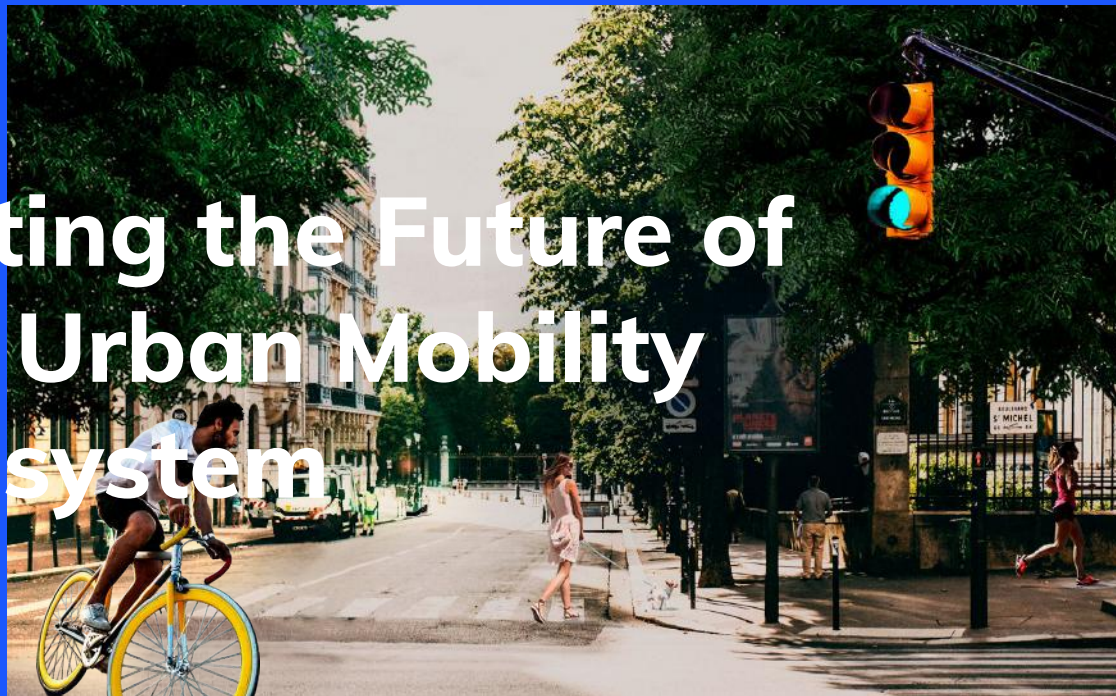


# Suiting the Future of the Urban Mobility Ecosystem



# From Portugal to the world **with love.**

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Founded in 2007, Ubiwhere is focused on Research, Development and Innovation of software-based solutions in the areas of Smart Cities, Telecom and Future Internet, and New Technologies.

We have the innate desire of changing the World. That's why we create, design and develop solutions that improve people's life. Day by day, our multi-skilled team works to bridge the existing gaps in the market.

— **We are here for the long run!  
Let's start?**

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## NEW TECHNOLOGIES

Every day there are new technological advances in the most diverse areas.

As an experienced technology company, we have the mission of being at the forefront of innovation and supporting companies and communities in creating new ideas that help make the World a better place.



## SMART CITIES

We believe in a sustainable world where people feel happy.

That's why we work every day to be leaders in Smart Cities and everything they involve: Environment, Mobility, Tourism, Energy and more.



## TELCO & FUTURE INTERNET

The Internet is not everywhere yet, but that's what we work for.

Today, everything happens at an amazing pace and, therefore, better infrastructure and networks are needed to keep up with developments.

Research and development of intelligent solutions for the Internet of the Future is one of our priorities.



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With  
solutions in  
more than 60  
**cities.**



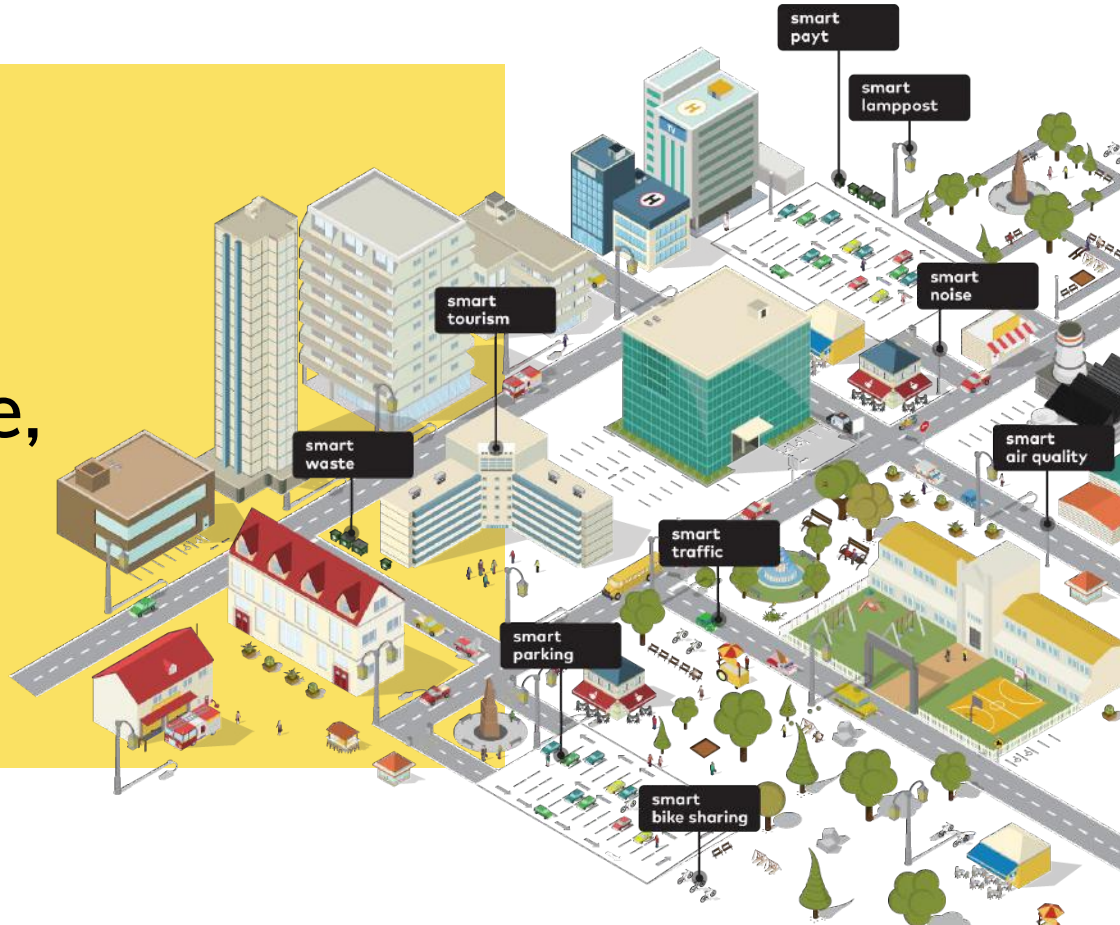
**We believe that great partners empower great ideas and build the best business.**

Meet some of them.





Can you imagine  
your city as a single,  
integrated system?



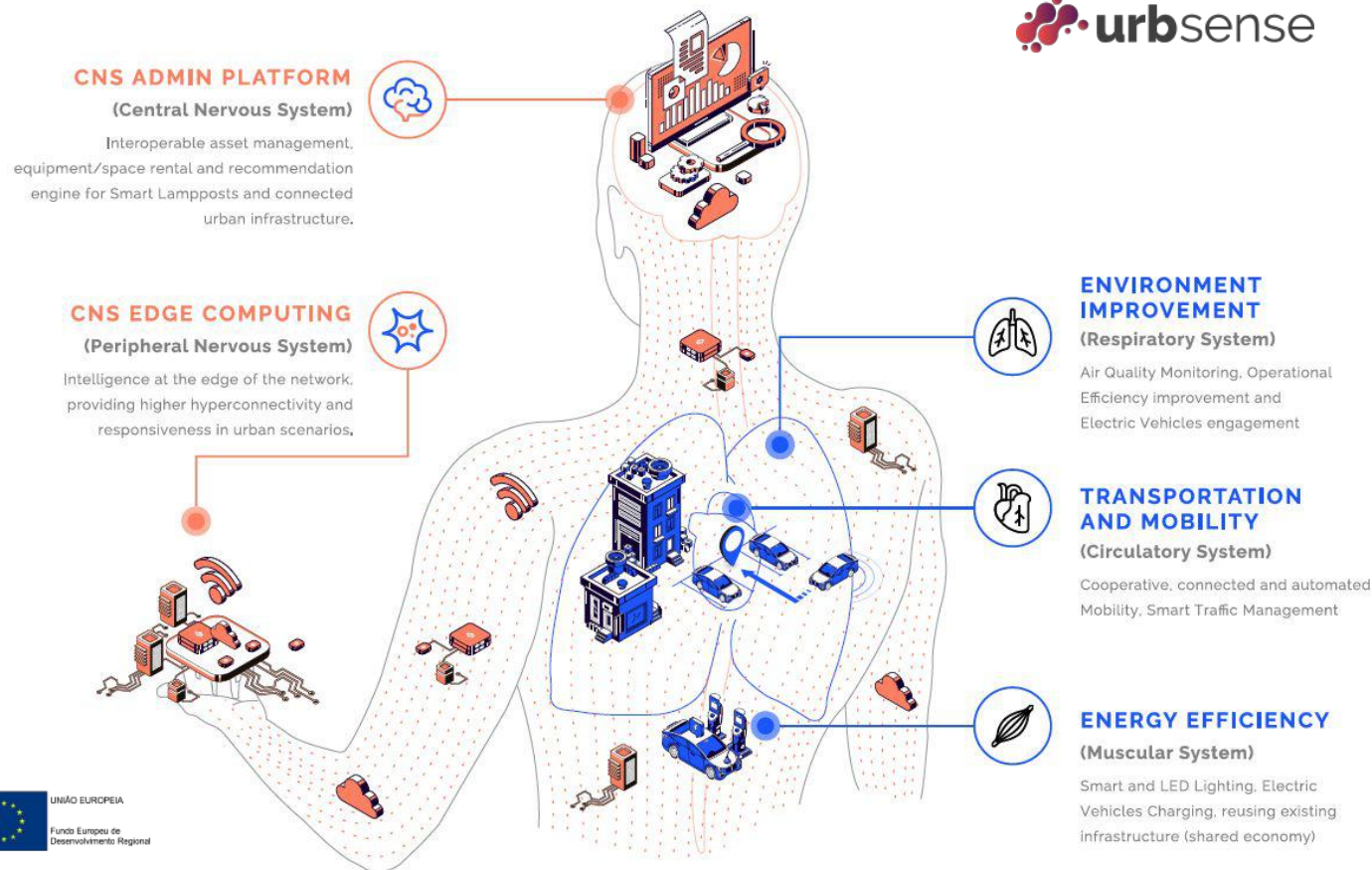
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# CITY NERVOUS SYSTEM

An organic approach to City Management.



The nervous system  
**transmits signals** to  
every part of the body to  
**coordinate its actions.**



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# The Central Nervous System.





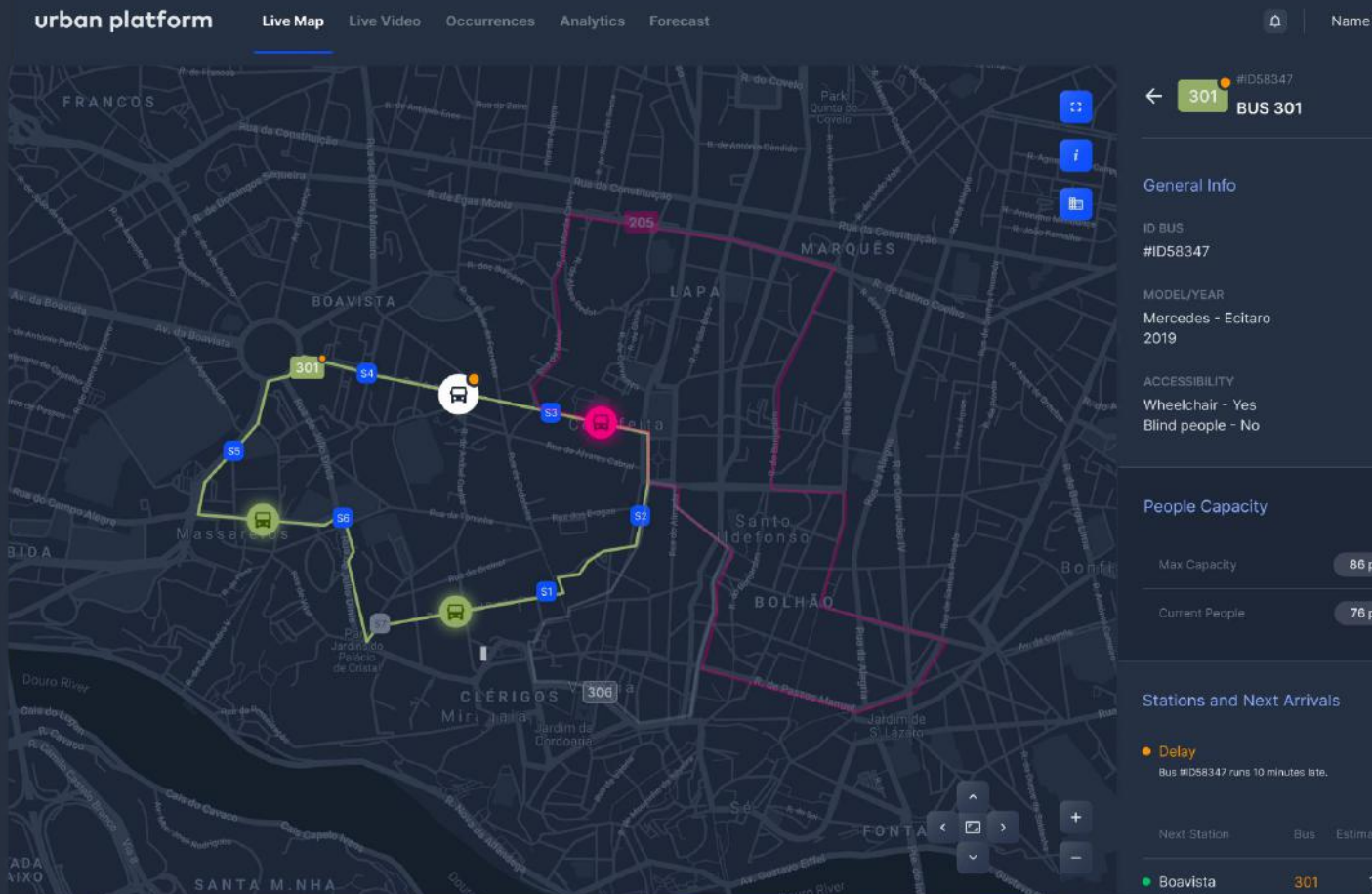
## Decisions in real-time

+ analyse information from several domains / sources in one screen

+ general overview of short-term historical data for comparison

+ mobility, environment, infrastructure, incidents and feedback

+ insights and alarms for decision-making in real-time



# Simulations & forecasting

+ time-series forecasts for different data sets (traffic, parking)

+ explainability in auditing and analysis of results

+ estimate greenhouse gas emissions

+ evaluation of impact of CCAM deployments

Filters

Forecast type

Traffic ^

☒ Traffic

☐ Parking

☐ Weather

Vehicle Type

☒ Car

☐ Motorcycle

☐ Truck

Vehicle Model

Eletric v

Route

From

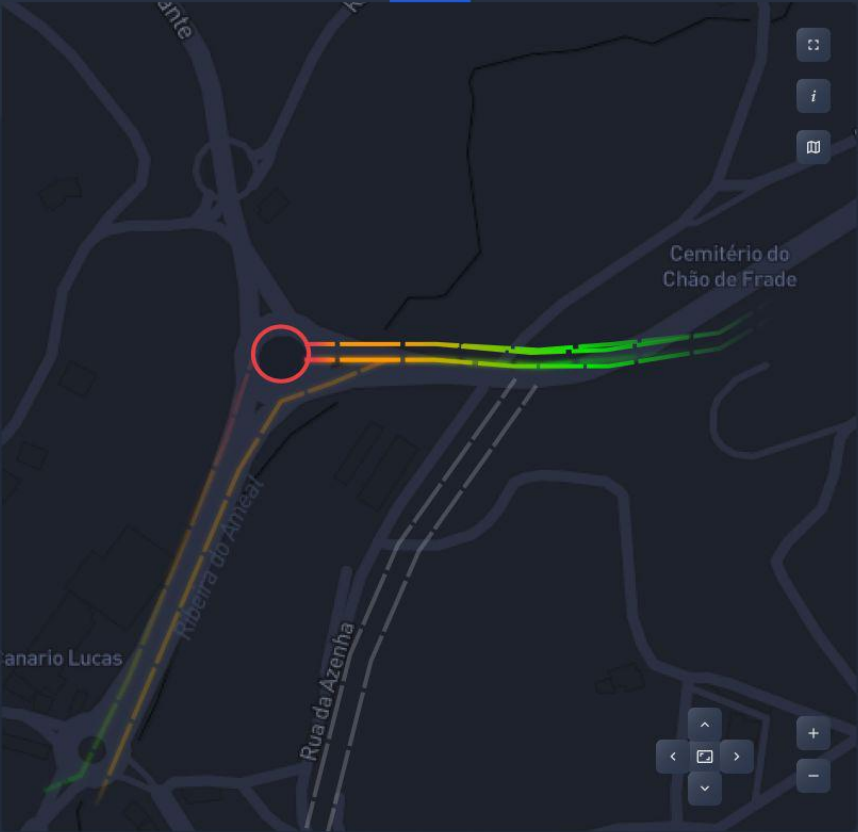
To

⊕ Add Location

Speed Limit (km/h)

50

☒ Legal Speed Limit



← RUA CEMITÉRIO DO CHÃO DE FRADE

TRAFFIC

JAM FACTOR

Name	9
Name	9
Name	8

Street Information

Dropdown



Edgelane emissions

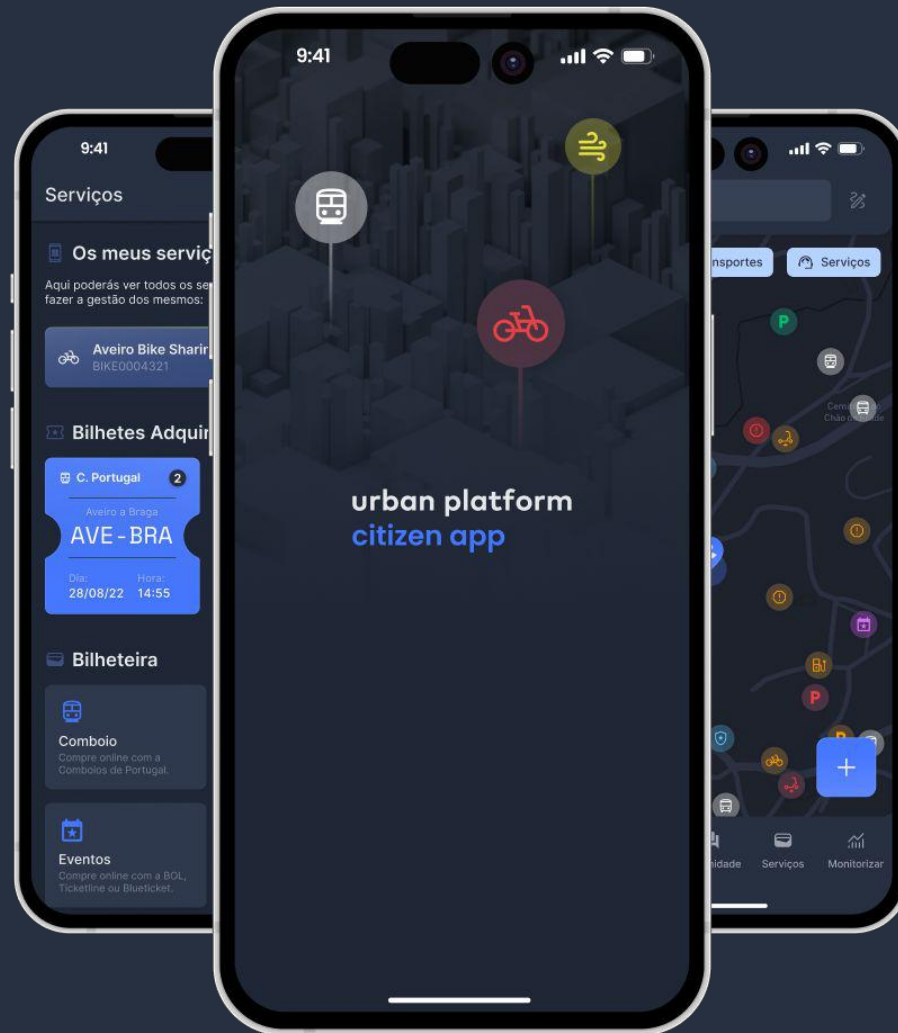
Dropdown



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## Digital tools for the community

- + usable app for citizens for feedback and mobility services (EV charging, public transit, bike-sharing)
- + easy integration with existing apps (SmartAppCity, CKAN, Open311)
- + creating awareness of the individual carbon footprint





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# Guimarães

a Best Practice by the  
European Commission



→ European Commission  
European Location Interoperability  
Solutions for e-Government (ELISE)

→ Gartner  
Location Intelligence  
Benchmark Case Study



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“Mobility is a fundamental human need, and an essential enabler of prosperity.

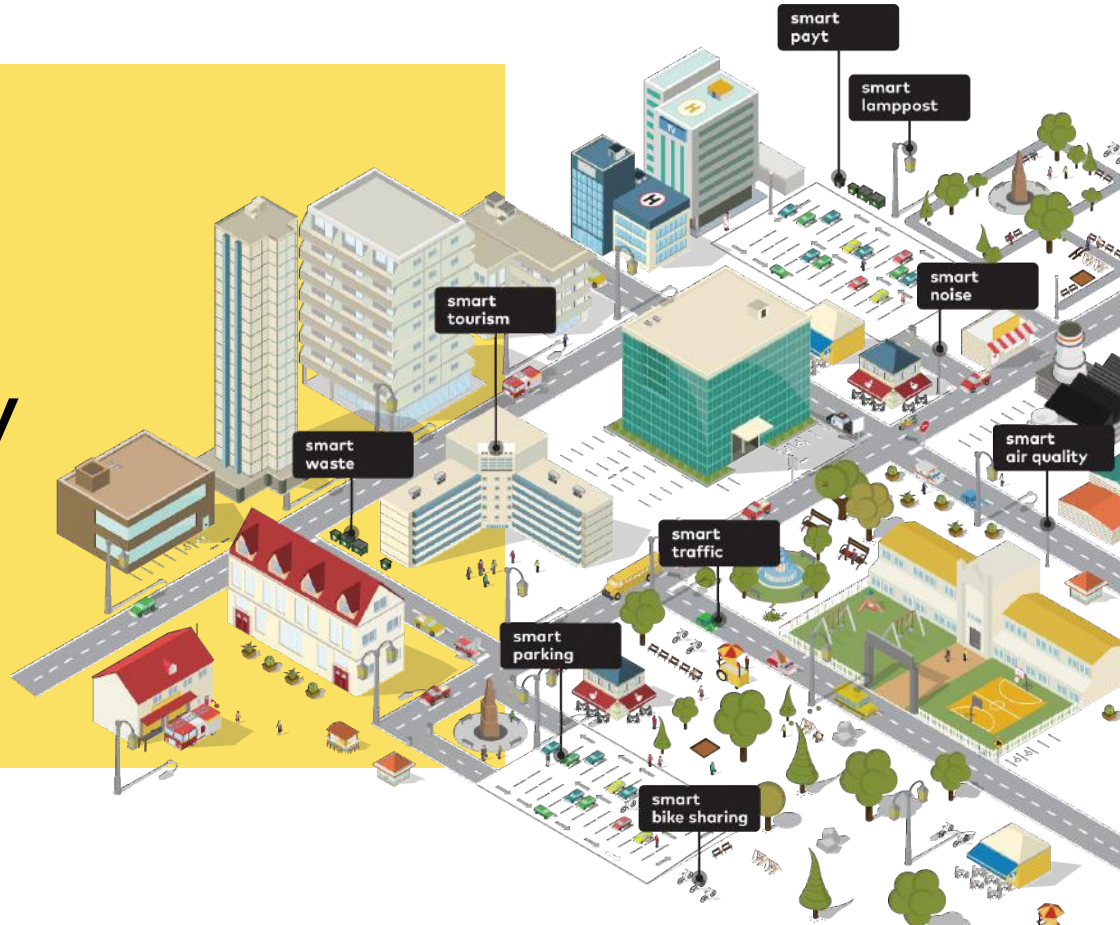
**But the current mobility paradigm is not sustainable”**



- [Shaping the Future of Mobility](#)
- [Financing the Transition to a Net Zero Future](#)
- [Global New Mobility Coalition](#)

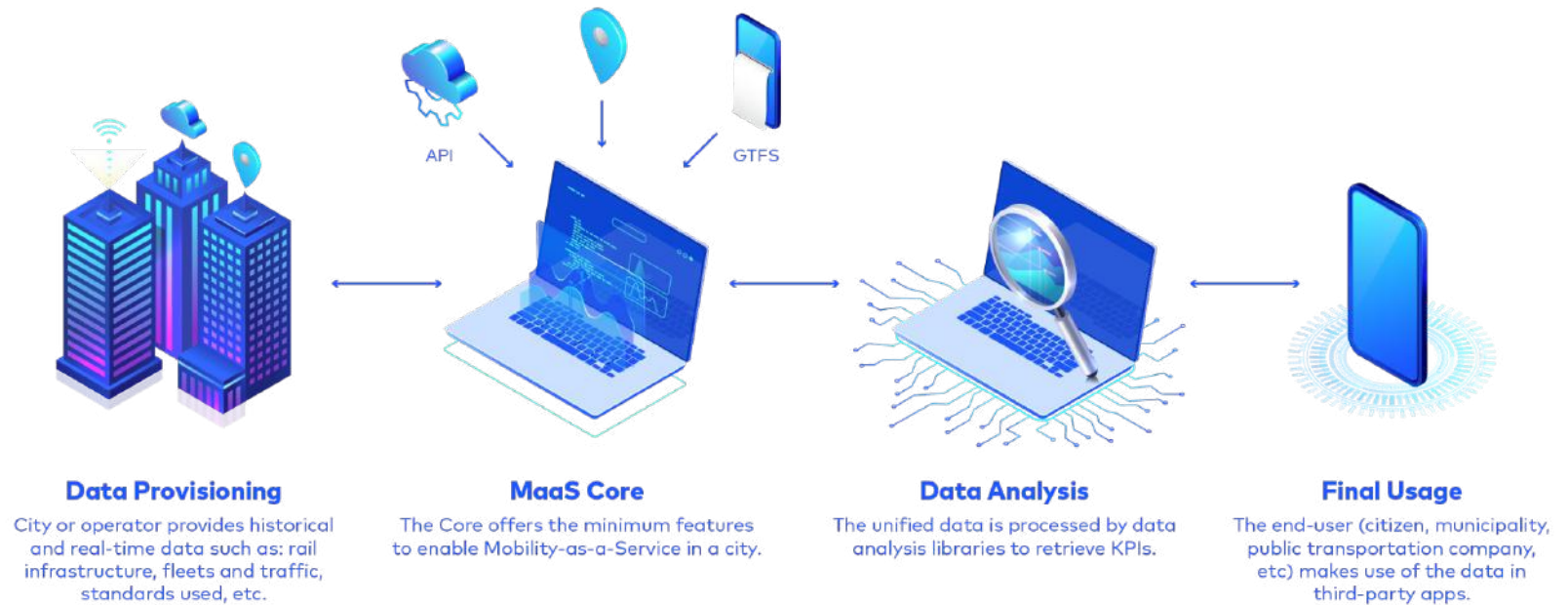


# How can city management improve the quality of life through digitisation?



# Enabling MaaS (Mobility-as-a-Service) with a single platform.





Gather private and public operators' data



View everything on a central and scalable platform



Integrate or create new use cases (on-demand, logistics, etc.)



Integrate, harmonise and standardise these datasets and web services



Define specific use cases on the platform (analytics, multimodality, etc.)

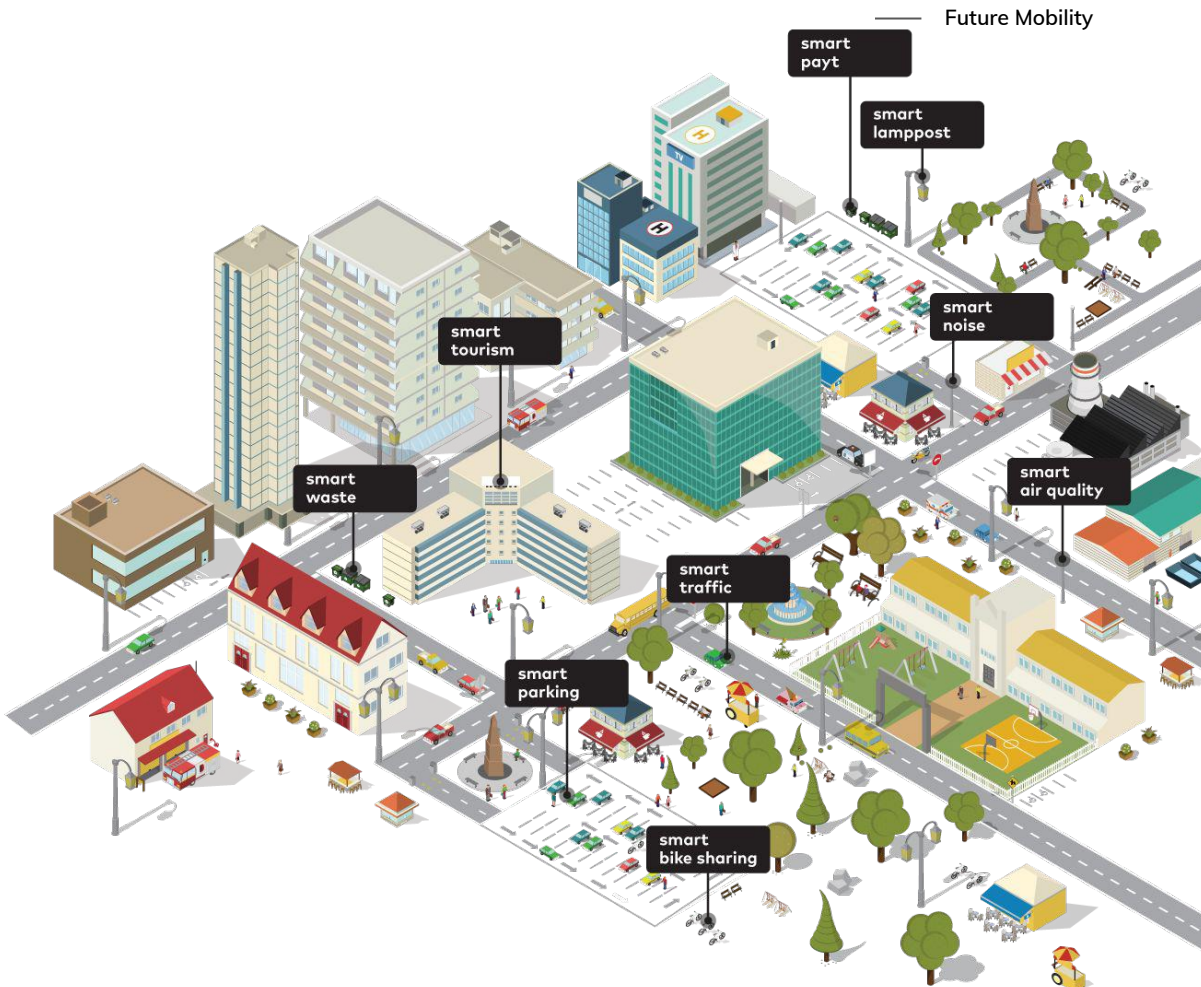


A regulated operator helps turn the MaaS vision into a reality





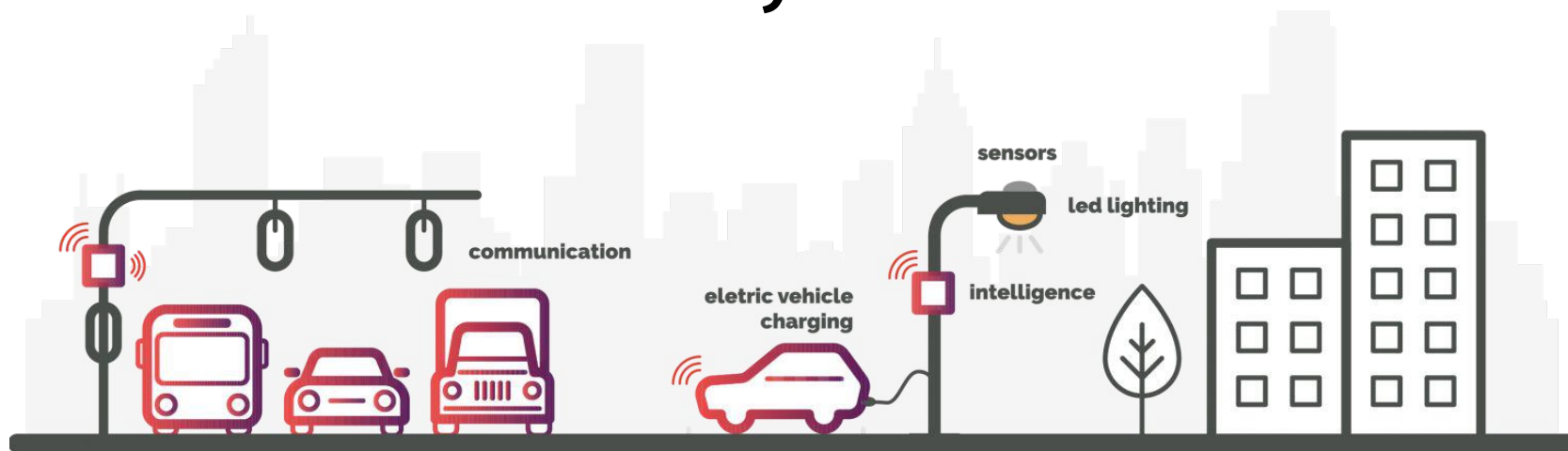
**Mobility** plays a **key role** in the current society being **as important as basic services.**



# Our **vision** for the **future**.

- 1** Bridge MaaS and Smart Cities
- 2** Enable a marketplace of MaaS for citizens
- 3** Empower a citizen-centric logic
- 4** Use novel networking technologies to enable MaaS

**Data collection** requires **widely available** and **reliable connectivity**.





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Meet the  
Uncle platform.







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A modular approach for shared smart infrastructure.

Easy to mix-and-match different modules into an elegant and clean solution, targeting both municipalities and different businesses across various domains.



- + Wireless connectivity
- + IoT sensing
- + EV Charging
- + Edge computing
- + New business models



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And enabling  
CCAM.

Autonomous shuttle  
demonstration in  
Aveiro (Portugal)  
during the Aveiro  
Tech Week event  
(October 2022).

Roadside unit processes data  
from the vehicle's on-board units

CCTV  
camera

messages

→ [ride2autonomy.eu](https://ride2autonomy.eu)

RIDE 2  
AUTONOMY

AVEIRO  
CITY

TECH  
CITY

instituto de  
telecomunicações

universidade  
de aveiro



Ride2Autonomy is a EU-funded project demonstrating autonomous shuttles in the transport system of 10 cities.

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Be it connected mobility, shared  
mobility, autonomous mobility...



# Ubiwhere @ Route25



## Cooperation between public transport and personal vehicles

Route25 focuses on cooperation between public transportation and assisted and autonomous vehicles at street and fleet management levels. At street level, Route25 is looking into ways to **prioritise public transportation in cooperative manoeuvres**.



## Multi-sensing and communications platform for situational awareness in an urban context

Route25 provides the communication and sensing infrastructure to enable autonomous driving to be deployed in different types of cities.

The project leverage Ubiwhere's Smart Parking to use the infrastructure in the parking area and test it in a private-public transportation scenario.

# Ubiwhere @ IN2CCAM

## Follower living Lab of Quadrilátero

Setup of **Connected Street Furniture** in Guimarães, a modular concept of a lamppost with cutting edge technology. It allows municipalities to future-proof their smart city and Mobile Network Operators to **cost-effectively** deploy their **5G solution**.

Connected Urban Furniture solutions are complemented with a **management platform** that allows tenants and owners/landlords to perform **lease** and **asset management tasks**.

Deployment of a management system to collect real-time data in the Municipality of Guimarães that will allow the city to monitor more than 900 on-street and off-street parking spaces.

The city has implemented The Urban Platform, UW's data management platform, (<https://urbanplatform.city/>) where multiple sets of information have been integrated (such as traffic flow observations, incidents, weather and buildings), being a case study by Gartner on Location Intelligence, and a best practice by the European Commission.

This solution sets the baseline for the city to experiment new mobility scenarios and use cases with AI and simulation for a greater efficiency and better quality of life.



This project has received funding from the EU's Horizon Europe Programme under grant agreement no 101076791 (Innovation Action)



ubiwhere

Suiting the future of  
cities and regions.

+ blueprint and reference  
architecture for EU data space  
for smart cities

+ real-time data collection and  
analysis and digital tools for  
the community

+ citizen-centric approaches  
for transparency and better  
governance

+ improving energy efficiency  
and reducing GHG emissions

+ enabling mobility  
management and evolution

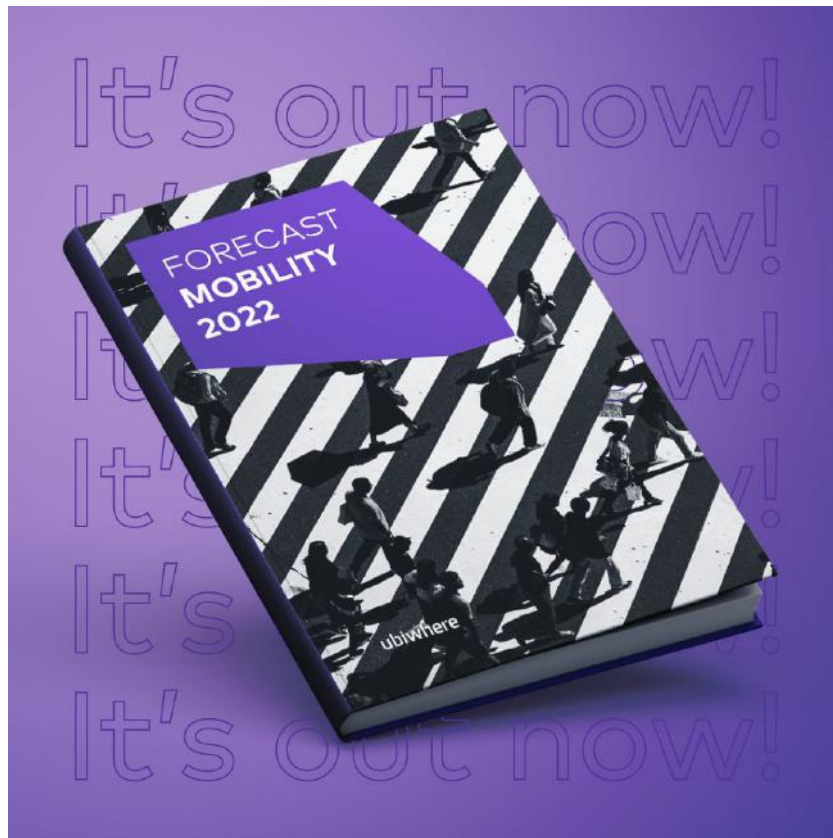
We're here for  
the long run.

## Forecast **Mobility** 2022

Ubiwhere's take and reflection on mobility, its tendencies and most relevant technologies for the future.



Get it here:  
<https://t.ly/vc54u>



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