Expression of Interest (EoI) for ToT of Granules for Bio-Degradable Bags

1. Description

Polythene bags/ bottles have become persistent threats to environment. The pollution caused by all pervasive polythene based packing material is having inadvertent impact on nature. Plastics and polyethylene takes about 200-300 years to decompose on its own. The efforts to recycle plastic by collection and segregation are tedious and costly. Keeping in view of ill effects of pervasive usage of plastics and polyethylene bags, various options are being researched to replace these hazardous materials.

In such efforts, DRDO scientists have developed **Granules for bio-degradable bags** to replace single use polyethylene bags. The single use bags is based on a formulation developed using PBAT starch and food graded additives. DRDO has developed two types of bags i.e. water soluble bags (for sea application) and water resistance bags (for land application). The existing polyethylene bag manufactures can migrate to these bags manufacturing with minimum change in plant and machinery.

The salient features of the Technology/ product are:-

- A alternate to conventional single use plastic.
- Eco friendly, Bio-degradable and Home compostable.
- No harm to animals/ aquatic life by disposal/ consumption.
- Bio-degradable within 60 days.
- Home compostable in 90 days.
- Fully tested and certified.
- Printable in multiple colors based on user requirement.
- Cost effective.

DRDO is willing to transfer the technology to industries for mass production to the benefit of society and mankind.

The ToT seeking Indian industries shall comply following criteria/ requirements:-

- (a) Capability to absorb the technology and have capacity to produce the granules and bring in the market within a shortest possible time.
- (b) Fulfillment of all regulatory requirements for manufacturing, QA/ QC etc.
- (c) Not under any ban by Govt of India/ Any state Govt/ UT or any Govt Agency.
- (d) Not be under insolvency resolution.
- (e) In-house R&D facilities.

2. <u>ToT Fees</u>

'Nil' ToT Fee to be paid by industry to DRDO for entering into Licensing Agreement for Transfer of Technology (LAToT).

3. EOI Submission Date

Industry may apply for Eol before **30**th **June 2022**. The Eol is to be submitted **by email only.** The Eol submitted by industries will be scrutinised by a Technical Assessment Committee (TAC) constituted by DRDO. Technically qualified company(ies) by TAC based on their capability and capacity to absorb technology will be given ToT on "**First Come First Served Basis**".

4. Contact Details

Interested companies are requested to apply against this EoI through email to following:-

To Director Advanced Systems Laboratory Defence Research & Development Organisation Govt. Of India, Ministry of Defence Kanchanbagh P O, Hyderabad - 500058 Email : director[at]asl[dot]drdo[dot]in

Copy to (for information) The Director Directorate of Industry Interface & Technology Management (DIITM) R No 447, DRDO Bhawan, DRDO HQrs, Rajaji Marg, New Delhi -110011 Email : diitm[at]hqr[dot]drdo[dot]in tot[at]hqr[dot]drdo[dot]in

5. Documents to be submitted with Eol

The industry (including DPIIT, Govt of India approved Startup) may express their interest for subject ToT. Industries must provide details about company and documents in support of their claim as per **Appendix- A**. In case any document is not enclosed with EOI, justification to be provided at relevant place. Any additional documents if required by DRDO shall be sought from the interested industries.

6. Other Terms and Conditions

The other terms and conditions for industry seeking ToT are the following:-

- (a) DRDO reserves the right to reject any offer or proposal without assigning any reasons.
- (b) Submission of EOI does not guarantee ToT to applicant industry.
- (c) A committee of experts constituted by DRDO may visit the company's manufacturing site(s) and facilities for assessing the strengths and capacity as furnished by the respective company before shortlisting for ToT.
- (d) Industry may obtain necessary permission/ License/ approval from the suitable authority for any application/ usage of Granules as per the rules/ processes of Govt of India in vogue after successful ToT.

List of support documents to be attached with EOI

- (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, turnover and net worth of the company 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 (if any) 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 for Ministry of Defence , Public Sectors and Paramilitary Forces, if any).
- (j) Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise to manufacture.
- (k) List of Testing and Support equipments for manufacturing.
- (I) ISO/ ISI certification or any other certification (if any).
- (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) Under taking from company seeking ToT that none of its Directors, Independent Directors, non-executive Directors, and Key management personnel are involved in any corrupt practices, unfair means and illegal activities.
- (q) Under taking from Company seeking ToT in respect of Para 1 (g) and Para 1(h) of EoI.