![kapsch >>>
challenging limits](logo)

Traffic management for the City of Vienna

"Traffic Management 2.0" will be implemented by the City of Vienna together with Kapsch as technology partner. On account of the most innovative, concrete and cost-effective concept submitted, Kapsch, a solution provider with a comprehensive perspective on the topic of traffic management and traffic control, was selected by the City of Vienna in a bidding competition in 2019.

With "Traffic Management 2.0", the city of Vienna is implementing the most modern traffic management system of its kind and is taking on a pioneering role worldwide!

The new and innovative functions of "Traffic Management 2.0" will noticeably improve traffic conditions in Vienna in the upcoming years. Emissions caused by road traffic are estimated to be reduced by more than 15%. Furthermore, with the complete system active, it is estimated that the time a car driver spends in traffic will be reduced by up to 30 hours per year - that's almost an entire working week. Last, but not least, since it is software based, there is no need for a costly reconstruction of the infrastructure. "Traffic Management 2.0" is software based can therefore be implemented cost-effectively and quickly.

The app "Grüne Welle Wien" (Green Wave Vienna) is now available for download in the Android and Apple / iOS app stores and serves both car drivers and cyclists. While at first development stage, it already includes about 75 intersections in an area around Ringstraße and the Danube Canal, covering a number of important arteries in the city center.

Project Scope:

A four-year frame contract that aims to provide the City of Vienna with a significant part of their "Traffic Management 2.0" solution, including:

- providing end users with data that allows them to navigate the city streets more efficiently
- using existing and new data to improve traffic flow with the aim to reduce congestion and emission
- making the vehicle an active part of traffic management

The scope of the framework covers the initial implementation in a pilot area, and there are plans to expand the network even further.

The Challenges:

- The volume and quality of traffic data is key to obtain significant results.
- Vienna is a large city with a complex mix of transport methods. Improving some methods without negatively affecting the other ones is crucial.

The Solution:

- Kapsch core EcoTrafiX™ system in combination with components from two subcontractors (GEVAS software GmbH and PTV Group)
- Using the latest digital methods: Instead of managing traffic in a static manner, e.g., via traffic light signals, "Traffic Management 2.0" adds dynamic traffic management based on live traffic flow information. This opens up completely new possibilities:

  I. A new form of dynamic traffic light control is currently being implemented in Vienna. It works with data from vehicles, and thus recognizes changing traffic conditions much better than previously possible.
  The completion of the pilot area around Ringstraße and the Danube Canal is planned for the end of 2022
  II. Next fall, the City of Vienna will provide its citizens a highly innovative navigation app. The goal of the app is to provide drivers with a navigation function that combines city and traffic data, allowing users to be guided in a more efficient way compared to alternative systems. As a first step, Kapsch's system will feed the navigation app with traffic signal data that allows it to optimize travel routing. Vienna will be the first city in Europe to offer its citizens this possibility.
  III. Based on the system foundations, by autumn 2023 further highly innovative navigation functions can quickly be added, including "Event Routing", "Green Wave Routing 2.0" and "Anti-Congestion Routing".

The Added Value

- Improved traffic management based on live traffic data.
- Significantly reduced emissions and traffic delays.
- Information on usage for end users surrounding optimal green wave driving.