



# FREEING UP THE STREETS

**TRAFFIC** VIOLATION

**PARKING VIOLATION SYSTEM**

**ACCESS VIOLATION SYSTEM**

VIDEO MONITORING

Free roads for vehicle passage in cities

Safety increase on the streets

Conditions for better provision of public services

Increase of parking spaces availability

Protection of private and reserved parking spaces

**CROSS PAVIS  
PARKING VIOLATION  
SYSTEM**

**DISCIPLINE IN THE STREETS  
TRANSIT ROADS, FLUENT TRAFFIC**



# CROSS PAVIS PARKING VIOLATION SYSTEM

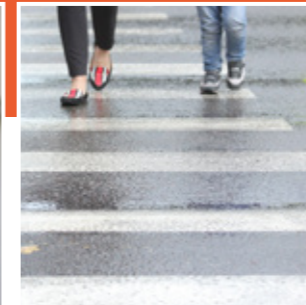
CROSS Pavis is a system for the automatic detection of illegal parking. It is used for an effective monitoring of keeping the parking rules in defined zones. It can effectively monitor areas of prohibited stopping or parking, or areas with a limited parking time.



## SITUATIONS THAT PAVIS AFFECTS



Areas of prohibited parking and stopping



Parking on pedestrian crossings, in entrance, pavements, bus stops etc.



Unauthorized parking in restricted zones



Exceeding the maximum permitted stay

**PAVIS**

FREE PASSAGE FOR ALL CITY ROADS USERS



## HOW DOES IT WORK?

Pavis is a system that scans the streets and pre-defined areas on them for parking offences. All movement of vehicles is monitored and evaluated. If a vehicle is found to be stopped or parking in an area where parking is restricted, a ticket is issued. The offence document is a set of proof materials including an overview picture of the offending vehicle with an automatically recognised license plate (using an LPR engine).

The system generates a list of offences with a time stamp, car number plate and accompanying detailed photo documentation. It runs independently, but all offences are sent to a central server for storage. Thanks to the thin web client, Pavis can also be set up to with any web-enabled device and used for immediate enforcement. The system can also be easily integrated into any 3<sup>rd</sup> party enforcement and violation solution.

CROSS Pavis is an easy and effective solution for every city

## PAVIS IS A WAY TO ACHIEVE

- Roads free for passage of vehicles
- Increased safety on the streets
- Conditions for better provision of public services - public transport, taxi, refuse collection, passage of rescue vehicles
- Protection of private and reserved parking spaces
- Better availability of parking spaces

## BASIC SYSTEM FUNCTIONS

- Automatic generation of offences
- Detailed and conclusive documentation of offences (offence report and photos)
- Time limit setting (offence tolerance)
- White list
- Customizable output format (open data format)
- Full functionality even in case of short-term data connectivity outage



# CROSS AVIS ACCESS VIOLATION SYSTEM

CROSS Avis is a system enabling simple and efficient monitoring of vehicles entering supervised urban areas, the evaluation of permission to enter such zones and generation of offences records in case of unauthorised entry or passage.

## USUAL SITUATIONS



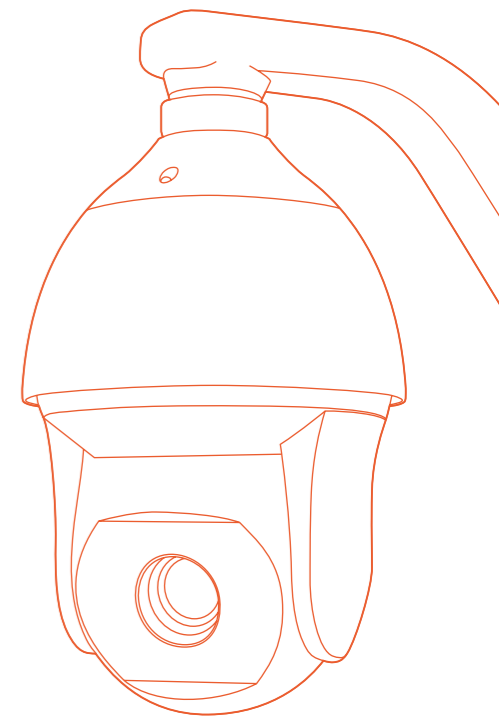
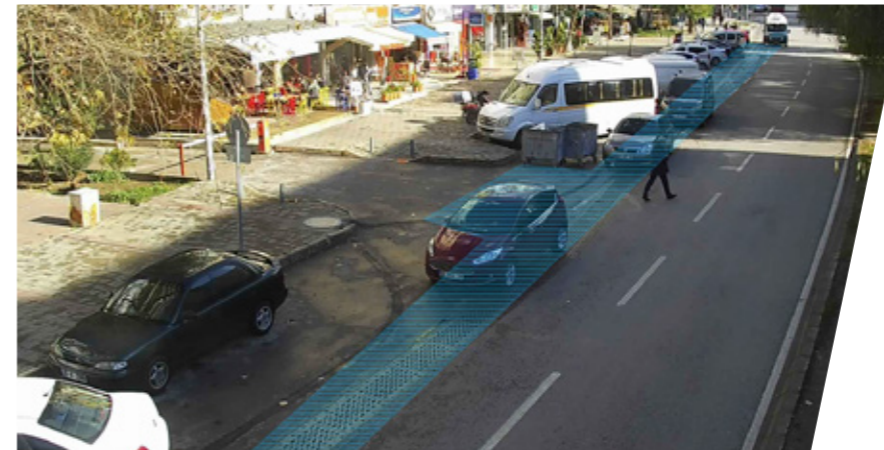
For detection, the CROSS Avis utilises a camera with an integrated system of license plate recognition. Each individual record contains:

- Vehicle's licence plate number
- Timestamp of the event
- Information about the precise location
- Evaluation of authorised or unauthorised entry, detection of violation and its character (violation protocol)
- Detailed photo documentation of the event

The CROSS Avis web interface also enables monitoring of given locations via a visualisation module including real live video from the place of installation.

## REFERENCES

### THE CROSS PAVIS SYSTEM IZMIR, TURKEY



CROSS Pavis installation has been a part of one of Europe's biggest ITS projects realised for the Turkish city of Izmir (4.5 million inhabitants). Currently, 116 Pavis stations are in use in various parts of the city.

Presently, the CROSS Pavis recognises around 300,000 vehicles per day under the 24/7 regime. During the heaviest traffic, more than 4,000 traffic violations per day are detected by the system for further processing.

### THE CROSS AVIS SYSTEM ČESKÉ BUDĚJOVICE, CZECH REPUBLIC

Traffic violation detection system for the vehicle transit control.



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