



Bid Number/बोली क्रमांक (बिड संख्या):  
GEM/2025/B/5930388  
Dated/दिनांक : 10-02-2025

### Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	03-03-2025 20:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	03-03-2025 20:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	180 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Agriculture And Farmers Welfare
Department Name/विभाग का नाम	Department Of Agricultural Research And Education (dare)
Organisation Name/संगठन का नाम	Indian Council Of Agricultural Research (icar)
Office Name/कार्यालय का नाम	Icar - Indian Institute Of Water Management (iiwm), Bhubaneswar
क्रेता ईमेल/Buyer Email	buycon242.icari.or@gembuyer.in
Item Category/मद केटेगरी	Custom Bid for Services - Development of a Decision Support System DSS for Crop Water Demand based Canal Automation System at Darpanarayanpur MIP Nayagarh Odisha India
Similar Category/समान श्रेणी	<ul style="list-style-type: none"><li>Software Support Services 2.0</li></ul>
Contract Period/अनुबंध अवधि	5 Year(s)
Minimum Average Annual Turnover of the bidder (For 3 Years)/बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का)	12 Lakh (s)
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	3 Year (s)
MSE Exemption for Years Of Experience/अनुभव के वर्षों से एमएसई छूट/ and Turnover/टर्नओवर के लिए एमएसई को छूट प्राप्त है	Yes
Startup Exemption for Years Of Experience/अनुभव के वर्षों से स्टार्टअप छूट/ and Turnover/ टर्नओवर के लिए स्टार्टअप को छूट प्राप्त है	Yes

<b>Bid Details/बिड विवरण</b>	
<b>Document required from seller/विक्रेता से मांगे गए दस्तावेज़</b>	Experience Criteria,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,OEM Annual Turnover *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
<b>Do you want to show documents uploaded by bidders to all bidders participated in bid?/</b>	Yes
<b>Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया</b>	No
<b>Type of Bid/बिड का प्रकार</b>	Two Packet Bid
<b>Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय</b>	2 Days
<b>Evaluation Method/मूल्यांकन पद्धति</b>	Total value wise evaluation
<b>Arbitration Clause</b>	No
<b>Mediation Clause</b>	No

**EMD Detail/ईएमडी विवरण**

Required/आवश्यकता	No
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**ePBG Detail/ईपीबीजी विवरण**

Advisory Bank/एडवाइजरी बैंक	PUNJAB NATIONAL BANK
ePBG Percentage(%) /ईपीबीजी प्रतिशत (%)	5.00
Duration of ePBG required (Months)/ईपीबीजी की अपेक्षित अवधि (महीने).	62

(a). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

**Beneficiary/लाभार्थी :**

DIRECTOR, ICAR-IIWM

Icar - Indian Institute Of Water Management (iiwm), Bhubaneswar, Department of Agricultural Research and Education (DARE), Indian Council of Agricultural Research (ICAR), Ministry of Agriculture and Farmers Welfare (Icar-unit-iiwm)

**MII Compliance/एमआईआई अनुपालन**

MII Compliance/एमआईआई अनुपालन	Yes
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## MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
2. If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to their meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
3. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
4. Years of Past Experience required: The bidder must have experience for number of years as indicated above in bid document (ending month of March prior to the bid opening) of providing similar type of services to any Central / State Govt Organization / PSU. Copies of relevant contracts / orders to be uploaded along with bid in support of having provided services during each of the Financial year.
5. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference for services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered service. If L-1 is not an MSE and MSE Service Provider (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band as defined in the relevant policy, then 100% order quantity will be awarded to such MSE bidder subject to acceptance of L1 bid price. The buyers are advised to refer to the [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if the credentials of the service provider are validated on-line in GeM profile as well as validated and approved by the Buyer after evaluation of submitted documents.
6. If L-1 is not an MSE and MSE Service Provider (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band as defined in the relevant policy, then 100% order quantity will be awarded to such MSE bidder subject to acceptance of L1 bid price.
7. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

### Additional Qualification/Data Required/अतिरिक्त योग्यता /आवश्यक डेटा

**Introduction about the project /services being proposed for procurement using custom bid functionality:**[1739168350.pdf](#)

**Instruction To Bidder:**[1739168355.pdf](#)

**Pre Qualification Criteria ( PQC ) etc if any required:**[1739168360.pdf](#)

**Scope of Work:**[1739168365.pdf](#)

**Payment Terms:**[1739168370.pdf](#)

**Penalties:**[1739168379.pdf](#)

**Quantifiable Specification / Standards of The Service/ BOQ:**[1739168385.pdf](#)

**Project Experience and Qualifying Criteria Requirement:**[1739168390.pdf](#)

**Educational Qualification including Profile of SME/Consultants /Professional Resources /Technical Resources if they are part of Project .:**[1739168395.pdf](#)

**GEM Availability Report ( GAR):**[1739168399.pdf](#)

**Buyer's Competent Authority Approval:**[1739168416.pdf](#)

**Any other Documents As per Specific Requirement of Buyer -1:**[1739168432.pdf](#)

**Undertaking of Competent Authority is mandatory to create Custom Bid for Services. Please download standard format document and upload:**[1739168480.pdf](#)

**Pre Bid Detail(s)**

Pre-Bid Date and Time	Pre-Bid Venue
21-02-2025 11:00:00	Topic: Pre-Bid meeting for Development of DSS Time: Feb 21, 2025 11:00 AM India Join Zoom Meeting <a href="https://us06web.zoom.us/j/87966615603?pwd=ncM0Z7UaLFekJl1AO2UH4LLUDlagLB.1">https://us06web.zoom.us/j/87966615603?</a> pwd=ncM0Z7UaLFekJl1AO2UH4LLUDlagLB.1  Meeting ID: 879 6661 5603 Passcode: 210225

**Custom Bid For Services - Development Of A Decision Support System DSS For Crop Water Demand Based Canal Automation System At Darpanarayanpur MIP Nayagarh Odisha India ( 1 )**

**Technical Specifications/तकनीकी विशिष्टियाँ**

Specification	Values
<b>Core</b>	
Description /Nomenclature of Service Proposed for procurement using custom bid functionality	Development of a Decision Support System DSS for Crop Water Demand based Canal Automation System at Darpanarayanpur MIP Nayagarh Odisha India
Regulatory/ Statutory Compliance of Service	YES
Compliance of Service to SOW, STC, SLA etc	YES
<b>Addon(s)/एडऑन</b>	

**Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़**

**Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी**

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	The quantity of procurement "1" indicates Project based or Lumpsum based hiring.	Additional Requirement/अतिरिक्त आवश्यकता
1	Sanjay Kumar Jena	751023, Infront of rail vihar, Chandrasekharpur, Bhubaneswar	1	N/A

## Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

### 1. Generic

OPTION CLAUSE: The buyer can increase or decrease the contract quantity or contract duration up to 25 percent at the time of issue of the contract. However, once the contract is issued, contract quantity or contract duration can only be increased up to 25 percent. Bidders are bound to accept the revised quantity or duration

### 2. Certificates

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

### 3. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

#### 1. Introduction

- **Main scope of work:** Development of a Decision Support System (DSS) for Crop Water Demand based Canal Automation System at Darpanarayanpur MIP, Nayagarh, Odisha (India)

- **Project Name**

Automated Canal Irrigation System for Efficient and Smart Irrigation Water Management

- **Objectives of the Project**

- To develop a decision support system (DSS) for real time canal operation
- To develop a flow monitoring, water delivery/release, control, and feedback mechanism for modulating canal flow for canal automation system
- To design an improved irrigation delivery mechanism for improved crop production and economic water productivity
- To assess the impact of the automated canal irrigation system with the improved delivery mechanism

- **Description of the Command Area**

The project is aimed at to automate the irrigation water in a minor irrigation canal system having 285 ha command area and 650 ha catchment area in Darpanarayanpur Minor Irrigation Project at Nayagarh District, Odisha to bring diversity of cropping system as per real time crop water demand. Presently, the command area is predominant in kharif paddy crop only. In order to optimize the temporal and spatial availability of irrigation water, total 11 Nos. of automatic solar operated gates, one head regulator, 05 nos. of cross regulators and an automatic weather system were already newly installed by a hardware industry partner in the minor canal system stretching in 2.5 km length.

· **Successful operation period of the DSS integrated with the SCADA system**

Total **5 years** from the date of successful implementation of the DSS in the automated canal irrigation system

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**2. Instruction to Bidder**

- The bidder should have experience in developing Decision Support System (DSS) **ir canal irrigation system.**
- While developing the DSS, basic canal data will be provided by project team of ICAR-IIWM.
- The bidder has to work with the hardware industry partner, who has installed the canal automation system in Darpanarayanpur MIP, Nayagarh (Odisha) while developing the DSS and during the entire project period.
- During the development of DSS and its operational period, the bidder will work jointly in coordination with Institute project team, authorized personnel by the competent authority, hardware industry partner, water user association and Department of Water Resources, Govt. of Odisha.

**3. Prequalification criteria**

- The bidder should have experience in developing Decision Support System (DSS) **ir canal irrigation System** and its functioning at the project site.
- If required, a committee from this Institute constituted by the competent authority may visit the canal automation site, which has been developed by the bidder to see its functionality.

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**4. SCOPE OF WORK**

**Scope of Work for development of DSS**

- Development of simulation model for canal irrigation management
- Hydrodynamic model development of canal system for modulating canal flow for Darpanarayanpur minor irrigation project, Nayagarh, Odisha
- Development of real time Decision Support System for canal automation

- Operationalization of developed canal automation system for Darpanarayanpur minor irrigation project , Nayagarh, Odisha

**The bidder should develop the DSS and integrate with SCADA system for successful operationalization of the canal automation system within 6 months period from the date of award of the contract.**

**Detailed tasks required to be accomplished for development of the DSS for successful operation of the canal automation system are as follows:**

- Development of GUI with GIS viewer for DSS
- Database system development for DSS
- Data collection for Base 1-D Hydrodynamic model development
- Base 1-D Hydrodynamic model development
- Development of data import tools from canal SCADA in DSS
- Development of irrigation demands simulation module
- Integration of irrigation demands simulation module in DSS
- 1-D Hydrodynamic model development incorporating automatic canal gates and other hydraulic structures
- Integration modules in DSS
- Display of results in a graphical and tabular format including model simulation animation in DSS
- Development of expert tools to send results to SCADA for triggering canal operation in DSS
- Job creations for automation in DSS
- Report generation in DSS
- Documentation for DSS operation manual
- Testing of DSS
- Training and capacity building
- Operationalize the DSS at user location
- Fine tuning, capacity building & documentation for DSS operation manual

**\*While developing the DSS, basic canal data will be provided by project team of ICAR-IIWM.**

#### **5. Payment Terms**

- Total 50 % of the finalized cost shall be paid to the bidder after successful development of the DSS, its integration with SCADA system and operationalization on real time basis.
- Thereafter, at the end of each year, 10 % of the finalized cost shall be paid for successful operation of the DSS system in integration with SCADA system developed by the Hardware Industry partner in a period of 5 years or decision taken by the competent authority to release the balance payment.

#### **6. Penalties**

- If the bidder leaves the contract in the middle of the contract period, then the bidder has to refund the full finalized cost meant for development of the DSS.
- During implementation of the project period, if the bidder breaches the contract in any form, which is harmful for successful implementation of the project, then the competent authority will have the right to cancel the contract with the bidder and in that case the bidder has to pay the entire finalized cost meant for development of the DSS.
- For any unforeseen situation, if the developed DSS fails to function in between the contract period, then the bidder will have to restore and make it operational without any additional cost. Violation of this contract, the bidder has to refund the entire finalized cost for development of the DSS. For this purpose, the decision of the competent authority is final.
- Any dispute arises during the contract period shall be amicably resolved between the bidder and the competent authority or higher authority at any level. Failure to this, the matter can be taken in Bhubaneswar Jurisdiction only.

## **7. Quantifiable Specification**

- Development of simulation model for canal irrigation management
- Hydrodynamic model development of canal system for modulating canal flow for Darpanarayanpur minor irrigation project, Nayagarh, Odisha
- Development of real time Decision Support System for canal automation
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- Development of GUI with GIS viewer for DSS
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- Data collection for Base 1-D Hydrodynamic model development
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- Training and capacity building
- Operationalize the DSS at user location
- Fine tuning, capacity building & documentation for DSS operation manual

**\*While developing the DSS, basic canal data will be provided by project team of ICAR-IIWM.**

### **8. Project experience and Qualifying criteria requirement**

- The bidder should have experience in developing Decision Support System (DSS) in canal irrigation System and its functioning at the project site.
- The bidder should have a group of technically experienced experts to take up this work in a time bound manner.

\*If required, a committee from this Institute constituted by the competent authority may visit the canal automation site, which has been developed by the bidder to see its functionality.

### **9. Educational Qualification including profile of SME**

- The bidder should have a group of technically experienced experts to take up the Development of DSS for canal automation work and its successful functioning in a time bound manner.

#### **1. Qualification Criteria:**

- The Contractor/Agency/Firm(s) should be registered under the Shop and Establishment Act and should possess valid Registration Certificate as on the date submission of bids and should be valid for the entire duration of the bid validity period relevant to the work mentioned in the tender document.
- The Contractor/Agency/Firm(s) should have valid GST Registration Certificate & PAN Number.
- GST clearance and deposit receipt in form GSTR-3B as per rule (5) for the FY 2023-24
- Income Tax Return Certificate for the last 3 financial years i.e. (FY 2021-22, 2022-23 & 2023-24)
- Financial statements including Balance Sheet and Profit & Loss Statement showing annual turnover duly attested by a registered Chartered Accountant for FY 2021-22, 2022-23 & 2023-24
- Average turnover of the Contractor/Agency/Firms(s) should not be less than RS. 12.00 lakhs (Rupees Twelve Lakhs) During the last i.e. (2021-22, 2022-23, 2023-24).
- Minimum three years of experience in the field of providing such services as per tender in Central Govt. establishments/Autonomous bodies of Govt. of India/Corporations of Govt. of India/ reputed public or private organizations, etc.
- The Contractor/Agency/Firm(s) should not have blacklisted by any Government Department/ Government Educational Institutions/ Research Institutes during the last three years.

#### **4. Buyer Added Bid Specific ATC**

Buyer uploaded ATC document [Click here to view the file.](#)

## Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached categories](#), trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.
15. Any ATC clause in contravention with GeM GTC Clause 4 (xiii)(h) will be invalid. In case of multiple L1 bidders against a service bid, the buyer shall place the Contract by selection of a bidder amongst the L-1 bidders through a Random Algorithm executed by GeM system.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

**All GeM Sellers / Service Providers are mandated to ensure compliance with all the applicable laws / acts / rules including but not limited to all Labour Laws such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972 etc. Any non-compliance will be treated as breach of contract and Buyer may take suitable actions as per GeM Contract.**

This Bid is governed by the [General Terms and Conditions/सामान्य नियम और शर्तें](#), conditions stipulated in Bid and [Service Level Agreement](#) specific to this Service as provided in the Marketplace. However in case if any condition specified in General Terms and Conditions/सामान्य नियम और शर्तें is contradicted by the conditions stipulated in Service Level Agreement, then it will over ride the conditions in the General Terms and Conditions.

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद

पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।

**---Thank You/धन्यवाद---**