

Output Factsheet: Pilot implementation of Value-Added services for increasing LEZs attractiveness in Turin's FUA

Project index number and acronym	CE243 SOLEZ
Lead partner	Municipality of Vicenza
Output number and title	O.T3.2 - Pilot implementation of Value-Added services for increasing LEZs attractiveness (in FUA Turin - People mobility - Freight transport)
Investment number and title (if applicable)	n/a
Responsible partner (PP name and number)	PP8 Comune di Torino/Torino Municipality - TOR
Project website	http://www.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

People Mobility

The Municipality of Turin realized a Pilot action - Living Lab MaaS Torino - to test and experiment the Mobility as a Service - MaaS paradigm as innovative low-carbon Value-Added mobility services. The experimentation of the MaaS paradigm involved a large private company (characterized by a significant number of commuters performing daily home-to-work trips), selected through a public tender.

The City of Turin tested a technology platform, accessed through a mobile app. The app has been shared among the selected company workers and it contained the following macro-features: Route planner, booking and payment (and validation) for the following means of transport: local public transport, bike sharing, scooter sharing, taxi; Collection of anonymous and aggregated data on users regarding use of the app, mobility choices made, kilometers traveled; Monthly corporate billing for costs for home to work mobility-job of employees, during the trial period. The Pilot action enabled to test in real-life experiment the MaaS platform and its innovative features, and to experiment incentive mechanisms for sustainable mobility within a restricted ecosystem of users - Living lab with company employees, involved in the pilot.

Freight transport

To reduce conflict of usage and negative traffic effects in urban spaces, as part of SOLEZ Pilot Activities the City of Turin tested the multi-users lanes concept for goods transport.

Multi-users lanes can be considered as a pull measure aimed at managing access to reserved bus lanes including freight transport. This measure represents an added-value freight mobility services enabling of sharing dedicated bus lanes by logistics operators - specific recognized commercial vehicles (mostly light commercial fewer polluting vehicles) - without affecting public transport system and reducing congestion for all categories of road users.

These lanes have been selected among the ones connecting urban and peri-urban areas of Turin with restricted areas (e.g. LTZ, pedestrian areas, etc.) useful for freight delivery services enabling to reach destinations for goods drop-off and pick-up in most convenient, safer, faster and cheaper way compared to the use of common road transport network (characterized by significant traffic patterns and congestion caused from conflicts between passengers and freight transport). Once defined the overall framework of the multi-user's lanes concept, Turin performed local-based data collection through On Board Units and questionnaires. It resulted that the permit to use LPT reserved lanes actually increases logistics operations' efficiency, reducing length of trips and negative traffic impacts, but specific conditions have to be respected, not to have negative side-effects on Public Transport.

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

ITC11 - Turin

Investment costs (EUR), if applicable

People Mobility

No investment costs charged on SOLEZ project. The design and development of the MaaS app and all connected technological infrastructures were ensured by City of Turin through own funds and/or other projects.

Freight transport

No investment costs charged on SOLEZ project.

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

People Mobility

The real-life testing of the MaaS concept and App carried out through SOLEZ project permitted to demonstrate the feasibility and functioning of the developed system and to fine-tune it. This activity involved a large private company characterized by a significant number of commuters performing daily home-to-work trips, that was selected through a public tender. The employees of this company have been the first direct beneficiaries of the MaaS system developed in Turin. In a further step (beyond the SOLEZ project lifetime), employees of the City of Torino are expected to be involved for the "massive" implementation of the MaaS system in the FUA.

It's worth to underline that this Pilot Activity was carried out in synergy between SOLEZ and other projects that provided the needed competencies and funding for MaaS infrastructure design and development.

Freight transport

The Pilot Activity allowed to collect a valuable set of data on vehicles behaviors, when allowed to use PT reserved lanes in and around the city center. For example, it emerged a problem related to the use of the parking lots reserved for loading-unloading operations, whose improper usage risks to jeopardize the advantages of the multi-user lanes concept. These data and knowledge will now be used by the City of Turin to define the criteria for implementing the multi-users lanes concept in its central area, allowing a notable CO2 savings from freight transport.

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

People Mobility

Through the MaaS digital platforms, users can plan end-to-end journeys (literally "from one point to another") by aggregating all public and private means of transport available in the city and paying for the service through a monthly subscription or based on usage. The main objectives of the implementation of the MaaS service are the reduction of the use of private vehicles in daily journeys, the increase in the use of public transport vehicles and sharing services in the city, the improvement of air quality in urban environment allowing informed and sustainable transport choices by users, the increase in accessibility and usability of Limited Traffic Zones (LTZs) by citizens and businesses. The results of the Living Lab MaaS experience can be applied to other similar situations to extend the implementation of the MaaS system and to extend the impact of the results gained.

Freight transport

The testing phase gave positive results and confirmed the intention of Turin Municipality to implement the multi-users lanes concept for goods delivery in city center. The on-site data collected and elaborated thanks to SOLEZ Pilot Activity will allow to define the relevant regulations in a more effective and already tested way, thus reducing the time for the adoption of this traffic management model and increasing its effectiveness. In addition, developed knowledge and lessons learned represent a valuable starting point for other cities willing to adopt similar measures.

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

People Mobility

The City of Torino designed and implemented Value-Added Services working on a Mobility as a Service (MaaS) schemes for passenger transport. The experimentation of the MaaS paradigm involved a large private company, selected through a public tender. In a further step (beyond the SOLEZ project lifetime), employees of Turin Municipality are expected to be involve for the "massive" implementation of the MaaS system in the Functional urban area.

The overall objective is to implement follow up measures addressed to overcome unsolved key issues as follows: to find a right balance between public and private sectors, for a unique and integrated mobility system; to define a precise role for public transportation authorities; to understand the MaaS impact on users' mobility behaviours and sustainability choices; to identify a winning business model.

Freight transport

Multi-users lanes can be considered as a pull measure aimed at managing access to reserved bus lanes including freight transport. This measure represents an added-value freight mobility services enabling of sharing dedicated bus lanes by logistics operators - specific recognized freight vehicles - without affecting public transport system and reducing congestion for all categories of road users. Thanks to the Pilot Action experimentation the City of Torino increased the urban logistics efficiency; improved traffic conditions for urban logistic vehicles. Moreover, all operators made use of the permission reserved for them and considered the policy very useful for improving their daily operations.

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

People Mobility

Mobility as a Service corresponds to a new model of mobility, which presupposes the passage from a personal property paradigm of individual transport vehicles to a paradigm of shared use of mobility, understood as a service.

The diffusion and success of this new model depend, first of all, on the ability of the mobility operators to offer the highest level of possible integration between the available public and private mobility services, allowing users to meet individual mobility needs in a simple, accessible, flexible and personalized way.

The realization of a MaaS passes through the implementation of a single technological platform that enables the integration between the different mobility options, both in terms of travel planning (intermodal route planner, real-time information on travel times and distances), both in terms of use (booking and payment of services through a single subscription or electronic wallet).

Freight transport

A limited number of goods transport vehicles belonging to the category of couriers, with methane or electric power were selected, with a special permit issued to access the ZTL of the city without limitations.

The vehicles involved in the experiment allowed CO₂ savings of 0.78 kg per day per vehicle, which corresponds to about 6.7 tonnes of CO₂ per year and a saving of 28102 grams of NO_x, which corresponds to a 70% reduction in daily emissions.

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

People Mobility - Freight transport

The value-added service toolbox is described in deliverables designated as:

DT 2.2.1 - DT 2.2.2. and DT2.2.3 available on <https://www.interreg-central.eu/SOLEZ.html> in the Publication Section

The Pilot Action customization, report and evaluation are respectively described in the deliverables designated as DT3.2.1, D.T.3.2.3, DT.3.2.7 and DT3.4.2

