

Pipeline Risk Detection at Scale with Satellite Data and AI

Product Overview

SurfaceScout is a pipeline monitoring solution that helps detect external threats such as **third-party activities and natural hazards** before they lead to damage, leaks, or costly disruptions. Powered by satellite imagery and AI, it delivers 100% ROW visibility, faster lead times, and highly precise insights to enable proactive risk mitigation.

In real world deployments, SurfaceScout has detected **up to 73% more external threats** than traditional methods, **reducing annual risk exposure by up to €5 million** per 1,000 kilometers of pipeline.



How Pipeline Operators Use SurfaceScout

Third-Party Risk Mitigation

Identify third-party threats such as construction or excavation, which often go undetected between patrols and are a leading cause of pipeline incidents.

Natural Hazard Monitoring

Monitor subtle ground disturbances that are hard to detect visually but can compromise depth of cover and elevate pipeline exposure risk.

High-Consequence Area Surveillance

Maintain continuous visibility across HCAs, where early threat detection can prevent escalation and costly interventions like pressure reduction.

Illicit Activity Detection

Identify patterns that may indicate illegal activity such as theft or tampering, enabling early intervention to reduce safety risks and prevent loss of containment.

Field Optimization

Eliminate manual triage, reduce unnecessary field deployments, and improve overall resource efficiency with high-precision, low-noise threat detection.

Regulatory Compliance

Maintain a defensible, timestamped record of right-of-way activity to simplify audits and support evolving regulatory requirements.

Positive Business Outcomes

SurfaceScout delivers measurable impact across **safety, cost efficiency, and compliance**. Earlier threat detection and full network coverage eliminate blind spots, preventing incidents and reducing risk exposure. Its high-precision analytics minimize false alarms, cutting unnecessary field deployments and focusing resources where they matter most. Unified, end-to-end workflows not only speed up response and improve coordination, but also generate audit-ready records that strengthen compliance posture and simplify reporting.

Key Features and Capabilities

	Full-Corridor Monitoring	Monitors 100% of the pipeline corridor including urban, remote, and restricted zones
	High Precision Analytics	Achieves +90% precision and +80% relevance, enabling prioritization of real, high-risk threats
	Rapid Insight Delivery	Delivers actionable risk intelligence within 12–24 hours from image capture, enabling faster, proactive response
	Historical Change Analysis	Identifies risks up to 2 weeks in advance using historical imagery and ML-powered change detection
	Smart Case Management	Automatically clusters related insights to reduce alert fatigue and improve task focus
	Closed-Loop Workflows	Tracks every stage—from detection to field inspection—all in one app with full mobile support
	Digital Audit Trails	Maintains full audit trail with user logs, timestamps, and change history for compliance
	Flexible Data Delivery	Supports CSV, GeoJSON, shapefile; REST API for GIS/ERP integration

Let's Talk

See how SurfaceScout can transform your pipeline monitoring program. Visit <https://www.live-eo.com/> or scan the QR code to book a demo.

