



CURACAO

Promoting progressive pricing

CURACAO Newsletter | Issue 2, October 2007

CURACAO NEWS

Second CURACAO User Group meeting – Stockholm 24-25 September

The CURACAO project on urban transport pricing had its second user group meeting in Stockholm – the Swedish capital city that recently reactivated its congestion tax after a successful trial and a controversial referendum. Over 35 participants came from around Europe to learn about forecasting, appraisal and evaluation of such complex transport projects as pricing.

Chaired by Bristol City Council, the user group meeting focused on the issues of prediction, appraisal and evaluation. The user group members received detailed and technical information from the practitioners that have put the Stockholm system into place. Speakers from the Swedish Road Administration, the City of Stockholm and WSP, one of the congestion charge's principal consultants, explained how they have worked to achieve the success of the Stockholm pricing scheme.

The Stockholm congestion tax has substantially increased the knowledge about prediction of results of pricing schemes through the use of software models. The workshop looked back at the modelling that had happened and compared this with the evaluation results. A comparison was made between the forecasts and the evaluation, showing several successes and some

State of the Art Report – Interim version

The first State of the Art Report was approved by the Commission in July 2007, and is now a public document. It is designed to focus on the issues of most concern to cities, and to provide answers to the questions which they have raised. These answers are based on experience from research and practice across Europe and on occasion more widely. Chapters cover

CURACAO User Group: join now!

The CURACAO User Group is a select gathering of 20 EU cities who take the lead in road pricing strategies for urban areas. The group is meeting six times throughout the project to discuss technical and policy issues concerning this highly controversial transport measure. The User Group has been asked by the European Commission to formulate concrete actions regarding road pricing in the follow up to the Urban Transport Green Paper. The CURACAO User Group provides the shortest access to state of the art information on pricing to urban transport professionals. If your city would be interested in joining the User Group for the last phase of the CURACAO project, please contact <icre@polis-online.org>.

failures. By learning where the Stockholm forecasts were wrong, user group cities that plan charging schemes can do better.

A site visit on the second day of the seminar completed this learning experience. Presentations shown during this event are online at <www.curacaoproject.eu>. For more information, contact <icre@polis-online.org>.

the specification of objectives, the design of schemes, predicting impacts, appraising and evaluating performance, the known impacts on the economy and equity, factors affecting acceptability and the transferability of results.

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We have since obtained reviews from experts in four other parts of the world, which confirm the structure and provide useful additional insights into experience elsewhere. These comments will be incorporated into

the second version which will be available in draft in January 2008, and will contain new chapters on technology, business models and the environment.

To view the current report, go to www.curacaoproject.eu/state-of-the-art-report.php

An online searchable good practice database

CURACAO brings together state-of-the-art information ranging from facts and figures on scheme specification, implementation and results observed in the CURACAO case studies, to a comprehensive review of research and practice collating up-to-date information and addressing issues such as RUC objectives, technologies, prediction/assessment techniques, acceptability and transferability. This body of knowledge will be also rendered through a simple web-based database hosted on www.curacaoproject.eu.

The database will offer options such as a good practice guide comprising the CURACAO case studies, the CURACAO State of the Art Review, and cross-related searching options. CURACAO members and parties outside the project will in the future have the opportunity to further enrich the database by uploading new case studies and updating the existing information. Users will be able to access a menu providing an overview of the CURACAO case studies and the main thematic areas addressed by the project.

Proposed topics include: Objectives, Type of Scheme, Technology Used, Charging Scheme under the Scheme Description, Barriers and Drivers under Implementation Process and finally under Scheme Results, users can have a glance at the efficiency, liveability, equity, environment, economy for instance.

The city menu will give users the opportunity to click on one or multiple case studies to read the updated information produced by them and compare facts and figures across cities. Users with an interest in a particular topic will use the “search by string” option, clicking on the key of choice and directly visualising the information contained in the database on that topic.

The first demo database was presented in Stockholm on the 24th-25th of September 2007. CURACAO members and invited guests had the opportunity to make comments and suggestions so as to produce a fine-tuned version expected to be released in December 2007.

NEWS FROM CITIES IMPLEMENTING ROAD USE CHARGE (RUC)

Stockholm congestion tax – reintroduction ¹



Source: The City of Stockholm

In August 2007 the congestion tax was reintroduced in Stockholm. The charging scheme is basically the same as during the trial in 2006. The congestion tax zone, charging hours and amount are the same as well as time for payment (14 days). However, the following changes that have been implemented in the permanent scheme are:

- No congestion tax during the month of July
- Reduced surcharge, from SEK 500 to 200
- Maximum surcharge for one calendar month of SEK 2,000 per vehicle.
- Exemption for taxis and mobility service vehicles removed.
- Exemptions for “green cars” limited to 2012
- Possible to deduct congestion tax charges when filing income tax returns.

Also, a number of improvements in the system have been carried out, for example improved company report/statement, no on-board unit and modified payment system.

¹ Jenny Källström, WSP Analys & Strategi



Evaluation from the initial period of the permanent scheme shows that the traffic volume reduction, in and out of the charging zone, is largely the same as during the trial, that is approximately 20% down.

Consequently there have been positive effects on accessibility (travel time) in the inner city and on the central arterials mainly in the afternoon.

However, due to recent roadworks the effects are not as large as during the trial.

The evaluation programme for the permanent scheme is not as extensive as during the trial and focus is now primarily on traffic effects. However, in 2008 there will also be reports on, for example, the effect on commerce, air quality and traffic safety.

Rome - further extension of Limited Traffic Zone (LTZ) system²

During the past six months some important achievements took place in Rome.

As shown in the picture on the right a modern electronic access gate has been installed in the core of the historic centre of Rome, Via dei Fori Imperiali, supervised until now by the police.

After a long and demanding discussion that has been going on between the Administration and the National Body supervising cultural heritage (Sovrintendenza ai Beni Culturali), finally a suitable solution has been found to implement the 23rd electronic gate that has closed the central cordon in Rome.

The new LTZ schemes are implemented according to a cost benefits analysis, in fact they run when traffic congestion is higher in order to discourage people from using private cars; it has been identified that the most critical traffic conditions in the sensitive areas identified usually happen during night-time hours.

After the Trastevere and San Lorenzo districts, another LTZ area has been identified and tested during summer



Source: ATAC, Rome

2007, Testaccio, located inside the Rail Ring. Besides the implementation of the Access Restriction, new pay parking lots were implemented in the surrounding areas. It will be decided whether to definitely implement this LTZ with electronic gates.

² Prepared by ATAC, Rome

Spitsmijden experiment³, Netherlands: Can the car driver be persuaded to avoid peak traffic?

The purpose of the experiment was to study whether reward stimulus could be a possible control instrument to influence mobility behaviour.

The experiment was conducted on the stretch of the A12 from Zoetermeer in the direction of The Hague. There are few alternative routes or on-and-off ramps on this stretch of motorway, which made the experiment relatively easy to control. The morning peak traffic period on this stretch of the A12 was determined to run from 7.30 to 9.30.

Various technologies were utilised in the experiment. Electronic Vehicle Identification (EVI) was a new technology for the Netherlands, and was used for registration and enforcement. Other technologies, such

as cameras with number plate recognition and GPS position logs were also used. In total, 340 drivers accepted the challenge to try to avoid the peak traffic hours.

As an incentive, two Yeti smartphones were given away by drawing among the participants. The reward for participants was money and the highest amount earned was EUR 290.

Half of the participants had little or no trouble avoiding driving during the peak traffic periods. Those who did find it difficult claimed that it was due to obligations at home or work. Many participants had made agreements with their

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employer about their work times or working at home, and at home they had made agreements regarding household chores and scheduling.

It is still too early to say if this experiment can provide a good solution for traffic. Traffic jam problems are too stubborn to be tackled using only one instrument. However, it is clear that a reward mechanism may help reduce rush hour traffic for specific groups of rush hour motorists at least. For more information, please go to <www.spitsmijden.nl/root/english.html> or visit <www.cura-caoproject.eu/relevant-documents.php>

³ The article was extracted from the brochure of the Spitsmijden experiment, <http://www.spitsmijden.nl/root/english.html>

OTHER EUROPEAN PROJECTS RELATED TO RUC

DIFFERENT Project

A key issue in putting differentiated charges into practice is the need to understand user reactions to differentiated prices, and this is under investigation in the **DIFFERENT project**⁴ through empirical as well as inter-related theoretical work. DIFFERENT is a two-year 6th Framework Programme project under DGTREN.

The theoretical side in DIFFERENT is based on three main pillars:

- Normative economic theory will tell which type of differentiated charging structures should be implemented to maximise welfare.
- Positive economic theory tells, given political circumstances, selfish motives of decision-makers and the influence of interest groups, which differentiated pricing structures are the most likely to be implemented.

⁴ Prepared by Christiane Bielefeldt, DIFFERENT project.

Spitsmijden experiment in short

Spitsmijden is Dutch for avoiding peak traffic. During the 50 working day Dutch experiment, 340 frequent drivers looked for alternatives to driving in morning traffic over the stretch of the Dutch A12 motorway from Zoetermeer towards The Hague. They were rewarded if they were successful, and it worked! The number of participants driving in peak morning traffic was cut in half. This was a promising result for an experiment using a new technique for traffic management unique to the Netherlands. A close co-operation with scientists, industry and government made this possible.

- Behavioural theory will take account of cognitive factors, which may lead travellers to make sub-optimal decisions, either because of their inability to process complex pricing information or because of 'irrational' patterns of behaviour.

One of the strands within the empirical work of DIFFERENT focuses on urban charges, and will be based on the case studies of Trondheim, London, Rome, Edinburgh, Stockholm and the Dutch Spitsmijden project. A Stated Preference survey has been carried out in Newcastle to establish the reaction of car drivers to a range of pricing scenarios ranging from very simple to highly complex ones. Modelling work will investigate how far pricing schemes with higher degrees of differentiation are expected to affect short-term travel behaviour.

The final results will be available in April 2008. For more information, please go to <www.different-project.eu>

Project Partners

The CURACAO project partners are:

- **Transport & Travel Research Ltd**
- **ISIS (Rome)**
- **ITS, University of Leeds**
- **Technical University of Dresden**
- **SINTEF**
- **Goudappel Coffeng**
- **WSP**
- **POLIS**
- **Regional Environmental Center for Central and Eastern Europe**
- **CERTU**
- **SESTRAN**
- **ATAC Rome**
- **City of Stockholm**
- **Public Roads Administration (Norway)**
- **Bristol City Council**

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Newsletter created and published by the Regional Environmental Center for Central and Eastern Europe

CURACAO is a project funded by the European Commission through the 6th Framework Programme for Development and Research.

