





Owner/Client	Location	Completion date	Final Contract Amount
Municipality of Slovenia	Ljubljana, Maribor, Novo Mesto, Murska Sobota	up to 2010	6.000.000 €

Iskra Sistemi d.d. are successfully managing urban traffic in Ljubljana and other major cities in Slovenia for more than 50 years. We are following modern trends of urban traffic automation and are implementing most contemporary solutions, ready for future challenges. Our traffic controllers MSKE are outdoor computers, combining engineer's knowledge and years of experiences. Fully modular hardware and high-capacity state-of-the-art software of the controllers are installed in stainless steel housing with excellent mechanical and anticorrosion characteristics and necessary ventilation to provide for reliable operation. Our goal is not successful management of one intersection, but current traffic flow in whole urban traffic system. We successfully completed road traffic automation in Ljubljana with more than 200 intersections and implemented more than 250 traffic controllers in all major cities in Slovenia.




Owner/Client

DARS

Location

Ljubljana

Completion date

July 2010

Final Contract Amount

360.000 €

Roundabout Tomacevo is the first automated 4 lane turbo roundabout in Slovenia. We adopted traffic light system to on-time traffic flow of each lane. Traffic is supervised by 76 inductive loops, indicating traffic flow and possible congestions to a traffic controller. That way the length of green phase is adapted to a real situation. Roundabout is managed by 44 three part traffic lights which are connected to a traffic controller which is connected to Ljubljana Urban Traffic Control Center. Different regimes are implemented in roundabout management: time management, manual management. All programs are fully adoptive during day time, night time, weekends and holidays. The results were shown on the first day, when we detected no congestions in the area which was Ljubljana's unsolved problem for years.





Owner/Client	Location	Completion date	Final Contract Amount
Municipality Ljubljana	Slovenia	up to 2010	600.000 €
Beijing	China		
Podgorica	Monte Negro		

It is crucial for cities to monitor traffic and provide it's flow in all important junctions. To ensure efficient supervision and control, Iskra Sistemi d.d. has developed Urban Traffic Control Center. Computer is supervising traffic flow in all intersections and is monitoring status of all traffic controllers, traffic lights and other traffic systems, such as video monitoring, traffic count, weather stations etc. On the base of received information supervisor or software itself choose the perfect traffic regime for time given. That way the result is not just current traffic flow at all times, but also positive environmental effect, accidents reducing, decreasing congestion phases and a lot more. It is also managing emergency vehicles routes, helps locate stolen vehicles and managing access control in the very center of the city. Supervisors are monitoring all city traffic systems by the video wall, which is connected to all systems showing video picture, status of devices or SCADA.




Owner/Client

DARS

Location

Slovenia

Completion date

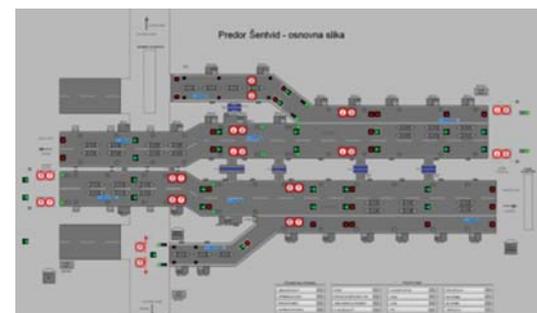
up to 2010

Final Contract Amount

11.400.000 €

TUNNEL INTELLIGENCE

Iskra Sistemi d.d. has equipped more than 52 km of Slovenian tunnels with most intelligent electro-safety equipment and systems for monitoring and supervision. All systems are managed by traffic controller with its software that is capable of executing different logical, sequence, time, numeric, arithmetic, regulative and communication functions. All subsystems, such as traffic lights, LED signalization, traffic count with inductive loops, emergency call system, video control, fire alarm, management of low voltage equipment and power supply, are connected to regional control center, where computers and supervisors are monitoring tunnels 24/7. Traffic safety is the key word. Recently equipped tunnels are Šentvid, Leščevje, Kastelec, Dekani, Trojane, Podmilj, Barnica and Podnanos.




Owner/Client

Ministry of Public affairs

Location

Slovenia

Completion date

up to 2009

Final Contract Amount

3.600.000 €

13 international border crossings between Slovenia and Croatia are equipped with Iskra Sistemi's Traffic Control Systems which satisfy the conditions and requirements of the European Union for external borders crossings. The Traffic Control System is supervised by the central control computer in the State Police Center and Customs Administration Centre. The system elements are graphically presented on the supervisory computer monitors, which also show the operation of the system throughout the border crossing. Above the border crossing entry lanes there are panels and variable signs, where various regimes of entry to and exit from the country can be set. The system is also checking height, counting and categorizing vehicles. Recently equipped border crossings are Starod, Dragonja, Središče ob Dravi, Bistrica ob Sotli, Petišovci, Rigonci.




Owner/Client

DARS

Location

Slovenia

Completion date

2005

Final Contract Amount

5.000.000 €

Electronic toll collection system provides solutions for efficient and automatic road tolling functionality, convenience and high comfort to travellers, low maintenance cost and fast return on investment. The ABC electronic toll collection system is designed for the highway, tunnel, bridge or parking access control use. The system enables:

- closed and open tolling system
- prepayment or post payment system
- read-only or read-and-write system.
- application of onboard unit (OBU) or contact-free chip card
- simple upgrading of systems at the existing tolling plazas or at new tolling plazas
- the system enables complete user anonymity (prepayment system)

Iskra Sistemi d.d. has equipped tolling stations in motorway sections Ljubljana-Razdrto and Hoce-Arja vas and successfully implemented electronic tolling system in 24 tolling stations across Slovenia.




Owner/Client

DARS

Location

Slovenia

Completion date

up to 2010

Final Contract Amount

3.600.000 €

The emergency call telecommunication system (ECS) is intended for motorway users to provide them with speech connection with the operator in traffic control centre. The operator uses the SCADA graphic interface to control the motorway emergency call system. The survey of the operation, current situation and indication of any failure of the system is provided by various graphic displays. When pressing the call button on the speech panel the user is immediately connected with the traffic control centre providing the necessary information or help. In addition to the voice communication, the emergency call system also enables data transmission and/or transmission of commands from various motorway traffic control systems. Iskra Sistemi d.d. has equipped 90% of all Slovenian motorways with Emergency Call System.



Motorway Control Center Dragomelj



Owner/Client

DARS

Location

Slovenia

Completion date

2009

Final Contract Amount

6.900.000 €

Iskra Sistemi d.d. has successfully completed project of connecting tunnel systems and emergency call systems to the most contemporary motorway control center in Slovenia - Dragomelj. All the systems are presented on huge video wall and several working stations and are controlled by SCADA system and supervisors. Motorway traffic is also supervised by video cameras and controlled by variable message signs and variable signalization that is responding according to weather and motorway condition. Dragomelj Center is monitoring 10 tunnels. All the tunnels are completely equipped with cameras. So supervisors have total control on traffic in the tunnels. Cameras are very precise, so supervisors can recognize any vehicle as well as executing speed control.




Owner/Client

DARS

Location

Slovenia

Completion date

up to 2009

Final Contract Amount

4.100.000 €

Level crossing 563.3 Stanovska 1 lies on main line Zidani Most – Šentilj – state border to Austria and it is equipped with electronic level crossing equipment based on 2 out of 2 technology and certified with SIL4 certificate. The LC is fully autonomous and it is using inductance loops for train detection and it is protected with two barriers and two road signals with belts. This level crossing is remotely controlled from station Poljčane and it can also be activated from the same station by setting the train roots from the dispatchers control desk. To activate this level crossing changes on station interlocking equipment were needed where special interface group to Iskra SpDrL 30 interlocking equipment was developed.

As common standard in Slovenia the crossing between track and road is done with rubber plates of Strail and this enables smoother passing over the track. This level crossing is also equipped with uninterrupted power supply which enables 8 hours of autonomy in case if the power supply is disturbed and equipped with information management system.

