## Bi-Modular Charge System (BMCS) for 155 mm Artillery Guns

HEMRL has developed a BMCS adoptable to various 155 mm artillery guns operating in all Indian terrains. It replaces the traditional cloth bag charge system which consists of a number of increments to achieve full range. Modular charge consists of a combustible case (CC) filled with cooler propellant to achieve improved barrel life and eliminates the wastage of propellant.



The BMCS consists of two types of charges – Lower Zones

(LZ) for shorter ranges and Higher Zones (HZ) for longer ranges. The system utilises fully indigenous raw materials, equipments and processes. Debris-free burning is ensured over a wide range of operating temperatures to take care of different weather conditions prevailing in Siachen to Rajasthan. Apart from primary ammunition, secondary ammunition can also be fired with BMCS. The BMCS was extensively evaluated and provisional range tables are generated. BMCS is adoptable to various guns by generating requisite range tables and are finalised during initial production.

Interested Industries may respond along with their company profile, financial & technical capabilities etc as per the following format –

- (a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, 1956)
- (b) Certificates of registration as a manufacturing unit, if any.
- (c) Balance Sheet for the preceding three years.
- (d) Income Tax returns for the preceding three year period
- (e) Details of shareholding/ownership pattern especially foreign partners/ shareholders, foreign employees, directors, etc. The company must adhere to the prevailing Govt of India policies and regulations on Foreign Direct Investment (FDI).
- (f) Annual budget for R&D during last three years.
- (g) Numbers and details of IPR or patents etc held by the company.
- (h) Number of technically or professionally qualified personnel.
- (i) Record of past performance (e.g Supply orders executed against of Ministry of Defence orders, public sectors and paramilitary forces, if any.
- (j) Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise.
- (k) List of Testing and Support equipments
- (I) ISO/ ISI certification or any other certification
- (m) Relevant clearances form the authorities/ ministries including relevant licenses for processing/ storing & production of explosives from DIPP & PESO
- (n) Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.
- (o) Capacity/Capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.

Eligible parties will be evaluated as per the procedure in vogue for giving Transfer of Technology (TOT) on non-exclusive basis.

Interested industry may write to Director, HEMRL Pune on the following address -

Director, HEMRL DRDO, Min. of Defence, Sutarwadi Pune – 411021 They may also contact on phone – (020) 25869316

or

Director, DIITM,DRDO HQ, Min. of Defence, DRDO Bhawan, Room No. 447, B Block, Rajaji Marg, New Delhi - 110011 Phone – 011 23013209