
 राष्ट्रीयसमद्रप्रौद्योगिकीसंस्थान NATIONAL INSTITUTE OF OCEAN TECHNOLOGY	सविदाआमंत्रणसचना(नन.आ.स फ़ामसख्या NOTICE INVITING TENDER (NIT)		
	: Form No.	NIOT/S&P/NIT	

ननविदासख्या/ Tender No.	NIOT/S&P/OE/22403/2023-24
Item Description	Dual Quad copter Drone (With buyer added specific ATC)
ननविदापरणाली/ Tender Mode	Single Tender (GeM) – Custom Bid
Issued to	M/s. ENERCOMP SOLUTIONS PVT LTD
“Only the Specified bidder is allowed to bid “for this tender. The other bidders’ bids are not allowed.	
ननविदाजाराहानकानाथ Tender Issue date	09.04.2024
ननविदाबदहोनेकीनिथिसमय Tender Closing Date and Time	03.05.2024 at 11:00 AM
ननविदाखलनकीनिथिसमय Tender Opening Date and Time	03.05.2024 at 11:30 AM
EMD Value	INR .87,320/= a) Scanned copy of the EMD instrument to be uploaded in the www.eprocure.gov.in/eprocure/app . b) Original EMD should be submitted through courier/ speed post or in person dropped at the tender box before the closing date and time of the tender
विविदाप्रलेखउपलब्धिसंस्थान Tender Documents available place ई ननविदाकललयसहायामनअल/	Tender documents can be downloaded from GeM Portal <u>and</u> NIOTwebsite www.niot.res.in till closing date and time of the Tender.
Bidding Type & Tender submission	The tender is being Two Bid system, Techno- commercial Bid and BOQ (Price Bid) should be uploaded separately alectronically through GeM Portal The price/cost should not be revealed along with the technical bid. In case, the price/cost is revealed the bid is considered as invalid and summarily rejected.
अपनेप्रश्नईमेलआईडीपरभेज Send your queries to the email IDs	hvt@niot.res.in
NATIONAL INSITUTE OF OCEAN TECHNOLOGY VELACHERY TAMBARAM MAIN ROAD NARAYANAPURAM,CHENNAI 600100 NIOT WEBSITE: http://www.niot.res.in/tenders	

INTRODUCTION

National Institute of Ocean Technology (NIOT), an autonomous body under the Ministry of Earth Sciences is engaged in developing technology for utilizing ocean resources in an eco-friendly manner.

Notice Inviting Tender

National institute of ocean Technology invites E-bids for the supply of **Dual Quadcopter Drone** at NIOT Chennai as per the specification enclosed (SCC) as at Annexure -I.

1. Submission of bids

Bidders are requested to submit their Bid/quotation electronically through **GeM Portal <https://gem.gov.in/>**.The responsibility to ensure timely submission of bid lies with the bidder. Bids submitted through FAX or e-mail will not be considered. Bidders shall also attach scanned copies of all the requisite documents i.e. other certificates/documents specified in the tender documents. The bids are to be submitted (electronically) as per the bidding type indicated in the front page of the NIT. The bidders are advised to register with GeM portal. **No manual tender is acceptable.**

The bids are to be submitted as per the bidding type indicated in the front page of the NIT. Please note that to participate in the tender. If you are a regular supplier of NIOT it is requested to register your company with portal and to procure if not owned already.

2. This NIT shall form part of the Purchase Order.
3. Terms and conditions indicated in the NIT shall be superseded by the terms and conditions mentioned in the Special conditions of Order (SCC) as at Annexure-I wherever applicable.

INSTRUCTION TO BIDDERS:

4. **Security:** Any information / material / document supplied along with this tender or after placement of order should not be disclosed or copied without written permission from NIOT.
5. **Contacting NIOT:** No correspondence / discussion / visits whatsoever will be entertained on the subject unless specifically called by this office after opening the tender for clarifications in writing. Any violation of this will render the quotation invalid and the firm is liable to be removed from our approved vendor list. However if vendor requires any clarification on the bid, the query may be mailed to the mail ID hvt@niot.res.in.
6. **Tender Opening:** The Bidder can participate in the e-tender opening with proper authorization letter from the respective Company.

- 7. Default in Performance:** If any Supplier is not successfully discharging their orderal obligations against the Order placed on them by NIOT within the agreed time limit, (OR) if there is any deficiency in performing such obligations, NIOT reserves the right to suspend such Vendor from their participation in future tenders of NIOT for a minimum period of one year. Even after revoking the suspension period the Vendor's performance still continues to be the same without any improvement, NIOT reserves right to BAN such Supplier permanently from participation in all the tenders of NIOT and organizations of MOES.
- 8. Goods:** Goods should be supplied only after receipt of The Purchase Order from NIOT.
- 9. Change of Name after award:** Request / intimations with regard to change of name of the Supplying company or constitution of the supplying company after the tender opening or award of Purchase Order shall not be allowed as a matter of right. The bidders / suppliers are required to submit all relevant documents with regard to change of name or/and change of constitution and the circumstances leading to such change beforehand. It shall be the discretion of NIOT to proceed with the Order after such changes and in case, NIOT decides to proceed with the Order, it may require the bidder / supplier to execute further agreements with regard to execution / implementation of the Order.
- 10. Purchase Order acceptance:** The successful bidder should submit Order acceptance within 15 days from the date of Purchase Order, failing which it shall be presumed that the bidder is not interested and his bid security /EMD shall be forfeited.
- 11. One Bid per Bidder:** A firm shall submit only one bid either individually or as a partner of a joint venture. A firm that submits either individually or as a member of a joint venture, if a bidder submit more than one bid will result in rejection of all the bids.

BIDDING CONDITION

- 12. Deadline for Submission of Bids:** Bids must be received by NIOT at the GeM portal specified in the Invitation for Bids cover page on or before the due date/ extended due date thereof.
- 13. Due date Extension, Corrigendum to NIT:** Any corrigendum including due date extension for NIT, Pre-bid minutes of meeting will be notified in GeM portal and NIOT website. Hence bidders are requested to watch NIOT website/ GeM portal for such due date extension and corrigendum, if any.
- 14. In case of the unscheduled holiday in Chennai** being declared on the prescribed closing / opening day of the tender, the next working day will be treated as the scheduled prescribed day of closing/opening day of the tender.

15. **Unsolicited correspondences:** NIOT will not entertain any unsolicited correspondence or queries on the status of offer against this tender.
16. **Non-Receipt of Tender:** NIOT will not be responsible for the non-receipt of the tender due to any network problem.
17. **Submission of tender by a tenderer** implies that he has read the Notice Inviting Tender and has made himself aware of the scope and specifications of the work to be done; conditions and rates at which stores, tools and plant etc. will be issued to him by NIOT; local conditions and other factors bearing on the execution of the works.

18.EMD/Bid security: The EMD/Bid security (**INR .87,320/=**)is mandatory as indicated in the cover page and should be submitted along with the technical bid for the value indicated in the front page of this tender document. The EMD / Bid security is mandatory requirement as indicated in the cover page and should be submitted along with the technical bid for the value indicated in the front page of this tender document. Bids without EMD will be summarily rejected.

The EMD /bid security may be accepted in the following form

- (1) Insurance Surety Bonds,
- (2) Account Payee Demand Draft (drawn in favour of "**NIOT other Receipt Account**", Chennai in INR or in equivalent foreign currency),
- (3) Fixed Deposit Receipt,
- (4) Banker's Cheque or Bank Guarantee from any of the Commercial Banks. (Bank Guarantee as per prescribed format available in the NIOT web site at the link
<https://www.niot.res.in/index.php/vendor/login>
- (5) Online payment in an acceptable form.

If the EMD (scanned copy of the instrument of EMD) is not submitted along with Techno-commercial The bid will be summarily rejected. The original EMD should be submitted (or) reach NIOT on or before closing date the time of the tender.

19. **Conditions for EMD / Bid Security:** EMD shall be returned / discharged to unsuccessful bidders within 15 days after the expiration of the period of bid validity or placement of Order whichever is later. EMD may be forfeited:
 - a. If a bidder withdraws, modifies for provided unsolicited offer voluntarily revising the price in whatsoever aspect its bid during the period of bid validity specified by the bidder on the bid form or
 - b. In case of a successful bidder, fails to furnish Order acceptance within 15 days of the Order and / or fails to furnish Performance Security.
EMD for a successful bidder shall be adjusted against performance security payable if submitted in DD / refunded if / performance security is submitted.

20. Bid Validity: Bids shall remain valid and open for acceptance for a minimum period of **90 days** from the date of opening of Un-priced Techno-commercial Bids when fully compliant tender is submitted by the bidder without any requirement for NIOT to seek additional documents towards evaluation of pre-qualification and/or in ensuring conformance to the specification / requirements of the tender. In the event of any delay in evaluation attributable to the vendor, vendor shall extend the tender by such a time taken by them in addition to above minimum tender validity period. A Bid valid for shorter validity period will be considered as a conditional tender and treated as invalid tender.

21. Bid validity extension: In exceptional circumstances, prior to expiry of the original Bid validity period, NIOT may request the Bidder for a specified extension in the period of validity. The request and the responses thereto shall be made in writing. A Bidder agreeing to the request will not be required nor permitted to modify his bid.

22. Conditional offers shall not be accepted.

23. Signing of bids: Each page of the tender and tender document shall be signed and uploaded by the bidder in www.eprocure.gov.in/eprocure/app.

24. The broad configuration / specification of the proposed purchase / work are given. Bidders are required to keep their proposal strictly as per the specification prescribed.

25. Acceptance of bids: NIOT may accept or reject any/all tenders including the lowest tender without assigning any reasons whatsoever. NIOT also reserves its right to accept any tender in part or parts only with such conditions as it may prescribe. NIOT is not bound to accept the lowest tender. NIOT expects full technical compliance and expects full scope of integrated supply as per tender specification and do not accept partial tenders.

26. The compliance sheet with reference to the specifications should be furnished against each parameter while submitting the quotation, which is absolutely necessary. THE TENDERER SHALL SUBMIT TECHNICAL & COMMERCIAL COMPLIANCE SHEETS and BOQ (Price bid) ALONG WITH THEIR OFFER. TENDERS WITHOUT COMPLIANCE SHEETS WILL NOT BE EVALUATED. The Price bid should be unconditional.

27. Canvassing: Exerting pressure and/or offering inducement in any form by the bidder or by any other person on behalf of the bidder shall disqualify the bid and lead to its rejection.

28. Commercial compliance as per the NIT shall be furnished along with the offer.

29. Unrealistic bids with either cost which is impossible to achieve or for bidders who show that they are completely inexperienced or have completely inappropriate equipment will be rejected.

TERMS AND CONDITIONS GOVERNING THE ORDER

30. Currency of bids:

- a) Firms outside India:** Quotations should be DAP NIOT, Chennai. (For other conditions please refer Additional Terms & Conditions for Import).

31. Guaranteed time of delivery – specific performance of Order;

The time of delivery including testing and handing over in satisfactory condition is the essence, and the item should be delivered within **120 days** from the date of acceptance of Purchase Order. In the event of part supply, NIOT shall withhold the entire payment until the whole of the supply as per the Order is delivered. In case if the delivery schedule indicated in the SCC is not stipulated as essential criteria, Supplier may indicate the period of delivery required for them.

32. Extension of delivery period: If the completion of systems / components is delayed for reasons of force majeure such as acts of God, Acts of Public enemy, acts of Government, fires, floods, epidemics, quarantine restrictions, illegal strikes and freight embargoes, the Supplier shall within 3 days from the date of such occurrence, give notice to NIOT in writing of his claim for extension of delivery period. NIOT on receipt of such notice may agree to extend the Order delivery date as may be reasonable but without prejudice to other terms and conditions of the Order. Unless the extended delivery period is agreed by NIOT in writing, supplier cannot claim the extension of delivery time as a matter of right. NIOT shall have the right to either cancel/extend the Order validity/levy LD as appropriate.

33. (a) Payment:

- a) **50 % payment** will be released within 30 days after receipt and acceptance of items and completion of entire scope of purchase order at NIOT & on submission of original invoice and other deliverable as per the purchase order. No advance payment will be made.
- b) **40% payment** will be released after the field performance acceptances by carrying out at least 5 satisfactory field operations on ocean data collections using CTD/MPS/coastal mapping/coastal mapping applications.
- c) 10% payment will be released after completion of the warranty period (or) on submission of warranty bank guarantee, as per NIOT format for equivalent value, then 100% payment will be released.

(b) Performance Bank Guarantee : Performance bank guarantee for 10% of the item value should be provided and it should be valid throughout the warranty period. Performance Bank Guarantee should be from any Nationalized/Commercial bank in India or their branches outside India. In case the performance bank guarantee is not provided, 90% payment only would be released and balance 10% after completion of the warranty period. Bidder should clearly mention their acceptance to this effect in their quote.

34. Delay in Completion / Liquidated Damage (LD): If the Supplier shall fail to deliver the systems / components within the time specified in the Order, NIOT shall recover from the Supplier as liquidated damages a sum of 0.5% of the PURCHASE ORDER price of the undelivered systems / components for each calendar week of delay. The total liquidated damages shall not exceed 5% (five percent) of the PURCHASE ORDER price of the unit or units so delayed. Systems / components will be deemed to have been delivered only when all essential components parts are also delivered. If any essential components are not delivered in time, the entire system / components will be considered as delayed until such time the missing parts are delivered.

35. (a) Warranty: The Supplier warrants that the Goods supplied under this Order are new, unused, of the most recent or current models and those they incorporate all recent improvements in design and materials unless provided otherwise in the Order. The Supplier further warrants that all Goods supplied under this Order shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by NIOT's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

The product supplied should be free from manufacturing defects and a minimum period of one year (**12 months**) warranty from the date of receipt and acceptance at NIOT. The warranty certificate should be furnished in the prescribed format available in the NIOT web site at the link <https://www.niot.res.in/index.php/vendor/login> in your letterhead. If the Vendors standard warranty is more than **12 months** the same shall be extended to NIOT. NIOT shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without cost to NIOT other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from ex- works or ex-factory or ex-showroom to the final destination.

If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC within a reasonable period, NIOT may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which NIOT may have against the Supplier under the Order. Also such failure shall lead to suspension of vendor from participation as deem fit by NIOT.

(b) Defect Liability clause: Any defect, or any other faults for plant components etc., which may appear against the set quality or performance characteristics within the Defects Liability period (DLP), of 12 months., any defects, arising in the opinion of the NIOT from materials or workmanship not in accordance with the Order, shall on demand which shall be made within the defects liability period, in writing by the NIOT and within such reasonable time as shall be stated therein specifying the work, materials or articles complained of notwithstanding that the same may have been passed or/and certified, paid for be amended and made good by the supplier. In case of default, NIOT may employ and pay other person or persons to amend and make good all such defects or other faults and all damages, losses and expenses consequent thereon or incidental there to. Supplier shall be made good and borne by the Supplier at the risk and cost of the supplier. And recoverable from the supplier by the NIOT or may be deducted by NIOT from any moneys due or that may become due to the supplier. Should any defective work

have been done or materials supplied by the supplier or their associates the supplier shall be liable to make good the same in the same manner as if such work or materials had been subject to the provisions. Any delay in rectifying the defects within a maximum time of one month shall result in automatic extension of DLP within Order price to the extent of delay in rectification.

36. Insurance: The Goods supplied under the Order shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the NIT. If any such damage occurred, the goods shall be replaced within in the Order price immediately without waiting for the insurance claim. The cost of insurance shall be in the scope of the bidder.

37. Risk and Insurance

If the Supplier fails to deliver the stores or any installment thereof within the period fixed for such delivery or at any time repudiates the Order before expiry of such period, NIOT is entitled to cancel the Order and source remaining items from any parties the stores not delivered at the risk and cost of the defaulting Supplier. No payment claimed for any part supplies made.

The Bidder/Supplier shall take out and keep in force the following adequate insurance to cover all risks including but not limited to third party risk coverage and shall submit to NIOT copy of policy:

During the development of the system, testing, trials and all transportation including transit up-to receipt of the Product / material at NIOT and acceptance after final phase of testing including during field operations.

The Bidder/Supplier shall take out and keep in force, adequate insurance in respect of their own as well as hired equipments (to the extent of their insurable interest) tools, materials, marine spreads, vessels, barges, crafts ships and operational facilities used during the entire period of their engagement in connection with the Supplier to the insurable value of such constructional plant, equipment and other things. NIOT shall have no liability whatsoever in this regard. NIOT shall not consider any claim whatsoever, hence Bidder/Supplier shall assess all possible risks and take adequate all risk insurance cover including transit insurance. General terms and conditions for tender submission & evaluation

NIOT reserves right to reject any or all of the bids received in response to this invitation to tender without assigning any reasons whatsoever.

Bidder shall note that NIOT will not entertain any correspondence or queries on the status of the offers received against this Tender Invitation.

Canvassing in any form by any bidder or by any other agency acting on behalf of the partner after submission of bid may disqualify the said partner. NIOT's decision in this

regard shall be final and binding on the partner.

Overseas bidders, while submitting Tender should indicate as to whether they have engaged the services of an Agent in India and if so, the extent of services such an Agent has to perform and the payment for such services. The payment to be made to the Agent will be deducted by NIOT from the payment of the successful overseas Partners and paid to its Indian Agent in non-convertible Indian Rupees after deduction of due taxes for services at prevailing rates. Such details should be provided in the Price Bids. Foreign bidders may kindly note that NIOT shall not entertain engagement

38. Force Majeure: For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of NIOT either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Supplier shall promptly notify NIOT in writing of such conditions and the cause thereof. Unless otherwise directed by NIOT in writing, the Supplier shall continue to perform its obligations under the Order as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

39. Discounts: Bidders are advised not to indicate separate discounts. Discounts, if any, should be merged in the rates against the quoted items.

40. Price:

The price shall include but not limited to

- a. Costs of goods/ services covered in this Order.
- b. Taxes and duties
 - c. Transportation and packing cost (Air worthy packing of internationally acceptable practices withstand transit and Transshipments by air / road / rail)
 - d. Cost of handling, documentation, freight, insurance from supplier's warehouse up to NIOT warehouse, installation and commissioning of the equipment when part of contractual obligation.
- e. Charges for all testing

The Bidder shall indicate on the appropriate price schedule form, the unit prices and total bid prices of the goods he proposes to supply under the Order strictly as per price bid format of tender.

41. Performance Security: The successful bidders should deposit 5% of the item value as Performance Security within 2 weeks from the date of issue of Purchase Order. The performance security shall be in one of the following forms:

- (1) Insurance Surety Bonds,
- (2) Account Payee Demand Draft (drawn in favour of “The Director N.I.O.T”, Chennai in INR Or in equivalent foreign currency).
- (3) Fixed Deposit Receipt from any Commercial Bank.
- (4) Bank Guarantee from any of the Commercial Banks.
- (5) Online payment in an acceptable form.

Performance security shall be forfeited in the event of breach of Order by the Order in terms of the Order. If Performance Security is not paid within the specified time, NIOT reserves its right to cancel the Order and forfeit the EMD /Bid security.

Bank Guarantee shall be as per prescribed format issued by a Commercial bank and valid for 60days beyond the scheduled delivery / completion period as per PURCHASE ORDER. This format can be downloaded from the link <https://www.niot.res.in/index.php/vendor/login>. Performance security shall be forfeited in the event of breach of Order by the Order in terms of the Order.

42. Arbitrations/Disputes: In the event of any dispute, difference, interpretation or application relating to this agreement arises, the same shall be settled amicably by the parties. In case the dispute or differences could not be settled amicably, the same shall be referred for adjudication through Arbitration by an Arbitrator to be appointed by the Director, NIOT. The Indian Arbitration shall be concluded in accordance with the provisions of Arbitration & Conciliation Act, 1996 or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings. Venue of such arbitration shall be at Chennai in India. The language of arbitration proceedings shall be English. The Arbitration shall make a reasoned award(the “award”), which shall be final and binding on the parties. The cost of the arbitration shall be shared equally by the parties to the Order. However, expenses incurred by each party in connection with the preparation, presentation etc., shall be borne by each party.

43.SUBMISSION OF TECHNICAL DOCUMENT

Specifications are basic essence of the product. The broad configuration / specification of the proposed purchase are given in the Special Order conditions (SCC). It must be ensured that the offers are strictly as per our specifications as mentioned in the SCC. At the same time it must also be kept in mind that merely copying our specifications in their quotation shall not make firms eligible for consideration. Technically unsuitable offers and offers not conforming to tender schedule shall be rejected.

a. The vendor is required to provide their comments item-by-item on the compliance sheet provided in the SCC. Where ever the specified parameter is required within range, the calculated/ estimated value as per the vendor’s design is to be provided in the “Remarks” column. Deviations /exceptions, if any, from the specifications to be recorded in the “Remarks” column.

b. In the case of test procedures mentioned in Annexure1 of SCC, if the vendor suggest some alternate test procedure to verify the same parameter, the detailed procedure has to be provided along with the quotation. NIOT reserves the right to

accept/ reject such alternate procedure, if any.

c. Offer must contain all relevant technical details. Relevant drawings pertaining to the quoted design, duly signed by the authorized official should be sent along with the quotation. Where ever mentioned, documentary evidence has to be enclosed in the quotation. Any erasures / over writing shall be counter signed by the person who is signing the bid. Any interlineations, erasures or overwriting shall be valid only if the person or persons signing the bid sign them.

44. INDEMNITIES: The Supplier hereby agrees to indemnify and hold harmless NIOT and its Director, officers and employees, from and against any and all suits, losses, liabilities, damages, claims, settlements, costs and expenses, including reasonable attorneys' fees, based on or arising, directly or indirectly, from:

- i.** breach of this Agreement by the Supplier
- ii.** Not performing the Scope of Work or any other obligation under this Agreement or Tender in accordance with the provisions and schedules of this Agreement or the Tender
- iii.** violation or contravention of any Legislation on the part of the Supplier
- iv.** any negligence or wilful misconduct of Supplier, which violates any provision of this Agreement
- v.** Infringement of any intellectual property belonging to any third party by the Supplier
- vi.** any breach of an agreement or misunderstanding between Supplier and any and all Third Parties due to which a liability arises on NIOT.
- vii.** any claim that any representations or warranties contained herein are not true or any breach thereof
- viii.** any loss or damage caused by the Supplier to NIOT, its personnel or property
- ix.** any loss or damage caused by the Supplier to any and all Third Parties for which a claim against NIOT has arisen
- x.** breach, expiry, cancellation, revocation or invalidity of any and all licenses, permits, authorizations and registrations which the Supplier is required to obtain, keep valid and comply with under any Legislation in Order to perform its obligations hereunder
- xi.** any obligation of the Supplier performed by NIOT under this Agreement or under any Legislation.

45. Termination of Order by NIOT:

a) The Order shall become effective from the date of signing of Order and the Order shall automatically get terminated after successful completion of all contractual obligation and warranty obligation as per the terms of the Order.

b)

- (i) Termination of the Order due to breach of Order by the supplier
- (ii) Termination of Order due to default,
- (iii) Termination of the Order due to insolvency,
- (iv) Termination of the Order for convenience.

If the termination of the Order happens due to the above factors, [(i), (ii) & (iv)] initially the written notice will be issued within 30 days to settle the issue on mutually agreed terms with mutual consent.

Commercial Terms Compliance sheet (To be filled by bidder)

Sl. No	Particulars	Yes	No	Page Ref
1	Whether EMD for INR .87,320/= is scanned and uploaded along with the technical document?			
2	Whether every page of the tender document is digitally signed and uploaded in the GeM portal along with the other documents.			
3	Whether Taxes and duties are shown separately in the quote. (Registration numbers for claiming the same to be strictly indicated and the copy of the certificates enclosed)			
4	Whether accepted to submit the Order acceptance within 15 days from the date of receipt of the PURCHASE ORDER?			
5	Whether submission of 5% of the item value as Performance Security is acceptable?			
6	Whether Quote is valid for 90 days from the date of tender opening or time specified in the tender document whichever is later?			
7	Whether submission of 10% of the item value as Performance Bank Guarantee is acceptable?			
8	Whether payment terms of the tender is complied with?			
9	Whether the tender is fully complying with tender specification Adjustment if no, list out deviations very clearly along with the appropriate reason for the deviation?			
10	Whether item-wise price is quoted as per price bid and quoted price is realistic?			
11	Whether liquidated damage as specified in the NIT accepted unconditionally?			
12	Whether the delivery period is acceptable as per the tender.			
13	Whether the warranty period is acceptable as per the tender.			
14	Bidder is responsible for all performance benchmarks and the quote should contain an undertaking certifying the same.			

Price Bid Format (to be filled by the bidder)

Sl. No	Item Description	Qty UOM	Unit Rate (INR)	Total (INR)
1	Supply of Dual Quadcopter Drone with Spares as per NIOT specification and requirements	1 Nos		
Total Amount FOR NIOT Chennai				

Note : The basic price should be all including GST.

Annexure - I

Special Condition of the Order (SCC)
Technical Specification cum Compliance Sheet (to be filled by the bidder)

Specification & requirements of Dual Quadcopter Drone			
1.	Name of Drone	Dual Quad Copter Drone	Compliance Yes/No
2.	Class of Drone	Medium category	
3.	Sub Category of Drone	Rotorcraft made of Carbon Fibre Composite and High Strength Aluminium alloy as per specification & drawing.	
4.	Flight controller make model specifications	Pixhawk Cube Orange Plus Hybrid system and should allow both Auto pilot mode & Manuel operation	
5.	Frequency of operation of Drone	2.4 GHz / 5.8 GHz	
6.	Endurance without payload	More than 60 minutes	
7.	Minimum payload carrying capacity	Drone should lift, carry and handle minimum of 25 kg instrument payload sustaining the coastal wind conditions	
8.	Endurance with payload of minimum 25 kg	More than 45 minutes	
9.	Motor & ESC make & model	Brushless Hobby Wing BLDC motors (H11M) arranged in a Coaxial method	
10	Motors arrangements	4 coaxial motors in Dual Quad configuration. (4x2) capable of maximum thrust better than 75 Kgs per arm with 2 motors in coaxial arrangement.	
11	Propeller details	Carbon fibre composite propeller 1200 mm pin to pin (48x17.5)	
12	Remote controller /GCS make & model	Siyi mk15	
13	Ground Control Station Software version	Mission Planner or equivalent	
14	Battery makes model	Li-Ion 14S40P 54V 168 AHR 8C or better using Molicel P42A or P42B cells.	
15	Other sensors	Obstacle Avoidance Radar Sensor (front & back)	
16	System Voltage	54V / 168 Ah	
17	Overall, all the dimensions (in m)	L- 2.96 m B- 2.96 m H- 1.03 m	
18	Max takeoff weight	90 Kg	

19	Operational Envelope	VLOS DAY Or NIGHT	
20	Surveillance Camera Details	<p>SIYI MK15 IP67 Camera</p> <ul style="list-style-type: none"> ● Image Sensor: 1/2.9"inch ● FOV: 105° ● Resolution: 720P (1280*720) @ 30 fps ● LED Angle: 120° ● Waterproof Level: IP67 ● Working Temperature: -10 to 50°C <p>The SIYI MK15 serves as a stationary camera mounted on the front side of the drone, offering live streaming capabilities to the MK15 transmitter screen</p>	
21	Camera for Survey & thermal mapping	<p>SIYI ZT30 D optical pod four sensors camera with Gimbals</p> <ul style="list-style-type: none"> ● 4K Ultra HD 8MP 180X Hybrid ● 30X optical zoom Gimbal camera ● 640x512 thermal imaging ● 320-Degree Yaw Axis Rotation ● Nose Mode ● Upside Down Mode ● Compatible with Ardu Pilot& PX4 (Mavlink) ● Ethernet, HDMI, CVBS Video Output ● High Accuracy & High Collaboration Control Algorithm 	
22	Transmitter details /GCS	<p>SIYI MK15 Long Range Radio Controller</p> <ul style="list-style-type: none"> • MK15 is equipped with a 5.5 inch FHD high-brightness touch screen, • The resolution is 1920*1080, Max. • Brightness can reach 1000cd/m2, so it can be used in full sunlight. • MK15 radio controller supports both HDMI and Ethernet video input. It can realize dual video streams synchronous display through an FPV hub (option) coupled with Ethernet version cameras, to see two videos from different angles at the same time. • MK15 radio controller has a built-in 10400 mAh, li-ion battery, • Endurance of GCS: 12 hours. 	
23	Altitude sensor	Laser / Barometric sensor type	
24	Application area	Ocean data collections and topographic mapping purposes at coastal regions	
25	RF Telemetry range	Horizontal range : 15 km Vertical range: 5 km	
26	Drone should have features	<ul style="list-style-type: none"> • Flight Termination System (FTS) • Return to home (RH) 	

		<ul style="list-style-type: none"> Flashing anti-collision probe light Fire resistance identification plate Flight controller with flight data logging capability Equipment with Geo-Fencing capability Equipment with Detect and avoid capability. 	
27	Instrumentation Tray	Instrument tray provision under the drone body to additionally attach any data logger, battery pack and payload release and rewinding mechanism etc.	
28	Spares	<ol style="list-style-type: none"> Motors (CW and CCW each 1 No) Body to ARM interconnecting hinges – 8 Nos Arm Carbon Fibre – 4 Nos. Battery Pack – 2 complete set (14S40P - 54V@168 AH). Remote Controller / GCS module with dual telemetry option & RF Antenna – 1 set. GPS Antenna – 2 Nos Rigid Carrying Case with Industry grade trolley & wheel – 1 No. Landing gear mechanism – 1 Set. Power key – 2Nos. Battery Charger – 2 Nos. 	
29	Payload mounting requirements	Hook provision should be provided to mount instrument payload without affecting the stability of drone either beneath the instrument tray or between the landing gear	
30	DGCA approval	Company should apply and obtain the type certificate & UIN for this Dual Quadcopter Drone to be supplied and applicable flying approval etc. NIOT will support in providing the necessary documents.	
31	Training and Field support	Company should provide training to NIOT staff on operation and maintenance of drone.	
32	Manual and Report	Detailed manual on Drone operation and troubleshooting should be supplied along with delivery of Drone.	
33	Motors and Flight controller certifications	Hobby wing H11M Motors and flight controller should have the essential CE or equivalent certifications	
34	Deliverables	Drone complete system as per specification and spares (as per list)	
35	Delivery	3 - 4 months	
36	Warranty	1 year warranty for complete system including battery packs	
37	Payment	<ul style="list-style-type: none"> 50% Payment will be released after the 	

		<p>supply and acceptance at NIOT</p> <ul style="list-style-type: none">• 40% Payment will be released after the field performance acceptances by carrying out at least 5 satisfactory field operations on Ocean data collection using CTD/MPS/coastal mapping/Coastal mapping applications.• 10% payment will be released after the successful completion of warranty period of one year.	
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Signature of the Bidder