

Invitation for Expression of Interest (Eoi) for Fabrication and Commercialization of 'Automatic Dynamic Balancing of Pressure (ADYBOP)'

1.0 Background

CSIR-Central Institute of Mining and Fuel Research (CIMFR), Dhanbad, Jharkhand is one of the premier laboratories under the aegis of Council of Scientific and Industrial Research (CSIR), Ministry of Science & Technology, Government of India. CSIR-CIMFR has developed (Patent No. 215681) its expertise for microprocessor based dynamic pressure neutralization system for control of fire in underground coal mines.

Many a times it has been proved that Dynamic Pressure Balancing System – a manual pressure balancing system around the sealed off area is an effective tool for combating fire in underground coal mines. Presently the following procedures are being adopted for implementation of dynamic balancing pressure technique to combat fire in underground coal mines. A pressure chamber is made outside of the isolation stopping provided with a small door at about 2-3 m from the isolation stopping. Two pipes are laid, connecting the pressure chamber to main intake as well as return airways. Air sampling pipe through the isolation stopping is used to measure the pressure differential across the isolation stopping by a manometer. Difference in pressure across the stopping, if any, is balanced by adjusting airflow rates through these pipes. This pressure balancing technique has successfully been implemented in a number of coal mines in India. It has been observed that for control of fire, balancing has to be maintained round the clock for several days, extending to over a year in some cases. This requires throughout human intervention. This is one of the main constraints of the system. To overcome these problems and to make maintenance of perfect balancing over a long period an easy task, a device for automatic balancing of pressure has been called for. The proposed system may be used to have a minimum intervention of human. The proposed device is capable of balancing pressure by automatic adjustment of airflow to pressure chamber by controlling valves in the pipes through a microprocessor based system.

2.0 Requirement

CSIR-CIMFR requires an industry partner on non-exclusive basis for fabrication of Automatic Dynamic Balancing System as designed by CSIR-CIMFR and subsequently commercialization of the engineered and industrial model of system. Therefore, Expression of Interest (Eoi) is invited from the reputed manufacturing industries having the knowledge and expertise of developing instruments for use in underground coal mines.

3.0 Eligibility Criteria

- (i) The firm should have its footprint in marketing product(s) in coal mines.
- (ii) The firm should have well established workshop for fabrication.
- (iii) The firm should have complete team of design, fabrication, execution, installation and commercialisation of the product in the underground coal mines.
- (iv) The firm should be engaged in manufacturing of mine safety appliances.

4.0 Terms and Conditions

- i. The selected firm should sign a licensing agreement with CSIR-CIMFR for fabrication and commercialization of the system.
- ii. All expenditure related to the fabrication, performance trial for automatic balancing system should be borne by the successful bidder without any liability to CSIR-CIMFR, Dhanbad.
- iii. Fabrication and performance trial of the first set of the system should be completed within 12 (twelve) months from the date of signing of the agreement.
- iv. Licensing agreement would be valid for 10 (ten) years from the date of signing of the agreement and which may be renewed on mutual consent.
- v. The selected firm has to pay a minimum lump sum licensing fee of Rs. 5.00 lakh before signing the agreement.
- vi. During commercialization the firm has to pay royalty based on the ex-factory selling price (excluding taxes) of each item to CSIR-CIMFR.
- vii. The firm should take all the necessary statutory approvals for use in underground coal mines. All the necessary expenditure in this regard shall be borne by the selected firm(s).
- viii. The firm should submit the detail drawing of the fabricated item along with electrical and electronics circuit, if any, after successful development of product.
- ix. The firm should also sign a non-disclosure agreement to maintain the confidentiality of the system to be developed.

5.0 Expression of Interest

The interested firm should submit their EoI with following information and documents in two bids system covering technical and financial bids through on-line NIC eProcurement System/Portal. Technical and financial bids should contain following information/documents:

(i) Technical bid

- a) Company profile and proof of fulfilling eligibility criteria.
- b) Experience of the firm regarding engagement in manufacturing and commercialisation of mine safety appliances (documentary proof to be submitted). The firm should have its own fabricating and developing workshop.
- c) Registration details of the company:
 1. Copy of the company registration certificate
 2. Copy of PAN of the firm
 3. Copy of GST Certificate of the firm
 4. CIN Number/MSME registration certificate
- d) Financial details of the company:
 1. Income Tax Return of last 3 financial years
 2. Audited Balance Sheet of last 3 years certified by Chartered Accountant showing minimum Rs. 3.00 crores annual turnover a period of past one year and cumulative Rs. 6.00 crores over last 3 consecutive years.

(ii) Financial bid

- a) Lump sum licensing fee agreed to pay by the firm before signing the licensing agreement for commercialization of the system. Minimum lump sum premium shall be Rs. 5.00 lakh.
- b) Royalty rate to be paid by the firm based on percentage of ex-factory selling price (excluding taxes) of the system during commercialization period. Royalty rate should not be less than 5 (five) % of the ex-factory selling price (excluding taxes).
- c) If two or more firms qualify the eligibility criteria, then the firm offering the highest royalty will be selected as the successful bidder. However, the other firms if agrees upon to accept the highest royalty rate will be considered for the development of the product on non-exclusive basis.

6. Agreement

The successful bidder (firm) will have to sign an agreement with CSIR-CIMFR after the award as per CSIR norms detailing the modus operandi and terms of reference for the award in line with the technical and financial bid, IPR rights of CSIR and the firm that will commensurate with the contributions by CSIR-CIMFR and the firm developing the System, development of collaborative mechanism for calibration and maintenance of the System at site for above said period. This will also cover the modalities of the commercialization and advancement of the System.

7. IPR

Any new IPR generated during development work will be owned jointly by both the parties. The firm will prepare the IPR document in association with CSIR-CIMFR as per CSIR norms. The firm that is selected for the award of the development of the System will have to abide by the confidentiality clause of the development as per the agreement with CSIR-CIMFR. The logo of both CSIR-CIMFR and the Firm(s) should be placed prominently over the product.

8. Arbitration

In the event of any disputes relating to or arising out of this agreement, such disputes shall be resolved amicably by mutual discussions and negotiations in good faith. Failing the above, the disputes shall be referred to and finally resolved by Delhi International Arbitration Centre (DIAC) under Arbitration and Conciliation Act. 1996 and the rules framed there under for the time being in force.

- The seat of Arbitration shall be New Delhi.
- The language of arbitration proceedings shall be English only.
- Each party shall bear and pay its own cost of the arbitration proceedings unless the Arbitrator otherwise decides in the Award.
- The provisions of this clause shall not be frustrated, abrogated or become inoperative, notwithstanding this agreement expires or ceases to exist or is terminated or revoked or declared unlawful.

9. Jurisdiction and applicable laws:

The agreement including all matters shall be governed by Indian Laws both substantive and procedural for the time being in force and subject to the exclusive jurisdiction of Courts at Dhanbad/ New Delhi.

10. Submission of EoI

The interested parties are requested to submit their EoI bids on-line through NIC eProcurement System/Portal on or before the due date of submission.