Request for Information (RFI)

For
Computer Based Educational Packages in Dredging

Indian Maritime University
Visakhapatnam Campus

Version: 1.0
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CONTENTS

1   ABBREVIATION AND TERMINOLOGY

IMU:	Indian Maritime University
IMU(V):	Indian Maritime University, Visakhapatnam Campus
RFI:	Request for Information
RFP:	Request for proposal
Responder:	Persons/ Companies intending to respond for this RFI
CSD:	Cutter Suction Dredger
PIP:	Picture –in – Picture
OEM:	Original Equipment Manufacturer

2   ABOUT INDIAN MARITIME UNIVERSITY

Indian Maritime University was established by an Act of Parliament on 14th November 2008. IMU is a teaching-cum-affiliating university and its main objectives are:

(i)   To facilitate and promote maritime studies, training, research and extension work with focus on emerging areas of studies like oceanography, maritime history, maritime laws, maritime security, search and rescue, transportation of dangerous cargo, environmental studies and other related fields, and also to achieve excellence in these and connected fields and other matters connected therewith or incidental thereto .

(ii)   To promote advanced knowledge by providing institutional and research facilities in such branches of learning as it may deem fit and to make provisions for integrated courses in Science and other key and frontier areas of Technology and allied disciplines in the educational programmes of the University;

(iii)   To take appropriate measures for promoting innovations in teaching-learning process, inter-disciplinary studies and research; and to pay special attention to the promotion of educational and economic interests and welfare of the people of India;

(iv)   To promote freedom, secularism, equality and social justice as enshrined in the Constitution of India and to act as catalyst in socio-economic transformation by promoting basic attitudes and values of essence to national development; and

(v)   To extend the benefits of knowledge and skills for development of individuals and society by associating the University closely with local, regional and national issues of development.

The erstwhile premier maritime training and research institutions like LBS College of Advanced Maritime Studies & Research, Marine Engineering & Research Institute, Training Ship Chanakya in Mumbai, Marine Engineering & Research Institute, Indian Institute of Port Management in Kolkata, National Maritime Academy in Chennai & National Ship Design & Research Centre in Visakhapatnam were subsumed into the university. The erstwhile institutions of IMU are old and having dedicated themselves in

their respective fields in the field of maritime education, training, research & consultancy.

More information can be found at www.imu.edu.in.

3 ABOUT IMU VISAKHAPATNAM CAMPUS

The IMU Visakhapatnam Campus emerges from the confluence of the centrally established Indian Maritime University at Chennai, and India's premier Ship Design and Maritime Research Institution, The National Ship Design and Research Centre (NSDRC). Pioneered in the early 90`s by the Government of India to pilot and consolidate national domain knowledge with global vision, NSDRC had undertaken several milestone projects in the areas of Ship Design, Construction and Applied Research. Therefore, IMU Visakhapatnam Campus heralds the integration of visionary academic insight with the accumulated professional expertise and knowledge base on Ship Design and Maritime Technology.

IMU Visakhapatnam Campus is running the following Programs under the School of Naval Architecture & Ocean Engineering

a. B.Tech in Naval Architecture & Ocean Engineering with a sanctioned strength of 40 students per batch.
b. M.Tech in Naval Architecture & Ocean Engineering with a sanctioned strength of 20 students per batch.
c. M.Tech in Dredging & Harbour Engineering with a sanctioned strength of 20 students per batch.
d. PhD Program

The School of Maritime Design & Research (SMDR) has been established at IMU Visakhapatnam Campus to carry out the activities of erstwhile NSDRC.

More information can be found at www.nsdrc.res.in; & www.nsdrc.com.

4   PROJECT OVERVIEW

IMU Visakhapatnam Campus is conducting a two year full time Master's Program in Dredging & Harbour Enginnering. Students who have completed thier undergraduate program in Civil / Mechanical/ Marine/ Naval Architecture & Ocean Engineering & Aeronautical engineering are eligible to take this sepcialised course.

IMU Visakhapatnam Campus intends to use Computer based educational packages which are readily available, to students of Master's program (M.Tech) in Dredging & Harbour Engineering so as to complement the class room lectures on various aspects of dredging. The educational packages are intended to cover the general dredging aspects along with details of Cutter Suction Dredgers (CSD).

5   RFI REQUIREMENTS PROCESS

5.1   Participation to RFI

Participation ot this RFI can be eligible responders in either of the two categories as listed below:

Category 1

a. The suppliers intending to respond to this RFI should have been in the business of supplying educational/ training packages in the area of dredging for the last 5years.

    AND

b. The responders should have supplied at least 2 such packages related to dredging to clients worldwide in the last 5 years.

Category 2

The responders should have on their own developed computer based educational packages / simulators in the area of dredging and be in the business of conducting training in the area of dredging for the last 8 years.

The responders may offer all / some of the products confirming to the functional requirements as indicated in **Section 7**

5.2   RFI Schedule

RFI key dates are the following:

25th January 2016	RFI made available to the bidders
5th February 2016	Deadline for addressing clarifications
10th February 2016	Response to all clarifications
24th February 2016	Deadline for receiving the response (all material)
1st March 2016	Responses to be evaluated. Bidder(s) will be invited to present solution to IMU Visakhapatnam Campus (presentation meetings, not negotiation meetings). Live demonstrations if applicable can be shown at this presentation.
30th March 2016	Decision to launch an RFP

All responses in the prescribed format as indicated in **Section 8** should be recieved on or before the scheduled date. Any responses recived after the scheduled date will not be considered for evaluation.

5.3   RFI related questions/clarifications / submission

All questions related to this RFI should be directed to:

Director,
IMU Visakhapatnam Campus
Gandhigram
Visakhapatnam
Ph: +91 (0)891- 2577744,
Fax: +91 (0)891-2577754
E-mail: director.viz@imu.co.in

5.4   RFI procedure

To answer this RFI please fill in the attached form as indicated in **Section 8** along with brochures, company profile, contact persons, leaflets etc about the company & products which are already available.

The responders are requested to send the attached form along with necessary enclosures by post so as to reach on or before **24th February 2016** to

Director,
Indian Maritime University
Visakhapatnam Campus
Gandhigram
Visakhapatnam
530005

6 RFI TERMS & CONDITIONS

6.1 Liabilities of IMU Visakhapatnam Campus

1. With this RFI we request information regarding your company and your products/services. The same information will be gathered from different companies and will be used to evaluate what suppliers we will follow up the sourcing process with a RFP.

2. This RFI is only a request for information about potential products / services and no contractual obligation on behalf of Indian Maritime University whatsoever shall arise from the RFI process.

3. This RFI does not commit IMU(V) to pay any cost incurred in the preparation or submission of any response to the RFI including travel,etc for making the presentations at IMU Visakhapatnam.

6.2 Confidentiality & RFI ownership

1. This RFI is both confidential and proprietary to IMU Visakhapatnam Campus, and IMU Visakhapatnam Campus reserves the right to recall the RFI in its entirety or in part. The Responders cannot and agree that they will not duplicate, distribute or otherwise disseminate or make available this document or the information contained in it without the express written consent of IMU Visakhapatnam campus.

2. Responders shall not include or reference this RFI in any publicity without prior written approval from IMU Visakhapatnam Campus. Responders must accept all of the foregoing terms and conditions without exception. All responses to the RFI will become the property of IMU Visakhapatnam Campus and will not be returned.

7 HIGH LEVEL REQUIRMENTS

This RFI is meant to solicit information on computer based educational products which can readily be used for the Masters Program in Dredging and Harbour Engineering and especially related to Dredging. The Various topics which are intended to be covered by such packages include

1. Types of dredgers, Design features and operational requirements
2. Dredging Equipment & Slurry Transportation:

3. Production Calculations & optimization

7.1 Overview of Functional Requirements

The Functional Requirements for The Computer based educational pacakages should include but not limited to:

7.1.1 Introduction to Dredging

a. Types of dredgers, operational requirement of dredgers, economics of operation, design features

    i. Basics of dredging
    ii. Equipment design, processes and production
    iii. Dredging projects
    iv. Operational aspects
    v. Dredging costs and contracts
    vi. Instrumentation
    vii. Maintenance
    viii. Environmental aspects;
    ix. Design considerations – creating and restoring wetlands Etc

b. Basic dredging procedures including planning, working methods, project production calculation, project cost calculation, project reporting & monitoring.

7.1.2 Dredging Equipment & Slurry Transportation

a. Dredge pump characteristics, pump cavitation

    i. Drive characteristics
    ii. Dynamic effects of pump and drives
    iii. Pipeline system characteristics
    iv. Interaction between pump, drive and pipeline
    v. Influence of solid particles on pump and slurry processes
    vi. Dynamic effects in the pump and pipeline systems

b. Cutter Suction Dredging

Cutter types used for various soil conditions, cutter design, phenomenon of under cut / over cut, spill, breaching etc

7.1.3 Production Calculations & optimization in Suction Dredging using CSD

a. Analysis of operational limitations:
    i. Calculation of suction limitation
    ii. Calculation of discharge limitation
    iii. Calculation of cutting limitation
    iv. Calculation of swing limitation

     v.   Spud carrier analysis

    vi.   Effect of Current, Waves & Wind

7.2 Overview of Performance Requirements

The Computer based educational / learning pacakges should be so designed that the learner can become acquainted with the complete dredging and discharging process, including barge, ladder, cutter head, main spud and spud carrier movements, as well as auxiliary spud, anchor booms and anchor handling, including the accompanying motors and hydraulic drive systems. They should be able to learn about the excavation process and the interaction between cutter head and soil, caving in and breaching of the soil, the mixture transport chain and the influence of tide, current, waves and weather. They should be able to discover how to operate and debug the vessel's power and auxiliary systems and about the specifics of those systems.

The laearners should be able to plan a dredging operation starting with site survey including surveying techniques, preperation of charts, dredging quantity estimations, selection of dredgers, production calculations, project monitoring and reporting.

7.3 Overview of Availability Requirements

It is intended that the computer based package is avalable to the students at any time. The package must support atleast 10 users using the packages simultanously.

7.4 Overview of Technical Requirements

The computer based educational packages may be designed in the form of standalone computer systems accompanied with learning material, instructions, Q&A sessions, videos, 3D interactive images, simulations, case studies etc. The systems should be able to be accessed from desk top computer / dedicated workstations with single / multiple screens based on the design. Audio instructions/ descriptions should preferably be available. The packages should be accompanied with standard lessons in form of audio instructions along with video imagery and text covering all aspects for dredging and in using cutter suction dredgers.

The package may also be designed in the form of a simulator with a separate instructor station in which case the students will have the option of using this one at a time along with an instructor station.

7.5 Legal requirements

The Responder shall defend and hold harmless IMU from patent, trade mark, copyright or other intellectual property liability or claims of any nature or kind, including costs and expenses for, or on account of any intellectual property rights made or used in the preparation of this RFI and also including costs and expenses of litigation, if any.

7.6   Optional requirements

The system may also have add on systems such as the Computer be connected to actual controls and or having virtual controls with multiple screens showing the controls and the physical behavior of various systems with PIP allowing for a comparison between the real thing and the control screens

8   FORM TO FILL IN AS ANSWER TO THE RFI

8.1   Responder's Particulars:

Question	Answer
Responders Company Name	
Company address	
Company web page	
Main products/services	
Main market/customers	
Ownership structure with ownership status in percentage	
Structure of mother corporation, joint ventures, subsidiaries, partnerships or other relevant relations	Attach annexure as required
Number of years on the market	
Company location(s)	
Quality management system(s)	
Financial information (Year wise)	
Turnover in Last 5 years (2010-2015)	
Profit / Loss in last 5 years (2010-2015)	
Contact person and responsible for answering this RFI	
Telephone	
Fax	
Email	
Please provide details of any outstanding legal action against your company or any directors or partners.	
Are there any anticipated mergers or acquisitions pending?	
Any conditions / Functionality that is listed in the RFI and cannot be met	

8.2 Information of the product(s) being offered

This part of the form should be filled in and sent along with supporting documents, brochures, leaflets etc.

Question	Answer (Attach required supporting documents as annexure)
Description of products or services that are already delivered to customers today, and could be comparable to what is requested in this RFI	
Reference customers using comparable products or services (including contact information)	
Reference customers using your products or services today, although they are not comparable with what is requested in this RFI (including contact information)	
Availability of spare parts and support in India.	
Description of Products being offered in response to this RFI	
Please provide information on your implementation methodology.	
Hardware/space/envionmental conditions required to use the product being offered?	
Was software written by your organization or acquired from a third party?	
Any third party tools need to be purchased and installed to run the products offered Provide a list of such third party tools and their OEMs What is the cost of such third party tools	
What development tools are provided with the pacakge so as to enable the user to develop its own training/learning exercises/scenarios?	

Question	Answer (Attach required supporting documents as annexure)
Training: Do you offer formal user training? What type of courses do you run and what is their duration? What level of training would you recommend? Describe any training materials offered? Do you provide user training at site?	
Please provide details of how the product is intended to be supported. What levels of support is available, definition of each level and what are the hours of operation and response times? Where are the support services located? Does support include product updates, as well as bug fixes at no extra charge? What is the helpdesk escalation procedure?	
Please summarize the total costs of your product. What are the licensing costs for individual parts of the solution? Are new releases chargeable separately? What are your consultancy rates to help with implementation? What do you charge for customization? What do you charge for training? What are the maintenance and support costs? Please give a breakdown.	

Question	Answer (Attach required supporting documents as annexure)
Do you offer discounts for volume purchases? Do you levy any charges for software or services during the evaluation period? If yes what are the charges?	
Any other specific terms and conditions which you would require for selling your products?	