

## SMART CITIES

# Air and Noise Quality

### HOW CAN TELEFÓNICA TECH HELP?

We help you implement more sustainable urban planning, reduce pollution, and inform citizens in real-time about environmental quality.

Exposure to air pollution causes seven million premature deaths annually, 240,000 of them in Europe, and contributes to the loss of millions of years of healthy life.

It is possible to **measure key pollutants, monitor noise levels, and record atmospheric variables** such as temperature, wind speed and direction. This enables informed decisions to be made to improve people's quality of life.

### WHO IS THIS SERVICE FOR?



**Urban managers** that are interested in addressing current environmental challenges, promoting a better quality of life for citizens and a healthier environment in their cities.



**Road network management companies** seeking to monitor and manage the environmental impact of mobility in the surrounding areas, promoting sustainability and reducing pollution.

## OUR VALUE PROPOSITION

### Our service

We offer an air quality monitoring service that provides real-time and historical data on pollutant levels, air quality and noise, using advanced sensors that transmit the information to a platform and/or visualizer.

The solution includes:

- › **Sensors:** To measure air quality parameters and a Class I or II sound level meter, which can be integrated into the same device that houses the sensors.
- › **NB-IoT connectivity:** Facilitates communications to the IoT management platform, simplifying the commissioning, configuration and remote monitoring of the devices.
- › **Smart Platforms:** Enable querying and analysis of collected data, offering advanced visualization and analysis tools.

### What does it allow you to do?

This service will allow you to:

- › **Measure air quality and noise parameters** in low-emission areas, identifying environmental impact and helping to determine optimal locations to reduce it.
- › **Inform citizens about air quality and noise levels**, while ensuring compliance with environmental and sustainability regulations.
- › **Assessing the impact of highways and roads** on surrounding areas, such as protected green zones, cities, residential areas or urban tunnels.

## Benefits

### Regulatory compliance assurance

The solution ensures monitoring and compliance with current environmental sustainability regulations.

### Urban planning support

Enables the integration of regulatory requirements into planning and management projects, such as low-emission zones, and effectively measures their impact.

### Reduced response time and improved decision making

Facilitates faster and more accurate decisions in implementing environmental preservation measures and improving citizens' quality of life.

### Access to more reliable data

Provides accurate and quality information that can be shared with citizens to foster transparency and trust.

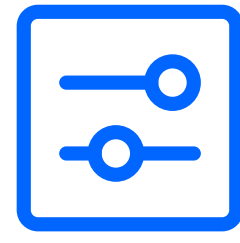


## Telefónica Tech's differential value



### Modularity and scalability

The solution is designed to adapt to current and future customer needs, allowing a progressive and flexible implementation.



### Simplicity in implementation and maintenance

Air quality measurement sensors that are easy to install, calibrate and maintain on-site, reducing complexity and operational costs.



### Advanced analytics

Incorporates descriptive and prescriptive analytics capabilities to simulate scenarios based on specific constraints, facilitating informed and strategic decision making.

## BUSINESS MODEL

The Air and Noise Management service covers both the hardware and software required to manage the devices, including their deployment and configuration. The solution can be integrated with the customer's existing analysis and visualization platforms, offering an adaptable and customized implementation.

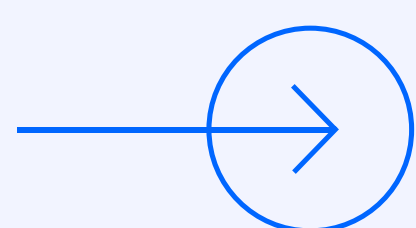
## RELATED PARTNERS



## RELATED SERVICES

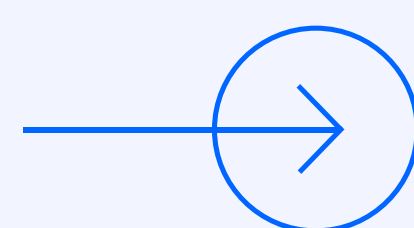
### AI & Data Consulting

We design a master transformation plan centered around data, guided by your business priorities. Based on these priorities, we build a technological ecosystem of IoT and Artificial Intelligence, enabling your company to leverage the potential of these new technologies to generate new revenue streams, optimize costs, or reduce risks.



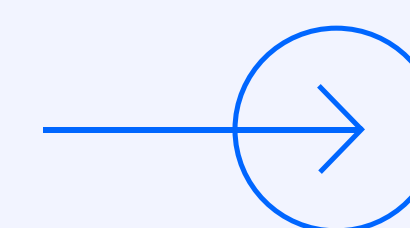
### Smart Parking

Accurate, real-time information on city parking zone occupancy. This solution enables better management and planning of available resources, enhancing operational efficiency and improving citizen satisfaction.



### Waste Management

We help digitize your municipality or business with an IoT-based solution. This tool provides real-time monitoring of container fill levels, enabling you to plan collections more efficiently and effectively.



Contact us to start the digital transformation of your organization.

