

NOIDA 05 July, 2019

# Expression of Interest (EOI) – Inviting technical proposals for enlistment of Consultants for Geo Hazard Assessment & Management along onshore Hydrocarbon pipelines

Interested reputed Consultants experienced in similar jobs are invited to submit application in prescribed format along with necessary documents in support of their technical and financial capabilities in order to get enlisted for the proposed job.

The completed Application form along with attachments in a sealed envelope superscribed with <u>"Application for enlistment of Consultants for Geo Hazard Assessment & Management along onshore Hydrocarbon pipelines"</u> may be forwarded to the address mentioned below within 30 days of publication of this EOI i.e. latest by 04.08.2019. Application received after 04.08.2019 will not be entertained.

Consultants applying against the EOI will be screened based on the technical proposals submitted by them in the attached template along with supporting documents. Shortlisted consultants will only be eligible to participate in the subsequent Request for Proposal (RFP) process for engagement of consultant(s) for such type of studies by GAIL.

Brief Scope of work, 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 RFP process.

### **Address for Submission of Proposal & Documents**

General Manager (CIMG)
Central Integrity Management Group, CO-(O&M)
GAIL (India) Ltd
20<sup>th</sup> Floor, GAIL Jubilee Tower
B- 35 & 36, Sector-1
Noida-201301
Uttar Pradesh, India

Email: <a href="mailto:cmggroup@gail.co.in">cmggroup@gail.co.in</a>; <a href="mailto:selvan@gail.co.in">selvan@gail.co.in</a> or <a href="mailto:ssverma@gail.co.in">ssverma@gail.co.in</a>; <a href="mailto:selvan@gail.co.in">selvan@gail.co.in</a> or <a href="mailto:ssverma@gail.co.in">ssverma@gail.co.in</a>;

Mobile Nos. +91-9868525289 or +91-9811708105

Contact no: +91-(120) 2446400/4862400 Extn. 12003/12008



### **SCOPE OF WORK & SPECIAL CONDITIONS**

### 1.0 BACKGROUND

1.1 GAIL (India) Ltd is a Central Public Sector Undertaking (PSU) under the Ministry of Petroleum & Natural Gas (MoPNG), Government of India. GAIL operates network of Natural Gas Pipelines covering more than 12000 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.

#### 2.0 OBJECTIVE

2.1 GAIL intends to hire the services of reputed consultants for Terrain Mapping, Analysis & Assessment of Geo-hazards along proposed or existing pipeline corridors and recommendation for route selection (new corridors) and monitoring & mitigation (new / existing corridors). By this Expression of Interest (EOI) application process, consultants possessing requisite experience and expertise shall be enlisted initially for a period of 2 (two) years. Subsequently, the actual study work will be taken up on case to case basis or as when required for pipelines and for the same, separate RFP will be issued by GAIL from time to time during the validity of the enlistment.

### 3.0 SCOPE OF WORK

- 3.1 Through this EOI, reputed Geological/Geotechnical consultants are proposed to be enlisted, who will be engaged separately to identify & assess geo-hazards along on-shore pipeline corridors (both proposed and existing), select corridors with least impact from geo-hazards (new pipelines) and establish an effective monitoring & management with the purpose of reducing the risk of pipeline failure.
- 3.2 The main objectives of Geohazard assessment is for identification of potential geo hazard locations along the pipeline route where typical construction practices are to be employed and where special construction or operation activities may be required to reduce potential threat for pipeline integrity issues and non-routine interventions. Severity of Individual and combined Geohazard shall be considered in designing mitigation and prioritizing ongoing operational monitoring /maintenances along with the as in design, construction & operational conditions. The typical scope of work by the consultants enlisted under this EOI shall cover the following:
  - Focussing on credible probable Geohazard within the pipeline corridor that may directly affect pipeline.
  - Terrain Mapping and Analysis of proposed or existing pipeline corridors with respect to geo-hazards based on pipeline route data (centreline alignment & satellite imageries, geo-technical investigation data (proposed corridors), pipeline details (existing / proposed). For the study, data has to be obtained by consultants from the availability of data in public domain or educational, research or application oriented institutions or agencies, internet resources (Google Earth etc.), Bhukosh (Geological Survey of India), literature review etc.



- Identification of different geo-hazards which may include but not limited to river crossings (river bank collapses, avulsion / meandering etc.), various geological / geotechnical phenomena (karst, special soils and wetlands, faults, mud volcanoes, erosion etc.), slope instabilities, ground subsidence, ground movement, earthquake related geo-hazards such as ground shaking, active faults, soil liquefaction, lateral spreading, slope instabilities, tsunamis etc.
- Qualitative Assessment of identified geo-hazards through systematic studies from the
  output of terrain mapping, integration and analysis, engineering judgement and personal
  experience. Field visits for consultant if required shall be arranged by GAIL to such sites.
  Depending on the geo-hazard type, the assessment may include identification of hazard,
  triggering mechanism, estimation of extent of problem area, empirical calculations,
  estimation of consequences in integrity of pipeline and environment and identifying
  methods for monitoring and mitigation.
- Consultants shall determine the impact on existing Pipeline integrity in terms of structural & metallurgical responses to Geo hazards resulting from Seismic activities, slope instabilities, soil interactions, food scour/avulsions/erosion, flooding, landslides etc. & recommend for the preventive measures.
- 3.3 Consultants shall also be competent to carry out the detailed study of the risk to existing pipeline from blasting rocks in the vicinity, unstable slopes, landslides, seismic hazards, water course scour & bank erosion, erosion control, Buoyancy control and recommend the mitigation measures for such types of threats which are implementable in the field.
- 3.4 Consultants may also require to carry out the study of potential Geotechnical hazards for laying of Pipeline segments using Horizontal Direction Drilling (HDD) in cases of Pipeline rerouting, lowering etc.
- 3.5 Detailed studies including strain limits using FEA may require to be conducted for the potential geo hazard segments. However, consultants in their EOI can mention their capabilities for conducting such studies so that if required RFP can be issued for carrying out such detailed studies to the same enlisted consultants.
- 3.6 It is not expected that consultants will do any physical site survey of their own. GAIL shall engage the agencies for carrying out any specific filed survey to collect the data required. However technical requirements for engaging such survey agency along with the required deliverables shall be prepared by the Consultant.
- 3.7 Engaged Geo Technical consultant are free to include additional/external expertise such as expert for FEA, pipeline Integrity expert, integration of collated data on ArcGIS platform etc if required to complete the job, under a specific RFP and it is deemed part of Consultant scope of work.
- **4.0** The typical deliverables of consultancy works shall include but not limited to the following:
  - a) Detailed report at the end of the study containing the approach, methodology and engineering basis for adopted methodology, study carried out, observations, conclusions and recommendations.



- b) Recommendations for Monitoring and Mitigation of potential Geo-Hazards
- 5.0 The visits to any selected sites on the pipeline corridors if required to evaluate the presence and nature of the geo-hazards for a robust assessment of the threat to the pipeline, shall be arranged by GAIL. Logistics for the visit of Consultant's experts (airfare by economy class from nearest airport from place of residence to nearest airport in India and further arrangements in air / road / rail travel within India to pipeline site, lodging & boarding in hotel in India shall be reimbursed by GAIL on submission of paid invoice on actual basis.

### 6.0 COMPLETION SCHEDULE

Detailed completion schedule shall be provided in subsequent Request for Proposal (RFP) documents for hiring of consultants as when required after enlistment of Consultants after EOI. This enlistment of consultants shall be valid for 2 (two) years form the date of finalization of enlistment.

### 7.0 TERMS OF PAYMENT

Detailed payment terms shall be provided during Request for Proposal (RFP) document.

### 8.0 CONFLICT OF INTEREST

GAIL policy requires that consultants provide professional, objective, and impartial advice and at all times hold the client's interests paramount, without any consideration for future work, and that in providing advice they avoid conflicts with other assignments and their own corporate interests. Consultants to be engaged for this assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of being unable to carry out the assignment in the best interest of GAIL, shall not be eligible to participate in this process of engagement. Without limitation on the generality of the foregoing, consultants shall not be hired under the circumstances set forth below:

- (a) Conflict between consulting activities and procurement of goods, works or services (other than consulting services covered in the scope of present engagement): A firm that has been engaged by GAIL to provide goods, works, or services (other than consulting services covered by these Guidelines) for a project, and each of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services for the Project. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and each of its affiliates, shall be disqualified from subsequently providing goods, works or services (other than consulting services covered by these Guidelines) resulting from or directly related to the firm's consulting services for such preparation or implementation.
- (b) Conflict among consulting assignments: Neither consultants (including their personnel and sub-consultants) nor any of their affiliates shall be hired for any assignment that, by its nature, may be in conflict with another assignment of the consultants. As an example, consultants hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project, and consultants assisting a client in the privatization of public assets shall neither purchase, nor advise purchasers of, such assets. Similarly, consultants hired to prepare Terms of Reference (TOR) for an assignment shall not be hired for the assignment in question.



- (c) Relationship with Employer's staff: Consultants (including their personnel and subconsultants) that have a business or family relationship with a member of the Employer's staff (or of the project implementing agency's staff) who are directly or indirectly involved in any part of: (i) the preparation of the TOR of the contract (ii) the selection process for such contract or (iii) supervision of such contract may not be awarded a contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Employer throughout the selection process and the execution of the contract.
- (d) A Consultant, who prepares Detailed Feasibility Report (DFR) of a Project, is not debarred from participating as Project Management Consultant (PMC) for the same Project as both are services in nature.

#### 9.0 CONFIDENTIALITY OF INFORMATION AND DATA

All information obtained by bidder/consultant/expert during the project 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. No part of the consultancy work shall be permitted to be presented and / or published in scientific / technical papers / journals etc. without prior approval of the Company in this regard.

### 10.0 PRE QUALIFICATION REQUIREMENTS

#### 10.1 Financial

The agencies to be enlisted through this EOI process shall be of sound financial standing evidenced by the following:

- a) The minimum annual turnover of the Consultant as per their financial results in any one of the immediate three preceding financial years shall be Rs. 0.5 Crores (USD 0.7).
- b) The net worth of the agency shall be positive in the immediate preceding financial year.

Documentary evidence (Annual report, Balance sheet, P&L account) in support of the same shall be provided along with the proposal duly attested by CEO/ Authorized signatory/ Head of the organization of the company.

Financial Pre-qualification requirements will be exempted for Academic and Research Institutions funded wholly or partly by Government of India.

#### 10.2 Technical

The agencies to be enlisted by GAIL for this EOI, shall be a Geological / Geo-technical consultant who must have completed execution of at least one consultancy or study work in the field of geo-technical assessment for Hydrocarbon Pipeline / National Highways / Railway Line in preceding five (05) years to be reckoned from EOI submission date.

Documentary evidence (WO copy/completion certificate/final payment receipt etc.) in support of the same shall be provided along with the proposal duly attested by CEO / Authorized signatory/ Full time Director/Head of the organization of the company/agency. In case bidder is not able to submit the above documents due to confidentiality agreements with clients, such texts/values can be made to hide in the documents and to



be submitted with the details of jobs executed as per given format in EOI along with the application.

Applicants with qualification / experience / certifications not relevant to the current requirement of enlistment 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.

- **11.0** Any canvassing on the part of the applicant will make the application liable for rejection.
- **12.0** Subsequent to the above, a Request for Proposal (RFP) shall be issued as when required to enlisted consultants based on their response to EOI.



**Annexure-A** 

### **APPLICATION FOR PREQUALIFICATION**

1	Name of the Agency/Organization	
2	Address (HQ)	
3	Address (Consultant Bidding Unit)	
4	Designated Person for Communication with Job Title	
5	Address of Designated Person	
	e-mail address	
	Mobile Number	
	Landline Number	
	Fax Number	
6	Pre-Qualifying Technical Requirements (Attach documents) The Consultant must have successfully executed at least one consultancy job in the field of Geological / Geo-technical assessment for Hydrocarbon Pipeline / National Highways / Railway Line in preceding five (05) years to be reckoned from EOI submission date.	
	Documentary evidence (WO copy/completion certificate/final payment receipt etc.) in support of the same shall be provided along with the proposal duly attested by CEO / Authorized signatory/ Full time Director/Head of the organization of the company/agency. In case bidder is not able to submit the above documents due to confidentiality agreements with clients, such texts/values can be made to hide in the documents and to be submitted with the details of jobs executed as per given format in EOI along with the application	
7*	Financial	Indicate Currency:
	Turnover in last 3 years	
	Net Worth as on 31.3.2019	
	Attach Audited Balance Sheet – last 3 years	
8	Other information demonstrating bidder's competence (attach documents)	Provide a list of key personnel with CVs
	nancial Pre-qualification requirements will be exempted for Acac inded wholly or partly by Government of India.	lemic and Research Institutions
Place	::	
Date		
		(Authorised Signatory)

**Note:** Documents in other than English Language shall have self-certified English translated copies.



### **Format for executed list of Jobs**

### Name of the Bidder:

Sr. No.	Client Name	Contact person Name, Email ID, Mob No.	Title of the	Nature of Engagement	Location	Period of Assignment		Documentary evidence provided
			(Describe in 50 to 100 words)	Location	From	То		

Certified that the above information is true to the best of my knowledge.

	Signature
Date	Name of CEO/CMD/ Authorised signatory/Director
Place	Seal