Manufacturing of Shaped Miniature Detonating Cord

The Canopy Fragmentation system is part of emergency escape system of aircraft in a two seater aircraft and thus each cockpit has its independent fragmentation system. It uses the shaped Miniature Detonating Cord (SMDC) fixed on the transparency as well as periphery to shatter the canopy bubble during ejection. Suitable initiation system is activated by pilot during emergency for safe ejection.

HEMRL has developed the technology for SMDC for use in pilot ejection system. SMDC is in the form of a continuous explosive filled cord and is fixed by means of adhesive to the inner surface of canopy transparency. The cord is led from the initiator assembly around both the periphery of the transparency and also to form an overhead pattern. Suitable protection is provided for the SMDC using attenuator material to reduce the shock wave. The pattern of SMDC on the canopy transparency is designated to achieve fragilisation of canopy for safe ejection of pilot. The technology of SMDC is available for manufacturing of SMDC.

1. Interested companies/industries are requested to apply against this EoI to following address:-

To,

The Director

High Energy Materials Research Laboratory (HEMRL)

DRDO, Govt. of India, Ministry of Defence,

Sutarwadi, Pune 411 021

Phone No: 020 25869230

Email-director.hemrl@gov.in

Fax No: 020-25869316

 A copy of interest may be sent to the following address without any attachment:-To,

The Director,

Directorate of Industry Interface & Technology Management (DIITM),

Room No. 447, DRDO Bhawan, Rajaji Marg, New Delhi-110 011

Email-diitm.hqr@gov.in

Phone No. 011-23007446

Fax-011-23793008

All industries interested in seeking ToT are requested to apply in the format given below. Kindly fill in the fields. The list of documents to be attached is provided in Annexure – I. Kindly provide the reference of page no. of supporting document in the relevant field of form.

<u> PART-1</u>

General Information

(Please enclose documents in support of information provided)

4	
1.	Name of the Technology requested for Technology Transfer (Technology name and concerned Lab, Category)
2.	Name of the industry/ organization
3.	Complete Address and other details
	Registered Office State Phone No Fax Email Website
	Factory State Phone No Fax Email Website
4.	Point of Contact Name Designation Address Mobile No Ph No Email ID
5.	NAME OF CMD/ MD /PARTNERS/ PROPRIETOR/ etc Name Designation Address Mobile No Ph No Email ID
6.	Date of Incorporation of company
7.	Foreign Direct Investment in company (if any in %)
8.	Shareholding pattern
9.	Turn over as per Audited Balance Sheet for the preceding three years. Year Year Year
10.	Annual budget for R&D during last three years (if any) Year Year Year
11.	Income Tax returns for the preceding three years

	period Year Year Year	
12.	Nature of company DPSU, Private Limited, Public Limited, Partnership, Proprietary, Ex- Serviceman Unit	
13.	Category of industry Large Scale, Medium Scale, Small Scale, Micro, Startup	
14.	MSME Registration No	
15.	Certificates of registration as a manufacturing unit, if any.	
16.	If Startup, DPIIT Registration No	
17.	UDYOG AADHAR No	
18.	PAN Number	
19.	Details of Industrial license for defence manufacturing issued by DPIIT (if any)	
20.	Details of PESO license (if any)	
21.	GST Number	
22.	Nature of business Manufacturing/ Sole Selling or Authorized Agent/ Assembler/ Traders/ Dealer/ Processor/ Repacker/ Others	
23.	Details of current products and services Products and services Supplied (please specify Govt/ Domestic market/ Export)	
24.	Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).	
25.	Details of registration with NSIC / SSI, DGS&D, other Defence Department, other Govt. Dept, membership of FICCI/ASSOCHAM/CII or other Industrial Association (Attach relevant copies of registration letters)	
26.	Have you already taken any technology from DRDO (If yes, give details attaching separate sheet) Name of the Technology, Lab, Year, License number	
27.	& Status ISO/ ISI certification or any other certification (If yes, give details)	
28.	Relevant clearances form the authorities/ ministries (if any)	
29.	Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.	
30.	Capacity/capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.	

<u> PART-2</u>

Infrastructure and other Information

1.	Total area of factory	
	Covered (m ²),	
	Uncovered (m ²),	
	Bonded space available (m ²)	
2.	Ownership of factory	
	Self-owned, partnership, rental	
3.	Electric power	
	Sanctioned	
	Installed	
	Standby (if any)	
4.	Availability of adequate infrastructure	
	(List of machines and their production capacities) and	
	technical expertise	
5.	Name of bank & A/c No Name of bank	
	A/c type	
	A/c no	
	Address of the bank	
	Phone:	
	Email:	

6. Details of current products:

S.No	Туре	Description	Licensed/installed capacity	Annual production for preceding 3 years

7. Details of foreign collaboration, if any

S.No	No Product Name and address of collaborator		Year	Remarks

8. Details of products developed for services

S.No	Nomenclature of stores	Order No. and date	Remarks

9. Please give details of important facilities & infrastructure as per following format for:

- (a) Production
- (b) Unconventional, special m/c
- (c) Testing & quality control facilities

ſ	S.No	Description of m/c	Make & model	Qty	Date of purchase	Remarks

2

10. Furnish the following details with relevant certificates and documents

(a) R&D facilities available

- (b) Inspection quality control of raw material components
- (c) Assistance from central agency for testing / calibration etc.:
- (d) laboratory and drawing office facility

11. Principal customers:

S. No	Name & address	S.O No and date	Date of last supply	Products supplied	Value

12. Future plans (if any) in respect of expansion programme/ installation of additional machines/ test facilities etc.

13. Name of the technology requested for transfer (give self-assessment of your capability to absorb the technology)

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14. Details of employee as on date on firm's pay roll

PERMANENT	PERMANENT					
Category	Post Held	Number	Qualification	Total Service		
Technical	Prod. Manager Q.C. Manager Supervisor Testing Staff (QC) Skilled workers Unskilled workers, etc					
Administrative	Purchase Manager Accounts Officer Office Superintendent Clerical Others, etc					

TEMPORARY					
Category	Post Held	Number	Qualification	Total Service	
Technical	Prod. Manager Q.C. Manager Supervisor Testing Staff (QC) Skilled workers Unskilled workers, etc				
Administrative	Purchase Manager Accounts Officer Office Superintendent Clerical Others, etc				

DECLARATION:

I / we confirm that the information furnished in Part 1 & 2 above is correct. In the event of any information given by me / us is found incorrect / false at any time, I / we understand our EoI for ToT will be cancelled/ rejected without notice, beside any other appropriate action against me / us.

Industry seal

Authorized signatory Name(s) in capital Designation and seal of authorized signatory

Date: Place: