Detailed, accurate and up-to-date information about the real world environment is key to the efficient management of assets and resources across many different industries. Our solutions deliver geospatial knowledge that enables end-users to dramatically improve business processes in transportation, electric utilities, oil & gas, infrastructure development and property management.

**GLOBAL SOLUTIONS FROM FUGRO**

Fugro helps clients realise operational efficiencies and streamline investments by delivering accurate, industry specific knowledge of assets and infrastructure through innovative geospatial solutions.

We deliver a 3D virtual model of the real world, combined with visualisation, analysis and reporting tools, and expertise. This facilitates assessment and monitoring of assets in the field. Our industry specific solutions enable end-users to unify business processes to reduce costs while improving operational results, safety and customer service.

Our solutions include:

- Roames asset management services for power companies
- RailData infrastructure information for rail professionals
- Engineering and management solutions for pipelines and oil & gas infrastructure
- Geomonitoring and dimensional control for infrastructure development
- Land & property management solutions for tax assessment, insurance and permitting
- Satellite mapping, terrestrial and airborne surveys to develop geographical information databases

Installing Fugro’s unique RILA system, used to measure absolute and relative track geometry at speeds up to 100 mph.

Carrying out surveys on oil and gas installations.
POWER TRANSMISSION & DISTRIBUTION
Fugro observes, models and simulates electrical networks to reduce risk and costs.

Through Fugro’s ‘Roames’ service, power companies can remotely investigate and monitor their network condition and performance, moving to proactive asset management and disaster recovery.

Roames tracks and identifies network defects where infrastructure and customer load is at risk, streamlines maintenance and reduces costs by avoiding and deferring ground line inspection, eliminating millions of kilometres in vehicle travel.

Roames is successfully used for:
- Network optimisation studies
- Vegetation management
- Asset condition analysis
- Conductor clearance
- Capacity studies
- Third-party infrastructure encroachment
- Performance monitoring
- Disaster management responses

ROAD & RAILWAY NETWORKS
We help clients design, build, upgrade and maintain road and rail infrastructure.

Whatever the scale of project or level of detail, we offer the information and insight to engineer and maintain assets improving cost-effectiveness and safety.

By integrating a unique suite of innovative technologies, Fugro provides more accurate, reliable and comprehensive data with less disruption to transportation networks.

Our services include:
- Absolute track position determination, horizontal and vertical geometry using regular trains
- Train-based, accurate georeferenced (XYZ) video recording
- Track, overhead line and signalling, condition surveys and monitoring
- Route-planning, 3D visualisation and detailed surveys of proposed routes
- Road surface condition assessments
- Underground utilities detection and mapping

LAND & PROPERTY MANAGEMENT
Fugro offers geospatial imagery and information in one comprehensive package.

This allows land and property managers to quickly and efficiently manage assets, monitor change, verify compliance, and assess risk.

Employing our highly accurate PanoramiX solution, with easy to interpret reporting and visualisation tools, allows asset managers, city planners, engineers and assessors to perform comprehensive site assessments, structure analysis and mass property appraisal.

Our web-based land management solution includes:
- Essential 360º parcel information for first responders and property assessors
- Environmental resources assessment to manage coastal structures, erosion, flooding and wetlands identification
- Automated detection and analysis of land use and land cover changes
OIL & GAS INFRASTRUCTURE
We offer life-of-field geospatial expertise and knowledge for oil & gas infrastructure, including LNG plants, brownfield sites and associated pipeworks.

Our client-driven solutions support decision making for engineers and plant managers alike, helping reduce down time and operational costs across the entire project lifecycle, while improving safety and efficiency.

Our services include:

- Dimensional control of structures and components to ensure first-time fit of all build components
- Accurate 3D modelling of oil tanks and LNG plants for dimensional design surveys, monitoring and asset management
- Geomonitoring of ground stability to assess risks related to field development
- Web-based SITE-SPOT service enabling plant managers to access up-to-date asset information to streamline day-to-day operations

PIPES & WELLHEADS
We combine industry expertise and information management tools to support planning, design, construction and maintenance of water and oil & gas pipelines.

Our solutions provide engineers and asset managers with essential information to meet the demands and rigorous schedule of onshore pipeline construction and operations.

Our services include:

- Pipeline route planning and surveying for feasibility, engineering and design studies
- Right-of-way staking, pipe tally, ecological assessments, regulatory services and as-built surveys for pipeline construction
- HCA identification and class location analysis
- Site-specific restoration plans and water well monitoring for post-construction work
- Monitoring of ground deformations and third-party interference to assess operational risks
- Pipeline information management system to improve maintenance and control
Fugro’s solutions are underpinned by a rich foundation in spatial data services that combine multi-platform sensors with cutting edge data processing and cloud computing technology.

Our services include:

- Satellite remote sensing and monitoring
- Airborne sensing and mapping
- Terrestrial surveying, geodesy and advanced GNSS processing
- 3D modelling and visualisation
- Cloud-based data management solutions

At Fugro, we use our expertise and industry specific knowledge to deliver geospatial intelligence on the changing environment. Bringing the real world onto your desktop, we turn spatial data into actionable information to build smarter business processes that make better use of global resources.