



MTSYS

AG EN DA

BEGIN.

01. Market

02. The concept

03. How does it work?

04. Benefits

MARKET

Every year kilometers of underground services are being added in Europe

THE SITUATION IN ITALY:

100.000

Kilometers of water pipes of asbestos

46.000

Kilometers of Fastweb telecommunication fiber

40.000

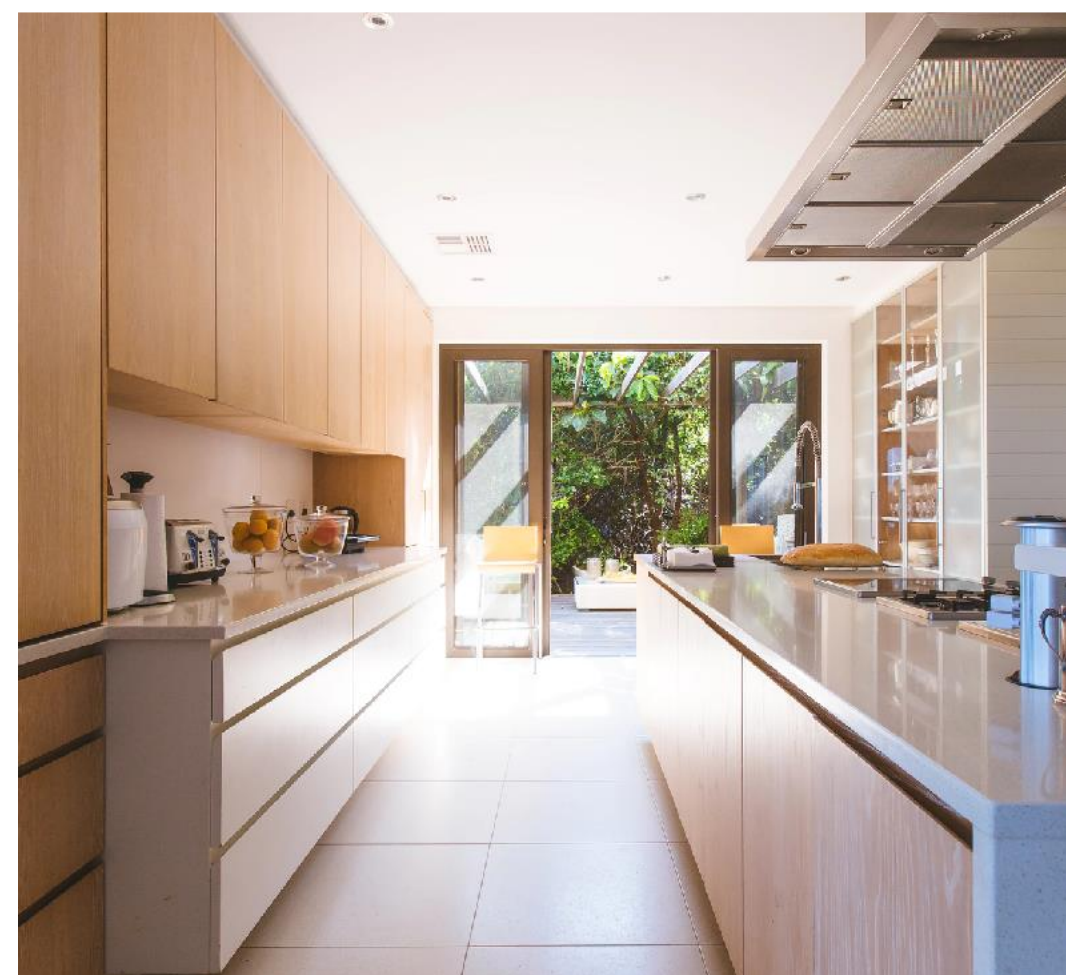
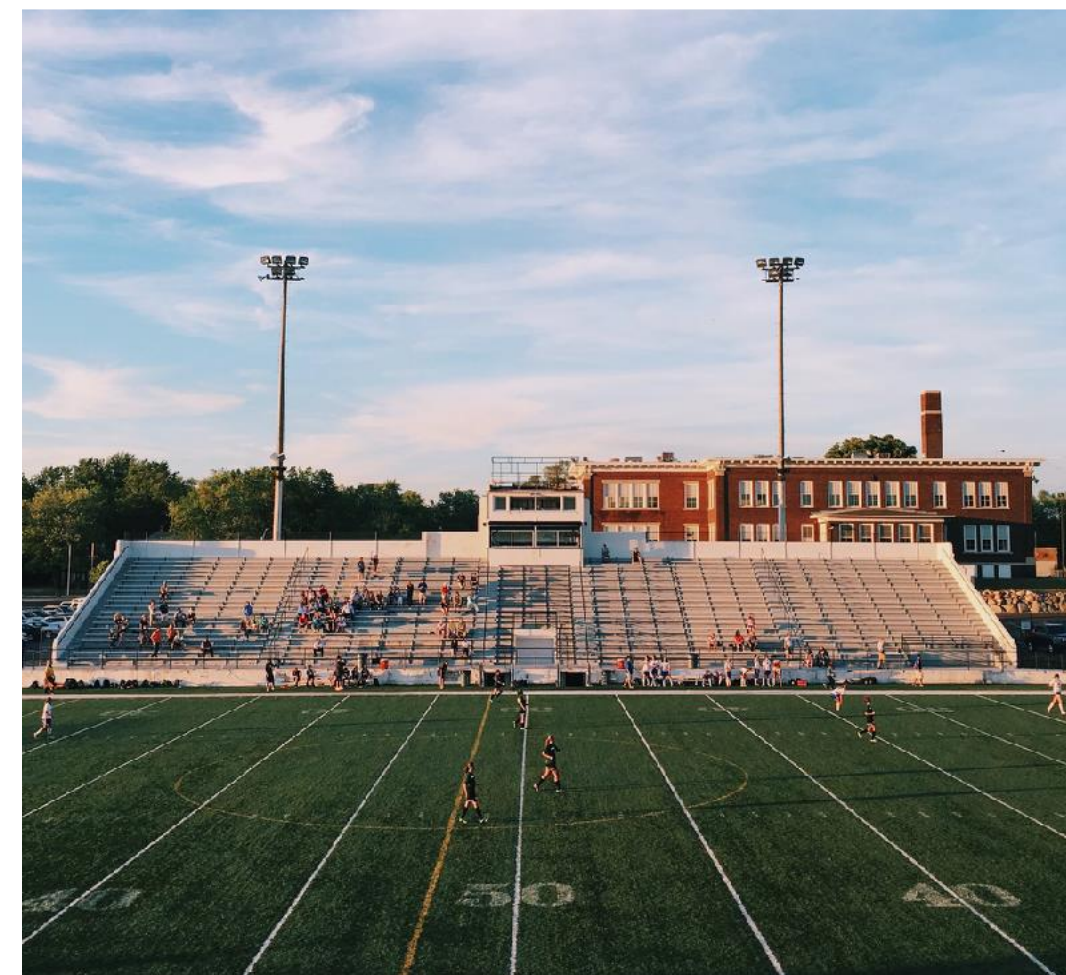
Kilometers of Gas Lines (network of SNAM)

45.000

Kilometers of electric network added

Market potential increases including private underground services

Besides the amount of public underground services, there are also numerous private ones added, such as: Industrial construction, private buildings and houses, schools, airports and sport facilities,



Daily incidents during digging are creating damages for the society

Frequently media is reporting incidents caused by interrupted underground services due to the invisibility. During actions of digging, lines or pipes are being damaged or broken.

Damages to people and environment are difficult to quantify.

Milano, blackout nella notte al San Raffaele: l'intero ospedale al buio per quattro ore

A Capri rotta tubatura, black out per sette ore

ROTTURA DI TUBAZIONI INTERRATE SOTTO UNA STRADA COMUNALE - RESPONSABILITÀ DEL COMUNE

— DUE ORE DI DISAGI —

Bari, si rompe tubazione black out al «Di Venere»

Home > Attualità > Fibra ottica, stop ai lavori per troppi danni alla rete del gas

FIBRA OTTICA, STOP AI LAVORI PER TROPPI DANNI ALLA RETE DEL GAS

Da **Riccardo Resta** - 4 Aprile 2017

0

Treviso » Cronaca

Guasto a una tubazione di San Fior, vasto black-out idrico nel Coneglianese: tutti senz'acqua

If only a world existed where you could make the
underground visible without digging

THE CONCEPT

With the intention to increase the visibility in the construction world, we've developed a system that is tracking and tracing the underground utilities and maintenance works in full transparency:

PRECISE

AFFORDABLE

CERTIFIED

Blockchain

SCALEABLE

LASTING

SECURE

MTSYS: Monitoring Technology System

MTSYS is a project started, in 2017, by a crossfunctional team of experts coming from the construction and tech world.

It is a monitoring technology platform that traces and tracks the underground services and maintenances. Minimizing errors and ensuring the work excuted according to the agreed criteria.



VISION

WE EXIST TO CONNECT
the construction world.

PROVIDING A MONITORING SYSTEM
to make the invisible construction parts **traceable**
and **transparent** for **users** and **government**.

HOW DOES IT WORK

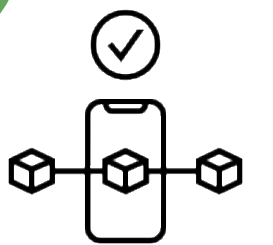
The MTSYS platform has 2 main phases:

1. INITIALIZATION

ENCODING & INTEGRATION

INITIALIZATION & UPDATE

Update of control points, certifications,...



Blockchain

2. CHECKING

INFORMATION

Encoding & Integration

Integration of track and trace technology (UHF RFID) with the underground services (Pipes, tubes, ...) by using tapes which are being placed on or over the lines.

UHF RFID tags are embedded into the tapes and are having unique identifiers linked to each underground service.

The objective is to track and trace all newly installed underground services

Initialization & Update

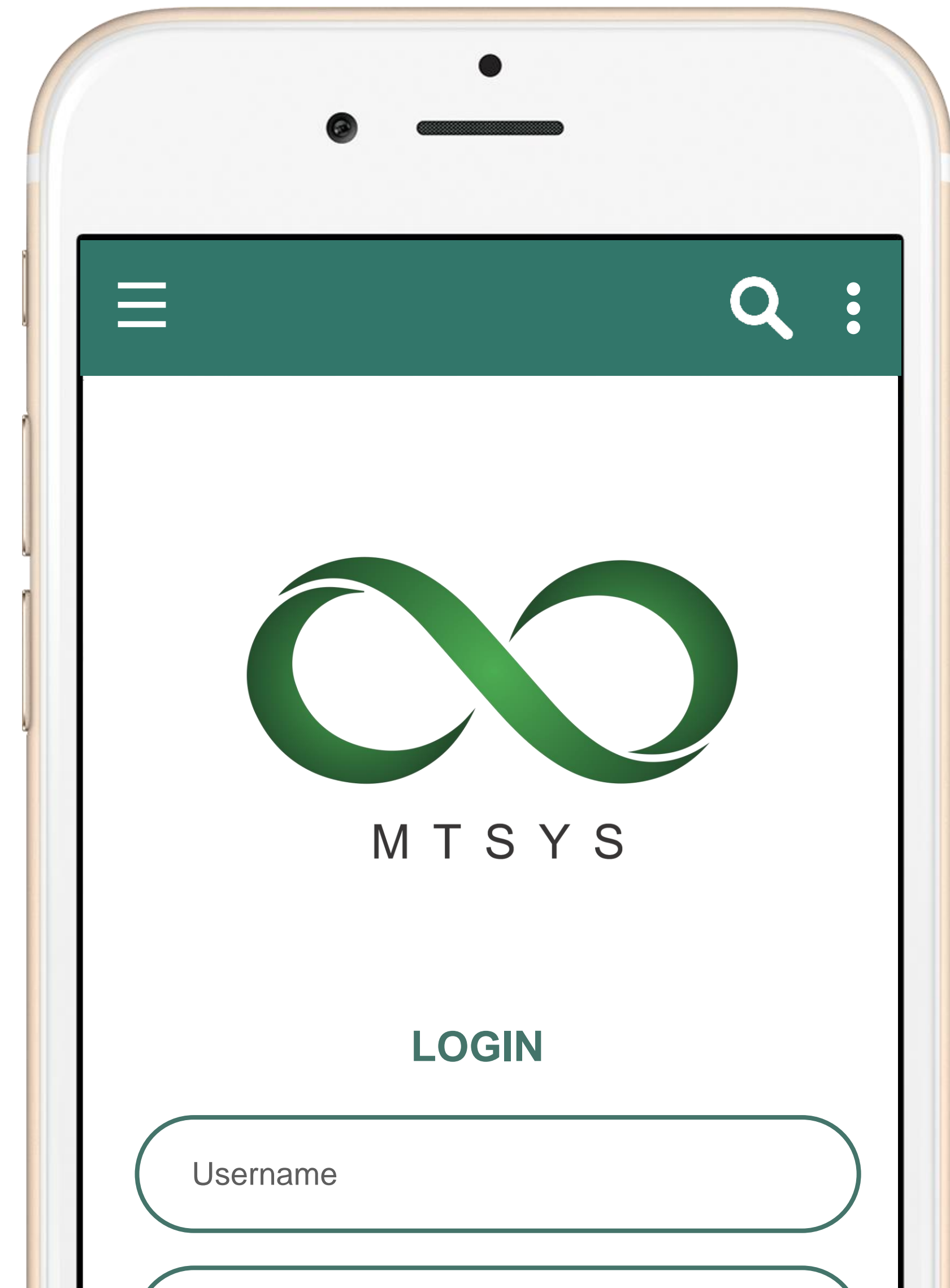
Linking and updating data to the unique identifiers (UHF RFID sensors):

- Company and operator reference/ ID;
- Depth and GPS position;
- Type of the underground services;
- Maintenance (type, ...);
- Time stamp;
- Other

Information

After the initialization/ update, the system allows to identify the position of the underground services and retrieve all uploaded data.

The system is using blockchain technology to protect the data and to provide full visibility in a secure and transparent way



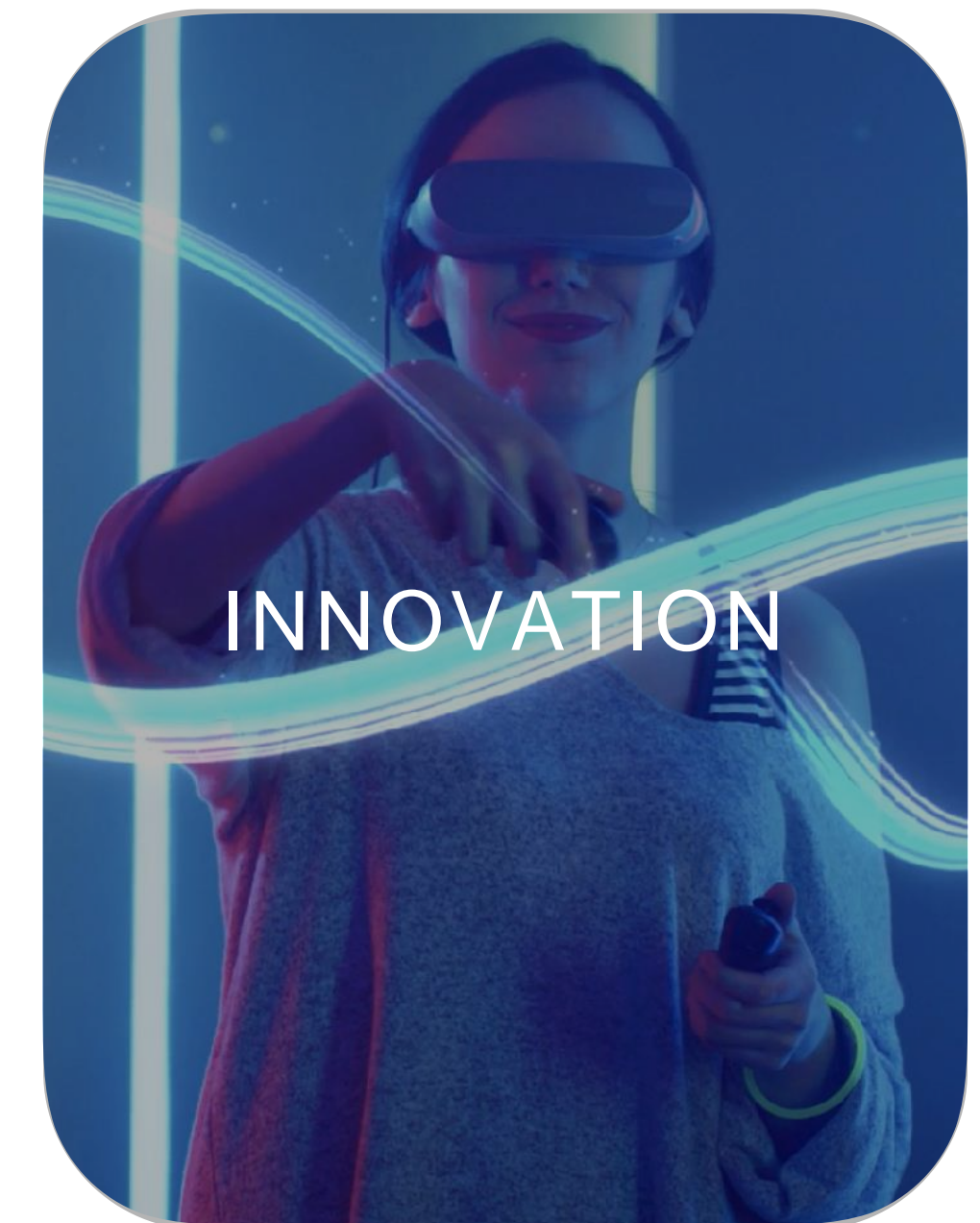
A system tested in collaboration with Politecnico di Milano

Thanks to the age-testing it is possible to guarantee
the life-cycle of the sytem



BENEFITS

Four main benefits:



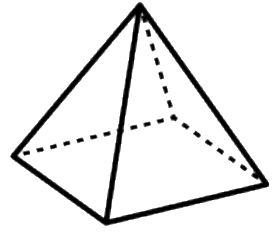


TRACEABILITY

The MTSYS platform provides realtime visibility of the underground services and their location.

The blockchain technology is providing secure visibility of the uploaded information to the company or to the user in a transparent way, as well as all the updates and maintenance data.





TRANSPARENCY

The MTSYS platform ensures the certifications and the progress of construction works done in real time.

The active system gives the possibility to check in real time the status of the works, guarantees the certification of the executing companies, in full transparency.



SECURITY

The system is able to identify and locate the underground services and helps to prevent unwanted damages.

Knowing the depth and location of the pipes, tubes or lines helps creating a secure work environment and saves considerable amount of time and money for all parties.





Innovation

MYSTS platform guarantees secure, transparent and accurate data which is currently not available in the construction world.

The utilization of blockchain technology allows to register sensible and confidential information in a secure and easily accessible way.



Making underground services intelligent and traceable, MTSYS platform offers numerous benefits to national and international entities:

01.

GOVERNMENT

Transparency to the real time progress of work.
prevents frauds.
Reduce down-time to society.
Certify maintenance.

02.

INSURANCE

Preventing damages provides savings on the insurance costs.

03.

CONSTRUCTION

Making the construction work safer by providing visibility of the underground services

04.

UTILITY & PRIVATE

Allows companies and individuals visibility of the location and certifications of the installed pipes, tubes and lines.
Making the housing smarter.

An aerial night view of a city, likely San Francisco, with lights reflecting on the water. The sky is a gradient of dark blue to orange, suggesting a sunset or sunrise. The city lights are concentrated in the lower half of the image, with a prominent bridge visible in the foreground.

WILL YOU JOIN US IN SHAPING THE FUTURE OF CONSTRUCTION?