

**TEXO s.r.l.**

**FOR 30 YEARS THE SPECIALISTS IN  
ENGINEERING FOR LIQUID DISTRIBUTION AND TRANSPORT SYSTEMS**

# WHO WE ARE



- 30 YEARS OF EXPERIENCE (1989-2019)
- NUMEROUS CLIENTS ALL OVER ITALY  
(Snam Rete Gas spa, SGI spa, Snam 4 Mobility spa, Saipem spa, Snamprogetti spa, Italgas spa, Gas Natural Distribuzione spa, ASET spa, Metano Città spa, Gruppo Erogasmet spa, Mediterranea Energia srl, Hera Ravenna srl, GEI srl, Costruzioni Dondi spa, SICIM Ireland Ltd,...)
- CERTIFICATIONS (UNI EN ISO 9001:2015; UNI EN ISO 14001:2015; UNI EN ISO 45001:2018)
- SUPPLIER QUALIFICATIONS: Snam SpA, Saipem Spa, Achilles RePro, Erogasmet S.p.a., CPL Concordia Soc. Coop., Italgas Spa and HERA Group
- MULTIDISCIPLINARY ENGINEERING SERVICES FOR LIQUID DISTRIBUTION AND TRANSPORT SYSTEMS

# WHAT WE DO

## SOLUTIONS FOR THE ENGINEERING OF GAS DISTRIBUTION SYSTEMS



1. Design of new gas distribution networks
2. Planning of maintenance and replacement of existing distribution networks
3. Planning and site management of civil construction work
4. Construction Site Management and coordination of health and safety activities for carrying out construction work for new gas distribution networks; maintenance and replacement of existing networks
5. Topographic measurement
6. Digitalized cartography for distribution networks
7. Assistance in testing of construction work carried out
8. Public and private permits and authorisations
9. Geognostic and geotechnical surveys and land investigations
10. Software development for hydraulic simulation, design and planning as well as management/maintenance of pressurized liquid networks

# Gas DISTRIBUTION systems



## SOME OF THE MOST IMPORTANT PROJECTS WE HAVE CARRIED OUT:

- “Methanization Italy” (Legislative Decree nr. 784) - Design of gas distribution networks in 15 Municipalities in the Region of Campania (Client: Consorzio Italmeco, Bonatti)
- Completion of the “Methanization” of Mezzogiorno L. Bersani - Preliminary and executive network design of natural gas distribution networks in 14 Municipalities in the Regions of Campania, Puglia, Basilicata, Calabria (Client: Italgas spa)
- AEEG territorial tenders in terms of the Ministerial Decree 226/2011 for the awarding of Concessions for gas distribution networks in 46 Municipalities in the Regions of Puglia, Sicily and Campania (Client: Gas Natural Distribuzione spa) and in 250 Municipalities in the Regions of Lombardy, Piemonte, Veneto e Lazio (Client: Erogasmet spa)



# Gas DISTRIBUTION systems



- Construction site management and coordination of health and safety activities for carrying out construction work for gas distribution networks, I.P.R.M. plants (main plants for withdrawal, pressure reduction and measurement), I.R.I plants (intermediate pressure reduction plants) and utility connection plants in 17 Municipalities in the Regions of Sicily, Basilicata, Puglia e Calabria, in addition to the maintenance and replacement phase of cast iron piping in the Metropolitan Area of ROME (Client: Italgas spa)
- Executive design and planning of natural gas distribution networks and the utility connections in 25 Municipalities of the Region of Zapad (west) of the Republic of Bulgaria (about 1000 kms of pipelines - Client: COSTRUZIONI DONDI S.p.A.)
- Development of software applications for the integrated management (hydraulic mapping and simulation) of an Information System of technological networks, in particular gas and water distribution networks as well as for the resolution of problems related to the design and hydraulic simulation of pressurized liquid networks.

# Gas DISTRIBUTION systems



The design and planning, site management and coordination of health and safety during the execution of the projects for natural gas distribution networks:

- has involved over 340 Municipalities in 9 Italian Regions
- has reached 25 Municipalities in the Zapad Region (Bulgaria)
- has involved multiple professionals (site managers; civil and mechanical designers and planners; electrical protection (PE) and electro-instrumental designers; health and safety coordinators in both planning and execution phases; project supervisors in execution phases; multidisciplinary project assistants - civil, mechanical, welding inspectors (ISS), PE, archaeologists



# WHAT WE DO



## SOLUTIONS FOR THE ENGINEERING OF GAS TRANSPORT SYSTEMS

1. Design and planning of new transportation networks for natural gas
2. Design verification in compliance with art. 26 Legislative Decree 50/2016
3. Planning of maintenance operations and replacement of existing networks
4. Design and planning as well as site management of civil works
5. Site Management and Health and Safety Coordination for carrying out construction work for new natural gas transmission networks, maintenance and replacement of existing networks
6. Real estate survey and data collection activities
7. Topographic surveys (traditional and U.A.V.-assisted)
8. Georeferencing of network lines and plants
9. Public and private permits and authorisations
10. Activities relating to the management of excavated soil and rock
11. Inspection of infrastructure, lines, plants and accessory components to verify suitability and technical status of the plant (including verifications for certifications pursuant to Presidential Decree 151/2011)
12. Assistance in testing the construction work as well as static tests

# Gas TRANSPORTATION systems



## SOME OF THE MOST IMPORTANT PROJECTS WE HAVE CARRIED OUT:

- (2009-2013) Direct contract for the design and carrying out of major construction work in the Regions of Puglia and Calabria : Snam Rete Gas Spa (REINV/INIPU; REINV/IMSUD)
- (2009-2013) Framework Agreement for design and site management in the Regions of Abruzzo, Molise, Puglia - Client: SOCIETA' GASDOTTI ITALIA Spa
- (2005-2007) Detailed design of natural gas pipelines in the Regions of Puglia and Abruzzo - Client: Snamprogetti Spa





# Gas TRANSPORTATION systems



- (2014-2019) Preliminary and executive design, Georeferencing, Site Management and Health and Safety Coordination of natural gas pipelines and plants for Snam Rete Gas Spa in the districts:

North: 212 Work Orders for Design and Planning

183 Work Orders for Site Management and Health and Safety Coordination

South East: 156 Work Orders for Design and Planning

122 Work Orders for Site Management and Health and Safety Coordination

111 Work Orders for Georeferencing

Centre West: 168 Work Orders for Design and Planning

108 Work Orders for Site Management and Health and Safety Coordination

68 Work Orders for Georeferencing

# CNG plants



Design and planning, site management and coordination of health and safety during the execution phase for the implementation of CNG supply delivery to automotive fuel distribution systems

Client: Snam 4 Mobility Spa

35 Work Orders for Design and Planning

3 Work Orders for Site Management



Design and planning as well as coordination and assistance to the site manager during the execution phase for the construction of the first fuel station for the supply of C-LNG (compressed and liquefied natural gas) at Pesaro (Via S. Pertini), which has a unique construction and characteristics in Italy.

# OUR PROFESSIONALITY



WE PROVIDE MULTIDISCIPLINARY ENGINEERING SERVICES USING A NETWORK OF EFFICIENT AND HIGHLY SPECIALIZED COLLABORATORS

CIVIL AND  
MECHANICAL  
DESIGNERS

CATHODIC  
PROTECTION  
SPECIALISTS

STRESS ANALYSIS  
SPECIALISTS

SITE MANAGERS AND  
ASSISTANTS

LINE AND PLANT  
DESIGNERS

WELDING  
INSPECTORS

MATERIALS  
SPECIALISTS

HEALTH AND  
SAFETY  
COORDINATORS  
IN DESIGN AND  
EXECUTION  
PHASES

ELECTRO-  
INSTRUMENTAL AND  
PROCESS DESIGNERS

TECHNICIANS FOR  
ACQUISITION OF  
PUBLIC AND  
PRIVATE PERMITS

SURVEYORS

# OUR PROFESSIONALITY



WE HAVE A FLEXIBLE COMPANY MANAGEMENT THAT ENABLES US TO INTEGRATE ALL THE VARIOUS COMPETENCES AND SKILLS INVOLVED

WE KNOW THE NEEDS OF THE PRIMARY CLIENT



WE OFFER A HIGH QUALITY AND COMPREHENSIVE PRODUCT

# OUR SPECIFIC SKILLS AND COMPETENCES

1. Development of mechanical engineering projects and environmental and territorial engineering especially in the energy and oil & gas sector, as well as providing complete georeferencing services of existing technological networks:

## Design and planning of lines and plants

- Verification of the feasibility outline
- Executive design and planning of lines
- Design and planning of crossings and parallels or of particular areas
- Design and planning of line points with interceptions
- Executive design and planning of concentrated plants
- Design and planning of electro-instrumental and remote control construction projects
- Design and planning of the cathodic protection, design and planning for creation of current rods
- Design and planning of CNG fuelling station points

## Design and planning of civil and environmental projects

- Design and planning of morphological restorations
- Design and planning of construction projects for the protection and regulation of water flow (dike, weirs, flow threshold, boulders, etc ...)
- Design and planning of slope stabilization works (gabions, palisades, drains, etc.)
- Elaboration of hydrological and hydraulic studies of crossed waterways by means of topographical evaluation of the crossing or by the design and planning of hydraulic protection and regulation construction work
- Preparation of hydraulic compatibility reports for waterways
- Preparation of geological-technical reports
- Elaboration of documentation with calculation report of reinforced concrete (also for the purpose of verification and reporting pursuant to anti-seismic regulations) as well as metal structures
- Preparation of reports for the calculation of building protection against atmospheric discharges pursuant to CEI standard 81/10 and Presidential Decree 462/01
- Static testing of reinforced concrete and metal constructions - laws nr 1086 of 5.11.1971 and nr 64 of 02.02.1974.

- Preliminary verification of the feasibility of crossing waterways, service lines or particular areas by means of horizontal directional drilling (HDD), micro/mini-tunneling or with the raise boring method
- Design and planning of crossing waterways, service lines or particular areas by means of horizontal directional drilling (HDD), micro/mini-tunneling or with the raise boring method
- Stress analysis of the line, including particular points (crossings, line points with interceptions or vertical sections)
- Preparation of documentation for archaeological risk assessment; supervision and assistance to the excavation work in the sections at archaeological "risk"
- Preparation of documentation for the study of the acoustic impact of the construction site work, technical report of the phonometric investigation for the assessment of environmental noise pursuant to Law 447/95
- Preparation of a technical report to verify the suitability of reusing excavated land on site, pursuant to Legislative Decree 152/06 (as amended), as well as regional and local laws on the matter.
- Technical assessment of the natural gas pipeline
- Verification and processing of technical documentation for the project evaluation request and certification pursuant to Article 3 of the Presidential Decree nr 151/2011
- Verification of the preparatory design for the assignment procedure (verification of the compliance of the project designs with the current legislation, as provided for in art.26 of Legislative Decree 18/04/2016 n.50, performed in consultation with the designer.)
- GPR Investigation (Ground Penetrating Radar)
- Geognostic and geotechnical investigations
- Data acquisition and calculation of electromagnetic interference produced by alternating current systems on metal pipes and telecommunication cables

**2. On site and topography land survey, using expert staff and modern topographic instruments suitable to all environmental and morphological conditions, to support design and construction activities:**

- Celerimetric and altimetric plan survey
- Retrieval of staking points
- Topographical survey with U.A.V. (Unmanned Aerial Vehicle)
- Obtaining of images in digital format, GIS elaborations
- Topographic, cartographic activities
- Retrieval and production of monographs
- Topographic surveys for the georeferencing of existing pipelines and plants and cartographic updating
- Georeferencing of the layout and territory in Land Registry and territorial cartography

**3. Consultancy relating to authorizations for public and private entities, for complete project management from the client brief to the final implementation in the execution phase:**

- Authorizations pursuant to Presidential Decree 380/2001
- Authorizations pursuant to Legislative Decree 42/2004 and subsequent amendments
- Authorizations pursuant to Legislative Decree 152/2006 and subsequent amendments
- Authorizations pursuant to Presidential Decree 327/2001
- Authorizations pursuant to Presidential Decree 151/2011
- Land Registry documentation
- Documentation for expropriation and predial servitudes

**4. Construction Site management service during the execution phase, offering a specialized and qualified team, including professional figures such as site supervisors, health and safety coordinators during the execution of construction work, electrical protection supervisors, welding inspectors :**

- Site management and supervision for mechanic construction work
- Coordination of health and safety on the construction site
- Supervision for welding activities
- Supervision for cathodic and electro-instrumental protection
- Coordination and implementation of hydraulic tests of existing pipelines