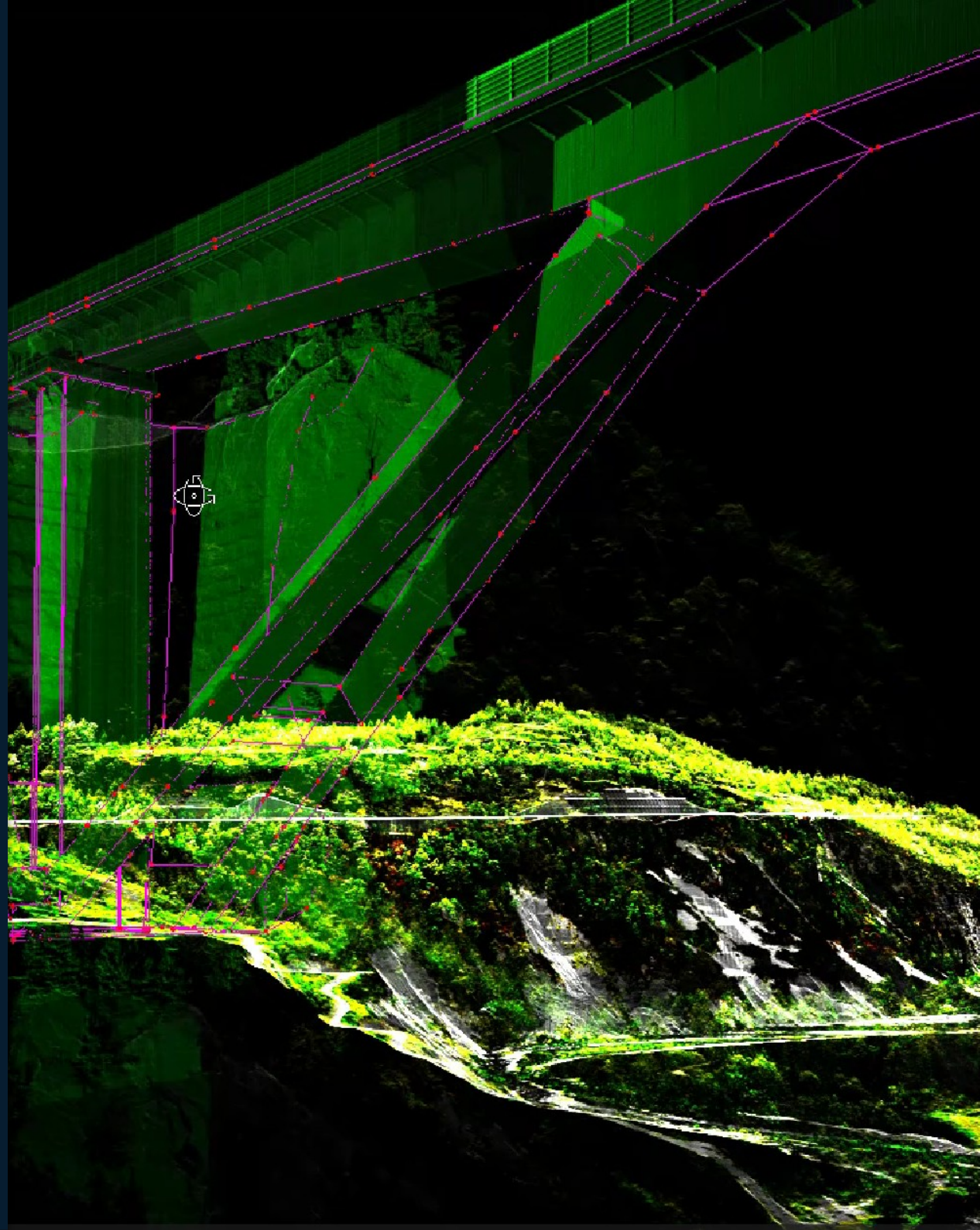
GLOBAL SERVICE

ADVANCED SURVEYING, GEOMATICS, MONITORING & BIM

for complex infrastructure

Corporate Brochure 2026

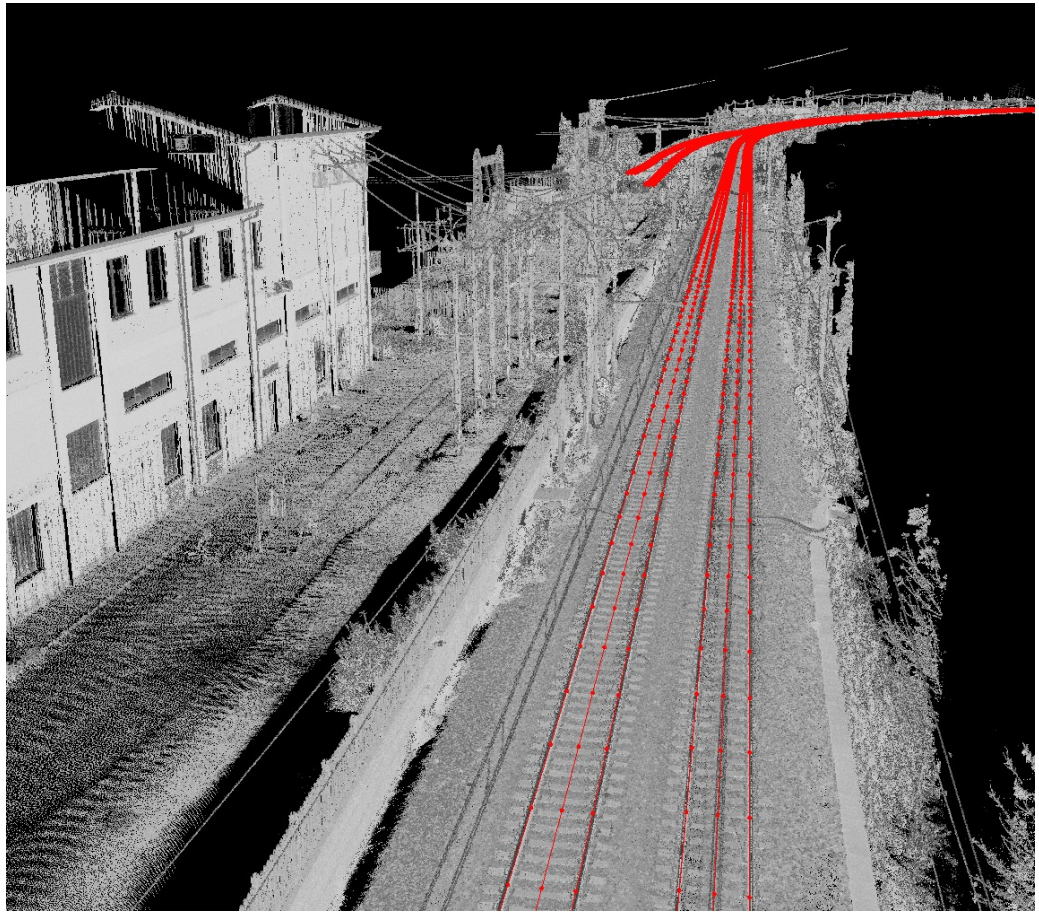
ROME · ITALY



COMPANY

Engineering the real world

Field data, geometry and monitoring for complex infrastructure.



Established in 2001, Global Service delivers specialist surveying, geospatial acquisition, infrastructure monitoring and BIM-ready digital models for complex transport and civil works.

Field teams combine GNSS control, railway measurement, LiDAR, laser scanning, mobile mapping, wireless monitoring and digital modelling.

The objective is simple: reliable engineering data for design, construction, verification and asset management.

2001	MULTI-TECH	FIELD → DATA
Established	Integrated workflows	Engineering-ready outputs

CAPABILITIES

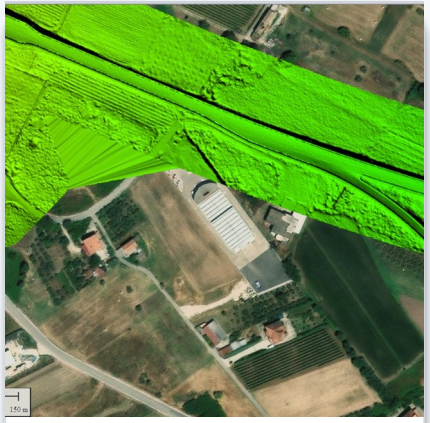
Integrated technical capabilities

A single delivery chain from field acquisition to engineering-ready data.



RAILWAY SURVEYING

Absolute track reference, GEDO surveys, geometry and tamping support.



REALITY CAPTURE

Terrestrial and mobile scanning, point clouds and as-built data.



INTEGRATED MONITORING

Wireless sensors, GNSS, levelling, laser scanning and InSAR.



BIM / SCAN-TO-BIM

Measured reality transformed into coordinated digital models.

RAILWAY

Railway surveying & track geometry

Specialist measurement workflows for track construction, realignment and verification.



Core capabilities

- Control networks and absolute track reference
- Trimble GEDO GX50 track surveys
- Gauge, cant, alignment and track geometry
- Railway asset and clearance surveys
- Tunnel sections and gabarit verification
- Tamping-support correction data
- Post-tamping and as-built verification

Track geometry and surrounding infrastructure are delivered within a consistent reference framework.

From control network to tamping support

A traceable workflow connecting survey control, track measurement and correction data.



01 **CONTROL NETWORK**

02 **ABSOLUTE TRACK REFERENCE**

03 **GEDO SURVEY**

04 **GEOMETRY ANALYSIS**

05 **TAMPING CORRECTION**

06 **VERIFICATION**

Typical outputs

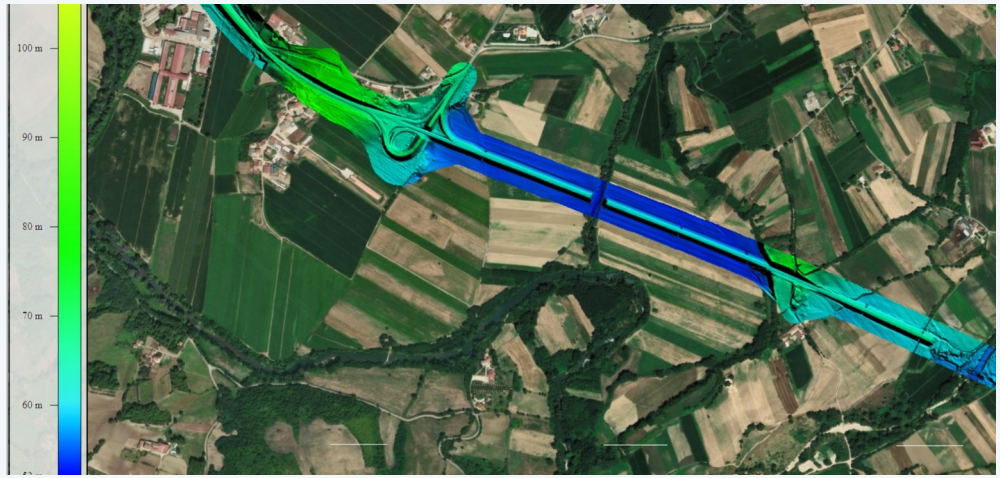
- Track geometry datasets
- Correction data for tamping operations
- Clearance / section checks
- Railway asset mapping
- As-built documentation

LIDAR

Airborne & UAV LiDAR mapping

Acquisition strategies scaled to corridor length, terrain, access and engineering requirements.





UAV LiDAR

Flexible deployment for infrastructure corridors, slopes, construction areas and detailed terrain mapping.

Airborne platforms

For long corridors and large territories, campaigns can be planned with specialist helicopter or fixed-wing platforms when project scale requires it.

Deliverables

- Classified point clouds
- DTM / DSM
- Orthophotos
- Contours and sections
- Engineering-ready corridor mapping

MONITORING

Integrated infrastructure monitoring

Multiple measurement layers, one controlled engineering dataset.





MULTI-LAYER MONITORING

InSAR
Wide-area deformation screening

IoT / wireless sensors
Tilt · vibration · displacement

Surveying
GNSS · robotic total stations · levelling

Laser scanning
Periodic 3D geometry comparison

INTEGRATED DATA

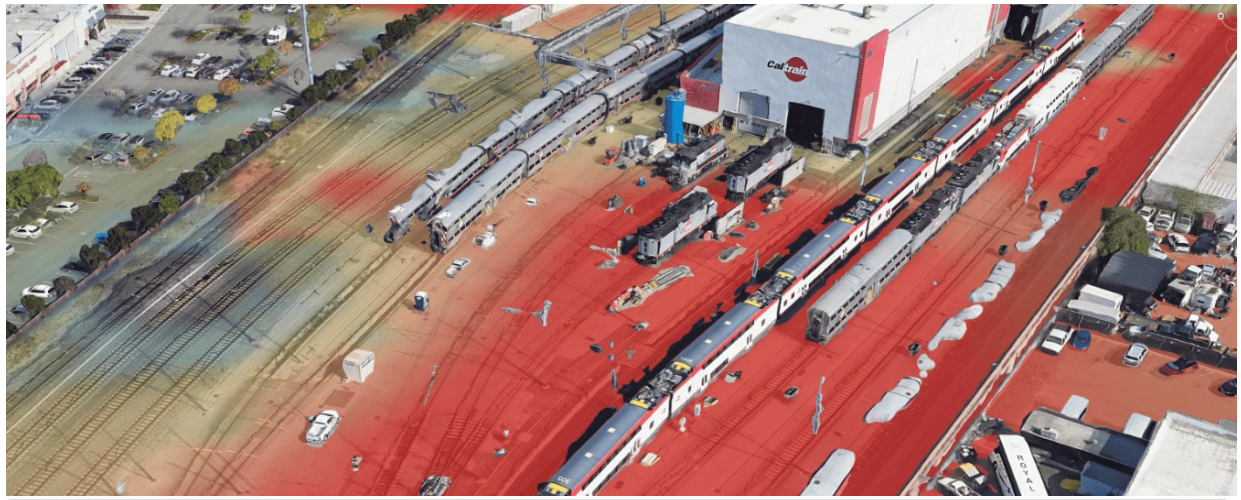
TRENDS THRESHOLDS REPORTING

Typical applications bridges · viaducts · railways · tunnels · buildings · slopes

MONITORING

InSAR as the wide-area layer

Historical displacement analysis and corridor-scale screening integrated with in-situ measurements.





Wide-area screening layer

InSAR is used to identify displacement trends and areas requiring closer engineering attention across large territories and infrastructure corridors.

What it adds

- Historical displacement analysis
- Persistent Scatterers and time series
- Subsidence and landslide screening
- Corridor-scale prioritisation

Integrated validation

GNSS · sensors · levelling · laser scanning

REALITY CAPTURE

3D laser scanning & mobile mapping

High-density reality capture for tunnels, railways, roads, bridges and complex built environments.



RIEGL terrestrial scanning for bridge and structural geometry.

RIEGL VZ-600i / VZ-400i

Acquisition workflows are selected around geometry, access, safety constraints and the required engineering outputs.

Engineering outputs

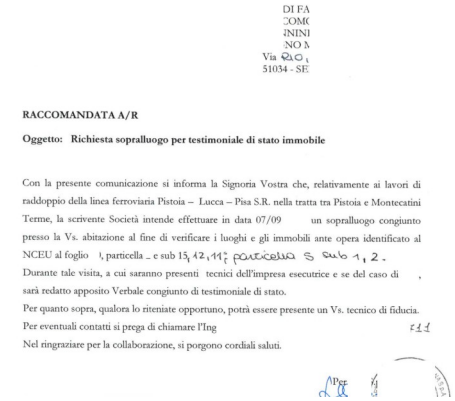
- Registered point clouds
- Sections, profiles, plans and elevations
- CAD / GIS datasets
- Meshes and 3D models
- As-built and BIM-ready data

Mobile mapping configuration for rapid corridor acquisition.



Pre-construction condition surveys

Objective, traceable documentation of existing buildings and adjacent assets before excavation, tunnelling and major construction works begin.



RACCOMANDATA A/R

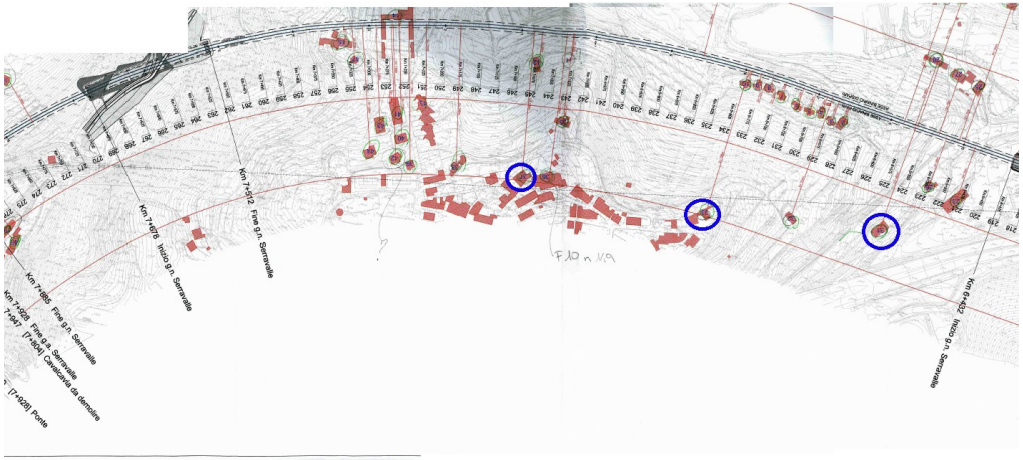
Oggetto: Richiesta sopralluogo per testimoniale di stato immobile

Con la presente comunicazione si informa la Signoria Vostra che, relativamente ai lavori di raddoppio della linea ferroviaria Pistoia – Lucca – Pisa S.R. nella tratta tra Pistoia e Montecatini Terme, la scrivente Società intende effettuare in data 07/09 un sopralluogo congiunto presso la Vs. abitazione al fine di verificare i luoghi e gli immobili ante opera identificato al NCEU al foglio , particella _ e sub 15, 42, 11, particella 5 sub 1, 2.
Durante tale visita, a cui saranno presenti tecnici dell'impresa esecutrice e se del caso di , sarà redatto apposito Verbale congiunto di testimoniale di stato.
Per quanto sopra, qualora lo riteniate opportuno, potrà essere presente un Vs. tecnico di fiducia.
Per eventuali contatti si prega di chiamare l'Ing
Nel ringraziare per la collaborazione, si porgono cordiali saluti.

Owner notification / appointment



Structured dossier delivery



Property mapping and asset identification along the corridor

What we do

- Property-by-property existing-condition inspections
- Photographic documentation and visible-defect mapping
- Building, road and adjacent-asset condition recording
- Coordination of appointments, access and verbal records

Typical deliverables

- TDS dossiers and archive-ready binders
- Location plans and asset references
- Condition sheets, photos and descriptive reports
- Baseline documentation supporting dispute prevention

Railways · tunnels · roadworks · urban sites

DIGITAL DELIVERY

BIM & Scan-to-BIM

Measured reality transformed into structured digital models.



Reality Capture → Point Cloud → Engineering Data → BIM

BIM models are developed from controlled field data for existing-condition modelling, as-built documentation and multidisciplinary coordination.

- Architectural / structural / MEP BIM
- Infrastructure BIM
- Federated model coordination
- Digital Twin readiness

From reality to coordinated model

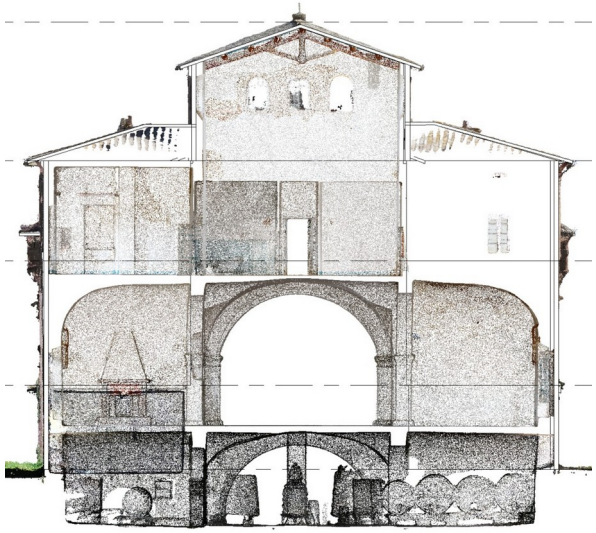
A visual chain preserving the relationship between the physical asset and its digital representation.



01 **FIELD / REALITY**



02 **CONTROLLED POINT CLOUD**



03 **BIM MODEL**

Control networks and project coordinates remain the geometric backbone of the digital model.

SURVEYING

Integrated engineering surveying

Foundational geospatial support from site control to final handover.



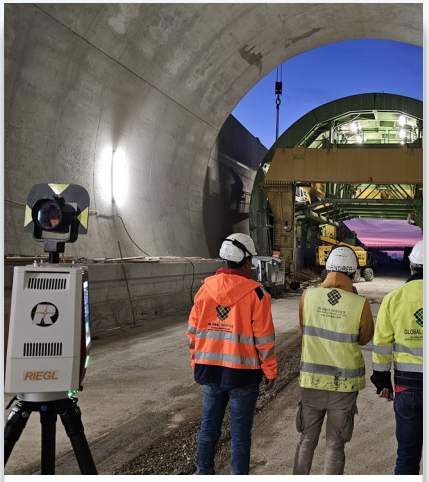
GNSS & CONTROL NETWORKS

Primary reference frameworks and site control.



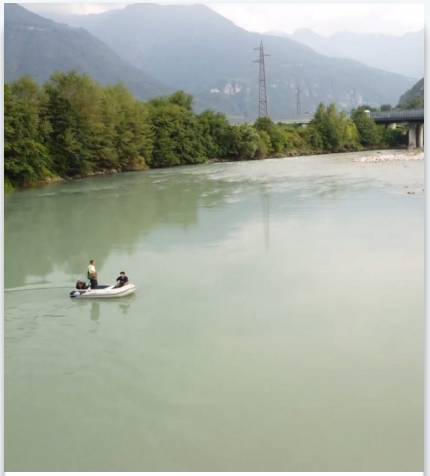
PRECISION LEVELLING

Vertical control for rail, tunnels and monitoring.



TUNNEL & UNDERGROUND

Alignment, sections, clearance and as-built.



BATHYMETRY

Hydrographic data for river crossings and structures.

SELECTED EXPERIENCE

High-Speed Rail · Verona–Padova AV/AC

Survey control, railway geometry and construction support on a major Italian high-speed corridor.



GLOBAL SERVICE SCOPE

- Primary control networks
- Precision levelling and traverses
- Laser scanning and detail surveys
- Railway trolley surveys
- Absolute track reference on relocated sections
- Tamping-support geometry data
- Construction and as-built verification

Sector **Rail · High-Speed Infrastructure**

SELECTED EXPERIENCE

Metro C Rome · Underground & urban infrastructure

High-precision surveying, 3D capture and monitoring in a dense urban environment.





Scope

- Detailed topographic surveys
- High-precision traverses and levelling
- 3D laser scanning of stations and structures
- Speleological / underground survey support
- Construction surveying
- Monitoring of historic buildings influenced by tunnelling

Deliverables

Controlled geometry · point clouds · sections · as-built data · monitoring records

SELECTED EXPERIENCE

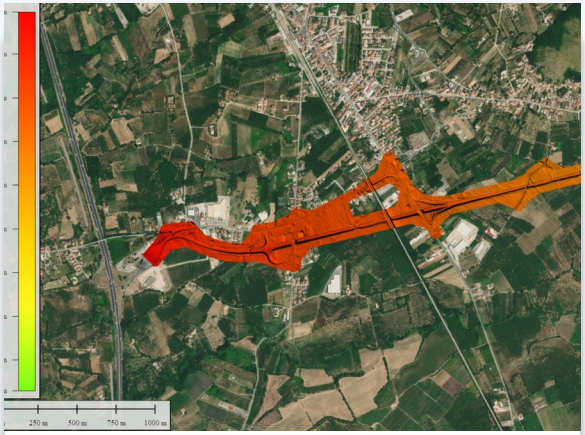
Roads, viaducts & corridor mapping

Large-area acquisition and detailed structural reality capture for highway projects.



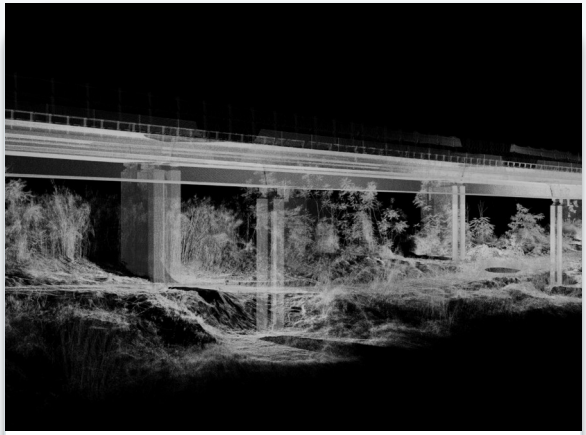
SS106 “Jonica”

Geodetic control, GNSS, aerial acquisition, orthophotos, terrain models and mapping for design support.



SS372 “Telesina”

LiDAR corridor mapping, terrain modelling, road geometry and engineering-ready outputs.



Viadotto dei Parchi · A51

Static laser scanning and mobile mapping supporting geometric documentation and structural investigations.

SELECTED EXPERIENCE

Autostrada Pedemontana Lombarda · Lots B2 & C

PEDELOMBARDA NUOVA S.C.p.A · topographic construction support on a major motorway programme.



GLOBAL SERVICE SCOPE

- Topographic construction support
- Control networks
- Stockpile volume calculation
- Setting-out
- Surveys and technical assistance across Lots B2 and C

Sector **Motorway · Major Civil Infrastructure**

Period **2024–ongoing**

SELECTED EXPERIENCE

Terzo Valico dei Giovi · Val Lemme

SELI Overseas / COCIV · topographic and tunnel-survey support for the AV/AC rail corridor.



Representative Global Service tunnel-survey activity.

GLOBAL SERVICE SCOPE

- Topographic support for tunnel excavation
- Control traverses and precision levelling
- 3D laser scanning
- Control networks and alignment verification
- Construction surveying
- As-built measurements

Sector **Rail · Tunnelling · High-Speed Infrastructure**

Period **2020–ongoing**

SELECTED TRACK RECORD

Railway & underground assignments

A broader track record across railway construction, monitoring and specialist survey workflows.

FS ENGINEERING – EX ITALFERR S.P.A.

Nationwide framework assignments

Control networks, precision levelling, railway trolley surveys, laser scanning, bathymetry and UAV LiDAR / photogrammetry.

Framework assignments

REG SCARL

Empoli–Granaiolo railway doubling

Construction topography and railway measurement support for the Siena–Empoli–Firenze line section.

Ongoing

ATI CEPRINI · CEMES · GCF

Pistoia–Montecatini railway doubling

Construction surveying, pre-construction condition surveys and condition records for affected roads and buildings.

RFI infrastructure programme

CONSORZIO HIRPINIA AV

Naples–Bari · Apice–Hirpinia

Topographic, meteorological and hydrometric monitoring of areas associated with the Grottaminarda tunnel.

High-speed railway programme

Also selected: Arcisate–Stabio · Brescia–Verona AV/AC · Manoppello–Scafa · Bergamo–Orio al Serio

SELECTED TRACK RECORD

Roads, motorways & major civil works

Selected assignments across motorway, road and major civil infrastructure programmes.

GHELLA S.P.A.

A14 · Ancona Nord–Ancona Sud

Topographic services supporting third-lane widening works on the Bologna–Bari–Taranto motorway corridor.

2012–2016 · Autostrade per l'Italia

VAL DI CHIENTI S.C.P.A.

Marche–Umbria · Maxi-Lotto 1

Survey support to design and construction activities across the Marche–Umbria road programme.

2006–2012 · Quadrilatero Marche Umbria

TECNE / AUTOSTRADE PER L'ITALIA

Motorway monitoring assignments

Traditional and automated monitoring, surveys, dimensional controls and setting-out for motorway assets and works.

Ongoing assignments

CONDOTTE D'ACQUA S.P.A.

Rome–Naples HS / Rome–Sulmona

Technical and topographic surveys, pre-construction condition surveys, technical support and condition documentation.

2002–2005 · TAV infrastructure

Also selected: SS106 Jonica · SS372 Telesina · Viadotto dei Parchi A51 · A24 tunnel surveys

TRACK RECORD

20+ years on major infrastructure

A continuous record across rail, roads, tunnels and complex civil works — from early TAV programmes to current multi-technology assignments.



Field-proven on active infrastructure and major construction sites.

Experience built through long-term involvement in major infrastructure programmes.

Selected milestones show continuity across high-speed rail, urban transit, roads and complex civil works, alongside the evolution toward integrated surveying, LiDAR, monitoring and BIM-ready delivery.

2002–05
ROME–NAPLES HS
Condotte · TAV assignments

2006–12
MARCHE–UMBRIA
Val di Chienti · Maxi-Lotto 1

2012–16
A14 MOTORWAY
Ghella · Ancona Nord–Sud

URBAN RAIL
METRO C ROME
Stations · tunnels · monitoring

RAIL
ARCISATE–STABIO
Salcef · railway completion works

RAIL
PISTOIA–MONTECATINI
ATI Ceprini · Cemes · GCF

2020 →
VERONA–PADOVA AV/AC
IRICAV DUE · high-speed rail

2024 →
PEDELOMBARDA
Lots B2 & C · ongoing

Selected clients & project partners

A representative selection of organisations supported across rail, roads, tunnels and major civil infrastructure.

TECNE

GHELLA

WEBUILD

IRICAV DUE

ITALFERR

GCF

SELI OVERSEAS

SALCEF

Representative selection based on Global Service project references and existing corporate materials. Logos and trademarks remain the property of their respective owners.

CREDENTIALS

Technology, quality & credentials

Selected core platforms, current qualifications and international network.

RIEGL VZ-600i / VZ-400i

3D laser scanning

Trimble GEDO GX50

Railway measurement

Professional GNSS

Control networks

UAV LiDAR

Aerial mapping

QUALITY & QUALIFICATIONS

UNI EN ISO 9001:2015

Certified quality management system applied to organisational and operational processes.

SOA QUALIFICATION

OS20-A · Class II

Certificate no. 38147/35/00 · issued 30/06/2025
Validity: triennial 29/06/2028 · quinquennial 29/06/2030

INTERNATIONAL NETWORK

ITALIAN INDUSTRY & COMMERCE OFFICE IN THE UAE
CAMERE DI COMMERCIO ITALIANE ALL'ESTERO

PROUD MEMBER
Supporting Italian excellence in the UAE and beyond

IICUAE Member 2026

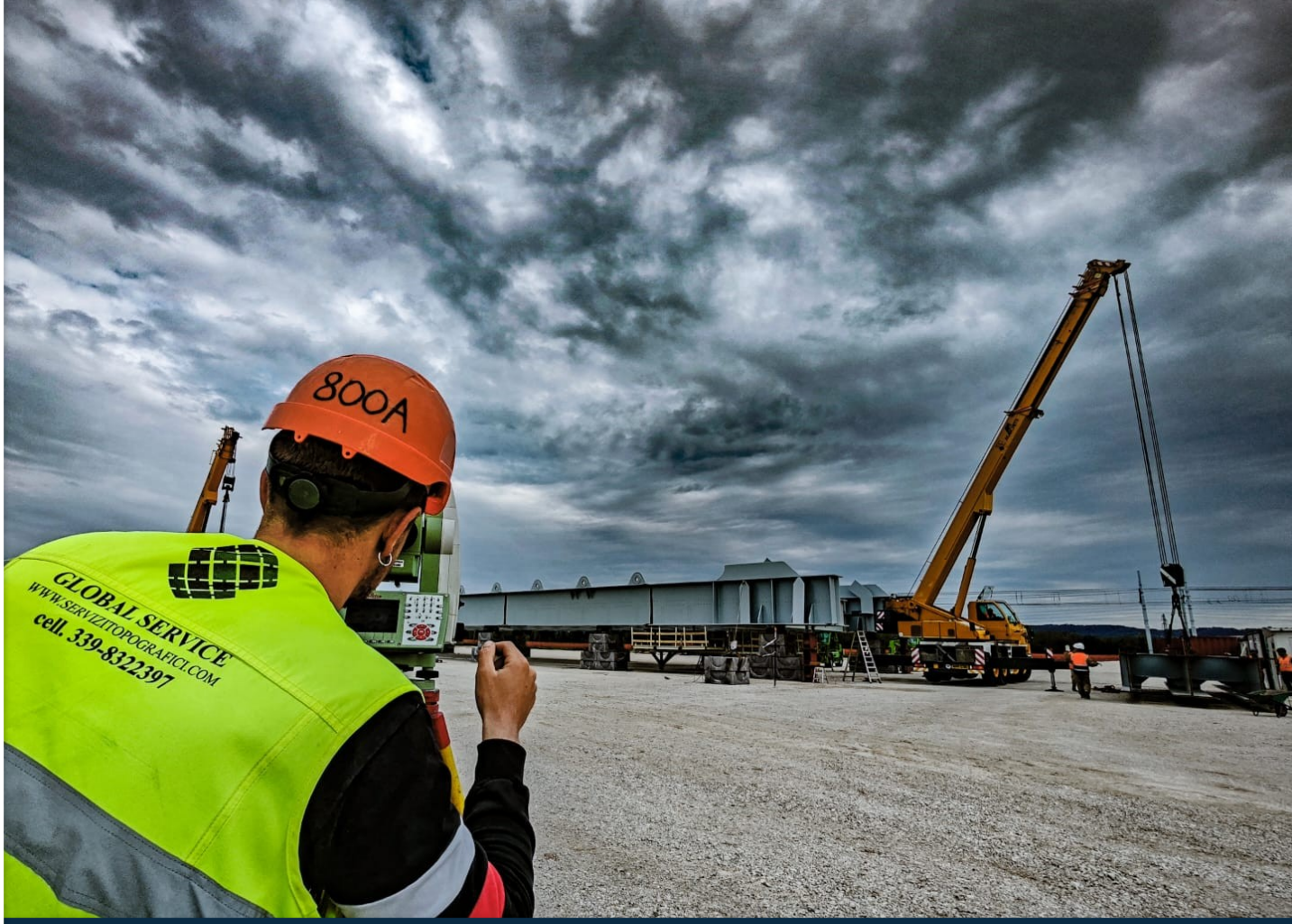
Italian Industry & Commerce Office in the UAE

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Engineering data for complex infrastructure.

Surveying · LiDAR · Monitoring · BIM