

Australia and New Zealand

World leaders and pioneers in tackling road congestion and infrastructure funding challenges.

The world's first and largest electronic toll collection system for an interurban environment is the Melbourne City Link.

Looking back on 10 years of experience – the introduction of this system has been the most powerful decision. It has significantly improved travel times for motorists and streamlined operations and related costs.

Kapsch TrafficCom's accurate and high performance installation has set an example throughout Australia and New Zealand. Up to date Kapsch TrafficCom has supplied multiple turnkey multi-lane free-flow systems around Melbourne, Sydney, Brisbane and Auckland and is the market leader in this specialized sector.

A Decade of Multi-Lane Free-Flow: Cooperating for success

Oceania today is leading the development in the area of cashless, multi-lane free-flowing toll roads, both in technique and operation. For over a decade, Kapsch TrafficCom has been part of the cornerstone in this remarkable development. Initially as a provider of the most advanced technical system available for multi-lane free-flow tolling and more recently as a provider of expertise to create highly efficient business models suited to the individual needs of each specific operator.

Project Scope:

- Motorway deployments through open and closed systems
- Full end to end solutions through roadside to central systems
- Walkable gantry solution to avoid traffic distributions for maintenance operations.
- Matching urban design requirements through cladding
- Enhancing safety for technicians to reduce visibility and distractions to road users
- High performance and availability systems to maximise revenue and avoid leakage

The Challenges:

- Kapsch was key in Australia to migrate away from Plaza to MLFF, this was apparent in the M5 West Motorway in Sydney by migrating the last Plaza to MLFF
- Tunnel installation throughout Australia have been key to customers where real estate has stood a challenge, Kapsch's experience and expertise had ensured a successful and on time delivery.

The Solution:

- Free flow toll collection using Dedicated Short-Range Communications (DSRC), video based detection and classification and Automatic Number Plate Recognition (ANPR).
- DSRC systems use cost-effective on-board units designed for collecting tolls from passenger cars and trucks that regularly use toll roads. The on-board units in the vehicles communicate with transceivers via the highest performance-to-cost DSRC solution on the market, using an Australian variant of the CEN 5.8 GHz standard, in an open-road (free-flow) toll collection.
- Kapsch's unique video-based stereoscopic 3D measurement and ANPR based systems are used to collect tolls from occasional and non-registered users. The vehicle characteristics and number plate are detected and read, using innovative technologies to determine whether the vehicle is required to pay the toll and to calculate the amount.

The Added Value

- Expertise in delivery efficiencies allows for flexible, adaptable and easy deployment.
- Full-service solutions from initial system design to ongoing maintenance
- Using a stereoscopic 3D based system to detect and classify vehicles with high performance in complex traffic conditions.
- Provide a safe and easy to use gantry design for maintenance, using a standard model that allows to match urban design requirements with strong delivery methodologies.