

Output factsheet: Pilot implementation of ICT enhanced services for smart parking for Zilina's FUA

Project index number and acronym	CE243 SOLEZ
Lead partner	Municipality of Vicenza
Output number and title	O.T3.1 - Pilot implementation of ICT-enhanced services for smart parking (in FUA Zilina)
Investment number and title (if applicable)	n/a
Responsible partner (PP name and number)	City of Žilina 10
Project website	http://interreg-central.eu/solez
Delivery date	01/2020

Summary description of the pilot action (including investment, if applicable) explaining its experimental nature and demonstration character

Žilina Pilot Action consists of the design and introduction of new parking regulation scheme and control systems in a specific area of the city. The municipality of Žilina wants to offer the drivers an alternative way of parking, avoiding cruising cars when finding a place for parking in front of the zone.

The pilot action consisted of two parts.

In the first part (customization action), was performed the general specification of the locality, the passport of the area in relation to the infrastructure, data collection.

In the second part, the installation of the sensory network itself began. The detection layer and communication layer were analyzed, and proper detection technology and communication technology was chosen during the customization action. The traffic flow detectors have been chosen for installation.

Achieved results are

- system of traffic flow detectors in front of the limited traffic zone of Žilina, which allows to monitor of traffic flow and obtain data

- application framework for following smart parking detection system installation in the future.

Long-term monitoring will allow the Žilina authorities to evaluate the positive/negative contribution to traffic flow at the considered local road network related to the execution of investment plans and developer projects at the given location. The novel approach relays on the assessment of traffic flow in the pedestrian zone and low traffic

zone as a basis for a new parking strategy. The data have been collected through a software application developed thanks to transnational cooperation during the first project phase.

NUTS region(s) concerned by the pilot action (relevant NUTS level)

The pilot action has been prepared and is being implemented in the NUTS SK031 Žilinský kraj

Investment costs (EUR), if applicable

Infrastructures and Thematic Equipment costs (BL5+BL6) are not charged on the project for this activity. These costs were covered with city own resources.

Expected impact and benefits of the pilot action for the concerned territory and target groups and leverage of additional funds (if applicable)

The results from pilot action (traffic flow data assessed from SOLEZ central SW) are crucial for defining an effective parking scheme for the area and for evaluating its impact. If succeeding, this will lead to a reduction of traffic in the area and can contribute to a change of mobility habits, encouraging the shift towards other transport means to reach critical city areas.

The experiences with ICT enhanced services for smart parking tested during the pilot action can help other municipalities from Zilina FUA to follow up installation in the future.

Long-term monitoring by this implemented smart system will allow the Žilina administrations to evaluate the positive/negative contribution to traffic flow at the considered local road network related to the execution of investment plans and developer projects at the given location. The Activity already benefitted of direct funds of city administration, that covered with own resources the cost for equipment, works and studies bought during the project.

Sustainability of the pilot action results and transferability to other territories and stakeholders.

At local level, the Pilot Action will have a long-lasting effect by impacting parking regulation decisions for the specific area. At a more general level, the approach resulted to be effective and applicable, and the intention is to replicate it to improve parking space management in other areas within the municipality.

Replication in other CE areas is surely possible, and the documents describing Zilina experience would facilitate this project.

Lessons learned and added value of transnational cooperation of the pilot action implementation (including investment, if applicable)

During the SOLEZ project activities, mutually beneficial cooperation among separate departments of the municipal council has been successfully established. Data collected will enable the creation of a parking regulation strategy for Žilina Functional Urban area.

The transnational cooperation focused, among others, on the specification of the SOLEZ action plan and on using the smart parking tool developed to meet local needs in terms of detection of current traffic conditions in the town centre.

Contribution to/ compliance with:

- relevant regulatory requirements
- sustainable development - environmental effects. In case of risk of negative effects, mitigation measures introduced
- horizontal principles such as equal opportunities and non-discrimination

Sustainable development: the pilot actions combined with the investment contribute to stimulating market transformation towards implementation other smart systems, mobilizing public & private investments to new parking system.

Equal opportunity: N/A

Environment: by giving the possibility to predicted traffic flow in given day and time give opportunity to improve the planning of low carbon mobility connected with traffic regulation and access restriction schemes in the Žilina Functional Urban Areas. By linking traffic flow monitoring data and air pollution monitoring data (Žilina implemented air sensors), according to the proposed system in the OT.2.1, it will be possible to monitor and evaluate the ambient air quality in selected area in the future.

References to relevant deliverables (e.g. pilot action report, studies), investment factsheet and web-links

If applicable, additional documentation, pictures or images to be provided as annex



Figure 1: The road surface installation of smart sensors of traffic flow

Figure 2: The road surface installation of smart sensors of traffic flow

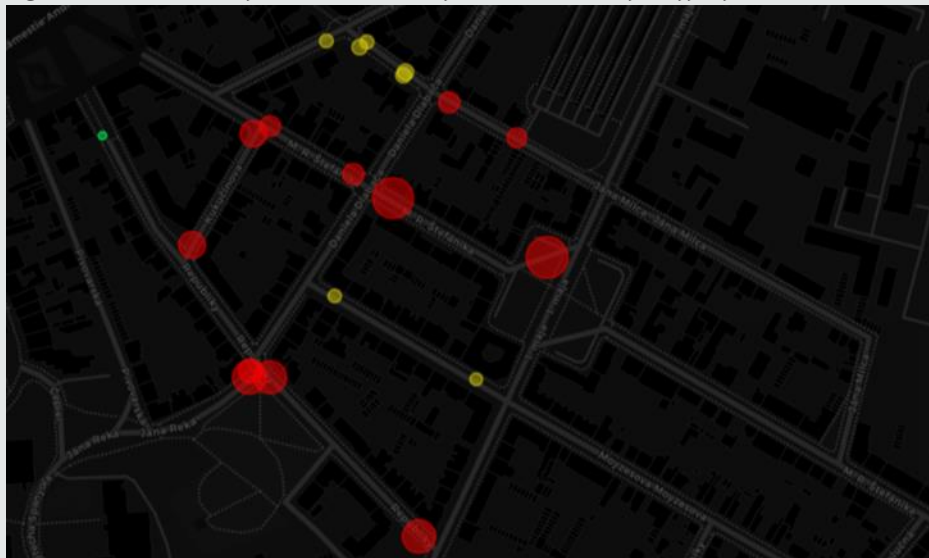


Figure 3. The map of road surface installation on Štefanikova street .



Figure 4: SOLEZ software application_ the map of road surface installation on Štefanikova street .

The ICT smart parking tool developed during the project are described in the following deliverables:

- D.T2.1.1 - Transnational review and user requirements of smart parking solutions
- D.T2.1.2 - Overall design and Regulation Schemes and related Data Management System
- D.T2.1.3 - Smart Parking tool developed

The full description of the Pilot Action implementation has been described in the project deliverables:

- D.T3.1.3 - Report on Pilot Actions on Smart Parking
- D.T3.4.1 - Evaluation report of Smart Parking Pilot Actions

The documents are available on www.interreg-central.eu/SOLEZ in the Publication section.