NOTICE INVITING EXPRESSION OF INTEREST (EoI)

FOR

E-LEARNING SOLUTION
FOR IWT SECTOR
AT NINI

EoI No.: IWAI/HY.NINI/22/2020/1

Invited by

INLAND WATERWAYS AUTHORITY OF INDIA

A-13, Sector-1
Noida – 201301, India

MAY 2020

Expression of Interest for e-Learning solution for IWT sector at NINI

1. Inland Waterways Authority of India (IWAI) is a statutory body of the Ministry of Shipping, Government of India (GoI). IWAI was setup 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) on the National Waterways (NWs) in the country.

2. National Inland Navigation Institute, (NINI) was established by IWAI in February 2004 to develop human resource for Inland Water Transport sector. The institute provides induction, up-gradation, and professional development training to the manpower for manning, operating inland vessels and to the IWAI staff for development of waterways and for repair and maintenance of inland vessels. The list of regular courses is attached.

3. The courses such as basic safety courses, GP rating (Inland Vessel) courses and the preparatory courses for Serang, Masters and Drivers, Inland Engineer competency certification under Inland Vessel Rules, Govt. of Bihar are regularly conducted by NINI.

4. NINI is also approved to conduct the following DG Shipping courses:
   a) Basic Safety Courses
   b) ECDIS
   c) RoC and ARPA

5. The pandemic CovID19 has disrupted the delivery of these training programs on account of lockdown and social distancing.

6. IWAI intends to allow NINI to continue the delivery of said courses including approved maritime education and training programs under DG Shipping.

7. The DGS has initiated the process of approving the use of Digital technologies for the conduct of all approved maritime courses by existing approved Maritime Training Institutes.

8. IWAI intends to engage consultants to initiate the use of digital technologies for Virtual Classes/ Live Video Sessions for course modules to be delivered. IWAI also aims to allow delivery of certain e-learning modules in offline mode.

9. At the same time IWAI intends to ensure that the controls and procedures for effective and efficient positive training and assessment currently in place are adhered to in the e-learning synchronous and asynchronous modes as well.

10. Towards above objectives there is need to put in place the following:
    a) appropriate hardware for delivery, monitoring, recording and safe storing.
    b) software that is secure, easy to use for delivery monitoring, recording and safe storage. It should also be able to positively determine authentic logging attendance of the bona fide trainee for training and assessment.

11. The hardware and software should also allow the bona fide trainer to be able to login, be able to draft his lesson and interactively deliver same in audio visual digital manner.

12. Develop teaching material for online delivery covering the contexts of knowledge, skill and attitudinal related with competence requirements of the STCW tables.

EOI-TOR

13. Inland Waterways Authority of India (IWAI) intends to float Expression of Interest (EOI) to gauge the market sentiment and know the interest of the IT enabled e-learning solution to meet the three requirements of Hardware, software and course material requirements comprehensively or in parts. The outline of the EOI is given below:

Part I

14. Inland Waterways Authority of India (IWAI) invites sealed offers of Expression of Interest (EoI) from reputed and established providers of competence-based e-learning content and learning management system over enabling software and hardware. The main features of the EOI are:

  a) Respondents should advise on the competence-based software management system that is secure and have functions to manage and report to meet the learning requirement.

  b) Respondents should advise on the proposed models of demonstrating competence for three levels of requirements and functions of STCW competence tables.

  c) Respondents should advise on the learning management systems with regards to reporting attendance, duration, and completion of the e-learning content. The LMS should be able to meet the statutory requirement of verification of delivery and learning at least five year down the line.

  d) Respondents should advise on the digital assessment solution to meet the STCW demonstration of competence requirement with secure identification, continuous monitoring, and feedback on assessment.

e) Respondents should advise on the hardware requirement to meet the requirement of developing and delivery of e-learning content of different demonstration models, and the learning management system.

f) Respondents should mention about the support needed from the Government with regards to internet provision or other requirements of cloud server.

g) Interested solution providers/ firms, willing to take complete responsibility, having required capability and capacity of delivering and managing such solutions for at least 5years, are invited to submit their credentials and documents demonstrating that they have the relevant experience to develop and execute the e-learning.

h) The work scope has four main elements namely the hardware, communicating application, e-learning/assessment online/off line developing and delivery software solution and the e-learning management system for monitoring, verification and assessment.

Part II

15. The shortlisting criteria shall be as under.

   a) The solution providers/ firms interested in the EOI must be registered in India.

   b) Balance Sheets/Annual Reports along with CA certificate must be submitted of last three years.

   c) Details of work executed pertaining to e-learning, CBT, simulation, Learning Management System, online assessment methods and similar IT based solution. The work executed with respects to the different elements i.e. hardware supply and maintenance, e-learning delivery software platform, e-learning management system software solution and development of different models of competence-based e-learning content is to be separately provided.

   d) Copy of Certificate of Incorporation.

   e) Detailed methodology for undertaking either one/ two or complete (all the elements) competence-based e-learning solution over next 5 years.

   f) Compliance of the solution with the International/National Practices/ Standards

   g) Company profile and Past experience

   h) Suggestions/Queries, requirements and expectations and any other facilitation.

16. List of courses to be delivered over next five years is attached at annexure-I. The list is tentative and may be modified based on requirement.

17. Interested parties may submit their "Expression of Interest" in E-procurement website and in sealed hard copies by 1500 hrs (IST) till 10th June, 2020 addressing to Hydrographic Chief, at the following address:

    Hydrographic Chief
    Inland Waterways Authority of India A-13, Sector – 1,
    Noida-201301, India
    Tel: (0120) 2527667; Fax (0120) 2544041
    Email- hc.iwai@nic.in Website: www.iwai.nic.in

18. The cover containing EOI should be sealed and superscripted "Expression of Interest (EoI) for e-Learning Solution for IWT sector. The responses received will be opened at 1530 hrs (IST) on 11th June, 2020. The interested bidder may seek any clarification on above from "Hydrographic Chief" at the above-mentioned address within 7 days of publication of this EoI.

19. IWAI reserves the right to accept or reject any offer or the whole process without assigning any reason to the bidders whatsoever.

20. This notice is issued only to elicit an Expression of Interest (EOI) from parties interested in providing e-Learning solution for IWT sector and does not constitute any binding/commitment from IWAI to invite any or all the parties in the subsequent bidding process. IWAI will not be responsible/ liable to any party in any way for costs associated in preparation & submission of EOI. IWAI is also not obliged to share clarification related questions with other bidders than the one which seeks clarification.

22.   Selection Criteria:

22.1   An evaluation committee of IWAI will examine the proposals submitted by the bidders.

22.2   The following shall be considered for evaluation of the firm / short listing the eligible firm for issue of tender / RFP document:

Marking system for short listing of bidders:

SL. No.	Description	Marks
1	Submission of documents as per EOI	10
2	Background of the organization with respect to similar **work** experience	10
3	Details of work executed pertaining to e-learning, CBT, simulation, Learning Management System, online assessment methods	Max. 30 (10 marks for each executed works)
4	Detailed methodology for providing either one or two or comprehensive and complete (all the elements) competence-based e-learning solution over next 5 years.	Max. 50 (5 marks for each solution)

22.3   Minimum 80 marks is the eligibility criteria for short listing.

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

Hydrographic Chief, IWAI

Disclaimer

1. This EoI document is neither an agreement nor an offer by the Inland Waterways Authority of India (IWAI) to the prospective Applicants or any other person.

2. IWAI will not be responsible for any delay in receiving the EoI. The issue of this EOI does not imply that IWAI is bound to select an Applicant or to appoint the Applicant, as the case may be, for <u>e-Learning solution for IWT sector at NINI</u>.

3. IWAI reserves the right to accept / reject any or all EoI submitted.

4. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. IWAI accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

5. IWAI reserves the right to change / modify / amend any or all provisions of this EOI document. Such revisions to the EOI / amended EOI will be made available on the website of IWAI www.iwai.nic.in and e-procurement website.

6. If at any time during the evaluation of EOI, IWAI requires any clarification on the documents submitted by the prospective firms, it reserves the right to request a clarification so as to complete the evaluation.

7. At the end of this process of evaluation, IWAI will short-list the parties who comply with the EOI conditions for appropriate action.

Hydrographic Chief

Annex-I

Tentative List of Courses for Online Delivery

SN	Course	Type
1	Elementary First Aid	Basic Safety
2	Personal Safety and Social Responsibility	Basic Safety
3	Fire Prevention and Fire Fighting	Basic Safety
4	Personal Survival Techniques	Basic Safety
5	Preparatory course for Serang (3rd Class Master)	Preparatory
6	Preparatory course for IInd Class Master	Preparatory
7	Preparatory course for Ist Class Master	Preparatory
8	Preparatory course for Engine Driver IInd Class	Preparatory
9	Preparatory course for Engine Driver Ist Class	Preparatory
10	Preparatory course for Inland Engineer	Preparatory
11	GP Rating Inland Vessel	Induction
12	Awareness Program Inland Water Transportation	MOOC

SPECIFICATION OF MINIMUM STANDARD OF COMPETENCE IN ELEMENTARY FIRST AID

Knowledge, Understanding & Proficiency / Course Covered	Methods of demonstrating competence	Criteria for evaluating competence

Competence: Take immediate action upon encountering an accident or other medical emergency
 	
1 Assessment of needs of casualties and threats to own safety
 	
2 Appreciation of body structure and functions
 	
3 Understanding of immediate measures to be taken in cases of emergency, including the ability to:
 	
  .1 position casualty apply resuscitation techniques
  .3 control bleeding
  .4 apply appropriate measures of basic shock management
  .5 apply appropriate measures in event of burns and scalds, including accidents caused by electric current
  .6 rescue and transport a casualty
  .7 improvise bandages and use materials in emergency kit
	Assessment of evidence obtained from approved instruction or during attendance at an approved course.	The manner and timing of raising the alarm is appropriate to the circumstances of the accident or medical emergency.
		
		The identification of probable cause, nature and extent of injuries is prompt and complete and the priority and sequence of actions is proportional to any potential threat to life.
		
		Risk of further harm to self and casualty is minimised at all times.

Elementary First Aid (EFA) Course

Duration: 2.5 working days			Total hours: 15 hours
Sr. No.	**Topic**	**Methods of teaching**	**Duration**
1	General Principles	Lecture / Presentation	1.0 hours
2	Body Structure and Functions	Lecture / Presentation	2.0 hours
3	Positioning of Casualty	Lecture / Presentation	1.5 hours
4	The Unconscious Casualty	Lecture / Presentation / Workshop / Exercises	1.0 hours
5	Resuscitation	Lecture / Demonstration of Equipment	2.0 hours
6	Bleeding	Lecture / Presentation / Workshop / Exercises	1.5 hours
7	Management of Shock	Lecture / Presentation / Workshop / Exercises	1.0 hours
8	Burns and Scalds, and Accidents caused by Electricity	Lecture / Presentation / Workshop / Exercises	1.0 hours
9	Rescue and Transport of Casualty	Lecture/Presentation/Exercises/Contingency plans for various security related emergencies	1.5 hours
10	Other Topics	Lecture / Presentation	2.0 hours
		TOTAL	**15.0 Hours**

PERSONAL SURVIVAL TECHNIQUES
COURSE OUTLINE

Duration: 2 ½ days

Subject Area	Hours	
	Lecture	**Demonstrations**
1. Introduction, Safety and Survival 1.1 Safety guidance 1.2 Principles of survival at sea 1.3 Definitions, survival craft and appliances	0.75	
2. Emergency Situations 2.1 Types of emergencies 2.2 Precautions 2.3 Fire provisions 2.4 Foundering 2.5 Crew expertise 2.6 Muster list and emergency signals 2.7 Crew and emergency instructions 2.8 Extra equipment and survival 2.9 Abandoning ship – complications	1.5	
3. Evacuation 3.1 Abandoning ship - last resort 3.2 Personal preparation for abandoning ship 3.3 Need to prevent panic 3.4 Crew duties to passengers 3.5 Crew duties - launching survival craft 3.6 Master's orders to abandon ship 3.7 Means of survival	0.75	
4. Survival Craft and Rescue Boats 4.1 Lifeboats 4.2 Liferafts 4.3 Rescue boats	2.25	
5. Personal Life-saving Appliances 5.1 Lifebuoys 5.2 Lifejackets 5.3 Immersion suits 5.4 Thermal protective aids	0.75	
6. Personal Life-saving Appliances (Demonstrations) 6.1 Lifebuoys 6.2 Lifejackets 6.3 Inflatable lifejackets 6.4 Immersion suits 6.5 Thermal protective aids 6.6 Personal survival without lifejacket 6.7 Boarding survival craft		3.75
7. Survival at Sea 7.1 Dangers to survivors 7.2 Best use of survival craft facilities	0.75	

8. Helicopter Assistance		
8.1 Communicating with the helicopter		
8.2 Evacuation from ship and survival craft		
8.3 Helicopter pick-up		
8.4 Correct use of helicopter harness		0.5
	1.0	
9. Emergency Radio Equipment		
9.1 Radiotelegraph installation for lifeboats		
9.2 Portable radio apparatus for survival craft		
9.3 Emergency position-indicating radio beacons (EPIRBs)		
9.4 Search and Rescue transponder (SART)	1.0	1.0
10. Review and Final Assessment	1.0	
Subtotals	**9.75**	**5.25**
Total	**15.0**	

PSSR Course Outline (Revised)

	Knowledge, understanding and proficiency	Approximate time (Hours) Lectures, demonstrations and practical work
1.	**Observe safe working practices** 1.1 Introduction 1.2 Importance of the course 1.3 Ship familiarization 1.4 Nature of shipboard hazards 1.5 Groups the equipment provided on board to counter these hazards 1.6 Use and demonstration of PPE 1.7 Lists operations that take place on board which can be hazardous 1.8 Loading and unloading of cargoes 1.9 Mooring and unmooring 1.10 Enclosed spaces 1.11 Hot work 1.12 Working aloft 1.13 Engine-room watch keeping and maintenance	3.0
2.	**Contribute to effective human relationships on board ship - Human relationships on board ship** 2.1 Interpersonal relationships 2.2 Team building 2.3 Team working skills and conflict resolution	3.0
3.	**Contribute to effective communication on board ship** 3.1 Fundamentals of communication 3.2 Methods of communication 3.3 Barriers in communication 3.4 Effective transmission skills 3.5 Effective listening skills 3.6 Effects and consequences of wrong communication 3.7 Communication sum-up	3.0
4.	**Comply with emergency procedures** 4.1 Explains the term 'emergency' 4.2 Types of emergency: collision, fire, foundering. 4.3 Shipboard contingency plans for respond to emergencies.	4.0

	4.4 Action to take on discovering potential emergency including fire, collision, foundering and ingress of water into the Ship. 4.2 Drills and muster 4.3 Value and need of drills and training 4.4 Knowledge of escape routes and internal communication and alarm system	
5.	**Take precautions to prevent pollution of the marine environment** 5.1 Define the term pollution 5.2 Describe the industries dependent on the marine environment, namely fisheries, coastal tourism, coastal urban development 5.3 Basic knowledge of complexity and diversity of the marine environment 5.4 Explain how marine pollution results in an economic loss to these industries 5.5 Describe the overall contribution, and effects, to global marine pollution from ship operations 5.6 Introduction to International measures undertaken for prevention of marine pollution from ship operations, namely MARPOL 73/78 (Annexes I to VI) 5.7 Introduction to Ballast Water Management, Anti-Fouling Systems 5.8 Contents of Oil Record Book	2.0
6.	**Contribute to effective human relationships on board ship (concluded) -Social responsibilities** 6.1 Rights and obligation of crew 6.2 Employment conditions, etc. 6.3 Drugs and alcohol 6.4 Health and hygiene on board 6.5 Summing up	3.0
7.	**Understand and take necessary actions to control fatigue** 7.1 Highlights accidents and incidents that have been attributed to fatigue and lack of adequate rest. 7.2 Explains the importance of obtaining the necessary rest 7.3 Describes the effects of sleep, schedules and the circadian rhythm on fatigue 7.4 Describes the effects of physical stressors on seafarers 7.5: Highlights the environmental stressors which have the potential to effect performance of seafarers 7.6: Describes the schedule changes on seafarer fatigue 7.7 Lists measures that can be taken to reduce fatigue and stress on board	2.0
	Review and Assessment	1.0
	TOTAL (3 days)	**21.0**

FIRE PREVENTION AND FIRE FIGHTING

COURSE OUTLINE

Duration: 3 days.

Subject Area	Hours		
	Lecture	Demonstration & Practical's	Films
Registration	0.25		
1. Introduction, Safety and Principles	0.50		
2. Theory of Fire 2.1 Conditions for fires 2.2 Properties of flammable materials 2.3 Fire hazard and spread of fire 2.4 Classification of fires and appropriate extinguishing agents	1.00		0.5
3. Fire Prevention 3.1 Fire prevention principles 3.2 Ship construction arrangements 3.3 Safe practices	1.50		
4. Fire Detection System & Alarms 4.1 Fire and smoke detection systems 4.2 Automatic fire alarm	0.75		
5. Fixed Fire-extinguishing Systems 5.1 General 5.2 Smothering effect systems: carbon dioxide (CO_2), foams 5.3 Inhibitor effect systems: powders 5.4 Cooling effect systems: sprinklers, pressure spray 5.5 Emergency fire pump (cargo ships) 5.6 Chemical powder applicants	1.75		
6. Fire-fighting Equipment 6.1 Fire hoses and nozzles 6.2 Mobile apparatus 6.3 Portable fire extinguishers 6.4 Fireman's outfit 6.5 Breathing apparatus 6.6 Resuscitation apparatus 6.7 Fire blankets	1.00	1.50	

7. Ship Fire-fighting Organisation
    7.1 General emergency alarm
    7.2 Fire control plans and muster list
    7.3 Communications
    7.4 Personnel safety procedures
    7.5 Periodic shipboard drills
    7.6 Patrol systems
	0.75		

8. Fire-fighting Methods
    8.1 Knowledge of fire safety arrangements
    8.2 Fire alarms and first actions
    83 Fire fighting
	0.75		1.00

9. Fire-fighting procedures	0.75		

10. Fire-fighting Drills
    10.1 Small fires
    10.2 Extensive fires
    10.3 Drills in smoke-filled spaces
		4.50	

11. Review and Final Assessment	1.50		
Subtotals	**10.50**	**6.00**	**1.50**
Total	**18.00**		

SPECIFICATION OF MINIMUM STANDARD OF COMPETENCE IN FIRE PREVENTION AND FIRE FIGHTING

Knowledge, Understanding & Proficiency / Course Covered	Methods of demonstrating competence	Criteria for evaluating competence
Competence No. 1: Minimize the risk of fire and maintain a state of readiness to respond to emergency situations involving fire 1 Shipboard fire-fighting organization 2 Location of fire-fighting appliances and emergency escape routes 3 The elements of fire and explosion (the fire triangle) 4 Types and sources of ignition 5 Flammable materials, fire hazards and spread of fire 6 The need for constant vigilance 7 Actions to be taken on board ship 8 Fire and smoke detection and automatic alarm systems 9 Classification of fire and applicable extinguishing agents	Assessment of evidence obtained from approved instruction or attendance at an approved course.	Initial actions on becoming aware of an emergency conform with accepted practices and procedures. Action taken on identifying muster signals is appropriate to the indicated emergency and complies with established procedures.
Competence No. 2: Fight and extinguish fires **1 Fire-fighting equipment and its location on board** Instruction in: .1 fixed installations .2 fire-fighter's outfits .3 personal equipment .4 fire-fighting appliances and equipment .5 fire-fighting methods .6 fire-fighting agents .7 fire-fighting procedures .8 use of breathing apparatus for fighting fires and effecting rescues	Assessment of evidence obtained from approved instruction or during attendance at an approved course, including practical demonstration in spaces which provide truly realistic training conditions (e.g. simulated shipboard conditions) and, whenever possible and practical, in darkness, of the ability to: .1 use various types of portable fire extinguishers .2 use self-contained breathing apparatus .3 extinguish smaller fires, e.g. electrical fires, oil fires, propane fires .4 extinguish extensive fires with water, using jet and spray nozzles .5 extinguish fires with foam, powder or any other suitable	Clothing and equipment are appropriate to the nature of the fire-fighting operations. The timing and sequence of individual actions are appropriate to the prevailing circumstances and conditions. Extinguishment of fire is achieved using appropriate procedures, techniques and fire-fighting agents. Breathing apparatus procedures and techniques comply with accepted practices and procedures.

	chemical agent	
	.6 enter and pass through, with lifeline but without breathing apparatus, a compartment into which high expansion foam has been injected	
	.7 fight fire in smoke-filled enclosed spaces wearing self-contained breathing apparatus	
	.8 extinguish fire with water fog or any other suitable fire-fighting agent in an accommodation room or simulated engine-room with fire and heavy smoke	
	.9 extinguish oil fire with fog applicator and spray nozzles, dry chemical powder or foam applicators	
	.10 effect a rescue in a smoke-filled space wearing breathing apparatus	