

Ref: EOI/INDEG/In-lined Tubing/2026

Dated: 27 August 2026

**Expression of Interest (EOI) from Domestic Manufacturers / Service Providers for
Development of Polymer In-lined Tubing/ Polymer In-lining Services**

1. Background

Oil and Natural Gas Corporation Limited (ONGC), India's flagship Exploration & Production (E&P) Company, is committed to promoting indigenous capability under the Government of India's Atmanirbhar Bharat initiative.

With a view to enhancing the service life of production tubing used in artificial lift systems, ONGC intends to develop indigenous sources for **Polymer In-lined Tubing** and **Polymer In-lining Services** for onshore assets.

In this purpose, ONGC has introduced a Development Order Policy (available at <https://tenders.ongc.co.in>), which provides a dedicated mechanism for development of indigenous products and services outside the regular tendering process.

Accordingly, ONGC invites Expression of Interest (EOI) from eligible domestic manufacturers and service providers having the requisite capabilities for development of Polymer In-lined Tubing and/or Polymer In-lining Services. The EOIs received shall be evaluated for consideration under ONGC's Development Order Policy.

2. Objective

The objective of this EOI is to identify competent domestic manufacturers and service providers capable of developing and supplying/providing:

- Polymer In-lined Tubing; and/or
- Polymer In-lining Services for ONGC-supplied tubulars and accessories.

The identified capabilities may subsequently be considered for development and field evaluation under ONGC's Development Order process, with a view to establishing reliable indigenous sources for future procurement.

3. Scope of Development

Interested parties may submit their proposals under either or both of the following categories:

A. Manufacture & supply of Polymer In-lined Tubing

Manufacture and supply of polymer in-lined tubing conforming to ONGC's technical specifications.

B. Polymer In-lining Services

Provision of in-lining services for ONGC-supplied tubulars and accessories, including:

- Internal cleaning and surface preparation of tubulars.
- Installation of seamless polymer liner.
- End termination/flaring and/or moulding, as applicable.
- QA/QC testing of lined tubulars.
- Delivery of finished polymer-lined tubulars.

The lined tubulars shall be suitable for operation in SRP and PCP wells. with the objective of enhancing tubing service life by minimizing corrosion, abrasion and friction.

4. Broad Technical Requirements

The proposed product/service should broadly meet the following requirements:

- Suitable for 2-7/8" to 3-1/2" production tubing.
- Seamless high-performance thermoplastic liner.
- Continuous operating temperature up to 120°C.
- Differential pressure rating of at least 5000 psi.
- Resistance to crude oil, produced water, acids, hydrocarbons and production chemicals.
- Mechanical bonding of liner throughout the tubing length.
- Compliance with applicable API standards.
- Successful completion of QA/QC tests including drift, hydrostatic, adhesion, thermal cycling, abrasion and spark testing.
- Capability to provide warranty and field performance support.

Detailed technical specifications and testing requirements are provided at Annexure 1.

5. Eligibility

Interested domestic manufacturers/service providers should possess the following:

- Manufacturing/in-lining facilities and infrastructure.
 - Quality management systems.
 - Testing and inspection facilities.
 - Technical expertise and manpower.
 - Experience/capability relevant to polymer-lined tubulars or similar oilfield applications.
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6. Information to be Submitted

Interested firms shall submit the following information/ documents:

- a. Letter expressing interest in participating in the EOI.
 - b. Company profile, including details of ownership and principal business activities.
 - c. Details of manufacturing/in-lining facilities and infrastructure.
 - d. Technical literature and product specifications.
 - e. Details of proposed polymer material and lining technology.
 - f. Quality Assurance Plan (QAP) and details of available testing facilities.
 - g. Details of similar supplies/services executed, if any.
 - h. Customer references and performance certificates, if available.
 - i. Details of relevant certifications/approvals, if any.
 - j. Any other technical information considered relevant to demonstrate the firm's capability.
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7. Submission of EOI

- Last date of submission: 17 September 2026
- Interested vendors shall send the EOI with requisite documents to:

Head, INDEG

Oil and Natural Gas Corporation Limited
Deendayal Urja Bhawan
5-A, Nelson Mandela Marg
Vasant Kunj
New Delhi – 110070

Email:

sanghi_sanjiv@ongc.co.in

mishra_sb@ongc.co.in

8. General

- The information submitted by the participating firms shall be used by ONGC for evaluation of their capabilities and for consideration under the Development Order process.
- ONGC may seek additional information/clarifications from the participating firms, if required, during the evaluation process.
- Participation in this EOI shall not confer any right on the applicant for placement of a Development Order or any future procurement order.

Scope and Technical Specifications for In-Lined Tubing (Development Order)

1. Objective

The in-lined tubing shall be used for completion of wells operating on Sucker Rod Pumps (SRP) and Progressive Cavity Pumps (PCP) to enhance tubing life by reducing abrasion, corrosion and friction between rod and tubing. The tubing shall be internally lined with a seamless thermoplastic liner and couplings shall be protected against corrosion in the J-area.

- **Manufacture & Supply of Polymer In-lined Tubing** (finished tubulars manufactured and supplied by vendor).
- **Provision of In-lining Services** for ONGC-supplied tubulars (vendor performs lining operations on ONGC-provided base pipe).

2. Scope of Service

A. Manufacture & Supply

- Vendor shall manufacture and supply polymer in-lined tubing conforming to ONGC specifications.
- Finished tubulars shall be delivered ready for field use, with all QA/QC certifications.

B. In-lining Services

The contractor shall receive bare tubing from ONGC in batches, perform internal cleaning/surface preparation, install the seamless polymer liner, perform end-termination (flaring/molding), conduct all QA/QC testing, and deliver the finished product.

3. Tubing Pipe Specifications.

2-7/8" EUE Tubing, 6.5 ppf, L-80, N-80 or P-110 grade conforming to API 5CT latest edition, PSL-2. Supplied tubing shall be free from dents, corrosion, pitting and mechanical damage.

- For **Manufacture & Supply**, vendor shall source and supply base pipe.
- For **In-lining Services**, ONGC shall supply base pipe.

4. Polymer Liner Specifications

- The liner material shall belong to a high-performance, wear-resistant thermoplastic polymer family such as **Modified Polyamide (Nylon-11 / Nylon-12)**, **Polyvinylidene Fluoride (PVDF)**, **High-Temperature HDPE**, or an equivalent proven oilfield-grade polymer. Bidders offering any alternative proprietary or trademarked polymer formulation must explicitly declare its base chemical family.
- The bidder must submit authentic Performance Certificates documenting a proven field track record. The material must have been successfully deployed by global E&P operators in

similar downhole environments

- Polymer grade and manufacturer shall be identified.
- Tensile Strength: Minimum 40 MPa.
- Elongation at Break: Minimum 150%.
- Water Absorption: Maximum 1%.
- Seamless, continuously extruded liner free from longitudinal joints.
- Minimum drift ID: 2.0 inch.
- Minimum liner thickness: 3 mm.

5. Bonding Requirements

- Liner shall be mechanically bonded throughout the entire pipe length.
- No movement, wrinkling, blistering, separation or delamination shall occur.
- Bond integrity shall be verified through representative testing.

6. Temperature and Pressure Ratings

- Continuous operating temperature: Minimum 120°C.
- Internal differential pressure resistance: Minimum 5000 psi.

7. Chemical Compatibility

The liner shall be resistant to crude oil, produced water, xylene, diesel, methanol, HCl (15%), HF (3%), scale inhibitors, corrosion inhibitors, biocides, EGMB, CO₂ saturated brine, aromatic hydrocarbons, completion fluids and workover fluids.

Acceptance Criteria:

- No blistering
- No cracking
- No delamination

8. Drift Testing

- 100% drift testing shall be conducted after liner installation using API drift mandrel.
- Drift diameter shall be certified by QAD/Third Party Inspection (TPI) agency.

9. Hydrostatic Testing

- Each joint shall be hydrostatically tested individually.
- Test pressure shall not exceed 80% of the supplied tubing body yield pressure.
- Test duration shall be minimum 30 minutes.
- No leakage, pressure drop or liner damage shall be permitted. Hydrostatic testing should be performed after thermal cycling test to identify any debonding or liner shrinkage.

10. Quality Assurance Tests

- Ultrasonic wall thickness verification.
- Adhesion/Bond strength testing.
- Thermal cycling test (Ambient → 120°C → Ambient, minimum 10 cycles).
- Abrasion resistance testing.

- Impact resistance testing.
- Spark/Holiday testing.
- Visual inspection of 100% joints.

11. Warranty

In case of any liner failure, debonding, cracking, manufacturing defects and premature wear is observed on surface prior to well completion, the failed tubular shall be replaced at no additional cost.

12. Performance Evaluation

Being a Development Order, suitability of the contractor's services for future regular procurement shall be evaluated based on its operational performance. The system must achieve a minimum of twelve (12) months of continuous, trouble-free operation in selected SRP/PCP wells of onshore Assets.

To be deemed successful for future procurement qualification, the lined tubing must meet the following parameters during and at the end of the 12-month trial:

- **Zero Liner-Related Failures:** No well interventions, workovers, or production losses caused by liner collapse, delamination, tearing, blistering, pin-end seal leakage, or any type of material failure.
- **Mechanical Integrity:** If a well is pulled for reasons not related to liner failure within 12 months (e.g., pump failure, rod parting), a visual and drift inspection of the pulled tubing must confirm no major internal scoring, diameter restriction, or bare steel exposure.