

Madrid

City Council Mobility Platform

As part of an initiative to modernize the city's mobility management, Madrid City Council selected Kapsch TrafficCom in February 2024 to provide a new mobility platform that integrates multi-vendor traffic management systems. The state-of-the-art EcoTrafIX™ software replaces the existing integrated platform and offers more flexibility and scalability for future challenges.

With EcoTrafIX™ Mobility, Madrid is preparing for the challenges of the future.

This is the first project in Europe to use the EcoTrafIX™ mobility suite as a unified platform for managing multiple traffic systems.

Kapsch TrafficCom is a long-term partner of the City of Madrid, which has relied on the company's expertise for 45 years to improve mobility and quality of life in Madrid, most recently with the first Bus Rapid Transit line and the expansion of the Low Emission Zone.



Project Scope:

The contract includes the supply of software and hardware as well as the maintenance of the city's traffic control center.

- Replacement of the existing integrated platform (GATAM) with Kapsch TrafficCom's EcoTrafIX™ software to act as an integrator of multi-vendor traffic management systems implemented in the Mobility Management Center of the City of Madrid,
- Supply of hardware and maintenance of the city's traffic control center,
- Migration of the existing Kapsch TrafficCom traffic control system (Optimus) to EcoTrafIX™ software in the eastern part of Madrid, including maintenance,
- Its functions include the maintenance of traffic lights, the installation of new infrastructure and the renovation of existing ones, the management of the systems of the Madrid Mobility Management Center (CGM), energy management at intersections, and eight innovation projects, including the urban corridor for connected vehicles (V2X), bus prioritization, and traffic light management based on pedestrian priority.

The Challenges:

- Use of the EcoTrafIX™ software as a new mobility management platform to control the various existing third party traffic management systems for the first time in Europe.

The Solution:

The overall architecture of the solution is based on Kapsch TrafficCom's systems

- EcoTrafIX™ Software (Version 3.6)
- Mobility Data Platform (MDP)

The EcoTrafIX™ software application monitors and manages mobility-related devices (traffic lights, controllers, measurement points, etc.), collecting traffic data not only from these systems, but also from other external sources, both existing and future, such as Google or WAZE, as well as other types of data, such as pollution data, equipment failures, GIS data, etc.

This enables global management of all connected subsystems, automation of response plans, integration of all data and its transfer to the Kapsch Mobility Data Platform (MDP) for advanced data analysis.

The EcoTrafIX™ software is not limited to equipment management, but also includes information and management of traffic events and incidents that occur in the Mobility Management Center of the City of Madrid. It also allows the incorporation of information on equipment breakdowns received through the different batches, as well as monitoring their status.

The EcoTrafIX™ software uses an HTML5 user interface with web browser access and integrated map-based visualization and operation.



The Added Value

- *The project represents a decisive step towards more efficient, sustainable and future-proof mobility management in Madrid.*