



**kapsch** >>>  
challenging limits

Kapsch TrafficCom

## ***Multi-Lane Free-Flow Tolling.***

Our Multi-lane free-flow tolling solution is the perfect choice for electronic toll collection and enforcement on all type of roads with high traffic volume or toll objects like bridges or tunnels. The solution is characterized by low operating costs, easy to install and ensures highly performant and accurate charging and enforcement.

Maximize your toll income with Multi-Lane Free-Flow Tolling by Kapsch.

# Multi-Lane Free-Flow Tolling.

Our interoperable turnkey solution, ideal for high level roads with high number of users, supporting all key electronic tolling technologies and tolling schemes.



To cope with ever rising road traffic it is crucial to maintain a network of high level roads. Yet, the costs of such an infrastructure are enormous. Moreover, congestion and resulting pollution question the sustainability and efficiency of road transport. Our Multi-Lane Free-Flow Tolling solution addresses these issues and allows to generate revenue that can be used to recover capital and operating expenditure on road infrastructure while ensuring fast and efficient flow of traffic.



Once our Multi-Lane Free-Flow Tolling solution is in place, our customers can safely rely on its flexibility. Based on our experience we know that road networks and the number of users are the subject of constant alterations. Therefore, we aim to provide the most flexible and modular solutions available. As the number of users changes our solution scales accordingly. If the road network needs to be modified temporarily due to construction works or permanently our solution can be adapted easily.



Inefficient tolling systems add to negative perception of road users towards toll roads. Our MLFF solution is designed to achieve excellent performance under heavy traffic conditions in fully multi-lane free flow environment. Therefore, exceptional user experience is guaranteed.



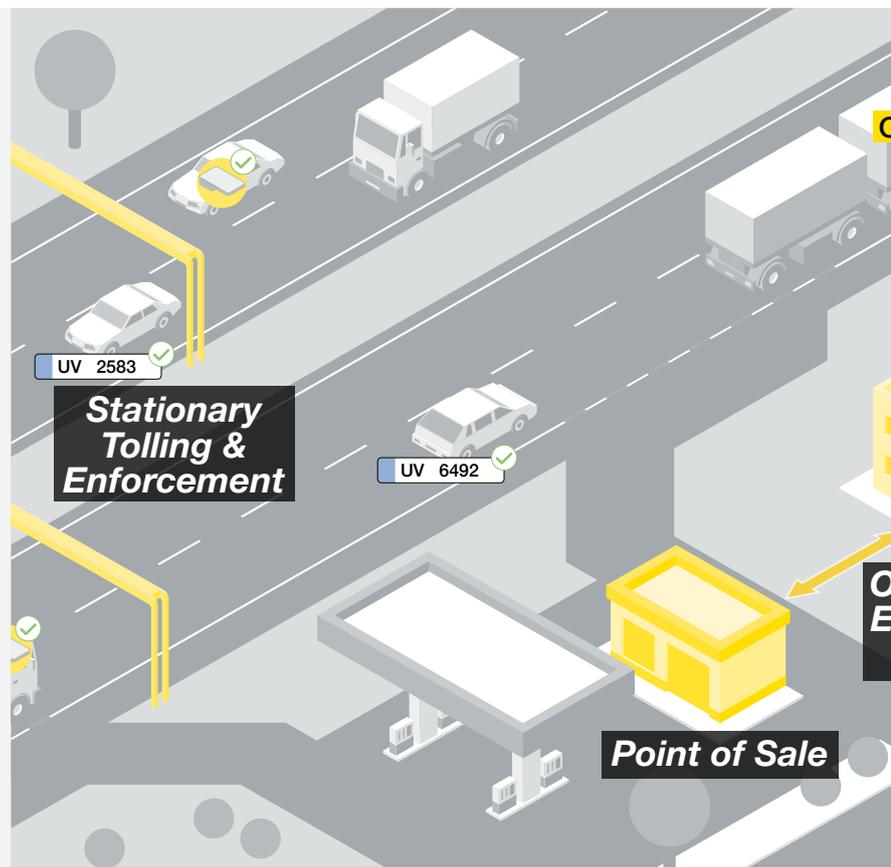
Solutions need to last. Therefore, at Kapsch we pay absolute attention to technology safe solutions. This means that we are permanently at the forefront of using new technologies and methods. That way we can ensure you will be satisfied with our solutions over their entire lifetime and beyond. If ever a new technology evolves we securely include it in case it proves to be beneficial for you or your clients.

## CEN DSRC on-board units.

- > Smallest available on-board unit on the market
- > Simple windscreen mounting
- > Long lifetime
- > Audible user feedback
- > Supports multi-applications
- > High security measures
- > High performance and used for European Union

## RFID-63 Tags.

- > Passive, battery-free RFID-63 transponders standardized for electronic toll collection
- > Windshield tag, especially designed for windshield glass
- > Headlight tag, specifically designed for headlight glass
- > Long lifetime



## Tolling Stations.

- > Full multi-lane free-flow tolling functionality during stop & go and high speed traffic
- > Available key electronic tolling variants: CEN DSRC 5.8 GHz, RFID-63 and ANPR or any combination
- > Tolling stations and/or combined tolling & enforcement stations located on the roadside

## Enforcement.

- > Highly frequented road sections are controlled by our stationary enforcement located on the roadside
- > With mobile enforcement vehicles can be checked on the fly and on-the spot
- > Portable enforcement allows to utilize the moment of surprise

## Reference Facts.

- > #1 electronic toll collection solution supplier globally and leading multi-lane free-flow tolling supplier world-wide with more than 100 Million on-board devices sold and approx. 20,000 equipped free-flow lanes
- > Customers around the globe rely on our free-flow tolling systems
- > Implementation of several nationwide multi-lane free-flow tolling systems for heavy good vehicles including long-term operation services in Austria, Poland, Czech Republic and Belarus
- > Implementations of several multi-lane free-flow tolling systems for all-vehicles including design, delivery, operation and maintenance in United States, Chile, Australia, New Zealand and South Africa

## Back Office.

- > The Operational Back Office verifies toll and enforcement transactions. The rating module unifies and charges the toll transaction according to the toll chargers rules
- > The Enforcement Back Office manages all toll enforcement incidents. Data is stored and reported according to the respective legislation
- > The Commercial Back Office covers all customer relationship management functionalities. It includes online and mobile channels, call centers and does all payment handling (PCI-DSS)



## Highlights.

- > Pioneer in multi-lane free-flow tolling (the world's first multi-lane free-flow system in Australia)
- > World-wide proven end-to-end turnkey solution with strong success record.
- > Technology neutral solution, supporting all key electronic tolling technologies: CEN DSRC 5.8 GHz, RFID-63 and ANPR (automatic number plate recognition)
- > Based on most innovative subsystems and products on the market, developed in-house
- > Interoperability & compliancy with international standards
- > Choice of several low-cost on-board units, depending on the tolling technology
- > High scalability to handle increasing number of users or road network extensions
- > High performance vehicle identification, detection, tracking, classification of passing vehicles
- > Latest security utilizing state-of-the-art security mechanisms
- > Most cost-effective free-flow electronic toll collection solution for occasional users (mixed scheme)
- > "One-stop-shop" solution offering, providing assistance during the planning phase, customized solution design, system implementation and technical and/or commercial operation of the system
- > As a global provider of various intelligent mobility solutions, we offer the broadest portfolio allowing you to upgrade your solution to include other ITS applications

## **Kapsch TrafficCom**

**Kapsch TrafficCom** is a provider of intelligent transportation systems (ITS) in the segments of toll collection, city access control and parking space management, traffic management, traffic monitoring, utility vehicle monitoring, electronic vehicle registration and V2X cooperative systems. The end-to-end solutions of Kapsch TrafficCom cover the entire value creation chain of its customers, from components and design to the installation and operation of systems, all from a single source. The core business comprises the development, installation and operation of electronic toll collection and traffic management systems. Reference projects in more than 50 countries on all continents have made Kapsch TrafficCom a globally recognized ITS provider. As part of the Kapsch Group, an Austrian family-owned technology group founded in 1892, Kapsch TrafficCom is headquartered in Vienna, Austria, and has subsidiaries and branches in 33 countries. It has also been listed since 2007 on the Vienna Stock Exchange (KTCG) and earned revenues of EUR 526 million in the 2015/16 fiscal year. The company employs over 4,600 employees worldwide.

**>>> [www.kapsch.net](http://www.kapsch.net)**