

संदर्भ सं. /Ref. No.:EOI/GPHY/2025-161

दिनांक/ Date: 30/04/2025

Description of works:

Expression of Interest (EOI) for “Seismic Data Archival, Retrieval, Copying and Transcription Software.”

Location; In the Geophysics Department, Oil India Limited, Duliajan, Assam

1. PREAMBLE:

OIL INDIA LIMITED (OIL), a “Maharatna” Category, Government of India Enterprise, is a premier Oil Company engaged in Exploration, Production and Transportation of crude oil & natural gas as well as production of LPG with its Field Headquarters at Duliajan, Assam. OIL has major share of its E&P activities in Assam & Arunachal Pradesh besides activities in rest of India and abroad.

As part of its strategy to strengthen its position as a leading upstream operator, OIL consistently engages in geophysical data acquisition, including 2D/3D seismic, passive seismic, and potential field methods, along with exploratory and development drilling in its operated areas. The Geophysics Department at OIL recognizes the critical importance of effectively managing seismic data, particularly given the large volume and age of datasets accumulated over more than four decades. To ensure the security, confidentiality, and easy accessibility of these valuable data assets, it has become essential to adopt a systematic and robust approach to geophysical data management, including tasks such as archiving, retrieval, duplication, and transcription.

2. OBJECTIVE

The success of any oil and natural gas company in exploration and production depends on its ability to accurately locate, retrieve, and process seismic data in a timely manner. Oil India Limited (OIL) invites Expressions of Interest (EOI) from reputed and experienced companies for the supply, installation, and commissioning of Seismic Data Archival, Retrieval, Copying & Transcription Software.

The proposed software should efficiently manage, archive, retrieve, copy, and transcribe seismic and navigation datasets while ensuring compliance with industry standards. The objective of this EOI is to identify potential software solutions that offer an integrated, scalable, and secure platform for seismic data archival, retrieval, copying, and transcription-ensuring data security, integrity, accessibility, and efficient processing.

3. SCOPE OF WORK

The scope of work includes but is not limited to the following:

- **User-friendly data management:** The software should facilitate seismic data archival and retrieval without requiring specialized knowledge of data formats.
- **Multi-format compatibility:** Seamless handling of industry-standard data formats, including SEG-Y and SEG-D, ensuring interoperability.

- **SEGY & SEGD Verification:** The software should verify the contents of SEG Y and SEGD (all version 0.0 to latest) tape or disk files, generating detailed listings from tape and trace headers with user-defined control over the displayed information.
- **Seismic Data Copying & Transcription:** The software should be capable of copying and transcribing seismic data in various formats (SEGD, SEG Y all version) between tape-to-disk, disk-to-tape, and tape-to-tape ensuring seamless data transfer with preservation of headers, metadata, format integrity throughout the process along with secure storage.
- **Data Transcription and Copying (One-to-Many & Many-to-One):** The software should support one-to-many and many-to-one data transcription and copying operations. It must allow a single input (file or media) to be split into multiple outputs, as well as enable merging of multiple inputs into a single output. All operations should maintain data integrity, header consistency, and adherence to SEG Y/SEGD (all version) format specifications.
- **Flexible input and output support:** Compatibility with various storage media, such as 9-track tape, 3480, 3490E, 3590, 3592, LTO Ultrium, DTF, DLT, SDLT, 8mm, 4mm, CD, DVD, and USB disk tape drives for long-term seismic data preservation and enhanced error recovery.
- **Seismic Data Retrieval & Search:** The software should efficiently retrieve data from tape media, support advanced search functionality, and allow selective file retrieval (SEGD, SEG Y) based on user-defined parameters such as file range and metadata.
- **Parallel Processing Capability:** The software should support simultaneous operations, enabling data retrieval from one tape, verification of another, and concurrent transcription of seismic data from multiple tapes using multiple tape drives. This ensures efficient processing, optimal resource utilization, and reduced operational time.
- **High-speed data transfer:** Optimized copy speeds determined by hardware capabilities, ensuring rapid data migration and storage.
- **Data validation and integrity checks:** Tools to audit, assess, and ensure the integrity of archived data, including reporting of missing files, traces, and parity errors.
- **Advanced visualization tools:** On-screen plotting of selected seismic records, traces, navigation lines, and time slices, with the ability to save visualizations as TIFF or BMP files.
- **Automated report generation:** Creation of detailed logs and summaries of data transcriptions, including copy logs, index files, and audit trails for operational transparency.
- **Support for data encapsulation formats:** Ability to encapsulate and de-encapsulate industry-standard formats such as RODE, BIN and TAR for efficient storage and transfer.
- **Error handling and recovery mechanisms:** Enhanced error detection and recovery features to minimize data loss during archival and retrieval.
- **Scalability and integration:** The software should be scalable to accommodate increasing data volumes and integrate seamlessly with existing data management systems.
- **Operating System Compatibility:** The software should be capable of running on Windows 7, Windows 10, and later versions of the Windows operating system.

4. SUBMISSION REQUIREMENTS

Interested companies are requested to submit the following documents:

- Company profile with details of similar projects executed.
- Technical specifications and capabilities of the proposed software solution.
- Details of previous experience with seismic data archival and retrieval systems.
- Documents/brochures showcasing their software capabilities.
- All documents/brochures submitted along with the EOI must be self-certified and should be clear and legible.
- The EOI is liable to be ignored in case of submission of any misleading/false representation. OIL reserves the right to ignore any or all EOIs, without assigning any reason thereof.
- The service providers who wish to present their solution capabilities may do so through VC/physical mode upon placing request and obtaining confirmation from OIL.

5. ADDITIONAL SUBMISSION REQUIREMENTS

- Vendors must clearly specify the type of licensing model proposed for the software:
 - **Annual Subscription**, or
 - **Perpetual License**The licensing terms should include renewal conditions, and upgrade policies
- Vendors must submit a **budgetary quotation** with a detailed, item-wise cost breakdown covering:
 - Software supply
 - Installation and commissioning
 - Training
- Vendors must also provide a detailed proposal for a **Three-Year Annual Maintenance Contract (AMC)**, applicable **post-warranty**. The AMC:
 - Must include support services, bug fixes, and upgrades (if applicable)
 - Should clearly mention the **pricing** for all three years
 - Must outline service levels, response time, and support mechanisms

6. SUBMISSION OF EOI

Interested service providers are invited to submit their EOI and any related queries at our email ID:

hgp_office@oilindia.in within **15.05.2025 up to 11.00 Hrs (IST)**, followed by hard copies of the same through courier/post superscribing "EOI No. EOI/for **“SEISMIC DATA ARCHIVAL AND RETRIEVAL SOFTWARE”** at the following address:

**CGM-GEOPHYSICS
OIL INDIA LIMITED
GEOPHYSICS DEPARTMENT
P.O. DULIAJAN-786602
DIST. DIBRUGARH, ASSAM, INDIA**

- The EOI(s) along with the relevant documents must be submitted in a comprehensive single file (.zip file).
- OIL reserves the right to accept or reject any/all EOI(s) submitted by parties and cancel the process at any time without any liability and assigning any reason thereof.
- This EOI is for information-gathering purposes only and should not be construed as a commitment by OIL to engage in any business with the parties expressing interest.

End of EOI Document