



PUBLIC SUMMARY OF DELIVERABLE

D9.3 – Integrated Urban Mobility Release 1

Project Acronym	TT
Project Title	Transforming Transport
Grant Agreement number	731932
Call and topic identifier	ICT-15-2016
Funding Scheme	Innovation Action (IA)
Project duration	30 Months [1 January 2017 – 30 June 2019]
Coordinator	Mr. Rodrigo Castiñeira (INDRA)
Website	www.transformingtransport.eu

Document fiche	
Authors:	Marta Galende [CARTIF], Jarno Kanninen [Mattersoft], Jorma Kilpi [VTT], Tomi Korhonen [Mattersoft], Mika Kulmala [Tampere], Juha Laakso [Infotripla], Jarkko Rouhe [Taipale], Johan Scholliers [VTT], Pedro Touya [VALL]
Work Package:	WP9
Task:	T9.1-T9.2-T9.3
Nature:	R
Dissemination:	PU

This document is a public summary of a confidential deliverable of the TT project. It serves as a summary of the release 1 demonstrators and provides links for external actors to connect to the TT pilot leaders if they are interested in more information.

DISCLAIMER

This document does not represent the opinion of the European Community, and the European Community is not responsible for any use that might be made of its content. This document may contain material, which is the copyright of certain TT consortium parties, and may not be reproduced or copied without permission. All TT consortium parties have agreed to full publication of this document. The commercial use of any information contained in this document may require a license from the proprietor of that information.

Neither the TT consortium as a whole, nor a certain party of the TT consortium warrant that the information contained in this document is capable of use, nor that use of the information is free from risk, and does not accept any liability for loss or damage suffered by any person using this information.

ACKNOWLEDGEMENT

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 731932.

Motivation

TransformingTransport (TT) demonstrates, in a realistic, measurable, and replicable way the transformations that big data can bring to the mobility and logistics market. TT is structured into 13 different pilots in 7 pilot domains, which cover areas of major importance for the mobility and logistics sector in Europe.

The **Integrated Urban Mobility** domain focuses on urban traffic management. Urban traffic management centres (TMCs) are in charge of keeping traffic flowing on the city's road network. However, as TMC operators do not have visual contact to all roads in the network, they are not always aware of the cause of disruptions and the status of traffic in the network. Hence, traffic management is in need of accurate information regarding the traffic status and problems occurring in the transport network. In addition, drivers of both personal cars and freight vehicles, as well as users of public transport, are in need of accurate real-time traffic status to be able to optimize their trips and to use working time efficiently. Big Data methods allow to better identify the source of the traffic disruptions, assist in taking the most optimal traffic management decisions, and assist in informing users with short delays.

Traffic policy is changing to a more pedestrian and cycling friendly cities, and cities are expected to turn major streets in the city centres to car-free streets. Many cities have already implemented policies restricting parking to specific zones and specific time slots. This puts goods delivery and loading/unloading of delivery vehicles as well as maintenance vehicles without sufficient and adequate access to destinations in the city centre. Use of big data allows simulating different configurations for the delivery vehicles' parking space locations and strategies. Tools for parking space reservation for freight operators assist in optimising the delivery tasks.

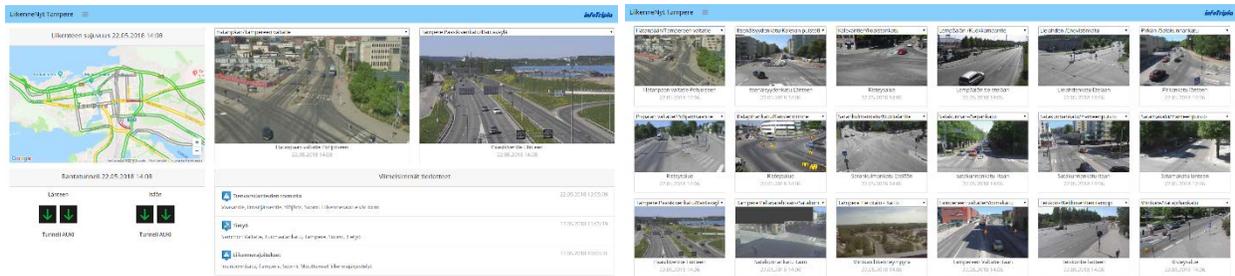
Two specific pilots are being developed within TT project focus on apply big data for improving transport in urban areas, both by improving situational awareness and by providing solutions for urban freight.

Tampere pilot

The Tampere pilot is located in Tampere, the third largest city in Finland and the largest inland city in the Nordic countries. The following partners are involved in the Tampere pilot: VTT, Infotripla, Mattersoft, Taipale Telematics and the City of Tampere. The city of Tampere has made efforts to make traffic data available as open data, including data from traffic light detectors and FCD data from public transport vehicles. Traffic management is in need of tools of up-to-date information on traffic to make timely decisions. By using big data technologies, more accurate real-time information on the traffic status can be obtained.

Several tools have been developed for improving situational awareness and the information provided to the urban TMC (see the figure below). A dashboard has been developed for the Traffic

Management Centre for providing an overview of the traffic. For traffic fluency calculation, both the traffic light data as well as floating car data from public transport and other vehicles are used. Through the application of neural networks, traffic jams are detected in images captured by traffic cameras, which have been installed at major intersections in the city centre. A tool for detecting anomalies, based on the analysis of short-term traffic volumes at nearby traffic lights, is being developed. Deviations in travel time of public transport vehicles between neighbouring stops also gives an indication of potential traffic jams.



Dashboard for the TMC operator

Travellers are informed through an improved website (tampereenliikenne.fi) and twitter feeds. Automation of the information allow to inform travellers faster and reduces the workload of the TMC operator, as he can concentrate on mitigation actions. Automated twitter messages are transmitted for specific traffic events, such as tunnel closures and accidents.

Urban freight delivery is a challenging issue, as efficient urban delivery is needed for assuring the sustainability of the freight delivery providers as well as their customer businesses in the city centre. On the other hand, authorities want to restrict freight traffic in order to reduce pollutions and make the city centre attractive for pedestrians and cyclists. The envisaged solution is to allow freight delivery vehicles to park only on restricted parking areas. A parking reservation app has been developed for freight delivery, and will be taken into use after decision of the city council.

Contact for more information about the pilot:

Johan.Scholliers@vtt.fi

Valladolid pilot

The Valladolid pilot is situated in Valladolid, a city in the north-central of Spain where freight delivery within the city has a great impact on traffic flow. This replication pilot has been designed following advices and specifications from two points of view: the City Council (as mobility manager) and the freight delivery companies (as user). The following partners are involved in this pilot: CARTIF, PTV, TomTom, LINCE and the City of Valladolid.

Transforming Transport - Valladolid Pilot

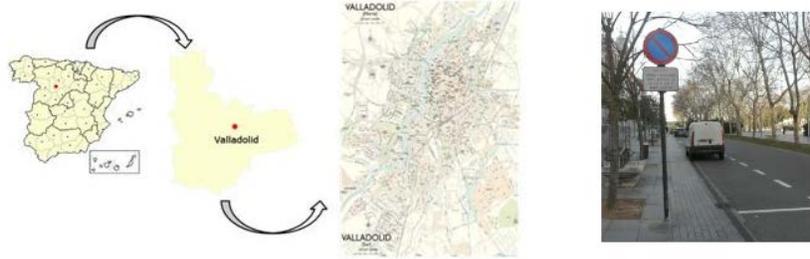


Homepage

Login

About

Contact us



The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731932



Copyright(©) 2018 TT Project – Valladolid Pilot Partners • [All rights reserved](#) • [Legal notice](#) • [Cookies policy](#)

[Valladolid Pilot Dashboard: main page.](#)

Contact for more information about the pilot:

tt@cartif.es