



**भारत, वलनल, त्येकल इल/लद.क**  
(इल इजगु एक;] भर लदक)  
**INLAND WATERWAYS AUTHORITY OF INDIA**  
(Ministry of Shipping, Govt. of India)

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**EXPRESSION OF INTEREST (EOI)**

IWAI/Hy/1(1)/Shoal/2011

**Expression Of Interest (EOI) for short listing of Indian firms for Shoal Analysis Solution**

1. Inland Waterways Authority of India (IWAI) under the Ministry of Shipping, Govt. of India, is the apex body for development of Inland Waterways in the country for Shipping and Navigation. The details on IWAI is available at [www.iwai.nic.in](http://www.iwai.nic.in)
2. IWAI wants to avail the services of a firm for development of GIS based information & decision support system to analyse river depth data for identification & prediction of Shoal formation in particular month / year at a place, permanent shoal or temporary shoal, migration of shoal, river behavior, effect of water level on depths etc.
3. Fortnightly / Monthly thalweg (longitudinal) surveys are being carried out for the entire stretch of the National Waterways No. 1, 2 & 3 with automated Hydrographic Survey System using DGPS technology & digital Echosounders. Detailed surveys at shoal locations are also being carried out for timely execution of River Conservancy works like Bandalling and Dredging. IWAI is preparing base maps in DXF format with the help of Satellite Imageries and SOI Toposheets, for carrying out thalweg surveys. IWAI is also measuring daily Water Level data at existing IWAI's gauge stations.
4. Scope of work:-
  - a) To automate the manual process to analyse the shoal
  - b) Use of Hydrographic Survey digital data in xyz format
  - c) Designing & creating a systematic multi-layered and multi-scale GIS database having both spatial & non-spatial components
  - d) Thematic display of Shoals
  - e) Identify Temporary Shoal locations in a particular Month & Year
  - f) Identify Permanent Shoal locations for a given duration of month / Year
  - g) Future predictions of Shoal, based on historic data
  - h) Profile view of sounding data
  - i) Software should give approximate dredging quantity **at each temporary & permanent shoal to achieve various depths viz. 2.0m, 2.5m & 3.0m**
  - j) Design & develop an error free, customized, secure web based GIS application suite that allows easy access to the IWAI officials. Different category of security & access of website for IWAI officials & Mariner is to be made.
  - k) GIS based report generation for:
    - Least Available Depth (LAD) (Chainage wise)
    - Maximum Length of Shoal (Chainage as well as Zone wise)

- Number of days Shoal has occurred
- Graphical representation of Water Level v/s LAD
- Effect of Dredging & Bandalling (improvement in depths)

This is based on the following information received in XLS format:

- Least Available Depth (LAD) (Chainage wise)
- Length of Shoal (Chainage as well as Zone wise)
- Water Level

GIS based analysis:

- i. What will be the effect on LAD when the Water Level changes
- ii. Generate Alarm for the areas where LAD reduces below the targeted depth (say 3.0m, 2.5m, 2.0m & 1.5m)
- iii. What is the water level at which the Shoal formation will start

- l) Generation of query & reports in printable format (on the basis of month-wise & year-wise data)
- m) Training to IWAI officials to utilize & manage the web based GIS application
- n) Operation & maintenance of the system for IWAI, H.O., NOIDA for two years period
- o) Copyright of Software / program to IWAI

#### 5. Eligibility Criteria:-

The Indian Firm intending to submit EOI must fulfill the following pre-qualification criteria:-

- a. Must be established for at least 5 years in the country.
- b. Must be a GIS based solution provider.
- c. Must have a proven experience in the field of GIS based solutions. Experience in Port / Waterways will be given preference.
- d. The annual accounts of firm should clearly indicate positive net worth.

#### 6. Component of Application:

Interested firms fulfilling the above requirements are requested to submit the EOI with details of their eligibility and following documents:

- i. Declaration that firm has not been banned or de-listed by any Govt. or quasi Govt. agency or Public Sector Undertaking.
- ii. Background of the organization with respect to similar experience and brief description of projects recently undertaken in the relevant field.
- iii. Tables showing organizational strength including manpower, other resources etc.
- iv. Addresses of Offices in India is to be provided.
- v. To furnish last 3 years (2009-10, 2010-11 & 2011-12) audited balance sheet / annual reports) showing turnover, net worth, profitability and cash flow or as certified by a firm of Chartered Accountants.
- vi. Documents in respect of PAN, service tax, VAT number/registration.
- vii. Registration Certificate / ISO Certificates / Other accredited agency certificates.
- viii. Work orders and performance certificates / job completion certificates in respect of GIS based solutions.
- ix. **Detailed** write up on proposed methodology to take up the project
- x. **Budgetary offers for taking up this project.**
- xi. Any other details which firm feel relevant to carry out the present assignment.
- xii. Name and details of the contact person (Mobile no., e-mail etc) submitting the proposal.

7. Submission of EOI

- a. The submission of the Expression Of Interest (EOI) together with requisite documents in a sealed envelope clearly mentioning “**EXPRESSION OF INTEREST (EOI) FOR SHOAL ANALYSIS SOLUTION**” shall be addressed to the Hydrographic Chief, Inland Waterways Authority of India, A-13, Sector-1, NOIDA, Distt. G.B. Nagar (U.P.) – 201 301 by the intending firms in their own letter head should be reached by 1500 hours on 10.06.2013 and will be opened on the same day at 1600 hours in the presence of representatives of intending bidders.
- b. IWAI reserves the right to accept or reject any or all EOI’s without assigning any reasons and no correspondence shall be entertained in this regard.

8. Selection Criteria:

The following items shall be considered for evaluation of the firm / short listing the eligible firm for Shoal Analysis Solution:

SL. No.	Description	Marks
1	Background of the organization with respect to similar <b>work</b> experience	10
2	Work orders and performance certificates / job completion certificates GIS based solutions	20
3	<b>Detailed</b> write up on the methodology proposed for taking up the project	20
4	After <b>opening of the offers</b> on 10.06.2013, firms may collect pilot data for a survey stretch up to 20.06.2013 for preparation of presentation. Presentation to the IWAI officials is to be given by 19.07.2013 to show their capability to perform the work.	50

Minimum 80 marks is the eligibility criteria for short listing.

The shortlisted firms will be issued with RFP (Request for Qualification cum Proposal) document to submit their competitive bids.

9. Special Instruction:

- i. Date of pre-bid meeting: 24.05.2013 at 1500 hours
- ii. Venue for pre-bid meeting / submission of bids - Hydrographic Chief, Inland Waterways Authority of India, A-13, Sector-1, NOIDA, Distt. G.B. Nagar (U.P.) – 201 301
- iii. Last date of submission of EOI: 1500 hours on 10.06.2013
- iv. Date of opening of bid: 1600 hours on 10.06.2013
- v. After opening of bids on 10.06.2013, firms may collect pilot data for a survey stretch up to 20.06.2013 for preparation of presentation. Presentation to the IWAI officials is to be given by 19.07.2013 to show their capability to perform the work.
- vi. Shortlisted firms will be issued with the RFP documents to submit. The date of submission of duly filled RFP will be intimated in writing.
- vii. IWAI wants to avail the services of a firm for development of GIS based information & decision support system to analyse its river depth data for identification & prediction of Shoal formation in particular month / year at a place, permanent shoal or temporary shoal, migration of shoal, river behavior, effect of water level on depths.
- viii. Time of completion of work: 180 days from the date of award of work
- ix. It is proposed to initially award the Operation & Maintenance (O&M) for the period of two years. However, the work may be extended for further period depending upon the performance.

Hydrographic Chief