



**Document
of
Expression of Interest
for
Removal of Hard Strata in Ghazipur– Varanasi
stretch of River Ganga, National Waterway No.1**

Cost of document: Rs. 1000/-

INLAND WATERWAYS AUTHORITY OF INDIA

(Ministry of Shipping, Govt. of India)

A-13, Sector-1, NOIDA, Gautam Budha Nagar (U.P)-201301

Ph. No: 0120-2527667, Fax: 0120-2543973, E mail: hc.iwai@nic.in

IMPORTANT NOTES:

- (i) This document should be returned in original duly filled in and signed with firm's stamp on each page.
- (ii) The bidder should read all the instructions thoroughly before submitting and adhere to the dates given.

Invitation for Expression of Interest:

Hydrographic Chief, Inland Waterways Authority of India (IWAI), invites “Expression of Interest” from Companies, Undertakings, Reputed Agencies, Consortium of Firms, Joint Ventures of India etc. having expertise in carrying out dredging work in waterways for the work of removal of hard strata in Ghazipur –Varanasi stretch of River Ganga (NW-1) for shipping and navigation as per terms and conditions of the tender to be issued at later stage. The approximate estimated cost of work is Rs. 14.80 Crore.

This Expression of Interest (EOI) document can be downloaded from IWAI’s website or can be obtained from the office of Hydrographic Chief , IWAI, A-13, Sector-1 Noida Uttar Pradesh (Phone:0120-2527667, Fax: 0120-2543973) on all working days (weekly off on Saturdays and Sundays) during working hrs. from 23 -12-2013 to 15-01-2014 on payment of Rs. 1000/- (Rs. one thousand only) through demand draft (DD) in favour of “IWAI Fund” payable at Noida/ New Delhi. If it is downloaded from IWAI’s website (iwai.gov.in) the bidder will be required to submit along with the EOI bid Rs 1000/- (as cost of this document) in the form of DD as above. The EOI bids not accompanied with the cost of EOI document would be liable to be summarily rejected.

Duly filled in EOI document will be received in the office of Hydrographic Chief, IWAI, A-13, Sector-1 Noida Uttar Pradesh up to 1500 hours on 16-01-2014. EOI bids will be opened on the same day(16-01-2014) at 1530 hours at IWAI’s office at A-13, Sector 1, Noida – 201 301.

Sd/

**Hydrographic Chief
IWAI, Noida**

EXPRESSION OF INTEREST DOCUMENT:

1. Introduction:

1.1 The Ganga – Bhagirathi- Hooghly river system from Haldia to Allahabad was declared as National Waterway No. 1 in 1986 by an Act of Parliament. Since then IWAI, being apex body in the country for development and management of inland waterways in the country, execute various developmental activities to develop the waterways for shipping purpose. The said portion of waterway traverses through the four major states namely- West Bengal, Jharkhand, Bihar and Uttar Pradesh and thus has a huge potential of cargo movement both in up and down stream directions.

1.2 Several coal based power plants are established along the bank of the waterway and some more power plants are coming in near future.

1.3 The development of Inland Water Transport (IWT) mode on this waterway will also serve the transportation needs of coal for these Power Plants.

1.4 The entire waterway has been segregated in to different stretches according to the Least Available Depth (LAD) being maintained by the Authority. For maintenance of LAD in different stretch various river conservancy works like- bandalling, channel marking and dredging are executed on recurring basis. However, in some portion in Ghazipur- Varanasi stretch (in Uttar Pradesh State) it becomes difficult to maintain the designed LAD due to presence of hard strata formed due to calcareous siltstone which cannot be eroded/ removed through erection of bandal as well as by the usual method of Cutter Suction Dredging.

1.5 To find out the nature of soil at these locations, a study was conducted by IWAI through M/s Techno Engineers Pvt. Ltd. Kanpur during 2010 and the findings of the report are as below:

1.5.1 Top layer of ground consists of rock mass which can be classified as calcareous siltstone.

1.5.2 The rock mass found at the site comes under category of soft rock.

1.5.3 The soil below the rock mass comes under moderate grade of stiffness.

1.5.4 Thickness of rock masses range from 0.45 m to 1.20 m.

2. Objective:

Hard strata formed due to presence of calcareous siltstone in Ghazipur –Varanasi stretch is dangerous for safe plying of vessel particularly in lean season when water level reduces considerably and is hardly enough for movement of the vessel. Even some time, when the water depth reduces to less than 1.5 m, the movement of survey vessel is limited up stream / downstream of the hard strata area for safety of the vessel. Thus, the objective of this project is to remove the hard strata existing at various locations between Ghazipur and Varanasi so that uninterrupted and safe navigable channel from Haldia to Allahabad can be developed and maintained.

3. Scope of work:

3.1 Scope of work covers removal of hard strata (calcareous rock) in a depth ranging from 0.45 m to 1.20 m and soft strata (clayey silt/ silt) in a depth ranging from 0.60m to 1.50m at nine shoal locations at Ghazipur road bridge (Ch. 1179 km) and from Chakeri-1 (Ch. 1242 km) to Gopalpur (Ch. 1258 km) and dispose of the removed material to identified disposal area at a distance of 200 m to 500 m in the river/ river bank. To develop a channel of 30 m width and 2.3 m depth below the chart datum the estimated dredging quantities (Hard strata + Soft strata) are as below:

SL.NO	LOCATIONS WITH CHAINAGE	QUANTITY in (cu. m)		
		Hard Strata	Soft Strata	Total
1	U/s Ghazipur Road Bridge (Ch. 1179 km)	5250	10500	
2	D/s Chakeri-1 (Ch: 1242 km)	2700	5700	
3	D/s Chakeri-2 (Ch: 1243 km)	10800	32400	
4	Chakeri (Ch: 1244 km)	10800	22800	
5	Deochandpur (Ch: 1247 km)	5400	23400	
6	D/s Saidpur -1 (Ch: 1251 km)	6000	16500	
7	Saidpur (Ch: 1253 km)	5400	20250	
8	U/s Saidpur (Ch: 1255 km)	8400	7350	
9	Gopalpur (Ch: 1258 km)	30600	15300	
	Total	85,350	1,54,200	2,39,550

3.2 The above mentioned dredging is required to be executed for development of a navigation channel as mentioned above using suitable type of equipment like Amphibian dredgers, Poclairn, Tug, Hopper Barge etc.

3.3 The dredging quantities indicated in the above mentioned table are only approximate and payment for dredging work will be made on cubic meter basis for the actual quantities dredged during execution of work based on the pre & post dredging surveys to be conducted jointly by IWAI and the selected bidder/contractor as given below:.

(i) Pre & post dredging survey shall be conducted by using automatic hydrographic survey system using reputed/ branded hydrographic survey software. Digital Echo Sounder having 0.1 m accuracy in depth measurement and GPS/ DGPS/ RTKS GPS having sub-meter accuracy in position fixing shall be used for survey purpose. The cross-sections shall be 10 m apart and soundings shall be taken continuously and plotted at 4 m interval on the cross section. The cross-section shall be extended up to 100 m. beyond the limits of the channel on either side. The quantity in slopes up to a maximum of 1 in 5 shall be worked out for a width of 10 meter either side of channel. Beyond 10 meter, no quantity will be considered for payment purposes. Area of cross-section shall be computed by using Simpson's Rule and these cross-sectional areas shall be used in trapezoidal rule to arrive at Volume dredged. The areas shall be computed by a combination of Simpson's rule and average method in case the width of channel is not suitable for direct application of Simpson's rule for full width. This aspect is to be decided by the Engineer-in-Charge (EIC).

(ii) Water Level (WL) observations and Temporary Bench Mark (TBM) construction for leveling of tide gauges.

(iii) 3-4 float observations at equal intervals.

(iv) The tolerance allowable in width shall be 1 m on each side from centerline of channel and that in depth +15 cm from the specified depth. Depth could exceed beyond the specified minimum for which payment will be limited to +15 cm only. Quantities on account of depth exceeding +15 cm and width exceeding the specified limit will not be considered for payment.

(v) After the pre-dredging survey and as soon as the alignment of channel to be dredged is released by IWAI, the proposed channel for dredging is to be marked by the contractor as per the advice of EIC.

(vi) The scale of pre and post dredging surveys should be 1:1000

(vii) The equipment, men and machinery for detailed survey will be provided by the contractor.

4. Approach & Methodology:

4.1 Total duration for completion of work of dredging will be 14 working months excluding monsoon period. In other words the dredging period would be from January, 2014 to June 2014, 6 month and November/December 2014 to May/ June 2015). The bidders can obtain copy of Geo Technical Investigation Report of above shoal locations from IWAI on payment of Rs 1,000/- in Demand Draft payable to IWAI fund. The bidders are also required to visit and examine site of works and its surroundings, actual local conditions and requirement thereof and satisfy themselves on their responsibilities and expenses, and all other information that is necessary for submission of "Expression of Interest".

4.2 A pre bid meeting open to all prospective bidders who have purchased / downloaded the EOI document will be convened at IWAI Office at A-13, Sector-1, Noida, Uttar Pradesh at 1500 hrs. on 03-01-2014. In this meeting, clarifications would be provided to the bidders for submission of EOI. In the meeting, the prospective bidders are also encouraged to give suggestions for inclusion in the Tender/RFP document to be issued as a next step. Prospective bidders are also requested to present their "solutions" in this pre bid meeting

4.3 The bidder shall indicate, in the EOI Document, the details of his Plan, Approach and Methodology for undertaking the work of 'Removal of Hard strata in Ghazipur – Varanasi stretch of National Waterway No.1, with special emphasis on resources to be deployed to carry out the work in a time bound manner. Based on the evaluation of the Plan and Eligibility Criteria mentioned hereunder in the EOI Document, the EOI submitted by the bidders shall be shortlisted for issue of Tender/RFP Document which would be in two bid format i.e. Techno Commercial Bid and Financial Bid. The successful bidder would be required to undertake the work of 'Removal of Hard strata in Ghazipur – Varanasi stretch of National Waterway No.1 as per terms & conditions of the Tender/RFP document.

5. Instructions of the bidders:

(a) Address for communication

All the correspondence and communications shall be addressed to the following address:

Hydrographic Chief,

Inland Waterways Authority of India, A-13, Sector-1 Noida Uttar Pradesh

(Phone: 0120-2527667, Fax: 0120-2543973 E-mail: hc.iwai@nic.in)

(b) All costs towards preparation and submission of EOI document and other related documents shall be borne entirely by the Bidders. IWAI in no case will be liable for any such costs, regardless of the outcome of the EOI.

(c) Time schedule for procurement and submission of 'Expression of Interest Document';

(i) Uploading of EOI Document on IWAI's website on 23-12-2013.

(ii) Pre bid meeting at 1500 hrs. on 03-01-2014.

(iii) Submission of EOI-up to 1500 hrs. on 16-01-2014.

(iv) Opening of EOI Document at 1530 hrs. on 16-01-2014.

(d) If any deadline specified falls on a Government holiday, the deadline shall stand extended automatically to the next working day.

(e) EOI Document received after the due date will not be considered.

(f) There is no exemption on Service tax. All the taxes have to be paid by the contractor.

(g) IWAI will not provide dredger assembling/disassembling yard. Contractor has to arrange the same.

(h) Liquidated damages (LD) clause will be there in the RFP. Maximum LD will be 10% of the contract value.

(i) The envelope containing 'Expression of Interest' must be clearly marked "Expression of Interest for Removal of Hard strata in Ghazipur – Varanasi stretch of National Waterway No.1 on the top and shall be submitted to the Hydrographic Chief, IWAI, A-13, Sector-1 Noida Uttar Pradesh(Phone: 0120-2527667, Fax: 0120-2543973 E. mail. hc.iwai@nic.in) in sealed envelopes duly signed by authorized representative and stamped by the company seal.

(j) Bidders, if needed, may seek clarification to any point of the EOI document from Hydrographic Chief, IWAI, in writing prior to the deadline for submission of proposal (pre-bid meeting).

(k) No bidders shall be allowed to make amendments to their proposal once submitted to Hydrographic Chief. They may however be asked by IWAI to provide additional information/document to ensure that all the bids received have necessary papers/details.

(l) All EOI Documents received by due date will be opened at 1530 Hrs. on the last date of the submission of Proposal in the presence of the bidders or their authorized representative who-so-ever wish to attend. Absence of the bidders or their authorized representatives, however, shall not obstruct or prevent the opening of the Proposals in any way. Bidders or their authorized representatives, who are present at the time of opening of proposals, shall sign in a register to record their presence. During opening of Proposal, Authorized Representative of the Hydrographic Chief, IWAI, will read out the names of the bidders who have submitted the Proposals.

(m) During the process of evaluation, the Hydrographic Chief, IWAI, may request the bidders to furnish any clarifications on Proposals submitted by them. The bidders shall furnish the necessary clarifications expeditiously by post/courier/fax/e-mail or by any other faster means of communication to the Hydrographic Chief , IWAI, A-13, Sector-1 Noida Uttar Pradesh(Phone: 0120-2527667, Fax: 0120-2543973; e-mail : hc.iwai @.nic.in).

(n) In case of failure to provide information essential to evaluate the Proposal, or not to provide timely clarifications by any bidder, Hydrographic Chief, IWAI, shall be at liberty to declare bids of such bidders as non-responsive and reject the proposal.

(o) IWAI, reserves the right to accept or reject any or all proposals without giving any reason what-so-ever. IWAI shall not be liable for any loss to bidders due to such rejection.

(p) Incomplete Proposals are liable to be rejected. All the information sought in the EOI Document must be furnished. Failure to furnish all the information required in EOI Document may result in rejection of Proposal. Separate or additional sheets may be used for supplementing or adding further details.

(q) Furnishing false or wrong information in the proposal would result in rejection of the proposal.

(r) Before commencement of the work, statutory clearance required, if any, from the concerned authorities will be taken by IWAI. Permission for dumping dredged spoil on the banks of the river shall be taken by the contractor from the U.P. State Govt. or from the owners of the land, if so required. IWAI can help the contractor to take up such matters with

Govt. of U.P. to find a solution. Any matter related to royalty in connection with the dredged material including payments if any shall be borne by the contractor.

(s) Depending upon the shoal locations to be dredged suitable dumping area/locations has to be identified by the contractor and seek prior approval of IWAI before commencement of the dredging work. Maximum lead distances for dumping the dredged material will be specified in the RFP document.

(t) The Contractor has to provide necessary bank protection / Cofferdam/retention work to ensure that the dumped material should not come back to be dredged channel. Length of bank protection work will be defined in the RFP document. Corresponding item will be incorporated in the BOQ of RFP.

(u) If the length of the shoal to be dredged is more than 500 m, on completion of 500 m dredging, the contractor shall arrange post dredging survey jointly with IWAI. If dredging has been completed as per the terms and conditions of the tender without any shortcomings the dredged locations will be deemed to be taken over by IWAI upon release of approval of post dredging survey charts approved by IWAI.

(v) The proposed dredging work spills over to post monsoon season, (ie. beyond May, 15), the contractor shall arrange post dredging survey for the completed portion of dredging (irrespective of 500 m criteria) before on set of monsoon. If the dredging has been done as per specifications, then also that portion will be deemed to be taken over by IWAI once the approved post dredging chart is released by IWAI.

(w) Director IWAI, IWT Terminal, Gaighat, PO – Gulzarbagh, Patna-800 007 (Bihar), Tel No.0612- 2630100,2630114,2630112, 263005, Fax No.0612-2630100, e-.mail iwaipn@rediffmail.com shall be the Engineer-in-Charge (EIC) of this project.

6. Requirement for Submission of EOI by the bidder:

The EOI bid should inter-alia contain following information:

(a) Name and complete address phone number, Fax number, email address etc. of the bidder.

(b) Name and complete address of Nodal/ Key Personnel, with office and residential telephone numbers (including cell number), e-mail address etc.

- (c) History and Background of the bidder.
- (d) Past Experience (to be submitted in sufficient detail and with documentary proof)
 - (i) Total number of years of experience.
 - (ii) Experience of the works of dredging in rivers/ inland waters/ tidal waters / ports etc.
- (e) Methodology- The bidders will submit in adequate details the approach and methodology he proposes to implement the work. The capacity and number of dredgers the bidder wants to mobilize during the work period along with their manpower and appurtenant logistics would be the key elements of the EOI proposal. The bidder would also submit the details of survey launches and equipment he proposes to utilize for this work.
- (f) Human Resources
 - Total Strength of the bidder's firm.
 - Strength in the area of assignment.
- (g) Experience of key Personnel
 - Qualifications
 - Relevant Experience
- (h) Financial Strength of the bidder
 - Financial Turnover for last three financial years
 - Net Annual Profit during last three financial years
 - Value / turnover of dredging work carried out during last three financial years.
- (i) List of dredgers (owned/ hired/ to be hired) to be submitted along with EOI bids. Similarly the list of proposed dredgers to be deployed shall also be indicated at the time of submission of RFP. Terms and conditions pertaining to change of dredger and its replacement will be given in the RFP document.
- (j) Month mobilization period will be considered from the date of award of work and thereafter 14 months period for dredging (excluding monsoon period)
- (k) Particulars on difficult and challenging assignments, in same or related sectors, accomplished by the bidder, with supporting details, letters of appreciation, indicating therein duration of time period as indicated in the letter for award of work and time actually consumed in performing the assignment, cost overrun if any.
- (l) Experience of working in the region.
- (m) Important Assignments in hand along with their cost.

(n) Any other relevant detail.

7. Pre- qualification Criteria:

The following criteria shall be adopted for assessing eligibility of the bidders:

(i) The bidder must have an established in house capacity for last 05 years (2008- 2013) for executing the dredging projects of such magnitude.

(ii) The bidder should have completed in the past seven years

(a) At least three similar works each costing not less than 6.00 crore; **or**

(b) At least two similar works each costing not less than Rs. 7.50 crore; **or**

(c) At least one similar work costing not less than Rs. 11.90 crore.

(iii) Average annual financial turnover of the firm/consortium for similar works should not be less than of Rs. 4.45 Cr. during last 3 years ending 31st March, 2013. This has to be submitted with supporting documents certified by a Chartered Accountant. The year with no turnover would also be considered for working out the average.

(viii) Special weightage (10%) will be given for experience of any work done in rivers.

(ix) Similar work would mean dredging in Sea or Coastal waters or rivers or Canals or lakes in India or abroad.

(x) The bidders should give the list of dredgers (with their type and technical specification documents that they are capable of executing dredging in Ganga river within stipulated time) they wish to deploy.

(xi) An evaluation committee of IWAI will examine the proposals and short list the bidders based on the EOI documents received.

Marking system for short listing of bidders:

Sl. No	Item	Marks assigned out of 100	Remarks / Explanatory notes
a.	Firm's Relevant Experience	50	70 % of the maximum marks shall be awarded for similar assignments undertaken by the Consultant firm as per item 7(ii) above. The remaining 30% shall be awarded for additional projects (3 nos) for any other infrastructure projects (other than dredging)

b.	Proposed approach & methodology for executing the work in a time bound manner (Schedule, commitment for deployment of resources etc.)	15	Evaluation will be based on the understanding of the project by the bidder, quality of document submission/ commitment to execute the work Financial capacity etc.
c.	Working experience in river.	10	60% of the maximum marks shall be awarded for the number of similar assignments he has worked on. 20% shall be awarded for the academic / professional qualifications. 20% shall be awarded for other relevant experience.
d..	In-house capacity of the firm to execute the work	10	Number and type/ output in terms of cum. of dredgers possessed by the company on his own name and number & type of dredgers he intended to deploy through other agencies.
e.	Experience of the Staff to be deployed for the project	15	70% of the maximum marks shall be awarded for the number of similar assignments carried out by the Project Manager, 30% shall be awarded for the academic / professional qualifications.
