

## **Brief**

### **Re: Outsourcing and Vendor Development**

1. GRSE has analyzed complete production activity and identified core and strategic operations. Accordingly comprehensive mapping of non-core activities has been carried out and accordingly the long term outsourcing and vendor development strategy has been framed in line with the outsourcing and vendor development guidelines forwarded by MoD and the same is briefed in the succeeding paragraphs.

2. The yard has also identified outsourcing avenues / products / processes and a major part of the non-core activities are undertaken through outsourcing to indigenous vendors, mostly by the process of sub-contracting. Details of shipbuilding work outsourced by GRSE are placed at Enclosure 1 for reference.

Further, most of the Equipment / Systems / Fittings / Yard Material that are used onboard warships built by GRSE are outsourced through indigenous resources. Only limited number of Equipment / Systems are procured from abroad, wherein the specifications provided by the customer [Indian Navy / Coast Guard] specify imported source. GRSE has no control over such imported equipment specified by the customer, in Build Specification that are part of Contract.

3. The items which are low in cost, generic in nature and less technology intensive are outsourced by the shipyard to private vendors/SMEs; this is in line with the outsourcing and vendor development guidelines promulgated by MoD.

4. GRSE actively promotes participation of SMEs in outsourcing programs as a part of outsourcing policy. The contribution by SMEs vendors is measured in terms of financial values and it is approximately 36% of total value of non-core products procured by the yard annually. The know-how & know-why available with the yard for such items are shared with Private Indian Vendors.

5. Items which are manufactured under TOT from OEM/Licensors like systems/sub systems etc. and not strategic in nature are partly outsourced to Private Indian Vendors e.g. block fabrication, machining and other operations of components etc in accordance with the outsourcing and vendor development guidelines promulgated by MoD.

6. Efforts are made to identify and assign to Indian vendors for indigenous development of items which are generic type and least technology intensive but imported by the shipyard like Cu-Ni pipes for plumbing activity in the ship; the yard extends technical assistance to develop

Indian vendors for such import substitution items as provided in the outsourcing and vendor development guidelines promulgated by MoD.

7. Another type of items which are technology sensitive, strategic and complex in manufacturing, TOT is denied by OEMs/Licensors, not enough support from overseas OEMs for example communication systems, gear box, engine, radar, electronics & software oriented systems & sub-systems etc, it becomes inevitable to develop and indigenize to achieve self-reliance. Accordingly manufacturing of such items are jointly exercised by the yard and Indian Private Industry e.g. Trehella Grab for BB, engine, gear box, steel for ship etc. This is in line with the recommendation detailed in the outsourcing and vendor development guidelines promulgated by MoD.

8. Presently 60-70% of production activities are being carried out through capable outsourced vendors developed for this purpose as long term measure and the yard has planned to increase the same by 2-3% every year.

9. The outsourcing value related to ship construction of the shipyard for the last three years are as follows:

- a) FY 2012-13: ₹ 47.17 Crores
- b) FY 2013-14: ₹ 66.96 Crores
- c) FY 2014-15: ₹ 57.54 Crores

10. Possible avenues to establish following strategic and long term partnership between the shipyard and capable Indian vendors are being explored:

- The competent vendors are invited to utilize the existing facilities like land, water front, infrastructure etc of the shipyard for fabrication of fully outfitted blocks for the yard under PPP model. [sort of ancillary development]
- Similarly the feasibility to establish JV with private vendors for manufacturing of small ships like barges, passengers ferry, tankers etc at vendors' premises is also being explored.
- Manufacture & fitting out of FRP Boats at GRSE using existing infrastructure by capable private vendors are also being analyzed.
- Mega outsourcing to Private Indian Vendors establishing long term partnership.

11. **Enhanced Outsourcing planned for P-17A Project.**

Further, GRSE is planning a multi-pronged approach to meet the future demand for hull blocks and pre-outfitted mega hull blocks for P17A. Brief details in this regard are outlined below:

a) **Consolidation of Mega Blocks at GRSE by Indian sub-contractors.**

In order to ensure efficient utilization of yard resources, turnkey outsourcing of mega blocks is being envisaged where hull blocks of maximum weight up to 225 Tons will be consolidated and pre outfitted by indigenous sub-contractor inside GRSE premises at Module Hall and adjacent area. Indigenous vendors for such mega block outsourcing are being developed towards fulfillment of the "Make in India" concept of the Government of India.

b) **Feeder line for Hull Blocks.**

The critical machinery compartment blocks will be fabricated in-house and pre-outfitted. Balance Blocks shall be outsourced for fabrication and block level pre-outfitting. Indigenous vendor base for such block fabrication is also been widened. Block fabrication by Indian sub-contractors inside GRSE premises at Rajabagan Yard [RBD] has been arranged. This will also lead to fulfillment of the "Make in India" concept of the Government of India. This concept is already being implemented for WJFACs now under construction. These hull blocks will then feed blocks for consolidation inside Module Hall, as mentioned in previous sub-para.

c) **Composite Outfitting.**

In the present outsourcing approach, a number of indigenous subcontractors are working simultaneously on various outfitting jobs viz. plumbing, insulation, ventilation trunking, cabling etc. composite outfitting of compartments is planned in the case of P17A project, which will accord single point responsibility for addressing all interrelated issues of outfitting and indigenous subcontractor would be given turn-key responsibility up to Final Inspection (FI) stage leading to fulfillment of the "Make in India" concept of the Government of India. This concept is also planned for trial implementation onboard last few LCUs.

12. Now the extent of indigenization achieved through outsourcing by GRSE is established as hereunder:

$$\text{Indigenization Index} = \frac{\text{VoP} - \text{Net Import Content}}{\text{VoP}}$$

Where,

Net Import Content = Imported Equipment + Imported Raw Material + Imported Services.

Net Outsourcing = VoP – Net Import Content – In-House Value Addition

Contribution % = Net Outsourcing Value / VoP

Accordingly the Indigenization Index of GRSE for the year 2014 – 15 is appended below:-

- a. VoP : ₹ 1665 Cr
- b. Net Import Content : ₹ 259.85 Cr
- c. In-house Value Addition : ₹ 509.98 Cr.
- d. Net Outsourcing : ₹ 895.17 Cr.
- e. Contribution % : 52.2 %

$$\text{f. Indigenization Index} = \frac{1665 - 259.85}{1665} = 84.4 \%$$

12. It is observed from the above that fairly high indigenization levels have been achieved in warship construction projects executed by GRSE; this implies that the shipyard has taken the right steps towards fulfillment of the "Make in India" concept of the Government of India.

13. A few advanced technology Equipment that go into warship construction are still imported from various countries / OEMs, as specified by the Customer / Indian Navy. Indigenization of such items is felt to be carried out by the Indian Navy / Coast Guard, since shipyard does not have the specialized knowledge required for development / manufacture of such equipment. It is relevant to mention that, shipyard is playing the role of integrator and does not specialize in manufacture of critical Equipment / Systems for onboard use.

14. GRSE's policies and procedures for enrolment, agreement, performance evaluation etc of vendors are contained in the "Policy on Registration, Re-assessment, Performance Rating of Vendors & Tender Holiday Document" promulgated in April 2008, as amended from time to time. GRSE's "Purchase Manual" as well as "Contract Manual" also include policy on Vendor Registration / Development.

However, the policy on vendor development has now been revamped in line with the guidelines contained in "Approach Paper for Outsourcing & Vendor Development" forwarded by MoD and accordingly "Vendor Development Manual" incorporating long term policy has been prepared and is in circulation for concurrence. The same will be put up to the Board for approval subsequently as directed.