## 1200ms Delay Cum Pyro Cartridges (DCPC)

HEMRL has developed several pyro cartridges to meet the requirement of missile programme. 1200ms DCPC is one of the delay pyro cartridges developed for carrying out ignition of NCM. The development is complete in all the aspects and comprehensive technology is ready for transfer for production.

The schematic of 1200ms DCPC delay pyro cartridge is as follows.



**1200 ms DCPC** 

1200ms DCPC delay pyro cartridge has electrical initiator, delay composition and pyrotechnic compositions. On provision of electrical impulse, 1200ms DCPC provides suitable energy in quick time essentially required for ignition of henceforth elements. 1200ms DCPC has been designed considering the requirement of redundancy as well as high reliability. The required raw materials for hardware fabrication as well as chemicals for preparation of pyrotechnic compositions are indigenized and available for taking up production by Govt./Pvt. agencies. Thus, the technology for manufacturing of 1200ms DCPC delay pyro cartridge is matured and ready for transferring as per the Govt. norms to suitable Govt./Pvt. agencies exhibiting explosive handling license.

 Industries are requested to submit their expression of Interest for ToT within 21 days of publishing of technology on DRDO web-page. 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- 25912101

E-mail: director.hemrl@gov.in

Fax No: 020-25869316

2. 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

E-mail: 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.

#### PART-1

#### **General Information**

(Please enclose documents in support of information provided)

|   | 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/<br>PROPRIETOR/ etc  |  |
|   |    | Name   |  |
|   |    | Designation  |  |
|   |    | Address  |  |
|   |    | Mobile No  |  |
|   |    | Ph No  |  |
|   |    | Email ID   |  |
| Į |    |  |  |

| 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<br>Agent/ Assembler/ Traders/ Dealer/<br>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 & Status   |  |
| 27. | 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. |  |

## PART-2

## Infrastructure and other Information

| 1. | Total area of factory                    |  |
|----|--|--|
|    | Covered (m <sup>2</sup> ),               |  |
|    | Uncovered (m <sup>2</sup> ),             |  |
|    | Bonded space available (m <sup>2</sup> ) |  |
| 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. | Туре | Description | Licensed/installed | alled Annual production |  |  |
|----|------|-------------|--------------------|-------------------------|--|--|
|    |      |             | capacity           | for preceding 3         |  |  |
|    |      |             |                    | years                   |  |  |
|    |      |             |                    |                         |  |  |
|    |      |             |                    |                         |  |  |

## 7. Details of foreign collaboration, if any

| S.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.No | Description | Make | Qty | Date of | Remarks |
|---|------|-------------|------|-----|---------|---------|
|   |      | of m/c      | &    |     | purch   |         |
|   |      |             | mo   |     | ase     |         |
|   |      |             | del  |     |         |         |
| L |      |             |      |     |         |         |

| <ol><li>Furnish the following details with relevant certificates and doc</li></ol> | uments |
|--|--------|
|--|--------|

(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<br>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)

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

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

| TEMPORARY |   |        |               |                  |
|-----------|---|--------|---------------|------------------|
| Category  | Post Held                                   | Number | Qualification | Total<br>Service |
| Technical | Prod. Manager<br>Q.C. Manager<br>Supervisor |        |               |                  |

|                | Testing Staff (QC)        |  |  |
|----------------|---------------------------|--|--|
|                | Skilled workers           |  |  |
|                | Unskilled<br>workers, etc |  |  |
| Administrative | Purchase<br>Manager       |  |  |
|                | Accounts Officer          |  |  |
|                | Office<br>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

#### List of Support documents to be attached with Eol

- (a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, as amended time to time)
- (b) Certificates of registration as a manufacturing unit, if any.
- (c) Audited 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)/DIPP norms as applicable.
- (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 equipment's
- (I) ISO/ ISI certification or any other certification
- (m) Relevant clearances form the authorities/ ministries (if any)
- (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.
- (p) PESO and DPIIT license for explosive handling if ToT is for high energy Material, explosives, propellants, and component/ system dealing with it etc.
- (q) Under taking form company seeking ToT that none of its Directors, Independent Directors, non-executive Directors, Key management personnel are involved in any corrupt practices, unfair means and illegal activities.
- (r) Details of the industrials license for defence manufacturing be provided by the industry seeking ToTs.
- (s) Application cum Industry Assessment Form