

The **Trans Adriatic Pipeline (TAP) AG** is a joint venture company established with the purpose of planning, developing and building the TAP natural gas pipeline. TAP's shareholding is comprised of BP (20%), SNAM (20%), SOCAR (20%), Fluxys (19%), Enagás (16%) and Axpo (5%).

#### **Geologist / Geohazard Management Specialist**

The Geohazard Management Specialist shall be the Operations Technical Authority responsible for the timely development, co-ordination and management of geohazard monitoring and surveillance to pro-actively and reactively manage risk exposure for the TAP pipeline and associated facilities. He will ensure processes and systems are established and will report and manage latent and emerging geohazards, providing technical guidance and direction.

#### Responsibilities:

- Define and implement a targeted, risk-based approach for the development of geohazard monitoring plans, consisting of specific plans for high risk geohazards; generic plans for medium risk geohazards and enhanced work instructions for routine ROW patrolling and surveillance to capture lower risk geohazards
- Ensure that synergies with ROW/Operational routine patrolling and surveillance are identified and leveraged.
- Define trigger mechanisms for reactive surveys responding to natural events such as flooding, heavy rainfall, heavy snowfall/melt, seismic activity. Identify reliable sources for triggers such as national and international data sources for weather or seismic events. Ensure that robust processes are in place and that resources are identified and available to respond in a timely manner
- Define, develop and implement regular high-resolution satellite/aerial/drone image acquisition for SME desktop review of geohazards to supplement planned physical site inspections.
- Develop and implement Depth of Cover Inspections and SME field assessment for high risk river sites.
- Review geohazard surveillance/monitoring reports and specialist studies ensuring that they are complete, accurate and fit for purpose.
- Develop, populate and maintain the Geohazard Risk Register; accounting for any changes in routing and implementation (or degradation) of mitigation measures
- Develop and maintain the Geohazard Monitoring and Surveillance Manual
- Actively participate in planned RoW and geohazard site inspections.
- Ensure that geohazard information and risk is recorded and accurately reflected in the company Pipeline Integrity Management System (PIMS)
- Ensure that geohazard inspection and surveillance outcomes are recorded in CMMS, GIS and the Document Management System. Define data capture protocols and support remote workforce management initiatives
- Act as the Contract focal Point for geohazard management Service Providers including the provision of technical experts, SMEs and specialist equipment. Carry out audits on the quality of work undertaken.
- Provide technical oversight and direction for remedial or intervention works to mitigate active geohazards including the installation of fixed monitoring such as extensometers, piezometers, inclinometers, surface gauges, vibrating wire gauges and reflectors for InSAR
- Identify and manage remediation of existing, and installation of new, protective measures for emerging geohazards including riprap, gabions, jute matting, bank reinforcement.
- Identify requirement for and manage the design, engineering and installation of any new major protection measure such as piling, drainage, shotcreting. river bank reinforcement, planting with the support of internal and external technical discipline experts



- Participate and/or lead in geohazard site failure and/or root causal investigations relating to emerging or existing geohazards that threaten the RoW terrain stability.
- Provide oversight to facility specific geodetic monitoring of settlement using monitoring and reference benchmarks. Review contract reports of routine measurements ensuring that interpretation is accurate and any increases in risk to the operating plant is clearly articulated.
- Collaborate with Pipeline Technical Authorities in analysing outputs from mapping pigs (x, y, z) and from stress tomography surveys which may indicate pipeline movement to determine if geohazards are active.
- Provide support to the pipeline Technical Authorities in the identification and assessment of offshore geohazards including landslides, karst, liquefaction, scour, spanning
- Support the environmental teams in management of soil erosion and the restitution of the RoW post-construction
- Maintain oversight of industry developments in remote-sensing data acquisition technologies and where technically and commercially viable integrate these technologies into the geohazard surveillance strategy and plans
- Collaborate with key stakeholders, namely in-country teams, maintenance and Project functions, ICT, and nominated Contractors and SMEs.
- As focal point for all geohazard issues; disseminate lessons learned, knowledge and best practice from industry sources. Keep up to date with industry developments, emerging new technologies and opportunities to improve knowledge

# **Main Requirements:**

#### **Professioneal Experience:**

10 years' experience in geotechnical related roles

5 years' experience in managing geohazards for oil and gas pipelines

Extensive experience with risk management of landslides, river crossings, active faults, liquefaction, seismic events

## **Project Experience:**

Recent and relevant experience in gas pipeline projects, involving construction and civil stabilisation methods

Good understanding of pipeline construction methods, terrain challenges, survey techniques, site/field investigations,

Good appreciation of interface management and scheduling

Good knowledge of basic business principles (finance, commercial etc)

#### **Expert know-how:**

Extensive experience in management of geohazards

Detailed knowledge in at least one key geohazard related discipline - geology, geomechanics, geotechnical engineering, geophysics

Sound knowledge of wider geohazard related disciplines

Good knowledge of Civil Engineering Principles

Good command of mathematics and numerical modelling,

Demonstrable understanding of expectation of contribution at Principal Engineer or Technical Authority Level

Pipeline engineering and management experience

Ability to manage multi-disciplinary input

### Technologies:

GIS Systems
SAR applications
Instrumentation
Geohazard Modelling Software
Microsoft software
Document Management System