

**QUESTIONNAIRE FOR EMERGENCY DE-BALLASTING SYSTEM FOR SSK  
SUBMARINES (MAKE – III)**

<b><u>Ser</u></b>	<b><u>Determinants</u></b>	<b><u>Firm's Remarks</u></b>
<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 design, manufacture of High Pressure bottles and associated auxiliaries.	
12.	Competence in designing de-ballasting system for submarines	
13.	R&D capability and facilities:- (a) Details of R&D infrastructure held (b) Details of technical manpower held for R&D efforts	
14.	In-house manufacturing facilities and infrastructure:- (a) Forging (b) Casting (c) Machining (d) Heat treatment (e) Metallurgy (f) CAD/CAM (g) Robotics	

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	(h) Tools/ Metrology (facility and calibration accreditation)	
15.	Simulation capability for testing the complete de-ballasting system	
16.	Details of IPR held	
17.	Details of IPR translated to field products	
18.	<p><b>Quality Assurance:-</b></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>	
19.	<p>Broad plan/ roadmap for design, development, manufacture and delivery of 250 Bar High pressure pneumatic bottle along with associated pipings, control and Monitoring system:-</p> <p>(a) Technologies to be acquired/ imported towards development of de-ballasting system.</p> <p>(b) Envisaged indigenous content.</p> <p>(c) Mode of participation: Single/ JV.</p> <p>(d) Incase of JV – List of joint partners.</p> <p>(e) Estimated time for completion of initial design.</p>	
20.	Estimated timelines for prototype development with milestones	
21.	Estimated timelines for production of final product as per <i>IN</i> requirement, post successful prototype development.	
22.	Any prior experience in handling de-ballasting system of submarine.	
23.	Details of standards to be followed for development, manufacture and testing of engine and its control system.	
24.	Envisaged indigenous content in the main engine and controls	
25.	Adequacy of infrastructure capabilities for HP Air bottles and associated pneumatic/ control components manufacture to meet <i>IN</i> requirements:-	

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	(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.	<b>Costing:-</b> (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 – Lt Cdr K Rumesh Menon Designation – Lt Cdr (Marine Engg) Tele No. – 011-23010294 Fax No. – 011-23011352 Mobile No. – 9495900304 Email ID – <a href="mailto:dme-navy@nic.in">dme-navy@nic.in</a>