

Abertis Mobility Services (AMS) tests a new distance-based fee solution for cities to promote public transport and active mobility

- *Abertis Mobility Services (AMS) is the industrial partner of IMMENSE, an innovative mobility project based on a Traffic Demand Management (TDM) scheme aimed at having more livable cities in favor of increasing the use of shared transport and active travel modes such as cycling, in exchange of less use of private vehicles.*
- *For the implementation of the actual pilot, AMS will test a new satellite distance-based fee (DBF) solution in the cities of Munich (Germany) and Esplugues de Llobregat (Barcelona, Spain) and an app for users participating in IMMENSE.*
- *AMS will test a DBF solution pilot with dynamic pricing in an urban environment, building on a great experience in this type of solutions from Road Usage Charging programs in the states of Washington, Oregon, Utah and Virginia in the United States.*
- *The pilot project will be executed by a consortium bringing together CARNET, the project leader, and with the collaboration of Cima Engineering & Environmental, S.L., the Universitat Politècnica de Catalunya – BarcelonaTech (UPC), City of Munich and Esplugues de Llobregat City Council.*

Barcelona, 12 April 2023 - Abertis Mobility Services (AMS), one of the world's leading providers of smart mobility solutions, is taking part in an innovative urban mobility project to develop a satellite distance-based fee (DBF) solution that will be tested in the Low Emission Zones of the cities of Munich (Germany) and Esplugues de Llobregat (Barcelona - Spain). The program, which is financed by EIT Urban Mobility, an initiative of the European Institute of Innovation and Technology (EIT), a body of the European Union and other partners, seeks to promote **intelligent, connected mobility, and expand the sure of shared transport and active travel.**

AMS will develop this product as an industrial partner of IMMENSE, a project that aims at defining innovation strategies in traffic demand management in cities to discourage and reduce the use of private vehicles and promote sustainable transport, with the aim to have more livable cities. Specifically, it is a Traffic Demand Management (TDM) scheme so that the cities involved in the pilot can simulate traffic strategies based on the information provided by the solution, together with an app that enables users to control their use of road infrastructures. The proposed solution, which will have a 2-month pilot phase and will involve around 1,000 citizens, will test a demand-driven pricing strategy, where users will be informed on the payment defined by a fixed fee to access the low emission zone, and a variable fee depending on the number of kilometers travelled, the level of usage and congestion at the time of access.

TDM schemes have a significant and positive impact on public life, reducing congestion and pollution, while promoting safety and improving air quality, the environment, and the health of inhabitants.

The project, which will involve the cities of Munich and Esplugues de Llobregat (Barcelona), will consist in the implementation of a simulated satellite DBF solution pilot in a city, covering the back-office management and the development of the app for the citizens. The company has experience in the implementation and operation of this type of schemes with the implementation of Road Usage Charging programs in the states of Washington, Utah, Oregon and Virginia in the United States

through its subsidiary Emovis. This satellite tolling framework is a system that allows drivers to pay for the actual use of the road network, with an exact calculation of the kilometers driven.

Reduce congestion in cities and use public spaces effectively

The project aims to help city authorities in Esplugues de Llobregat and Munich and support the effectiveness of their Low Emission Zones. The developed tools are set to simulate a scenario where congestion is reduced by a 10% and 25% for Esplugues de Llobregat and Munich respectively depending on the availability of alternative routes within the affected areas.

In the medium and long term, IMMENSE will also make it possible to free up at least 10% of public space for the use of shared transport and active travel modes, among others, due to the optimization of the use of road infrastructure and the increase in revenues of the dynamic fare system.

The implementation of this pilot is planned for 2 months, from September to November 2023. During this period, the complete system will be tested with approximately 1,000 users in the cities of Esplugues de Llobregat (Spain) and Munich (Germany), with an integrated system platform and end-user application, capable of managing urban traffic demand through a dynamic pricing strategy.

To attain a final solution that could be both scalable and useful to a broad range of cities, IMMENSE welcomed into the partnership the municipalities of Munich and Esplugues de Llobregat as they both have different consolidated TDM schemes, including Low Emission Zones and vehicle access regulations.

In addition, IMMENSE will serve as a platform for city authorities to simulate, report, evaluate and, in a hopeful future horizon, implement TDM schemes.

IMMENSE will also generate Big Data, providing a comprehensive framework to improve and implement bespoke TDM strategies, thus ensuring a high potential for replication and scaling in different European contexts. This supports the EU's launched mission of "100 Climate Neutral and Smart Cities by 2030", while contributing to EIT Urban Mobility's vision of "creating mobility that enables people and goods to move affordably, quickly, comfortably, safely and cleanly, while accelerating solutions and the transition towards a user-centric, integrated and truly multimodal transport system."

Cleaner cities for the whole community

IMMENSE is aligned with EIT Urban Mobility's strategic focus of building public support to implement and maintain TDM schemes that change citizens' travel patterns. However, these solutions may face social opposition as established mobility patterns are questioned. The benefits of IMMENSE and the implementation of models with gamification in the tool overcome this problem, as they increase public support for congestion charging mechanisms in different urban areas represented by City Demonstrators.

TDM schemes like IMMENSE are extremely effective in providing good transportation options for all citizens and communities. For example, by promoting greater use of active modes of transport, the programme will also ensure access to cleaner, safer, more affordable, and equitable travel options.

According to Christian Barrientos, CEO of AMS, *"we believe that all agents and players of the mobility ecosystem must promote a paradigm shift in urban traffic management, implementing Traffic Demand Management (TDM) schemes, to improve air quality, discourage and reduce the use of private vehicles*

entering the city center". He explains that IMMENSE is an excellent example of this and hopes that the program "will open the door for many European cities to improve their own infrastructures and traffic management options and, more importantly, have a great positive impact on the life of their communities."

Dr. Maria Tsavachidis, CEO of EIT Urban Mobility, said: *"With IMMENSE, Esplugues de Llobregat and Munich will deploy and test dynamic road pricing for traffic demand management. Their experiences may open the way for many other European cities that are urgently trying to reduce private vehicle traffic. Changes to the transportation system have a direct impact on citizens, businesses, and communities. Therefore, citizen participation and awareness during testing are key to ensuring acceptance and a wider scale of these solutions."*

About Abertis Mobility Services

[Abertis Mobility Services](#) (AMS) is a world leader in sustainable mobility solutions for cities and interurban transport systems. AMS has over 40 years of experience in designing, implementing, and managing innovative, state-of-the-art electronic toll solutions in 12 different countries. The company partners with road authorities, municipalities and local authorities, and private companies that operate toll infrastructure. AMS is also the competence centre of the Abertis Group, a world leader in the management of toll infrastructures.

Aligned with the UN's Sustainable Environmental, Social and Governance Development Goals, AMS focuses on reducing its carbon footprint and fostering a diverse and inclusive workplace.

About EIT Urban Mobility

[EIT Urban Mobility](#), an initiative of the European [Institute of Innovation and Technology \(EIT\)](#), a body of the [European Union](#), aims to accelerate solutions and transition towards a user-centred, integrated and truly multimodal transport system. As the leading European innovation community for urban mobility, EIT Urban Mobility works to avoid fragmentation by facilitating collaboration between cities, industry, academia, research, and innovation to solve cities' most pressing mobility challenges. Using cities as living laboratories, your industrial, research and university partners will demonstrate how new technologies can work to solve real problems in real cities by transporting people, goods, and waste more intelligently.