Editorial

WELCOME TO THE THIRD ISSUE OF THE FLOW NEWSLETTER!

The mission of the FLOW project is to put walking and cycling on an equal footing with motorised modes of transport as a solution to tackle urban congestion by developing a user-friendly methodology to assess the effectiveness of walking and cycling measures using traffic modelling. FLOW is supported by the Horizon 2020 programme of the European Commission. The FLOW newsletter aims to keep you informed about the project's progress and interim results. The FLOW project has reached its half-way point, which is a time to reflect on achievements and plans for the project’s remaining 18 months. We report on some of them – the selection of the Market Forerunners and Market Followers and the FLOW Final conceptual framework – in the current newsletter. Each newsletter also puts a FLOW city and partner in the spotlight and this time our city is Sofia and our partner is PTV. As usual, we also give you a glimpse of how congestion is featured in the news. We encourage you to stay informed by signing up to receive our newsletter at www.h2020-flow.eu and/or by following us on Twitter at @FlowH2020.

We wish you a pleasant read!
One of FLOW project's goals is to provide local authorities with innovative planning and modelling services for walking and cycling measures. For this reason, the project looked into planning consultancies that could lead the way. Twelve Market Forerunners and 26 FLOW associates are forming a network of companies that will further develop this market through participation in workshops and online trainings. The selected consultancies will have the opportunity to be featured in the online FLOW Congestion Reduction Catalogue and will gain exposure to cities across Europe. The most innovative, active Market Forerunner companies will be recognised with an award.

The ten selected Market Forerunners are:

- Arcadis UK – United Kingdom
- Clifton Scannel Emerson Associates – Ireland
- FÖMTERV – Hungary
- Goudappel Coffeng – The Netherlands
- Jacobs Engineering Group – United Kingdom
- MINT NV – Belgium
- Public Transport Consult – Serbia
- Roland Müller Küsnacht AG – Switzerland
- TIS – Portugal
- Trivector – Sweden
- Vectos – United Kingdom
- Planungsbüro VIA – Germany

The list of selected FLOW associates, as well as more information on the work of the FLOW associates and Market Followers can be found on the FLOW website.

The selection criteria used for selecting both the Market Frontrunners and the FLOW associates was based on:

- Geographic spread across the EU and beyond
- Mix between SMEs, medium and large companies
- Range of experience in the modelling of walking and cycling measures

The FLOW project will soon release its conceptual framework, which is a summary of the key products of FLOW. The conceptual framework aims at illustrating the relationship between a walking or cycling measure and the person flow in a city, and the wider consequences. Transport modelling provides input to the impact assessment.
The figure summarises the FLOW conceptual framework used to assess walking and cycling measures’ effects on the transport network performance, as well as the socio-economic costs and benefits occurring from walking and cycling measures. The figure shows the policy cycle of urban transport measures. The FLOW approach enters the equation in the process of agenda setting and measure selection, when a decision maker considers to implement a walking or cycling measure, but fears that a congestion would result out of it, or is not aware of the potential benefits that it may bring about.

The FLOW multimodal transport network performance analysis methodology and FLOW impact assessment tool will deliver a basis for decision making. The transport network performance analysis methodology includes 3 key performance indicators, of which two need to be selected. Criterion for the selection of the two is the scope of the measure. The impact assessment tool consists of 16 indicators, which assess the socio-economic impacts of walking and cycling measures.

The conceptual framework will be applied and tested in the FLOW cities Budapest, Dublin, Gdynia, Lisbon, Munich and Sofia. By putting the FLOW multimodal transport performance analysis methodology and the impact assessment tool into practice, cities will learn about the value and use of new transport modelling tools. Decision makers will be provided with facts and figures in order to assess how walking and cycling can be put on equal footing with other modes of transport.

**City In The Spotlight:**

**SOFIA**

With a total population of over 1.3 million inhabitants, Sofia is the capital and the largest city in Bulgaria. It is an important administrative, industrial, and transport hub.

The city is currently developing a new sustainable mobility culture with large scale new investments made over the past six years in the construction of the metro lines and renewal of public transport vehicles.

At present the share of the bicycle transport is considerably low in Sofia but it is expected to increase in the coming years. Over the past few years 50 kilometres of bicycle lanes were constructed. Another 9 kilometres are planned to be constructed in the near future. In addition, 6 new bicycle lanes are in a process of being designed and developed. Moreover, during the construction of the metro all new metro stations are equipped with bicycle racks. There are more than 60 bicycle racks in total. A tender procedure is opened for selection of a contractor of a bike-sharing system in the centre of the city – it will include 33 bicycle racks and 400 bicycles. It is also envisaged to make the city centre shared-space for the bicycle transport and road transport by restricting the maximum speed to 30km/h.

Within the FLOW project and with the help of the Technical Support Partners, Sofia Urban Mobility Centre (SUMC) is implementing Cycle2Work campaigns with high profile organisations. The purpose of the campaigns is to:

- raise awareness about cycling as a means of transportation in Sofia
- make cycling more attractive in the city
- in the long-term reduce the city’s congestion by increasing cycling.

In 2016 SUMC held three Cycle2Work campaigns which focused on raising people’s motivation to reconsider their commuting habits. The measurement of behaviour change was carried out through ex-ante and two ex-post surveys. Each of the three participating companies was provided one parking rack for bicycles, 10 regular bikes and 1 E-bike for the campaign period. Besides the test bikes, during the campaign the employees benefited
from three cycling activities such as: bicycle training, bike tour in the outskirts of the city, Cycle2Work challenge and a lot of promotional branded materials as incentives.

The cycling trainings were dedicated to safe cycling in urban conditions and to learning the best techniques accordingly. The participants had also the possibility to join the bike tours in the outskirts of Sofia and the Cycle2Work challenge - a game for employees to compete based on cycled kilometres and number of days cycled to work.

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**Partner In The Spotlight**

**PTV GROUP**

PTV Group plans and optimises everything that moves people and goods worldwide – be it transport routes, distribution structures or private and public transport. Thanks to experts knowledge in traffic and transport planning, PTV occupies a unique position. In the Traffic business field, PTV offers software, data and scientific techniques for modelling and simulating traffic networks. This helps traffic and city planners in over 120 countries to organise optimal traffic flow. PTV’s headquarters are located in Karlsruhe since the company was founded in 1979. Around 700 employees around the world are working on powerful solutions for public administration, government departments, trade and industry.

Within FLOW, PTV takes over the lead of work package two (WP2), which aims at developing a comprehensive FLOW Congestion Assessment Methodology. It includes the improvement of existing transport modelling software and state-of-the-art impact assessment tool to better analyse the wide range of impacts of walking and cycling measures, covering both quantitative (monetisable) and qualitative aspects.

With the achieved software developments, cities will be able to depict the behaviour of pedestrians & cyclists, as well as to model their interactions with cars in a realistic manner. The enhanced software versions improve the movement of cyclists through the modelling of shared space, bike-sharing schemes, and route choice options. All achievements will be presented in a sequence of training and exchange activities: online courses, webinars and on-site workshops are organised to disseminate the knowledge amongst market forerunners and the whole FLOW cities network.

Besides the development of a set of analysis & evaluation tools, PTV also offers technical support for all partner- and exchange cities during the whole project to ensure high quality modelling work.

The aim of FLOW is in line with PTV’s own discipline contributing to a sustainable transport system.

The German company PTV Planung Transport Verkehr AG is a member of PTV Group. For more information, please visit our website at [www.ptvgroup.com](http://www.ptvgroup.com).
Project in the spotlight

CONGESTION REDUCTION IN EUROPE, ADVANCING TRANSPORT EFFICIENCY (CREATE)

The CREATE project aims at reducing traffic congestion in cities by decoupling car use from economic growth. CREATE is about exploring solutions and alternatives for more liveable cities and it encourages a shift from cars to more sustainable transport modes: cities should be able to be economically performant, have a growing population and still have a reasonable congestion level.

The project focuses on qualitative and quantitative analysis of transport measures and policies in five capital cities: Berlin, Copenhagen, London, Paris and Vienna. CREATE wants to understand how these five cities managed over the years to face a regular increase of cars use and and how they reached sustainable solutions. The project is built to inspire cities and relevant stakeholders to adopt a sustainable approach and to avoid as much as possible mistake from the past.

By exchanging with five Eastern European and Mediterranean cities (Bucharest, Skopje, Tallinn, Adana and Amman) and by organising peer-learning activities or training sessions, CREATE project is able to guide cities to adopt sustainable transport policies and measures as well as to benefit from tailored advice.

The extensive experience of project partners combined with awareness raising activities will generate new ways for cities to transfer research from the lab to the street. The project consortium is made up of 10 European and Euro-Mediterranean cities, several universities (UCL, Sciences Po, Dresden University, BOKU), a network of cities (EUROCITIES) and an SME (INRIX).

CREATE works to speed up the process of tackling congestion, to avoid traffic growth/mitigation policies and it contributes to the EU urban agenda.
Waiting times at traffic lights in 's-Hertogenbosch

The Dutch city of 's-Hertogenbosch located in the north Brabant region is implementing a smart system that keeps waiting times at traffic lights as reasonable as possible. Traffic lights in 's-Hertogenbosch use a detection system which registers every single road user and adjusts times of the signals accordingly. The detected road users are digitally lined up in the computer and ordered according to the network priority for a particular junction. That leads to a waiting line with “weighted road users”. The computer then simply adjusts the lights of the basic cycle. The green times are very short, only 4 seconds are guaranteed. For motor traffic the first detection loops are at a distance of 60 metres ahead of the intersection whereas for cycling they are at 25 metres.

The state of every signalised intersection is monitored and every detection loop is indicated and logged. Thus, road user in ‘s-Hertogenbosch have the feeling that signals respond to their presence. This has to do with the detection of every single road user coupled with a network strategy. For every type of road user, a network of main routes is determined. There are main routes for transit, for private motor traffic and for cycling. These networks inevitably cross each other’s paths at junctions. A priority system based on decisions by the council determines which road user gets priority where and when. The system is very sophisticated and allows also the public transport to function better. Every bus is tagged and the time-tables of every line are registered. The system knows exactly when which bus needs to arrive at a certain intersection. If a bus is running too early, on time, or late the installation sets the lights accordingly.

This multi-modal control strategy is very well adapted to cycle traffic and is not new in The Netherlands. In 's-Hertogenbosch the decision was made to give priority to cycling while reducing road congestions and allow road users to save time.

The full article and the interview with Eric Greweldinger, traffic light expert in the municipality of ‘s-Hertogenbosch, together with an explanatory video on intelligent traffic signals in ‘s-Hertogenbosch are available on the FLOW website.
The ‘Mini Holland’ scheme in east London: ‘traffic evaporation’ and more space for cyclists

The first London pilot scheme for a more cycling friendly urban environment with less cars and more space for pedestrians and cyclists has produced positive results that might be introduced in other cities across Britain.

The programme - denominated Mini Holland and adopted in the area of Walthamstow - aims at removing traffic in residential areas, delivering a more cycle-permeable place, and addressing rat-running traffic.

Despite the strong oppositions coming from the residents towards this east London suburban cycling scheme, new results concerning congestion reduction are particularly encouraging. “Traffic levels in 12 key roads in the ‘village’ area of Walthamstow fell by 56 per cent, or 10,000 fewer vehicles a day, Waltham Forest council has told residents”, the Evening Standard reported.

The Mini Holland scheme is part of the then mayor Boris Johnson’s plan to make London’s suburbs better places for cycling. Waltham Forest council was one of three boroughs to win about £30 million each to introduce this scheme.

The overall traffic reduction is of 16 per cent with a slight increase in traffic on two roads bordering the area. Final results are expected next year. Simon Munk, infrastructure campaigner for the London Cycling Campaign, highlighted the replicability of this scheme and has referred to as ‘traffic evaporation’ in action.
UPCOMING EVENTS

20-21 March 2017
EUROPEAN CYCLE LOGISTICS CONFERENCE 2017
Vienna (Austria)
This event will showcase best practice in cycle logistics, highlight support needed and define the strategy required to implement successful cycle logistics solutions and initiatives.
http://bit.ly/2hYQDSm

29-30 March 2017
4TH EUROPEAN CONFERENCE ON SUSTAINABLE URBAN MOBILITY PLANS
Dubrovnik (Croatia)
The European Conference on Sustainable Urban Mobility Plans is the principal annual event enabling the international community of practitioners, policy makers, city staff and academics from across Europe to come together to debate key issues, highlight developments in mobility planning and exchange ideas and experience.
http://bit.ly/2hZ1Lyn

13 - 16 June 2017
VELO-CITY 2017 CONFERENCE
Arnhem-Nijmegen City Region
(The Netherlands)
European Cyclists' Federation's Velo-city series of conferences is widely considered as the global cycling summit. The conferences are designed to encourage cycling as part of daily transport and recreation. Early bird registration opened on 12 December 2016.

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