. Being a <http://eprocure.gov.in/procure/app>, the EOI has to be submitted online through <http://eprocure.gov.in/procure/app> only. The brief details of EOI are appended below.

क्र. सं. SI. No	कार्य का नाम Name of the Work	बोली संदर्भ सं. Bid Reference No.	निविदा क्रमांक निविदा संदर्भ सं Tender Id Tender reference no.	बोली समाप्ति की तारीख और समय Bid Submission end date and Time
(1)	ग्लोबल एक्सप्रेसन ऑफ़ इंटरैस्ट कम् मार्केट कंसल्टेशन: टो करने योग्य हाइब्रिड मरीन एनर्जी कन्वर्टर और ओशन ऑब्ज़र्वेशन प्लेटफ़ॉर्म। GLOBAL EXPRESSION OF INTEREST CUM MARKET CONSULTATION Towable Hybrid Marine Energy Converter and Ocean Observation Platform.	ईकोईस:क्रय: 56/2026 INCOIS: PUR: 56/2026	2026_INCOI_924498_1 INCOIS-PUR-56-2026	06.10.2026 17:00Hrs

eprocure.gov.in/procure के तहत, EOI को eprocure.gov.in/procure यानी <http://eprocure.gov.in/procure/app> पर 'Bids/RAs' कॉलम के ज़रिए ऑनलाइन जमा करना होगा। किसी भी मदद के लिए, कृपया eprocure.gov.in/procure की हेल्पलाइन से संपर्क करें। आप इन लोगों से भी संपर्क कर सकते हैं: श्री वी. सुब्रह्मण्यम (ईमेल: manyam@incois.gov.in; फ़ोन नंबर: 040 2388 6022) / श्री दसारी प्रसाद (ईमेल: dasariprasad@incois.gov.in; फ़ोन नंबर: 040-2388 6082)।

Being a eprocure.gov.in/procure, the EOI has to be submitted online through the eprocure.gov.in/procure i.e., <http://eprocure.gov.in/procure/app> under the Bids/RAs column. For any assistance, please contact help line of eprocure.gov.in/procure. The following personnel may also be contacted: Mr. V.Subrahmanyam (email: manyam@incois.gov.in; Phone No. 040 2388 6022)/Mr. Dasari Prasad (email: dasariprasad@incois.gov.in Phone No. 040-2388 6082)




(वी. सुब्रह्मण्यम/ V.Subrahmanyam)
Administrative Officer (Purchase),
प्रशासनिक अधिकारी (क्रय), ईकोईस
Tender Inviting Authority, INCOIS





Basic Details

Organisation Chain	ESSO-INCOIS		
Tender Reference Number	INCOIS PUR 56-2026		
Tender ID	2026_INCOI_924498_1	Withdrawal Allowed	Yes
Tender Type	Global Tenders	Form of contract	EOI
Tender Category	Works	No. of Covers	1
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No
Payment Mode	Not Applicable	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No

Cover Details, No. Of Covers - 1

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical/Finance	.pdf	GLOBAL EXPRESSION OF INTEREST CUM MARKET CONSULTATION Towable Hybrid Marine Energy Converter and Oce

Tender Fee Details, [Total Fee in ₹ * - 0.00]

Tender Fee in ₹	0.00		
Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	No		

EMD Fee Details

EMD Amount in ₹	0.00	EMD Exemption Allowed	No
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Nil	EMD Payable At	Nil

[Click to view modification history](#)

Work / Item(s)

Title	56-2026				
Work Description	GLOBAL EXPRESSION OF INTEREST CUM MARKET CONSULTATION Towable Hybrid Marine Energy Converter and Ocean Observation Platform				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	As applicable				
Show Tender Value in Public Domain	No				
Tender Value in ₹	50,00,00,000	Product Category	Power/Energy Projects/Products	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	180	Period Of Work(Days)	NA
Location	Andaman and Nicobar	Pincode	744101	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	INCOIS HYDERABAD
Should Allow NDA Tender	No	Allow Preferential Bidder	No		
Tenderer Class	As per Tender Document				

Critical Dates

Publish Date	02-Sep-2026 09:00 AM	Bid Opening Date	07-Oct-2026 05:30 PM
Document Download / Sale Start Date	02-Sep-2026 09:30 AM	Document Download / Sale End Date	06-Oct-2026 05:00 PM
Classification Start Date	02-Sep-2026 10:00 AM	Classification End Date	11-Sep-2026 11:00 AM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (in KB)
	1	Tendernotice_1.pdf	GLOBAL EXPRESSION OF INTEREST CUM MARKET CONSULTATION	529.58

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	Tender Documents	eoi.pdf	GLOBAL EOI CUM MARKET CONSULTATION	512.40

Bid Openers List

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	aneesh@incois.gov.in	Aneesh A Lotlikar	ANEESH ANANDRAO LOTLIKAR
2.	venu@incois.gov.in	VENUGOPALARAO VANGAPANDU	VANGAPANDU VENU GOPALA RAO
3.	dasariprasad@incois.gov.in	PRASAD DASARI	DASARI PRASAD

Tender Properties

Auto Tendering Process allowed	No	Show Technical bid status	Yes
Show Finance bid status	Yes	Stage to disclose Bid Details in Public Domain	Technical Bid Opening
BoQ Comparative Chart model	NIL	BoQ Compative chart decimal places	2
BoQ Comparative Chart Rank Type	NIL	Form Based BoQ	No

TIA Undertaking

S.No	Undertaking to Order	Tender complying with Order	Reason for non compliance of Order
1	PPP-MII Order 2017	Not Applicable	EOI CUM MARKET CONSULTATION
2	MSEs Order 2012	Not Applicable	EOI CUM MARKET CONSULTATION

Tender Inviting Authority

Name	V S MANYAM
Address	INCOIS HYDERABAD

Tender Creator Details

Created By	PRASAD DASARI
Designation	Asst. Manager
Created Date	01-Sep-2026 06:49 PM



INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION SERVICES

An autonomous institute under the Ministry of Earth Sciences, Government of India
Ocean Valley, Pragathi Nagar (BO), Nizampet (SO), Hyderabad 500 090, Telangana, India

GLOBAL EXPRESSION OF INTEREST CUM MARKET CONSULTATION

Towable Hybrid Marine Energy Converter and Ocean Observation Platform

for field validation of the INCOIS Ocean Energy Atlas
Phase I pilot deployment, Andaman and Nicobar Islands

EOI No. PUR:56/2026 Dated [01.09.2026]

This is a global enquiry. Indian firms, foreign firms and consortia of both may respond. There is no fee, no document cost, no bid security and no earnest money. No portal registration and no digital signature are needed to respond. This is not a tender, and it does not ask for prices.

1. At a glance

Item	Details
Purchaser	Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, an autonomous institute under the Ministry of Earth Sciences.
Funding	Deep Ocean Mission, Vertical 2, Ministry of Earth Sciences.
What INCOIS plans to buy	One contract covering design, construction, towage, installation, commissioning and ten years of operation and maintenance of a towable floating platform. The platform carries a hybrid marine energy converter and an ocean observation suite.
Where	Off the Andaman and Nicobar Islands, within reach of Port Blair for marine services. The exact position is fixed after the site survey.
Cost	This EOI does not ask for prices and none should be sent. INCOIS will seek cost information separately and in writing at a later stage.
Published on	Central Public Procurement Portal (eprocure.gov.in) and www.incois.gov.in . Copies also go to Indian Missions abroad and to foreign Missions in India.
Written queries by	11.09.2026 Through CPP Portal and e-mail vijay@incois.gov.in , manyam@incois.gov.in
Pre-bid meeting (Hybrid)	15.09.2026, 1500 hours IST, Hybrid. The joining link is published on the same portals three days earlier.
Responses by	06.10.2026, from publication, up to 1700 hours IST.
How to send	Through CPP Portal and One signed PDF by e-mail, or a signed hard copy by post or by hand. Either will do and only one need be sent.
Language	English.
Contact	Member-Secretary, Technical and Financial Evaluation Committee, INCOIS, Hyderabad. E-mail: vijay@incois.gov.in , manyam@incois.gov.in with a copy to dasariprasad@incois.gov.in . Telephone: 040-23886083 / +91-8801215474

2. Background

INCOIS published the Ocean Energy Atlas. It provides the wind, wave and solar resource of the Indian Exclusive Economic Zone, and every number in it comes from a satellite & data driven model. Presently, no station anywhere in Indian tropical waters measures all three together, accurately, for long enough to check those parameters. INCOIS proposes to build a floating test bed off the Andaman and Nicobar Islands to close that gap.

The platform has three objectives (i) to measure the wind, wave and solar resource at the site for twelve months, and the measurements are compared against the Atlas, (ii) it carries wave, wind and solar converters as test

modules, so that the behaviour of such machines in Indian tropical seas can be studied and (iii) it then also works on as a permanent observation node for INCOIS services.

This is a research facility and not a power project. Energy produced during the trials is dissipated off on board in a load bank, and nothing is exported to any grid in Phase I. The facility succeeds if it survives one monsoon and one cyclone season, returns at least 90 per cent complete data, and yields a corrected Atlas. How many units it generates is not the test, although the platform is to be built so that power can be sent ashore later, as para 4 sets out.

No platform anywhere in the world combines wave, wind and solar conversion in commercial operation, and the three technologies are at different stages of maturity. A specification for a facility of this kind cannot be frozen responsibly without first asking the firms who would have to build it, which is the reason for this document.

3. About this EOI

- It is a market consultation, issued ahead of the tender so that INCOIS writes a tender the market can bid for.
- It is not a tender, a pre-qualification or a shortlist. No ranking of respondents is prepared and none is published.
- The tender that follows is an open global tender. Any eligible firm may bid in it whether or not it responds here. Responding gives no advantage and staying away bars nobody from anything.
- **This EOI does not ask for prices, and none should be sent.** Do not include a rate, a quotation or a budgetary figure anywhere in your response. If one arrives, INCOIS will set it aside and will not take it into account. Cost information will be sought separately, in writing, at a later stage.
- The technical detail here tells you what the tender will later ask for, so that your firm can get ready. It is not a scoring sheet. Where something does not apply to your scope, or you do not have the figure, write "not applicable" and move on. A blank does not count against you.
- INCOIS is not bound to issue the tender. It may change or withdraw this EOI at any stage by notice on the portals named at para 1.
- Your response is examined by the Technical and Financial Evaluation Committee constituted for this project and by government reviewers. No other firm sees it, and it is not used to write a specification around the product of any one supplier.

4. The work in brief

The particulars below are indicative. They are given so that you can judge the size and the difficulty of the work, and they are settled in the tender after this consultation. INCOIS does not prescribe the rating of any individual converter, because the choice of rating belongs with the designer.

Item	Indicative particulars
The facility	One towable floating platform carrying a hybrid marine energy converter, being wave, wind and solar working in combination, together with an ocean observation suite. An ocean current or tidal converter may also be offered as an option mounted on the platform. Recoverable and re-deployable elsewhere in Indian waters.
Installed capacity	About 250 kW in aggregate. How that aggregate is divided between wave, wind and solar is your choice. If you offer an ocean current or tidal converter as an option, state its rating separately and outside the 250 kW aggregate. INCOIS does not fix the rating of any single converter, the number of units, or the conversion principle. State what you would offer and why you would offer it.
Wind conversion	The wind machines are to be vertical axis and omnidirectional.
Power delivered ashore	This is required and is not an option. The platform is to be built in Phase I so that power can later be delivered to a nearby grid, to a shore station or to a building on land. Phase I dissipates its output on board, but the route out is to exist in the design from the start. That means a cable route and hang off, terminations at the hull, space and rating for export switchgear, protection, synchronising and metering, and the naval architecture to carry the weight of the riser and the cable. Set out how you provide for it and what it costs you in weight and deck area.
Provision for later expansion	A firm requirement. The platform is to be built in Phase I so that installed capacity can later be raised three or four times without replacing the hull or the mooring. That calls for reserved deck area with at least two spare module bays, structural and stability reserve at those positions, electrical capacity and cable routes rated for the higher power, space and cooling for a larger battery, a mooring uprating case already analysed, and spare data channels.
Platform	Towable steel floating platform, classed by a member of the International Association of Classification Societies such as the Indian Register of Shipping or equivalent. Design and fatigue life 25 years. The size is to carry the converters offered, the observation suite and the reserve for later expansion. Coatings with cathodic protection. Recovery and re-deployment with a marine spread of 21 days or less.

Item	Indicative particulars
Modularity	Every converter sits on a standard seat with standard electrical and data connections, so that a module can be exchanged at sea without altering the hull. This is what makes the platform a test bed rather than a one-off machine.
Station and mooring	State the depth range your platform is designed for and can be moored in, say which depth you would recommend for this facility, and give your reasons. The mooring is to be designed for the 100 year extreme condition, for the case with one line damaged, and for fatigue, with load monitoring on every line, an allowance for marine growth, and retrievable anchors suited to the site soil.
Design environment	Tropical and cyclone prone. The provisional envelope carried forward from earlier work is a 100 year significant wave height of about 11 m, a 100 year ten minute mean wind of about 52 m/s, and a peak wave period of 14 to 15 seconds. A site specific metocean study has not yet confirmed these figures, and published estimates for the Bay of Bengal vary a good deal with the method used and with whether one or two severe cyclones fall inside the record. Treat them as an order of magnitude only. Since the water depth is left open, read the wave height as a deep water value and transform it to the depth you propose. INCOIS will fix the design basis by corrigendum after this consultation, so that every bidder designs to the same sea state.
Power, storage and dissipation	An integrated power system, battery storage and a seawater cooled resistive load bank, each rated for the aggregate capacity you actually offer, so that the plant can always dissipate its own full output. State the ratings your design needs. Storage with battery management, gas and fire detection and suppression, and marine type approval. At least 72 hours of autonomy for the core measurement channels. No grid export in Phase I.
Observation and data	Directional waves, two current profilers, a temperature and salinity string with a profiling winch, a full weather station with two pyranometers, a tide gauge, six degree of freedom motion measurement, hull strain, mooring line load monitoring, metering on every module, battery and load bank data, fire and gas detection, CCTV, One pyrgeometer, two 3-d sonic anemometers, one Eddy Covariance system (IRGA, 3d-sonic and IMU), one infrared radiation thermometer and navigation aid health. Acquisition and control with a historian, time stamped from a satellite clock, open data formats, three independent telemetry paths, at least 90 per cent availability on every channel, controlled and logged remote access, all data stored within India, and calibration traceable to national standards.
Ocean chemistry package	Offered as an option. Say whether you can supply and integrate it, and what it needs from the platform.
Marine operations	Load out and sea fastening, ocean tow of roughly 760 nautical miles from an Indian east coast yard under a marine warranty survey, pre-lay of moorings, hook up and commissioning inside the January to April weather window. Hazard studies, an emergency response plan, and navigation marking coordinated with the Coast Guard and the lighthouse authority.
Operation and maintenance	Ten years on an availability basis, running from the date of commissioning. The twelve month validation campaign is year one of those ten and not an addition to them. Annual campaigns, a calibration rotation, a two year strategic spares holding, management of marine growth and mooring integrity, remote monitoring, a refit in year five, a final survey in year ten, and structured transfer of knowledge to INCOIS staff.
End of the term	The hull is to be designed for 25 years. INCOIS may extend the term or redeploy the platform, so removal at year ten is not assumed.

Key design questions

These are the engineering questions that decide the design and the cost. This is a first of its kind facility, so the hard parts are set out openly here rather than left for bidders to find after award. Answers in words are enough and they need not be long. Answer what falls within your scope and write "not applicable" against the rest. Do not attach costs.

- 4.1 Integration. No platform combining wave, wind and solar conversion is in commercial operation anywhere. How would you carry single point responsibility for integrating the three, and how would you control the interfaces?
- 4.2 Water depth. The depth is left open on purpose. What depth range is your platform designed for, what depth would you recommend here, and what changes with depth in your hull form, mooring, anchors and installation method?
- 4.3 Design sea state. Please review the provisional envelope at para 4. What wave height and period would you design to?
- 4.4 Mooring, seabed and seismic conditions. What is your design method for the line system, the one line damaged case, connector fatigue and marine growth, and how do you allow for seabed movement and tsunami loading in a seismically active region?

- 4.5 The mix you would offer. What split of the aggregate capacity between wave, wind and solar do you propose and why, would you offer an ocean current or tidal converter as an option, and what wake and shading losses does your deck layout produce? Against the aggregate you offer, what ratings would the power conversion, the battery storage and the seawater cooled load bank need, so that the plant can always dissipate its own full output?
- 4.6 Getting the power ashore later. How would you provision now for the export cable, hang off and riser, switchgear, protection, synchronising and metering, and what does that provision cost in weight, deck area and stability?
- 4.7 Tow, weather window, supply chain and later expansion. The tow is roughly 760 nautical miles with one installation window between January and April and about nine months for construction. What is your tow and installation plan, what lead times do you expect for chain, anchors, converters and instruments, and how would you provide now for raising capacity three or four times later?

5. What comes from INCOIS

The following information will be provided from INCOIS.

- Ocean Energy Atlas data for the site and the surrounding waters, with the satellite data / model basis and the assumptions behind it. Correcting that dataset is the purpose of the facility, so the successful bidder gets it from the outset.
- Two instruments, issued for integration, being a directional wave rider buoy, and an acoustic Doppler current profiler. You are responsible for mounting, power, data interfacing, calibration checks after installation and recorded handover, but not for their supply.
- Data hosting inside India, through INCOIS data centres and receiving facilities.
- Scientific staff for the twelve month campaign, quality control of the data, calibration traceability through INCOIS laboratories, and coordination with Indian institutions and the Deep Ocean Mission for work at sea supporting the campaign.
- Documentation support for necessary approvals from any agencies.

INCOIS does not provide the marine spread, tugs, barges or support vessels, port and yard facilities, fabrication capacity, consumables, or the crew for marine operations.

If there is something else INCOIS could provide that would materially cut your cost, risk or time, say so at Form 2, Part D. Each suggestion is considered before the tender is written.

6. Draft qualification criteria, published for your comment

These are drafts and they are settled after the responses to this EOI are studied. If any of them would keep a capable supplier out, say so at Form 2, Part D with your reasons. Credentials of a parent, subsidiary or associate company that is not itself the bidder or a named consortium member are not counted.

Criterion	Draft requirement, open to comment
Platform and marine construction	One classed floating marine structure of 300 tonnes displacement or more delivered in the last ten years, with a class certificate from an IACS member. Alternatively, an operating shipyard or engineering contractor with a class approved facility and at least three marine steel deliveries of 200 tonnes or more each.
Energy converters	For each converter offered, evidence of Technology Readiness Level, supported by scaled open water testing or certified tank testing, and either certification already held or an agreed plan to obtain it within this contract.
Instruments and data	One delivery in the last seven years of an integrated marine or oceanographic multi-sensor system with telemetry and quality control, to a government, research or offshore client.
Marine operations	Capability, directly or through a named consortium member, for ocean towage and offshore installation under a marine warranty survey. One comparable tow and installation in the last ten years, or a credible plan naming the marine operations partner.
Financial	For the lead or sole bidder, average annual turnover of Rs. 15 Crore or more over the last three audited years, positive net worth, and working capital or credit lines of Rs. 10 Crore or more. For technology partners, positive net worth or a parent or bank guarantee. Comment on these figures is particularly wanted from smaller specialist firms.

7. How the contract is likely to be shaped

Indicated now so that you can plan. Comments at Form 2, Part D.

- One contract covering design, construction, towage, installation, commissioning and ten years of operation and maintenance, with one party carrying single point responsibility.
- Consortia of up to six members are expected to be allowed, with a named lead member holding joint and several responsibility and not less than 51 per cent of the contract value. An arrangement where an established shipyard or engineering contractor leads and technology firms supply the converters is welcome.
- Payments against verified milestones. Performance security of three to five per cent of contract value. Any advance is limited and covered by a bank guarantee.
- Parent company or bank guarantees where a technology partner is small, together with design and software escrow and step-in rights.
- Operation and maintenance paid against availability. The ten year term runs from the date of commissioning, so a shift in the installation window does not shorten it. Damages are tied to availability and to delivery of data, not to how much energy is generated.
- Marine and third party insurance through construction, tow, installation and operation.
- All data and the corrected Atlas dataset vest in INCOIS and the Ministry of Earth Sciences.

8. How to respond

The forms. There are two, at the back of this document. Send both together in one signed PDF, or in one envelope.

No prices. Do not send a rate, a quotation or a budgetary figure with your response. INCOIS will ask for cost information separately at a later stage.

Sending. Through CPP Portal and by e-mail to vijay@incois.gov.in, manvam@incois.gov.in with a copy to dasariprasad@incois.gov.in, or in hard copy to the address at para 1, so as to reach INCOIS by the closing date and time. Either mode will do and only one need be sent. A scanned signed copy is acceptable. Where an e-mailed file exceeds 15 MB, send a download link instead. Where both a hard copy and an e-mail copy arrive and the two differ, the signed hard copy prevails.

Part scope. Responses limited to part of the work are welcome, whether the platform only, one converter only, the instruments only, the marine operations only, or operation and maintenance only. Say so at Form 1 and answer only what applies. Since the tender is presently intended as a single contract with single point responsibility, a part scope firm should expect to bid as a consortium member or as a sub-contractor.

Queries and the pre-bid meeting. Written queries by e-mail up to 11.09.2026. The online pre-bid meeting (Hybrid) is on 15.09.2026 at 1500 hours IST. Send item 1.10 of Form 1 through (e-mail) at least three working days ahead so that the arrangements can be made. Attendance is optional and is not a condition for responding. The record of the meeting, with replies to all queries, is published within seven days. Every clarification of substance goes to everybody through the portals. INCOIS does not hold separate technical discussions with any single firm.

Corrigenda. This EOI is amended only by written corrigendum on the portals named at para 1. Watch those sites.

Time. Thirty-five days are allowed, which is longer than usual and reflects the international character of this enquiry. INCOIS may extend the period by corrigendum if the response is thin.

Late responses. A late response may be taken on record at the discretion of INCOIS, since no competition or ranking arises here. Do not rely on it.

Cost and law. Each respondent bears its own cost and nothing is reimbursed. Information is supplied at your own risk, and its use in preparing the tender gives you no right or preference of any kind. This EOI is governed by the laws of India and the courts at Hyderabad have jurisdiction.

Issued for and on behalf of the Indian National Centre for Ocean Information Services

(Signature and seal)

Name:

Designation:

E-mail:

Telephone:

Date:

Place: Hyderabad

The forms

Reply on your letterhead, signed by a person authorised to do so, answering against the numbers below. Attach drawings, data sheets, test reports and reference lists as numbered attachments wherever they help. Answer what applies to you and write "not applicable" against the rest. A blank does not count against you. Nothing in these forms is an offer and nothing binds either side. Do not include prices.

Form 1. Who you are, what interests you, and pre-bid registration

- 1.1 Legal name, type of entity, country and year of incorporation, registration number, registered office, office in India if any, and who ultimately owns the firm.
- 1.2 Contact person: name, designation, e-mail, telephone. Website.
- 1.3 Which part of the scope interests you: the whole facility, the platform only, one or more converters, the instruments only, the marine operations only, or operation and maintenance only.
- 1.4 How you would bid: alone, in consortium or joint venture, or under a shipyard or engineering contractor as lead. Name the intended lead and members, and how the work would be divided.
- 1.5 If your interest is part scope only, would you act as a consortium member or as a sub-contractor, what kind of lead contractor would you look to, and what integration margin would you expect that lead to carry?
- 1.6 Your approach to fabrication in India, any yard tie-up contemplated, and your expected local content as a percentage with the basis of calculation.
- 1.7 Turnover, net worth and available working capital or credit lines for the last three years, with the currency stated, for each firm that would be part of the bid. This is optional. Audited statements are not required at this stage and leaving it blank does not count against you.
- 1.8 Is the firm, any intended consortium member or any intended sub-contractor from a country sharing a land border with India, or is any technology licensed from an entity of such a country? If yes, give the registration position and the scope of the licence. This is for information at this stage. The formal declaration is taken at the tender stage.
- 1.9 Confirm that the firm is not debarred by any government, and list any court case or arbitration in the last five years, one line each. A one line answer is enough and no documents are needed at this stage.
- 1.10 Pre-bid meeting. Do you intend to respond to this EOI, yes, no or undecided? If no or undecided, the main reason. Do you intend to join the pre-bid meeting? Give the names, designations and e-mail addresses of up to three participants. Do you want a site visit or further data before responding, and what data? Do you consent to your organisation being named in the list of participants circulated with the record of the meeting?
- 1.11 Name, designation and signature of the authorised signatory.

Form 2. What you can supply, and your comments on this draft

Answer the parts that fall within your scope. Use one copy of Part A for each converter you offer.

Part A. Each converter offered, whether wave, wind, solar, ocean current or other

- 2A.1 Type, model name and conversion principle. How far developed it is, the Technology Readiness Level you claim, and the evidence behind that claim, being tank or basin test reports and open water deployments with site, dates, duration and availability achieved. Attach them.
- 2A.2 Rated capacity and the number of units you would install, and how that fits the aggregate of about 250 kW. Cut-in and cut-out conditions, the declared power curve or power matrix, and your estimate of annual energy at the site conditions at para 4 with the basis of that estimate.
- 2A.3 Weight dry and operating, main dimensions, materials, and what the converter needs from the platform, being footprint and seat loads, electrical supply, hydraulics and data protocol. Electrical output, converter needed, power quality and behaviour during faults.
- 2A.4 Operating limits for wave height, period, wind, current and temperature. The platform motion it tolerates in heave, pitch, roll and acceleration, and your analysis of dynamic coupling with platform motion.
- 2A.5 Survival mode: what triggers it, whether automatic or manual, and the sea state and wind speed it is designed to survive. Failure modes, safety systems, emergency stop and containment of hazards. For a hydraulic take-off, state fluid type and volume, containment and spill prevention, accumulator safety and seal life.
- 2A.6 For a wind turbine, confirm the machine is vertical axis and omnidirectional and needs no yaw system. Give the rotor swept area and which standard therefore applies, the overspeed and braking protection, and the

blade material and fatigue basis. State the minimum spacing between machines and the wake loss you calculate at that spacing.

- 2A.7 For solar, module construction, the salt mist, ammonia and potential induced degradation qualification held, wind uplift design, tropical derating and access for cleaning. State the shading loss if any caused by the turbines, masts and structure over a full day and through the year.
- 2A.8 Certification held or planned, the certifying body and the milestones of the plan. Any third party verification already done, giving agency, scope and date, and reference users.
- 2A.9 Marinisation and durability: corrosion protection, coatings, galvanic isolation, how you manage marine growth on wetted and moving parts, and structural and fatigue design life.
- 2A.10 Maintenance interval and method, at sea or ashore, and the yearly effort. Overhauls or replacements expected inside ten years: what, in which year, how long down, and where the work is done. Spares and consumables with lead times, and obsolescence risk over ten years.
- 2A.11 How this converter would scale for the later increase to three or four times capacity?

Part B. Platform, mooring and marine engineering

- 2B.1 Hull concept proposed for this application, with an indicative general arrangement sketch. Main dimensions, lightship steel weight and displacement, with the basis stated. Deck area offered and the area held in reserve for later expansion.
- 2B.2 The water depth range your platform is designed for and can be moored in. The depth you would recommend for this facility and why. What changes in your hull form, mooring type, anchor type and installation method as the depth changes across that range.
- 2B.3 Stability and freeboard for the tow and on station, including air gap and green water. Design and fatigue life of hull, mooring and structure, with the basis stated.
- 2B.4 Class society intended, the rule set to be applied, class approvals already held, and the coating and cathodic protection system with its design life.
- 2B.5 Fabrication yard or yards: location, class approval, load-out and launch capability etc.
- 2B.6 Mooring design approach for these cyclonic conditions, the analysis method and software used, and reference designs. Your allowance for seabed movement and for tsunami loading in a seismically active region.
- 2B.7 Tow methodology for about 760 nautical miles, tows already carried out, experience of marine warranty survey, and your approach to recovery and re-deployment within a 21 day marine spread.

Part C. Instruments and data, power system, schedule, maintenance, export and expansion

- 2C.1 Integrated marine or oceanographic data acquisition systems you have delivered, giving client, scope and year. Whether integrating the three instruments INCOIS free issues presents any difficulty, and what interface information you would need.
- 2C.2 Proposed architecture for acquisition, control, historian and open data formats. Telemetry approach and bandwidth budget, and how three independent paths would be provided. Control system cyber security, storing data within India, controlling remote access, and calibration traceability with the laboratories used.
- 2C.3 Power system architecture and energy management logic. State the ratings you propose for the power system, the storage and the load bank, and show that the load bank can dissipate the full output of the converters you offer. How you avoid load bank overheating and fouling of the heat exchanger, the power quality you can hold, the autonomy provided for the instruments, and the black start sequence with no shore supply available.
- 2C.4 How you would build in the route for delivering power ashore later, to a nearby grid, a shore station or a building. Cable route and hang off, terminations at the hull, export switchgear, protection, synchronising and metering, and the effect on weight, deck area and stability. What you would need to know about the shore end before sizing it.
- 2C.5 Achievable period from award to commissioning in months, with main stage durations, and long lead items with their lead times. Whether a nine month build and installation in the January to April 2028 window are workable, on what conditions, and the main risks to the schedule.
- 2C.6 How your operation and maintenance organisation would be set up: local presence at Port Blair or not, response times, the yearly campaign and calibration rotation, spares policy including the two year strategic holding, management of marine growth and mooring integrity, remote monitoring, and crew movement. Your safety record over the last three years and your experience of working in Indian waters.
- 2C.7 How you would build in room to raise capacity three or four times later without replacing the hull or the mooring. Structural reserve in tonnes and per cent and how it is worked out. How stability and air gap are

held at the higher mass. How the mooring takes the increased load, whether by spare capacity now or a defined re-rating later. How busbars, switchboards, cables and converter space are rated or provisioned, and the spare feeders given. Space, cooling and fire protection for a larger battery. Spare data channels and bandwidth. State any trade-off the provision involves.

Part D. Your comments, and what would stop you bidding

The most useful part of your response. Say plainly where the draft would not work. Answer the key design questions at 4.1 to 4.8, use the table for specific points, and answer the questions below it.

What you are commenting on, being a criterion at para 6, an item at para 4, or a contract condition at para 7	Your comment, or the change you suggest	Your reason preferably with evidence

- 2D.1 What, if anything, would prevent you from bidding at the tender stage? Name the specific requirement, condition or risk, and say whether it is absolute or a matter of degree.
- 2D.2 The single change to the draft criteria, the technical requirements or the contract conditions that would most increase your likelihood of bidding.
- 2D.3 Tax and duty treatment you would assume, being the delivery terms for imported items, the split between supply and services, the customs duty and GST position, and whether you would rely on any concession for scientific research equipment or on project import treatment. Name the route. Do not give figures.
- 2D.4 Payment and security: the milestones you would propose, your position on performance security of three to five per cent and on any advance secured by bank guarantee, the insurance you would provide through construction, tow, installation and operation, and the warranty period offered and how it sits with the ten year maintenance term.
- 2D.5 Intellectual property and end of life: ownership, licensing, escrow of design and software, confirmation that all data vests in INCOIS and the Ministry of Earth Sciences, and your liability for removing the platform and restoring the site.
- 2D.6 Can you produce, at the tender stage, a letter of engagement from a class society, audited statements for three years for every member, the test reports and certificates at Part A, a power of attorney and consortium agreement, registration on the Central Public Procurement Portal with a digital signature certificate? Say which of these would be difficult, and whether the portal enrolment procedure is workable for a foreign firm.
- 2D.7 Anything else INCOIS could provide that would materially cut your cost, risk or time, and any other commercial condition INCOIS should know before writing the tender.

Signature of authorised signatory:

Name and designation:

Firm:

Date: