

## City of Ravenna December 2007

### Access restriction

#### Context

The city of Ravenna has an historical centre of 1,75 Km<sup>2</sup>. The city of Ravenna has 95.53 private cars, and 0,64 car per inhabitant, the highest index in the Emilia-Romagna Region.

The political orientation toward urban goods delivery complies with the broader vision of a city that strives to control, and if possible reduce, air pollution and energy consumption. From 2002 urban goods delivery became an important point on the local agenda.

The city centre of Ravenna has a Limited Traffic Zone – LTZ that includes most of the historical city centre. ZTL access restriction is composed of two parts:

In one there are restrictions to vehicular traffic from 0:00 to 24:00, all days, including Sundays, in the other part the restrictions apply from 7:30 to 20:30 every day, including Sundays.

The access to the LTZ is not subject to any tariff. Loading and unloading operations are allowed as follows: 8:30-10:30, 14:30 16:00 and 0:00-7:00

In loading/un-loading area, vehicles are allowed to stop for a maximum of 30 minutes with the obligation to show the parking disk.

#### Objectives

General objective of the Municipality of Ravenna consist in reduction of vans/trucks during the time windows most preferred by tourists, the reduction of illegality in parking by loading/unloading vehicles and stimulate a more efficient urban delivery system by increasing load factors and using cleaner vehicles.

#### Description of the action

The Municipality of Ravenna has launched at the middle of 2007 the new “General Urban Traffic Plan”, which include the Access and park in City Centre” regulations, with new rules to differentiate entry hours of truck on the base of type of engine and combustible.



To maintain the respect of the access rule the Municipality has recently start with an ITS system, SIRIO, an access remote-monitoring system. SIRIO consists in an installed monitory point in every city centre access with a digital camera and a local processing unit, equipped with an OCR (optical character recognition) software able to recognise the plate number of vehicles, and sanctioning the vehicle without access permission.

SIRIO is part of the Control centre, an integrated system where all the transport-related ITS system installed in the city, that will be used together for the traffic supervision and impacts, permitting the monitoring and enforcement of the access restrictions. The Control centre will become fully operative from the middle of 2008.

The technology that will be together operative from 2008 are:

- 8 external traffic flow detectors (6 with variable message panels).
- 3 dynamic traffic light plants with flow detectors (3 more soon).
- Urban bus localization system.
- Park addressing system with 12 variable message panels and traffic flow detectors.
- 17 more flow detectors.
- SIRIO with 5 detecting points (one more soon).

The control centre is the heart of all traffic technologies owned by the municipality.

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Its development will be done in three phases:

1. Operating connection of existing technologies and detailed definition of next phases.
2. Remote control of load/unload parking places, first implementation of a general traffic supervisor, car-sharing management, registered operators management.
3. Final implementation of the system and extension to the whole city.

### Further planning and expected results

The first phase of implementation of the Control centre is started. At the moment Ravenna is reorganizing the operating centre of the Municipal Police in order to accommodate the terminal of all the transport-related and mobility ITS systems.

Next step will be the operating connection (physical and logical) of that systems in order to make them available for the injection activities of the second phase related to the car sharing management and registered operators management.

### Contact

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