INTEGRATED HEADQUARTERS OF MINISTRY OF DEFENCE (NAVY) DIRECTORATE OF MARINE ENGINEERING FAX: 011- 23011352; E-MAIL: <u>dme-navy@nic.in</u> ; TEL: 011-23792796

REQUEST FOR INFORMATION – 'ONEGA' SIMULATOR

1. THERE IS A REQUIREMENT OF SETTING UP A TRAINING SIMULATOR FOR THE 'ONEGA' AUXILIARY MACHINERY CONTROL SYSTEM OF INDIAN NAVAL SHIPS AT INS SHIVAJI, LONAVLA, MAHARASHTRA. THE BROAD REQUIREMENTS OF THE SIMULATOR ARE ENCLOSED.

2. INTERESTED FIRMS MAY CONFIRM THEIR WILLINGNESS AND ABILITY TO SUPPLY THE SIMULATOR AND FORWARD THE FOLLOWING INFORMATION TO **PRINCIPAL DIRECTOR MARINE** ENGINEERING, ROOM NO. 306, C-WING, SENA BHAWAN, INTEGRATED HEADQUARTERS MINISTRY OF DEFENCE (NAVY), NEW DELHI 110011, FAX NO +91-11-23011352 BY 20 JUL 10:-

SL. NO.	PARTICULARS
(A)	CAPABILITY TO SUPPLY THE SIMULATOR AS PER THE BROAD REQUIREMENTS PLACED
	AT ENCLOSURE.
(B)	CONFIRM WHETHER SUCH SIMULATOR HAS BEEN PREVIOUSLY SUPPLIED BY YOU TO
	ANY OTHER ORGANISATION / COUNTRY / NAVY
(C)	PREVIOUS EXPERIENCE OF SUPPLY OF SIMILAR SIMULATORS WITH DETAILS OF
	ORGANISATIONS TO WHICH SUPPLIES ARE BEING MADE BY YOU AT PRESENT.
(D)	CONFIRM YOUR WILLINGNESS TO CONDUCT NCNC TRIALS THROUGH COMPUTER
	SIMULATION AT IHQ MOD(N), NEW DELHI
(E)	CONFIRM ACCEPTANCE OF THE PAYMENT TERMS AND OTHER TERMS & CONDITIONS
	STATED IN THE STANDARD CONTRACT DOCUMENT PLACED AT CHAPTER V OF DEFENCE
(-)	PROCUREMENT PROCEDURE- 08.
(F)	INDICATE THE EXPECTED DELIVERY PERIOD FOR SUPPLY OF THE SIMULATOR FROM THE
	DATE OF CONTRACT.
(G)	INDICATE ELEMENTS THAT NEED TO BE STRUCTURED INTO THE COSTING OF THE
	SIMULATOR SUCH AS TRAINING, COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT
(11)	
(H)	ANNUAL TURNOVER DURING THE PRECEDING 3 YEARS
(J)	BRIEF TECHNICAL DETAILS OF YOUR PROPOSAL FOR THE SIMULATOR.
(K)	COMPLETE CONTACT DETAILS INCLUDING FAX AND EMAIL.
(L)	INDICATE THE PERCENTAGE OF INDIAN EQUITY IN YOUR FIRM (IF ANY).

3. THIS REQUEST FOR INFORMATION (RFI) MAY BE CONSIDERED AS ADVANCE INFORMATION TO OBTAIN ANY REQUIRED GOVERNMENT CLEARANCES AT YOUR END.

BROAD REQUIREMENTS FOR 'ONEGA' SIMULATOR FOR AUXILIARY MACHINERY CONTROL SYSTEM OF INDIAN NAVAL SHIPS TO BE INSTALLED AT INS SHIVAJI

1. The 'Onega' Auxiliary Control System is fitted on a few Ships of the Indian Navy. The Control System monitors and controls various ship systems such as Fire Main System, Sprinkling System, Prewetting System, Flooding System, Fuel Tank Ballast System, Compressed Air System, Ventilation System, Fuel System, Domestic Fresh and Sea Water Systems, Distilling Plants, Air conditioning system, Refrigeration Plants etc.

2. The simulator should be suitable for training of operators on the 'Onega' Auxiliary Control System of the ships of the Indian Navy. The Operator Consoles of the Simulator should be a replica of the Operator Consoles of the Onega System Consoles fitted on the ships with the same look, feel and functionality. The purpose of the Simulator is as follows: -

(a) To provide hands-on training to the operators of the Ships in the effective operation of Onega Control System.

(b) To familiarise the operators with normal and emergency procedures in the operation of the Onega Control System.

3. The Simulator should be based upon the current digital computer and simulation software technologies. Simulation software should be developed using a proven real-time object oriented software environment. The equipment hardware and software are to be compliant to open architecture standards and should not include any proprietary designs or operating systems.

4. The Simulator should include an Instructor Facility for monitoring and control of the training session by the instructor. The Instructor Facility should have the capability to start and stop the training session, freeze, record, replay, backtrack and reset the simulation and the consoles to a selected initial condition. The Instructor's Facility should include soft panel displays of the operator consoles which are updated in near real time as per the status of the hardware consoles. The simulator should include a trainee evaluation package which should provide an online assessment of the performance of the trainees on the Simulator. The Simulator should include customized lesson plans with a provision to induce faults and emergencies to alter the simulated scenario.

5. The Simulator should also include an offline Computer Based Training (CBT) Package to train the operators on all aspects of the Onega Control System including major components, layout, technical details, operation, troubleshooting etc. The Simulator should also include a suitable UPS unit for operation of the simulator equipment in the event of power failure up to 30 minutes.