



ROAD TRAFFIC TECHNOLOGY



GOOD JOURNEY  
INNOVATIONS



# CROSS HOLDING

The company dates back to 1994 and set out by installing systems comprising stand-alone traffic light controllers. We have grown and diversified ever since to the extent that our staff now carry out major Smart City and road projects all around the world. Enabling smooth, safe travel for everyone is the goal of CROSS – a family-run business – and the team it employs.

Ing. Tomáš Juřík  
CEO

## VISION

To be at the forefront of developing and implementing innovative traffic technologies. To deliver world-class services, technology and products to our partners and customers.

## WHY CROSS?

- State-of-the-art technology
- In-house R&D
- Experts and transport engineers
- Wealth of real-world experience
- Customized solutions
- Flexibility

## 1994

BEGINNING OF  
THE STORY

## 200+

EMPLOYEES

## 50+

DEVELOPERS

## 500+

MILLION CZK  
IN REVENUE

The advanced technologies we develop in-house at CROSS are applied in everything we do – ITS and Smart Cities projects, Traffic Control, Parking, Weigh-In-Motion, Road Telematics and Road Weather status. We have specialists on hand for consultation capable of discussing a potential project of any scale, covering all the bases – from A to Z. An important factor for

clients is the knowledge that any state-of-the-art proposal from us will be interoperable with the software or hardware they already have in place and can be customized to suit the given application. Systems by CROSS have been installed in locations from Japan to Brazil, Norway to Tanzania with the aim of keeping traffic moving whatever the local conditions.

### CROSS HOLDING:

CROSS Zlín, a. s. | Incinity, s. r. o. | Lab Systém, s. r. o. | Cross Türkiye | Cross Deutschland | Spinnea



INTERTRAFFIC INNOVATION AWARDS 2018  
Winner in the Infrastructure category



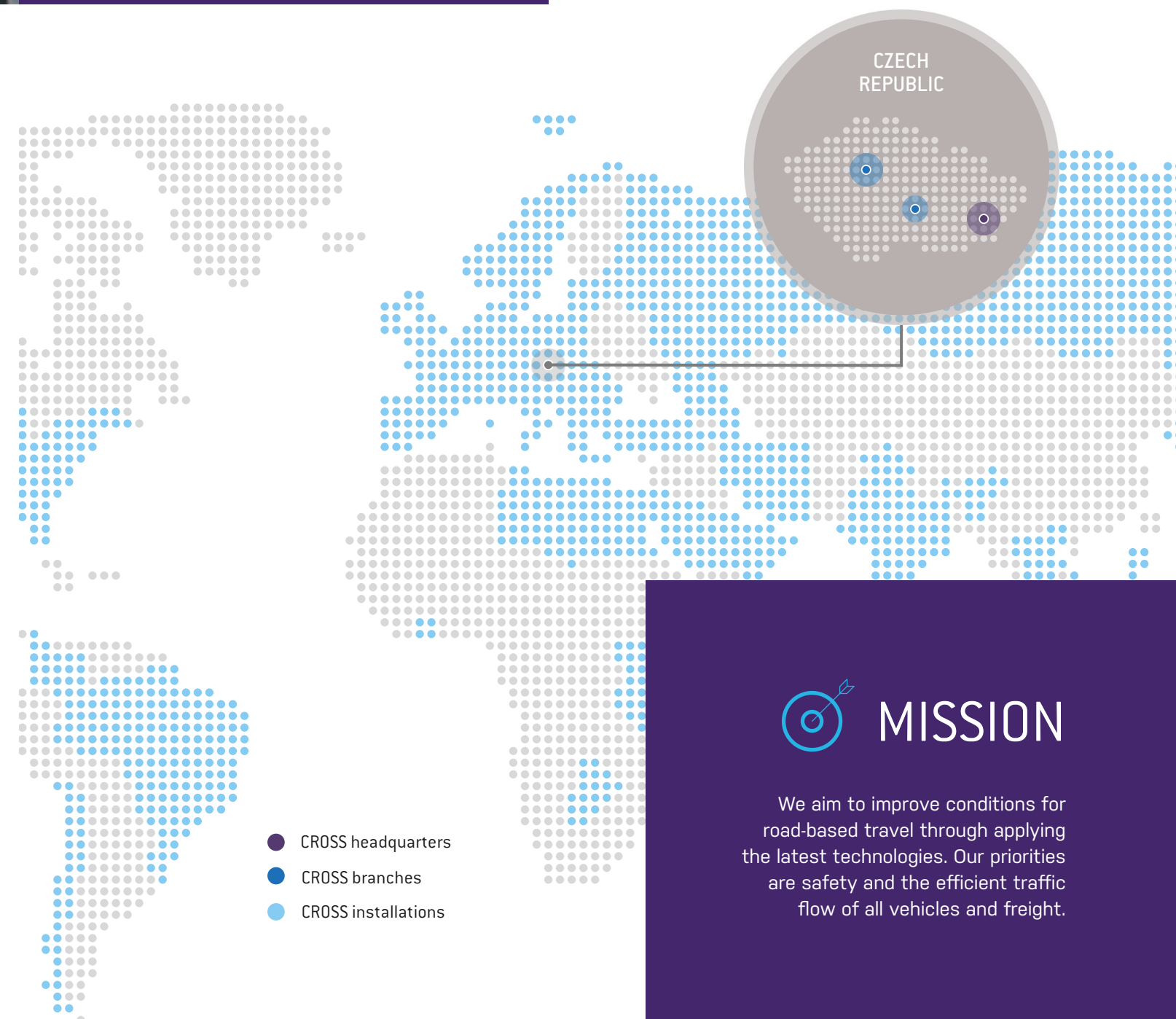
INTERTRAFFIC INNOVATION AWARDS 2016  
Overall winner



INTERTRAFFIC INNOVATION AWARDS 2016  
Winner in the Smart Mobility category



SMART CITY SERVICE AWARD 2017  
Winner



## MISSION

We aim to improve conditions for road-based travel through applying the latest technologies. Our priorities are safety and the efficient traffic flow of all vehicles and freight.


# PRODUCT OVERVIEW

[www.cross-traffic.com](http://www.cross-traffic.com)

## WEIGH IN MOTION

An advanced and progressive Weigh-in-Motion system for weighing fast-moving vehicles in combination with loop detectors, road sensors and a core WIM module. CROSS software enables on-line measurement as well as immediate validation and enforcement.

[www.optiwim.com](http://www.optiwim.com)



## TRAFFIC CONTROL

Complete systems and hardware for intelligent control of traffic in cities, including traffic light controllers and control centres for comprehensive monitoring purposes and adaptive traffic management.



## PARKING SYSTEMS

A complete solution for parking in outdoor areas, urban zones, garages or car parks. Every device is integrated with a system that handles all management and control, including payment terminals for off-street and on-street parking.



- CrossWIM** dynamic weighing unit with a facility for direct enforcement
- #OPTIWIM®** certified as the most precise system for assessing dynamic weight

- CROSS RS 4** traffic light controller
- CROSS RS 4S** traffic light controller
- eDaptiva®** full-featured urban traffic management centre
- PTC®** maintenance and programming software

- CrossPark** parking system with automatic barriers
- CROSS APTM** universal payment terminal
- CROSS APTL** payment terminal lite

## ROAD WEATHER

A system for monitoring and predicting weather conditions on roads and in cities. It can be extended to form a comprehensive solution with numerous options for intelligent management of wintertime road maintenance.

[www.metis4.com](http://www.metis4.com)




## TRAFFIC VIOLATIONS

Solutions for eliminating illegal stopping and parking on the streets of city centres. Systems for evaluating authorized or unauthorized entry and transit in areas where traffic is regulated.



## DATA COLLECTION

State-of-the-art systems for classifying and counting vehicles, based on inductive loops, cameras or radars. The ability to monitor traffic flow and calculate travel times.



## INVIPO®

A platform that enables the visualisation and integration of solutions for smart cities and intelligent road networks.

[www.invipo.com](http://www.invipo.com)

- CrossMet** road and urban meteorological stations
- METIS** advanced road weather information system
- SSWM** system to aid decision-making in road maintenance
- WMI** performance of wintertime maintenance and cost analysis

- CROSS Pavis** parking violation system
- CROSS Avis** entry and transit detection

- CrossCount** traffic counter and classification device
- Travel Time module** traffic detectors and unit for traffic flow monitoring and predicting travel times
- CROSS ControlUnit** universal unit for collecting and transferring telematic data



COMPREHENSIVE  
SMART CITY PROJECT

ITS:  
SMART TRAFFIC  
SYSTEM



Izmir is the third largest city in Turkey, the administrative centre for its province and home to almost 4 million inhabitants.

CROSS was tasked with supplying and installing infrastructure that included traffic lights, equipment for detecting and monitoring traffic flow, parking violation systems, meteorological devices to gauge weather conditions on roads and other technologies for its transition into a smart city. In total, over 3,000 individual items were incorporated in the system, which communicates on-line with Invipo - the Smart City platform.

ITS IZMIR was awarded the Smart City Service trophy in 2017



TRAFFIC CONTROL:	400 intersections
TRAFFIC CONTROL CENTRE:	9 x 6 m video wall
PRIORITY FOR PUBLIC TRANSPORT:	1,500 vehicles
PARKING:	60 navigation boards
ON-STREET PARKING:	2,000 road sensors
INFO PANELS:	108 digital message boards

PEDESTRIAN ZONES:	107 sets of bollards
ROAD WEATHER SYSTEMS:	30 stations
PAVIS:	116 monitoring locations
TRAFFIC VIOLATIONS:	100 locations
DATA COLLECTION:	209 traffic points

[www.itsizmir.com](http://www.itsizmir.com)

REFERENCES

Other references



Hungary  
Network of 106 Weigh-in-Motion stations



Mošnov, Czech Republic  
Comprehensive airport parking



Czech Republic  
Road weather national system



Aarhus, Denmark  
Cloud-based urban traffic control system



St. Petersburg, Russia  
Traffic control on Vasilievsky Island



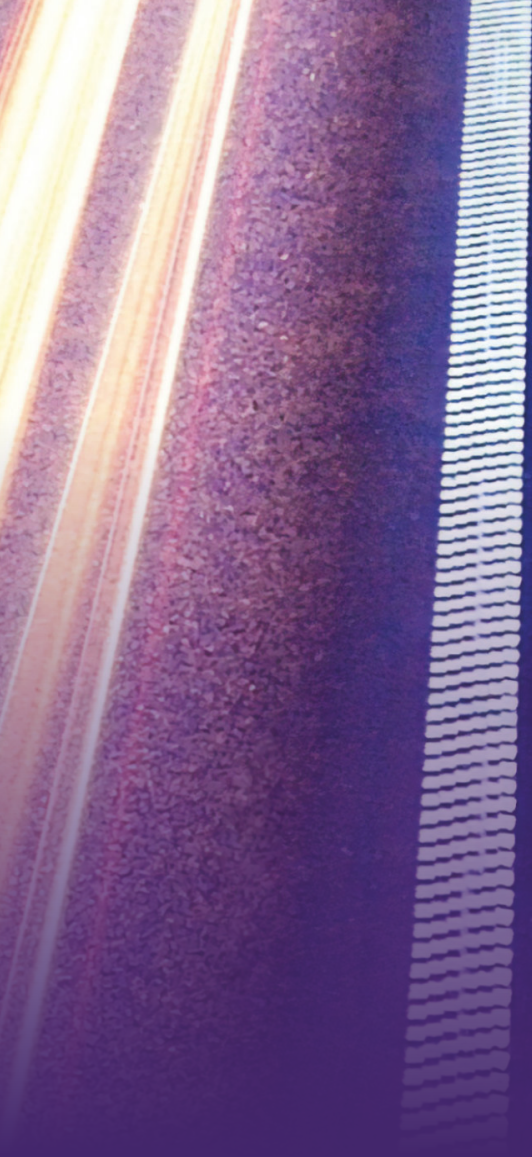
Bulgaria  
Data collection, network of 200 CrossCount stations



Saudi Arabia  
Weigh-in-Motion



Czech Republic  
Weigh-in-Motion for direct enforcement



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EUROPEAN UNION  
European Regional Development Fund  
Operational Programme Enterprise  
and Innovations for Competitiveness

**[www.cross-traffic.com](http://www.cross-traffic.com)**

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