ARGO
TOMORROW'S TECHNOLOGY ON TODAY'S ROADS

MOVYON
Tech the Future

ARGO is the extended platform for **managing and monitoring infrastructures' life cycle**. All the potential of Digital Engineering in a single solution:

Complete **digitization** of infrastructures' assets

Mobile APP and **Digital Twin** to support on-site and remote inspections

Database for management, governance and control of data and processes

Artificial Intelligence for image recognition and defects' analysis

Integration of data collected by **IoT sensors** for structural monitoring

PARTNER

IBM

FINCANTIERI NexTech

ARGO'S BENEFITS

Full digitazion
of inspection process

Increased **productivity**
and **efficiency** of
inspection processes
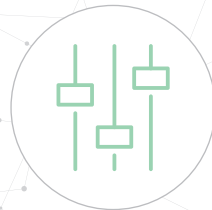
**Modular
and scalable** platform

**Transparency
and data
control**

Health monitoring
of infrastructures

**Analytics and
reporting** on
assets and
defects
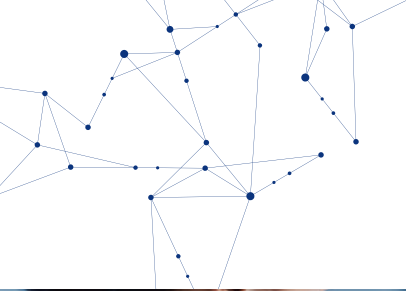
ASSET MANAGEMENT AND DIGITIZATION
All infrastructures handy

The digital inventory is the archive **relying on IBM Maximo technology**, integrated in Italy with MIMS' AINOP system. It allows the **collection, management and control** of the structural data concerning bridges, overpasses, viaducts and tunnels in their individual components, the quality of information and processes and, at the same time, it defines the Data Governance tools **in real time**. Based on the data stored in the digital inventory, the system generates the simplified **Building Information Modeling (BIM) of the infrastructure**: a crucial support for the operator in navigating the asset during the inspection process.
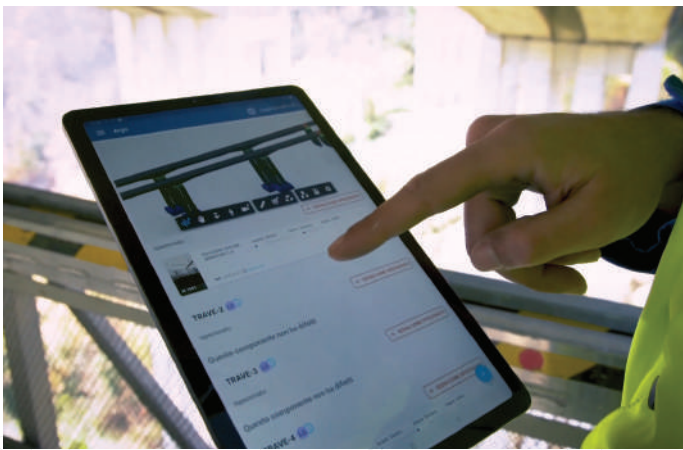
THE MOBILE APP
In the operators' hands, standing by their side

During the on-site or remote activity, the user is fully supported by the Mobile App which allows to **browse the infrastructure and enter all the inspection information** for each individual component: from the detected defect (or its absence) to the precise positioning on the individual components, to the photographs. The Mobile App makes sure everything has been inspected and only then, it authorizes the final stage of the process, with **maximum precision** and **safety**.
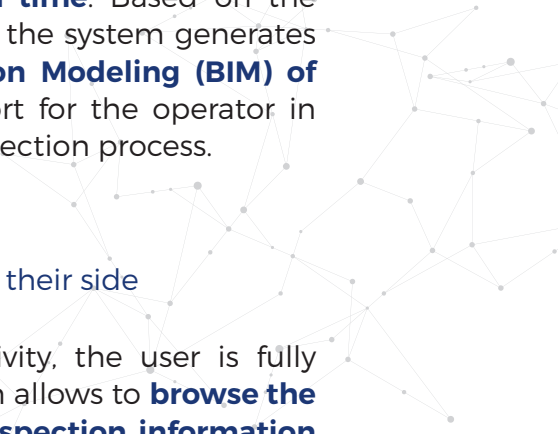
DIGITAL TWIN
Each asset has its digital twin

Equipped with very high-resolution video cameras and LIDAR lasers, the drones provided by Fincantieri Next Tech perform the **3-dimensional scan**. The **millions of geo-referenced points** generated, which are associated with the **related real photographs of the asset**, are transformed into an **accurate and completely digital reconstruction**. **The virtual alter ego supports the operator in remote inspections** and **allows advanced analysis**.

ARTIFICIAL INTELLIGENCE
Algorithms supporting decisions

The **detection and analysis of defects** and their evolution is **assisted** by the application of **AI**. **Image Recognition algorithms** support operators' decisions through the timely analysis of photographs taken in the field and by drones and the identification of defects associated with the components of the infrastructure.

IoT SENSORS
To monitor the infrastructures

The installation of **IoT sensors** on infrastructures allows the collection of a large amount of data for their **assessment and health check**. The data is automatically collected on the platform and flows into the system in aggregate form, providing precise indicators for evaluation.

ARGO'S FIGURES ON AUTOSTRADE PER L'ITALIA'S NETWORK

1.943
bridges
and viaducts

1.799
overpasses

574
tunnels

3.000
km road
network

650.000
components

ABOUT US

We are leaders in the development and integration of Intelligent Transport Systems solutions and Autostrade per l'Italia's centre of excellence for research and innovation.

We are **digital engineering for mobility**: we design, integrate and implement **innovative solutions to design the future**, which, for us, is already intelligent, sustainable and powered by an invisible but ever-present technology.

We operate **in Italy and abroad**, developing systems for monitoring and managing infrastructures, for controlling and managing road conditions and road safety, for toll payment, smart roads and smart cities.

We work with our customers - public administrations, distributed infrastructure providers, large companies, and service providers - to make the travel experience more convenient, easier and safer for the community.

We are committed **to improving operational processes and finding innovative and technologically advanced solutions**.

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