Expression of Interest (Eol) for UNIAC of Project 1404

Technology Overview

- 1. ARDE had developed Pinaka rocket, a free flight, all-weather, indirect fire artillery rocket system with lower accuracy over extended ranges. This delivery error over extended ranges can be mitigated by using an on board inertial guidance system aided by satellite navigation.
- 2. The accuracy has been improved by integrating the guidance, navigation and control (GNC) kit to the rocket system. Hence the GNC Kit was developed and integrated to the unguided Pinaka rocket, converting it to a Guided weapon.
- 3. GNC Kit consists of the actuation system, UNIAC, power supply and telemetry systems.
- 4. UNIAC (UNIfied Avionics Computer) is one of the major sub-systems of project 1404. It is an integrated avionics computer with On Board Computer, Navigation and GNSS receiver functionality.
- 5. EOI is requested from competent firms for Fabrication, Assembly and Testing (Built-to-Print) of UNIfied Avionics Computer (UNIAC) as part of TOT and the TOT terms and conditions are detailed below.

Terms and Conditions

- 1. Processing of EOI applications shall start after 10 days from the date of publication on DRDO website.
- 2. The firm's turnover should be greater than Rs.50 Cr. per annum.
- Documents to be submitted with EoI. The firm must provide details about firm and documents in support of their claim as per Appendix- A. Any additional documents as required by DRDO shall be sought based on request received from the interested industries.
- 4. As an essential criterion, the firm should have demonstrated capability of development/ fabrication & assembly of Avionics Systems (similar to on-Board Computers (OBC), Missile Interface Unit (MIU), Inertial Navigation Systems (INS) & Telemetry (SCP & PCM)), qualified and delivered to Ministry of Defence/ Defence Establishments/ Public Sectors /Paramilitary Forces/any Government agencies. In addition, prior experience in development/ fabrication of avionics systems with expertise in integration and handling of IMU should be possessed by the firm (SO copies for the delivery of similar systems should be provided).
- 5. Previous & on-going experience of delivery of above systems with clearance by Defence QA agencies like DGQA, MSQAA/R&QA, RCI, CQA etc is essential.

- 6. It is essential that the participating firms shall have ISO 9001:2015 /AS 9100D certification.
- 7. The participating firms shall have in house facilities for components/PCBs storage in controlled environments and facilities for environmental tests (Climatic and Dynamic test facilities).
- 8. The Industry shall also have experienced & skilled manpower for debugging, testing and documentation of embedded systems, established quality management system, willingness and capability to setup specialized infrastructure (Rate tables for Calibration etc.).
- 9. The Other Terms and conditions for industry seeking ToT are the following:
 - a) Submission of EOI does not guarantee ToT to applicant industry.
 - b) The other terms and conditions are as per the 'DRDO Policy and Procedures for ToT' for Category 'A' mentioned at <u>https://www.drdo.gov.in/sites/default/files/inline-files/DRDO%20Policy%20%26%20Procedure%20%20for%20ToT.pdf</u> at DRDO website.

Contact Details

1. The desirous industries should send their Expression of Interest (EoI) to Director, RCI on the following address:-

Director,

Research Centre Imarat (RCI) Vignyana Kancha Hyderabad- 500 069 Fax:040-24306002 E-Mail: director[at]rcilab[dot]in

Copy to:-

Director,

Directorate of Industry Interface and Technology Management (DIITM),

DRDO Headquarters,

DRDO Bhawan, Rajaji Marg,

New Delhi- 110011.

Fax: 011-23793008.

E-Mail: diitm[dot]hqr[at]gov[dot]in

tot[dot]hqr[at]gov[dot]in

Appendix-A

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 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 to fabrication, assemble, and test UNIACs.
- k) List of Testing and Support equipments.
- 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 Eol.
- r) Brief description of R&D facilities and certificates recognised by any Govt agencies.