

NIE No. GRSE/GMD/ASW-SWC/12/01
Expression of Interest (EOI) For Design of Anti Submarine Warfare Shallow
Water Craft (ASW-SWC) for Indian Navy.

1. Garden Reach Shipbuilders & Engineers Ltd (GRSE), is a wholly owned PSU under ministry of Defense, Govt of India. At present, for a prospective ship tender, GRSE intends to find a suitable design partner from reputed warship design houses/ warship builders worldwide, having adequate experience in designing and building of ASW Shallow Water Craft.
2. **Expression of Interest (EOI)** is invited from reputed warship design-house / warship building shipyards, having requisite experience, know-how and competent manpower, for supply of the following in respect of the said ASW Shallow Water Craft, an outline specification of which is placed at Annexure-A:
 - a) Supply of Basic Design & Functional Design having built-in RCS & IRS features.
 - b) Integration of Hull Mounted SONAR (HMS) with hull with suitable fairing plates to minimize flow separation.
 - c) Recommended mounting system / acoustic enclosure for Machinery and other adaptations necessary for achieving acceptable underwater noise level.
 - d) Design and Supply of Composite Superstructure, in case, Aluminium is not accepted by Indian Navy.
3. **EOI** to be forwarded **within 21 days** from the date of publication of this **EOI** in either in GRSE website or in the press and **must include** the following:
 - a) Previous experience in designing & building of similar ASW Shallow Water Craft. Details of such craft viz. name of vessel, end-user, year of build etc to be furnished.
 - b) Certificate from the user towards satisfactory performance of the ships, built to the proposed proven design.
 - c) GA Plan & short specification of the proven design.

- d) A tentative proposal (without price) for supply of deliverables as indicated in para 2 above.
- e) Details of financial status (copy of last three years Audited Annual Statement of Accounts & Report) together with list of bankers with mode of operation along with fund / non-fund based facilities.
- f) Confirmation for ensuring complete confidentiality and information security features/policy in view of defense related job.

4. **EOIs** received shall be assessed and graded by GRSE after scrutiny of the data / information received from bidders, as sought in para 3 above, and, only shortlisted vendors shall be considered further towards final selection of the firm through Request for Proposal (RFP) subsequently. Gradation of EOIs will be done by GRSE based on a marking system, in which marks will be awarded against each of the items sought in para 3 above. Full marks against each item will be as given hereunder. Minimum qualifying marks shall be 60, and, confirmation as sought vide para 3 (f) *ibid* is mandatory. GRSE's decision in respect of award of marks and, shortlisting shall be final.

a) Item against para 3 a)	-	20
b) Item against para 3 b)	-	20
c) Item against para 3 c)	-	20
d) Item against para 3 d)	-	20
e) Item against para 3 e)	-	10
f) Item against para 3 f)	-	10
Total Marks		100

5. Following information should also be forwarded along with **EOI** as applicable:-

- a) Name of Organization
- b) Address of Head Office / Registered Office
- c) Telephone No. / Fax No. / E-Mail Address / Website
- d) Name, Designation & Contact Details of **Contact Person**
- e) Name & Signature of Authorized person on behalf of the organization
- f) Constitution of the Company
- g) Income Tax Permanent Account Number (PAN)
- h) Service tax Registration Number
- i) Trade License

- j) Sales Tax Registration
- k) ESI Registration Number
- l) Import / Export Code

6. **EOI**, quoting the tender no., is to be submitted to:

General Manager (S) (D)
Garden reach Shipbuilders & Engineers Ltd.
61 Garden Reach Road
Kolkata – 700024
Ph: 033 2469 6120
Fax: 033 2469 8144
E-mail: des.gm@grse.co.in

Outline Specification of ASW Shallow Water Craft

It is a ASW Shallow Water Craft class ship for anti-submarine warfare operations in coastal water, within 200NM of the base port.

Criteria	Details
Role	Combating threat posed by submarines Undertake low intensity maritime operations Laying of mines
Principal Dimensions	Length 70 M Draught max 2.7M in full load without sonar dome Displacement max 700T
Speed & Endurance	Speed max not less than 25 Knots at full load Endurance: 1800NM at 14Knots
Weapons	<ul style="list-style-type: none"> ➤ ASW Combat Suite <ul style="list-style-type: none"> • HMS, of array dia of 1200mm or less. For best performance of HMS, the self-noise level of ship must be optimized by means of selection of propulsion package, location of sonar dome, isolation of m/cy noise by resilient mounts, acoustic enclosure, distributed isolation material & flexible connections and algorithm based adaptive beam noise cancellation etc. • Mine laying rails • Low Freq. Variable Depth Sonar (LFVDS) • Rocket Launcher • Torpedo Tube launcher • Fire control System for Rocket Launcher & Torpedo Tube Launcher ➤ 2x 12.7mm Stabilised Remote control Gun with optronic control

Power Generation Machinery	100% reserve power & arrangement of shore supply
Air conditioning and Ventilation	Fully air-conditioned for tropical condition with Total Atmospheric Control System. AC plants to use Non CFC Refrigerants catering for total heat load plus 100% reserve capacity.
Ship Automation	Integrated Platform Management System – IPMS Automatic Power Management System – APMS Battle Damage Control System – BDCS etc
Hull form	Single hull construction based on proven hull form or supported by adequate model testing. Main hull to be of welded steel.
Stealth Features	Ship should have stealth features in terms of reduced Radar Cross Section, low acoustic signature & low infra red signature.
Degaussing	Ship should have degaussing system