

**QUESTIONNAIRE FOR LIGHT WEIGHT HIGH SPEED MARINE DIESEL  
ENGINES (BOAT DIESEL ENGINE) (MAKE-II)**

<u>Ser</u>	<u>Determinants</u>	<u>Firm's Remarks</u>
<b><u>Company Details</u></b>		
1.	Name and registered office address	
2.	Factory/ Work address	
3.	Category of industry – Large scale/ SME/ MSME	
4.	Details of Supply Orders executed in last 03 yrs	
5.	Organisation structure and details of manpower held:- (a) Technical – Skilled and unskilled. (b) Administrative.	
6.	Past business details with <i>IN</i>	
<b><u>Financial Status</u></b>		
7.	Profit and Loss Account	
8.	Average Annual Turnover, in last 03 years	
9.	Present Net worth	
10.	Present source of finance and borrowing limit (Bank details)	
<b><u>Technical Details</u></b>		
11.	Competence in engine design, manufacture and simulation of Diesel engines, stern drive and associated control system.	
12.	R&D capability and facilities:- (a) Details of R&D infrastructure held (b) Details of technical manpower held for R&D efforts	
13.	In-house manufacturing facilities and infrastructure:- (a) Forging (b) Casting (c) Machining (d) Heat treatment (e) Metallurgy (f) CAD/CAM (g) Robotics (h) Tools/ Metrology (facility and calibration accreditation)	

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14.	In-house testing facilities	
15.	<p>Capabilities to design and manufacture sub-assemblies and components:-</p> <p>(a) Broad list of sub-assemblies and components designed and manufactured in-house.</p> <p>(b) Broad list of sub-assemblies and components outsourced from Indian/ foreign manufacturer.</p>	
16.	Capability to produce engines to IMO Tier III specification	
17.	Details of IPR held	
18.	Details of IPR translated to field products	
19.	<p>Quality Assurance:-</p> <p>(a) Organisation structure of QA and QC department.</p> <p>(b) Compliance to ISO 9001:2015 Quality Management system (Certificate to be enclosed)</p> <p>(c) Are the manufacturing/ assembly processes statistically quality controlled.</p> <p>(d) Are all Critical to Quality Processes (CTP) and parameters Critical to Quality (CTQ) identified.</p> <p>(e) Is the process Capability index (Cpx) measured and ensured more than 1.33.</p>	
20.	<p>Broad plan/ roadmap for design, development, manufacture and delivery of 6MW Diesel Engine along with associated Control and Monitoring system:-</p> <p>(a) Technologies to be acquired/ imported towards development of engine.</p> <p>(b) Envisaged indigenous content.</p> <p>(c) Capability of integrating the engine with propulsion package.</p> <p>(d) Mode of participation: Single/ JV.</p> <p>(e) Incase of JV – List of joint partners.</p> <p>(f) Estimated time for completion of initial design.</p>	
21.	Estimated timelines for prototype development with milestones	
22.	Estimated timelines for production of final product as per <i>IN</i> requirement, post successful prototype development	
23.	Details of standards to be followed for development, manufacture and testing of engine and its control system.	

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24.	Envisaged indigenous content in the main engine and controls	
25.	Adequacy of infrastructure capabilities for engine production and spare manufacture to meet /N requirements:- (a) Requirement of setting up of new assembly line or augmenting/repurposing the existing assembly line. (b) Requirement of erecting a new test bed or augmenting/ repurposing the existing test bed.	
26.	Costing:- (a) Cost of prototype development and their basis. (b) Cost of final product and their basis.	
27.	Roadmap for providing onsite after-sales basis:- (a) Spares (indigenous and imported) (b) DI and repair services. (c) Capability to undertake AMC/ RRC/RC	
28.	Any other details that the vendor like to put forwards to the feasibility study board	
29.	Contact details	Name of Officer – Cdr Deepak K Designation - Cdr (Marine Engg)-Indg Tele No. – 011-23010092 Fax No. – 011-23011352 Mobile No. – 8130025847 Email ID – <a href="mailto:dme-navy@nic.in">dme-navy@nic.in</a>