

Scope of Work  
&  
Terms of reference  
For  
**Expression of Interest for Selection of Consultants**

**towards**

Framing of Guidelines to Develop National Inland Navigation Institute ( NINI)  
to be Centre of Excellence in IWT Sector

**File Reference : IWAI/WB/NW-1/ 10 /4 /2018**

**Activity Ref : IN-IWAI-71540-CS-QCBS**

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for

“Capacity Augmentation of National Waterway-1. Project”



**Client: Inland Waterways Authority of India, Ministry of Shipping,  
Government of India  
Country: INDIA**

**INLAND WATERWAYS AUTHORITY OF INDIA**

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	<p style="text-align: center;"><b>Scope of Work &amp; Terms of reference for Expression of Interest for Selection of Consultants towards Framing of Guidelines to Develop National Inland Navigation Institute ( NINI) to be Centre of Excellence in IWT Sector</b></p> <p>File Reference : IWAI/WB/NW-1/ 10 /4 /2018 Activity Ref : IN-IWAI-71540-CS-QCBS</p>
1	<p><b>Introduction to the Project</b></p> <p>Inland Waterways Authority of India (IWAI) is a statutory body under Ministry of Shipping, Government of India. IWAI was set up in 1986 for regulation and development of Inland Waterways for the purposes of shipping and navigation. IWAI is primarily responsible for development, maintenance and regulation of Inland Water Transport (IWT) in the country and including technical training specifically National Waterways (NW). Government of India has so far notified 111 inland waterways as National Waterways.</p> <p>National Waterway -1 (NW-1) on the Allahabad-Haldia stretch of Ganga-Bhagirathi-Hooghly river system of 1,620 km in length is a waterway of national significance passing through the States of West Bengal, Jharkhand, Bihar and Uttar Pradesh. It potentially serves the major cities of Haldia, Howrah, Kolkata, Bhagalpur, Patna, Ghazipur, Varanasi and Allahabad, their industrial hinterlands, and several industries located along the Ganga Basin. The rail and road corridors of this region are already saturated. Hence, development of NW-1 would result in an environment friendly, fuel efficient and cost-effective alternative mode of transportation, especially for bulk goods and hazardous goods and over dimensional cargo.</p> <p>The world Bank (WB) has identified Varanasi, Haldia and Sahibganj for construction of multimodal terminals with rail and road connectivity and IWT terminals at Ghazipur and Kalughat. Apart from the above terminals one navigational lock at Farakka is being built. IWAI is planning to Augment the Navigational Infrastructure of National Waterway-I</p>
	<p><b>IWAI and Inland Waterways Transport Sector</b></p> <p>A. India has about 14,500 km of navigable waterways which comprise of rivers, canals, backwaters, creeks, etc.. Inland Waterways are being developed to provide an efficient, cost effective and environment friendly mode of transport in the country. In addition to the existing five National Waterways, 106 new National Waterways have been declared by the National Waterways Act 2016 in April 2016.</p> <p>B. To develop Sustainable Inland Waterway Transport System and to effectively meet the growing transportation demand of cargo and passengers, Human Resource is one of the key element. Institutional Development and Capacity Building is essential activity under the JMVP, as part of this activity in order to develop professionals and manpower for Inland Waterway Transport across the country NINI is to be developed as "Centre of Excellence for Inland Water Transport" and in parallel it is to be managed and operated in a professional and efficient manner.</p>

	<p>C. JMVP, IWAI invites proposals from training institutes /organizations for Framing Guidelines to Develop National Inland Navigation Institute (NINI) to be Centre of Excellence in IWT Sector.</p>
2.0	<p><b>Purpose / objective of the assignment:</b></p> <p><b>NINI - National Inland Navigation Institute</b></p> <p>a) National Inland Navigation Institute (NINI) has been setup by Inland Waterways authority of India (IWAI) for imparting training to the IWT personnel in the IWT disciplines including Hydrographic Survey, River conservancy, River training works, Navigational aids, Construction of jetties/Terminals &amp; their management, Operation, repair &amp; maintenance of Inland vessels, Preparatory Courses for Certificate of Competency as per Inland Vessel Act.</p> <p>b) The institute is the Examining Body for training and examining the manpower of Inland Vessels by Govt. of Bihar under Inland Vessel Act 1917. The institute is duly certified as ISO 9001-2015 and is graded as A+ (outstanding) under the Comprehensive Inspection Program Guidelines by DG Shipping.</p> <p>c) The institute is situated on the right bank of Ganga River just upstream of Mahatma Gandhi Setu. The campus houses main building, 6 Classrooms, a Library, 120 seat air conditioned Auditorium, Computer Laboratory, Inland Vessel Navigation Simulator, Basic Dredging Simulator, Workshop, Staff Room, Playground and the administrative area.</p> <p>d) The hostel for 150 students and dining hall are located at the rear of the campus. The institute hostel has a capacity to accommodate people at a time. The institute has a Marine Simulation Center that hosts Radar and ARPA, RANSCO, Full Mission Ship Handling Simulator, ECDIS and Liquid Cargo Handling Simulator.</p> <p>The institute has been conducting induction and preparatory courses for Masters and Engine Drivers for Inland Vessels, Basic Dredging Courses and DG Shipping approved Basic Safety courses, NCV course, ROC, ARPA, SMS and BTM Courses</p>
3.0	<p><b>Scope of the Work</b></p> <p>NINI, the Centre of Excellence in IWT Sector is to be a premier Institute that houses state of art modern training and research facilities, develops model courses based on best practices and procedures for IWT sector (includes Logistics, Supply chain and Multimodal) and professionally conducts training and skill development for the IWT sector.</p> <p>The Scope of work for Framing Guidelines to Develop National Inland Navigation Institute (NINI) to be Centre of Excellence in IWT Sector is outlined below:</p> <ol style="list-style-type: none"> <li>1. <b>Criteria for Center of Excellence in IWT Sector</b></li> <li>2. <b>Assessment and Gap Analysis for NINI as Center of Excellence</b></li> <li>3. <b>Detailed Action Plan for NINI as Center of Excellence</b></li> <li>4. <b>Assessment of Governance of NINI</b></li> </ol>
3.1	<p><b>1.Criteria for Center of Excellence in IWT Sector</b></p> <ol style="list-style-type: none"> <li>a) Identify and State Characteristics for Centre of Excellence ( CoE) in IWT Sector</li> <li>b) Identify and State Functions of CoE for IWT sector</li> <li>c) International benchmark and criteria for CoE in IWT sector</li> </ol>

	<p>d) Develop criteria for CoE in IWT sector for Indian Scenario for evaluation of NINI</p>
3.2	<p><b>2. Assessment and Gap Analysis for NINI as Center of Excellence</b></p> <p>a) Conduct detailed assessment of training infrastructure, resources and training activities being carried out at NINI</p> <p>b) By assessment in a above, desktop study of secondary data and study of various reports available at IWAI including latest reports of HPC, Howe and by Consultants of DPR's on Feasibility National Waterways assess to develop the training requirements in different disciplines of IWT sector (Waterway Development, Terminal Management, Survey &amp; Hydrography, Vessel Construction &amp; Repair, Vessel Operation &amp; Management and Logistics) based on functional, statutory and client requirements.</p> <p>c) Conduct rapid selective primary survey to confirm the training requirements as developed in (1b) above.</p> <p>d) Conduct a desktop study of training, training resources and training infrastructure in IWT sector being followed in Europe, USA, China, Vietnam and Brazil</p> <p>e) Using the training requirements and assessment of training infrastructure and training at NINI Identify the Gaps in Training, Training Resources and Training Infrastructure</p>
3.3	<p><b>3. Detailed Action Plan for NINI as Center of Excellence</b></p> <p>a) Based on the assessment in Paragraph II above, Finalise the Structure, Training Process, Thematic Areas and Accreditation for development of NINI as Centre of Excellence in IWT sector</p> <p>b) Based on the study in (3.1) &amp; (3.2) above and in consultation with IWAI prepare a Master plan for Development of NINI as Centre of Excellence in IWT Sector taking in account:</p> <ol style="list-style-type: none"> <li>a. the Current Need and Priorities</li> <li>b. Phase wise approach</li> <li>c. Modern, Innovative State of the Art training methodology, training facilities and infrastructure</li> <li>d. Training Standards, framework and International Best Practices</li> <li>e. Potential Courses to be developed in short, medium and long term</li> <li>f. Training infrastructure and equipment to be procured</li> <li>g. Accreditations and Recognitions</li> <li>h. Recognitions, Associations and affiliations with Institutes of Repute (National and International)</li> </ol> <p>c) Identify an Institute that is closely meeting with the requirements of the Master plan for Development of NINI as Centre of Excellence in IWT Sector and arrange a field trip of 5 days to visit the institute by senior management (5 Numbers) of IWAI.</p> <p>d) Develop action oriented plan for development and procurement of training material, training equipment including identifying resources of supply.</p>

	e) State the possible areas of cooperation including faculty and student exchange program between European Institutes, IWT Industry and India.																
3.4	<p><b>Assessment of Governance of NINI</b></p> <p>The Consultant should examine the Governance frame work of NINI including its Management; Administration; Decision Making; Finance Support and sustainability including the recovery of Cost, identify the gaps and the needs of improvement therein.</p> <p>Subsequent to assessment of above functionalities, consultant to provide a frame work for Governance of NINI.</p>																
4.0	<p><b>Deliverables for Development of NINI as Centre of Excellence</b></p> <table border="1"> <thead> <tr> <th>S No.</th> <th>Deliverable</th> <th>Time-Line (AOW)</th> </tr> </thead> <tbody> <tr> <td colspan="3">Development of NINI as Centre of Excellence</td> </tr> <tr> <td>1.</td> <td>Assessment and Gap Analysis of Training, Training Facilities and Management of NINI and Training at NINI</td> <td>2 Months</td> </tr> <tr> <td>2.</td> <td>Master Plan for Development of NINI as Center of Excellence in IWT sector</td> <td>1 Month</td> </tr> <tr> <td>3.</td> <td>Recommendations and Proposal to Develop National Inland Navigation Institute (NINI) to be Centre of Excellence in IWT Sector with action oriented milestone based plan</td> <td>4 Months</td> </tr> </tbody> </table>		S No.	Deliverable	Time-Line (AOW)	Development of NINI as Centre of Excellence			1.	Assessment and Gap Analysis of Training, Training Facilities and Management of NINI and Training at NINI	2 Months	2.	Master Plan for Development of NINI as Center of Excellence in IWT sector	1 Month	3.	Recommendations and Proposal to Develop National Inland Navigation Institute (NINI) to be Centre of Excellence in IWT Sector with action oriented milestone based plan	4 Months
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5.0	<p><b>Staffing</b></p> <p><b>Consultant</b> must have relevant experience complying to the requirement of terms of reference (TOR), and the experts deployed to completed the assignment in the scheduled time must have adequate experience w r t TOR.</p>																
	<b>Key Expert</b>	<b>Qualification</b>	<b>Experience</b>														
5.1	<b>Education Expert</b>	<p><b>Minimum Qualification</b></p> <ol style="list-style-type: none"> <li>1. Graduation in any discipline.</li> <li>2. Master Degree in Marketing Management/Marine Engineering/Shipping/Economics /Transportation Planning/Port Planning/IWT/Logistics/Human Resource Management/Multi Modal Transportation Management or equivalent</li> </ol> <p><b>Desirable Qualification:</b> M.Phil or Phd in any above related discipline will be an added advantage.</p>	<p><b>Minimum Experience</b></p> <p>5 to 7 years of experience in the field of Business Development/ Port/ Logistics/ Maritime/Shipping/IWT/ Marketing Research etc.</p> <p><b>Desirable experience:</b></p> <p>1 to 2 years of experience in the field of Research / Training activities / Planning Assessment / Institutional strengthening/ Capacity Development/Educational Institution Management and Administration Business Research/ Transportation Research/ Finance etc.</p>														
5.2	<b>IWT Expert</b>	<p><b>Minimum Qualification:</b></p> <ol style="list-style-type: none"> <li>1. Graduation in any discipline</li> <li>2. Post Graduate Degree/Diploma/Certificate in Logistics /Transportation Planning/ Economics/ IWT /Human Resource</li> </ol>	<p><b>Minimum Experience:</b></p> <p>5 to 7 years of experience in the field of Maritime/IWT/Port/Logistics/Business Development/Shipping/Marketing Research etc.</p>														

		<p>Management/ Multi Modal Transportation Management/ Marketing Management/Shipping Management/Port Management or equivalent</p> <p><b>Desirable Qualification:</b> M.Phil or Phd in any above related discipline will be an added advantage</p>	<p><b>Desirable experience:</b> 1 to 2 years of experience in the field of Research/ Training activities/Assessment / Planning/Institutional strengthening/ Capacity Building/Educational Institution Management and Administration/ Business Research/ Transportation Research/ Finance etc.</p>
5.3	<b>Local Expert</b>	<p><b>Minimum Qualification:</b> Post-Graduation in any discipline of Management/Marine Engineering/ IWT/ Logistics/ transportation Planning/ Shipping/ Economics</p>	<p><b>Minimum Experience:</b> 3 to 5 years of experience in the field of Maritime/IWT/Port/Logistics/Shipping /Marketing and Business Development/ Research etc.</p>
6.0	<p><b>Abbreviation's:-</b></p> <ol style="list-style-type: none"> <li>1. ARPA → Automatic Radar Plotting Aid.</li> <li>2. RANSCO → Radar ARPA &amp; Navigation Simulator course.</li> <li>3. ECDIS → Electronic Chart Display &amp; information System.</li> <li>4. NCV → Near Coastal Voyage.</li> <li>5. ROC → Radar Observer course.</li> <li>6. SMS → Ship Maneuvering Simulator</li> <li>7. BTM → Bridge Team Management.</li> </ol>		

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