



GAIL (India) Limited
CENTRAL INTEGRITY MANAGEMENT GROUP, NOIDA

NOIDA
27th October, 2017

Expression of Interest (EOI) - Empanelment of SMEs (Subject Matter Experts) for expert advice on O&M issues on Welding & Metallurgy, RCA Lead and Metering System related to GAIL owned Natural Gas and LPG pipelines across India as and when required.

Interested SMEs (Subject Matter Experts) experienced in similar jobs are invited to submit necessary documents in support of their Technical and Financial capabilities in order to get pre-qualified for the proposed empanelment.

The completed Application Form along with attachments in a sealed envelope superscribed with **“Application for Pre-Qualification of SMEs”** may be forwarded to the address mentioned below or the same can also be mailed to cmggroup@gail.co.in latest by 30.11.2017. Application received after 30.11.2017 will not be entertained.

SMEs applying against the EOI will be screened based on submitted Application Form along with attached documents. Shortlisted SMEs will be eligible to participate in the subsequent tendering process/RFP for intended engagement of experts.

Brief Scope of work and Terms of engagement are indicated in the following sections. Detailed Scope of Work, Schedule of Rates, Evaluation Methodology, Bid Evaluation Criteria etc. will be intimated during the subsequent tendering process.

ADDRESS FOR APPLICATION FORM & DOCUMENTS SUBMISSION

**Chief General Manager (O&M)-CO
Central Integrity Management Group, CO-(O&M)
GAIL (India) Ltd
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Uttar Pradesh, India
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1.0 SCOPE OF WORK

1.1 BACKGROUND:

GAIL (India) Ltd is a Central Public Sector Undertaking (PSU) under the Ministry of Petroleum & Natural Gas (MoP&NG) Government of India. GAIL operates network of Natural Gas Pipelines covering more than 11000 Km with a capacity of above 206 MMSCMD & two LPG Pipelines covering 2040 Km with a capacity of 3.8 MMTPA of LPG. Along the pipelines, there are booster/compressor stations. In addition, GAIL owns seven process plants across India for extraction of liquid hydrocarbons from natural gas.

1.2 OBJECTIVE:

GAIL intends to hire the services of Subject Matter Experts (SME) for a period of 02 years and if the tendered quantities are not exhausted within two years same can be extended for further period of 01 year at the same rates and terms & conditions.

1.2.1 Empanelment of Subject Matter Experts

It is proposed to empanel SMEs (preferably one each) in the following domains/subjects:

- (a) Welding & Metallurgy issues related to pipelines and Process Plants
- (b) RCA Lead
- (c) Metring System

NOTE: Interested SMEs can submit their interest for ONLY ONE subject/domain

The brief typical scope of work for the empanelled SMEs will be as detailed below but not limited to the followings:

2.0 TYPICAL SCOPE OF WORK FOR SUBJECT MATTER EXPERTS:

The objective of hiring Subject Matter Experts in various domains as detailed above is for seeking expert advice on issues related to specific domains which may arise from time to time.

There will be two types of activities for each SME:

- (a) **OFFICE ACTIVITY:** SME's Home Office activity where the concerned SME will review the data, report etc. as and when requirement arises and submit the report with suggestion/remedial

action. All Office Activities shall be carried out from SME's native office.

- (b) **SITE VISIT:** Site visit(s) by concerned SME as and when the requirement arises. The SME shall visit the site anywhere in India normally within 15 days or mutually agreed convenient date from the date of express communication from GAIL. During site visits, to and fro travel arrangement (Business Class in Air)/ Railways in AC-1/AC-2 Tier where the air connectivity is not available, Local travel as well as boarding arrangement will be in the scope of GAIL.

2.1 SME ON WELDING & METTALURGY:

Deployment as and when required for site visit or office activity. The typical scope of the work of the expert shall be as detailed below:

- ✓ Recommendation based on the issues that may arise at site(s).
- ✓ The SME may need to physically supervise the process of welding at site.
- ✓ Defect investigation and Suggestion/recommendations on material failure of sub-assembly/assembly/equipment.

2.2 SME ON RCA LEAD:

OBJECTIVE OF RCA:

The objective of a performing RCA through the engaged "SME on RCA Lead" is to perform root cause analysis for a particular problem(s)/ event(s)/ happening (s)/ eventuality (ies) so that based on the recommendation(s)/ finding(s) of the SME w.r.t root cause of the faults/ problems same can be removed and final undesirable event(s) can be prevented from recurrence.

The SME will be working independently under the guidance of EIC or authorized representative of the EIC.

METHODOLOGY OF RCA:

RCA can comprise of many different tools, processes, and philosophies. However, several very-broadly defined approaches or "schools" can be identified by their basic approach or field of origin such as safety-based, failure-based and systems-based.

- Safety-based RCA - Accident and occupational safety and health.
- Failure-based RCA - Failure as employed in engineering and maintenance.
- Systems-based RCA - Change, risk management and systems analysis.

Performing Root Cause Analysis (RCA) of different Eventualities/ Problems inside GAIL Facilities based on Case to Case approach for following areas:

- i. Safety- Occupational Health & Safety
- ii. Process (Risk & Safety)
- iii. Pipelines (Mechanical)
- iv. Static Equipment & Piping (Mechanical)
- v. Electrical, Electronics & Instrumentation (E & I)
- vi. Rotary Equipment
- vii. Areas may not be limited as mentioned above. Scope of RCA depends on Case to Case Eventualities/ Problems inside GAIL Facilities.

An indicative General Methodology for performance and documentation of a RCA is given in the followings & may be altered based on the mutual discussion on a case to case basis:

Site Survey - It shall include visit of preferably three to four (03 to 04) experts including RCA Team Lead. RCA Team Lead should be a certified Root Cause Analyst. Other Team Members to be drawn from GAIL or GAIL appointed Agency.

- I. Preparation – where the SME/RCA Lead will mobilize to site, establish the investigation team’s terms of reference, meet with seniors site representatives and finalize arrangements for conducting the RCA
- II. Identification of Problem & Categorization of Problem – Shall establish timeline of Incident Brief by client on what happened, and in what sequence
- III. Safety briefing – prior to commencement of site data and evidence gathering
- IV. Site visit and evidence collection – based on the following key evidence sources: People (by interviews), Parts (equipment / hardware), and Paper (documentation, procedures and records)
- V. Interviews – to be undertaken with witnesses to determine sequence of events and clarify key facts related to the incident. These interviews shall

be held on a one-to-one basis between the witness and the RCA Lead so that the witness can provide their input freely and without prejudice

- VI. RCA Workshop – Team-based workshop will be facilitated by RCA Lead to determine and agree root causes, using suitable methodology. The RCA workshop will be performed at the nearest GAIL office soon after the site visit and information gathering is complete. The workshop will be chaired by the RCA Lead.

Based on the Site Survey findings/ observations/ data gathered/ RCA workshop carried out; RCA Lead shall submit the draft report for review of GAIL.

Further the RCA Lead shall advise GAIL regrading requirement of carrying out any Forensic Testing/ Specialized Software modelling or analysis etc. which is absolutely necessary for arriving at the conclusion of Root Cause.

RCA Draft report shall be submitted to GAIL & to be discussed in person with GAIL w.r.t RCA solutions and recommendations through meeting conducted at GAIL, Noida/ Video Conference/ Webinar/ Tele Conference.

RCA Final report shall be submitted to GAIL & to be discussed in person with GAIL w.r.t RCA solutions and recommendations through meeting conducted at GAIL, Noida/ Video Conference/ Webinar/ Tele Conference

A standard methodology for the RCA should be proposed by the RCA Lead who will address all the requirements mentioned. The methodology will be based on the RCA technique proposed to be implemented. GAIL shall evaluate the proposed methodology for completeness and conformance to its requirements. The detailed approach and study methodology will be shared with GAIL during performance of the each of the RCA study.

Software Modelling, NDT, Destructive Testing if required will be in the scope of GAIL.

RCA Team Leader should be a certified Root Cause Analyst and must have carried out at least one Root Cause Analysis for any event/ accident pertaining to Chemical/ Petrochemical / Hydrocarbon Processing Industry / Fertilizer / Power Plant / Oil & Gas Industries during the preceding 07 years from the date to be reckoned from the closing date of EOI.

An undertaking regarding Possession or Hiring of Software required for RCA such as PROACT®/ REASON®/ Apollo Root Cause Analysis/ TapRoot®.

2.3 SME FOR METERING SYSTEM:

The typical scope of the work of the expert shall be as detailed below but not limited to the followings:

- Review of existing Maintenance Practices (like calibration, periodicity of calibration of various instruments, periodicity of proving of primary meters, monitoring of meter health indicators, procedure of reconciliation, etc.) and thus comparing them with world's best practices and recommend procedural improvements from time to time.
- Review GAIL's maintenance policy with respect to metering and suggest changes in policy guidelines as required
- Field visits for evaluation of metering station, its design, certification of compliance to applicable standards / GAIL's policies, as and when required. Techno-commercially feasible corrective actions as required for improving the existing metering systems may be provided
- Vetting & approval of metering skid design, P&ID, Hazop as required, etc. for new metering installations.
- Advise on type of metering system to be implemented for a given operating & site conditions in case existing methods are not practical
- Expert advice w.r.t. LNG custody transfer methodology. Vett of existing methodology vis-à-vis international practices and suggest corrective actions as required
- Guide in uncertainty estimation of metering stations and provide advice on improvements / modifications for improving the uncertainty of the metering stations
- Developing Standard Operating Procedures (SOP) for metering related activities
- Expert advice w.r.t. developing standardised specifications for metering related instrumentation such as transmitters, RTDs, meters, flow computers, GCs, etc.
- Expert advice w.r.t. standardisation of procedures, formats, procedures, etc. in the organisation which include SAT & FAT procedures, FDS for metering system etc.
- Expert advice on resolving metering related issues with suppliers & consumers

- Expert advice on upkeep of meter prover facilities at Hazira & Dibiyapur as well as addressing issues pertaining to traceability, uncertainty, etc.
- Expert advice on various international & national standards like AGA, GPA, ISO, API, ASTM, etc. applicable to different types of metering systems like orifice, turbine, Coriolis, USM, etc. w.r.t. applicability of various clauses, their revisions, etc.
- Expert advice on new technology adoption w.r.t. metering systems
- Define performance objectives, and determine acceptable performance levels for various activities related to metering systems
- Give training to GAIL metering engineers for skill enhancement on half yearly basis
- Devising learning modules for improving the skill of metering engineers in GAIL
- Devise a training module so that with the available expertise within GAIL, a certificate course on calibration can be imparted to technicians & engineers within GAIL
- Any other jobs related to metering which may arise from time to time.
- Act as the “go to” person within a department or function for questions and problems related to metering, reconciliation, etc.

3.0 SPECIAL TERMS AND CONDITIONS

3.1 CONTRACT PERIOD:

The contract shall be initially valid for a period of 02 (TWO) years from the date of Fax of Intent (FOI) and if the tendered quantities are not exhausted within two years, same can be extended for further period of 01 year at the same terms and conditions at sole discretion of GAIL.

3.2 TIME SCHEDULE FOR WORK COMPLETION:

Time period for each assignment / project and the required man-days / man-hours shall be mutually agreed between GAIL and engaged SMEs. GAIL shall convey its approval for the time limit for each job for a particular assignment.

3.3 TERMS OF PAYMENT:

- 3.3.1 The payment will be made on completion of each assignment / project separately based on the pre-agreed duration, on the declaration by SME stating number of man-days / man-hours utilized by him for completing the particular assignment only. The payment will be released within thirty (30) days of receipt of accepted invoice & the final report provided the report being acceptable and agreed upon by both GAIL and the SME.
- 3.3.2 GAIL shall deduct tax at source as per Indian laws and a certificate of Tax Deducted at Source shall be issued. Bidder shall be responsible for payment of all applicable taxes in his/her country of residence and no separate payment shall be made on this account. In case of Indian bidder, Cenvatable Invoice shall be raised as per Service tax Act. Indian Bidder shall submit Service tax registration number if applicable. In case of foreign bidder, service tax shall be borne by GAIL as per Service tax Act applicable in India.
- 3.3.3 The amount payable in the invoice towards consultancy charges shall be as per the actual man-days/man-hours utilised for each assignment.
- 3.3.4 Payment will be made to the SME/bidder only as per bank mandate form submitted by him/her/firm/company with due endorsement by the bank concerned.
- 3.3.5 In case of Indian bidder, Invoice, Pan Card and bank a/c details shall be provided in the name of bidder.
- 3.3.6 In case of Foreign Bidder, the following documents shall be required in the name of the bidder at the time of payment:
- a) Invoice shall be raised by the engaged SME only.
 - b) Pan Card in India in the name of bidder, Otherwise tax rate applicable due to non- availability of PAN card as per Income tax Act 1961 shall be deducted.
 - c) Declaration of No Permanent Establishment (Non-PE Establishment Certificate) in India on the bidder's letter head.
 - d) Tax Residency Certificate (TRC) from the Income tax authority of the country in which the bidder is a tax resident. The TRC shall be provided for the relevant taxation year.
 - e) Bank Account details in the name of SME duly certified by bank.

NOTE: The SME shall submit three copies of the Original Invoice, two original copies of TRC, PAN Card and Non-PE Establishment Certificate or other documents as per the statutory requirement, as and when applicable.

The courier charges on account of dispatch of the Original copies of Invoice & Documents will not be re-imbursed.

3.4 CONFIDENTIALITY OF INFORMATION AND DATA:

All information obtained by bidder/consultant/expert during the interpretation work and all information/data/maps etc. provided by the Company to the bidder/consultant/expert must be considered confidential and must not be divulged by the bidder/consultant/expert or its personnel to any-one other than the Company's personnel. This obligation of bidder/consultant/expert shall be in force even after the termination of the contract. For publishing scientific/technical papers based on the findings/results of the interpretation in scientific journals etc. the personnel engaged by the bidder/consultant/expert must take prior approval of the Company in this regard.

3.5 ADVANCE PAYMENT & MOBILISATION ADVANCE:

Not Permissible.

3.6 DEFECT LIABILITY PERIOD:

Not Applicable.

3.7 PRICE REDUCTION SCHEDULE:

Not Applicable.

3.8 CONTRACT PERFORMANCE BANK GUARANTEE:

Not Applicable.

3.9 TRAVELLING CHARGES, BOARDING AND LODGING:

To and fro Business Class air fares from the nearest airport of workplace / country of origin of the SME to India by shortest route will be arranged by GAIL. In case, based on the request of GAIL, the SME books air ticket on his own, the amount will be re-imbursed on actual basis based on submission of documentary evidence/original air tickets. Local travel by air (Business Class or Economy Class if the Business Class is not available in the route/airlines)/ road / train, lodging & boarding in FIVE STAR Hotel (wherever available) during stay at different sites in India or GAIL Guest House will be borne by GAIL.

3.10 TRAVEL TIME CHARGES:

Travel time (to & fro) charges will be regulated/ reimbursed for the duration of actual travel as per the following methodology:

Travel Hours	Re-imbursement Amount
< 06 Hours	No payment
> 06 Hours but < 12 Hours	½ MAD
> 12 Hours to = < 24 Hours	01 MAD

3.11 OTHER RE-IMBURSEMENT:

Visa charges of the Foreign SME for India visit will be re-imbursed by GAIL on submission of documentary evidence of the expenditure on account of the same.

Local taxi/train/air travel (as applicable) from the Home Office of the SME to the nearest International/National Airport will be arranged by the SME and the amount will be re-imbursed based on submission of required original documents (if available) or self-certified expense certificate.

4.0 PRE QUALIFICATION REQUIREMENTS:

4.1 Subject Matter Expert in his / her individual capacity or through a company/firm where he/she is a partner/owner shall be allowed to participate in the bidding process.

In case, the bidder is a company/firm then an undertaking/commitment shall be provided by the company/firm that only the SME identified through the selection process shall provide the services under the contract and make visits on behalf of the company/firm in which he/she is an owner/partner. All communications, reports etc. related to the contract will be issued under his/her signature only.

4.2 Financial

4.2.1 SMEs desiring to participate in this EOI and the ensuing tender stage after prequalification shall be a registered tax payer in the respective country of normal residence and quote their Tax Payer Identification number accorded by the Revenue Agency of their respective country.

4.2.2 Self-certified photo copy of proof of tax payment in any of the previous two years will be required to be submitted during the subsequent tender stage/RFP.

4.3 Technical

- 4.3.1 The SMEs in respective domains should have done at least one consultancy or study work (in line with the typical scope of works as given above) during preceding seven years prior to the application submission date for a Hydrocarbon Pipeline Operator or Hydrocarbon Pipeline Regulator of any country or any reputed organisation/Institution. Self-attested documentary evidence in support of above is required to be attached along with Application Form.
- 4.3.2 SMEs proposed to be engaged are expected to possess a high level of expertise, experience and qualifications in the relevant domain. Detailed evaluation shall be carried out at the subsequent stage (Tendering) based on a Score based system of evaluation with due consideration for the level of qualification (PhD/Masters/BS/BE/ B.Tech/ Others), experience (number of years of practice in the relevant field), certifications. At this stage (EOI), SMEs may indicate the above details with supporting documents wherever required, for screening purposes.
- 4.3.3 Applicants with qualification / experience / certifications not relevant to the current requirement of engagement shall be excluded in the screening process. Decision of GAIL in this regard shall be final and binding and no representation or correspondences will be entertained.
- 4.3.4 Any canvassing on the part of the applicant will make the application liable for rejection.

APPLICATION FORM FOR SME

1	Name:	
2	Date of Birth (DOB):	
3	Address:	
4	Nationality:	
5	Tax Identification Number registered with the Revenue Authority of the native country (TIN / ITIN / PAN)	[Please attach a self attested copy of registration]
6	Applied for: (Tick one Box ONLY)	Welding & Metallurgy <input type="checkbox"/> RCA Lead <input type="checkbox"/> Metering System <input type="checkbox"/>
7	Qualification: (Attach documents)	
8	Professional Certifications: (Attach documents)	
9	Experience: (Attach documents)	
10	Prequalifying Experience for Subject Matter Expert: (One consultancy or study work on respective domains/fields/subjects for Hydrocarbon Pipelines during preceding seven years prior to the application submission date for a Hydrocarbon Pipeline Operator or Hydrocarbon Pipeline Regulator of any country or recognized organisation/Institute.	[Please mention here the brief title of job done, Agency for whom the job was done, Year of execution; Please attach a self-attested document in confirmation issued by the Agency]
11	Number of publications in International Journals: (Attach documents)	
12	Other information demonstrating bidder's competence: (Attach documents)	

13	Details of Company / Firm owned solely or in partnership by the SME: (Tick and provide details if required)	A. Not Applicable: <input type="checkbox"/> B. Company / Firm <input type="checkbox"/>		
		S.No.	Nature of Business	Participating Interest
14	Declaration: 1. I am a Citizen of ----- (Country Name) having Passport No.----- ----- valid till----- (Month/Year) 2. I am eligible for tourist / business visa for entry into India 3. I Prima facie fulfil the requirements indicated in the EOI for participating when RFQ is issued by GAIL			

Place:

Date:

(Signature of SME)

NOTES:

1. SME may attach his resume in addition to above in English Language.
2. Documents in other than English Language have to be attached along with self-certified English translated copies.