CURACAO – Coordination of Urban RoAd user ChArging Organisational issues

Supporting the fairer and more efficient pricing of road usage in urban areas.

A Coordination Action for research and best practice monitoring.

CURACAO is a new EC funded project which aims to coordinate research and monitor the results of the implementation of road user charging as a demand management tool in urban areas.
Traffic congestion as a problem in cities

One of the most difficult problems that modern day cities face is traffic congestion, and congestion continues to be a significant factor affecting the quality of life in today’s cities. Traffic congestion can be caused by:

- Many people living and working in the city;
- More people owning and using cars;
- A shortage of off-street parking, so that cars are parked on the roads instead;
- People not using public transport, either because it is less convenient, too expensive or not available.

These trends can be addressed by using a set of policies and measures aimed at reducing and rationalising transport demand on a network, or part of it, in order to reduce traffic congestion.

Road user charging (RUC) is a powerful tool for managing mobility demand and has the potential to improve traffic flows and encourage modal switch. However, despite this potential, European cities have on the whole been slow to implement RUC schemes.

Solution: road use charging and CURACAO

One of the possible solutions for reducing the problem of traffic congestion in cities is Road User Charging (RUC) or more simply, road pricing.

Examples include traditional methods such as turnpikes and toll roads, as well as more modern schemes employing electronic toll collection such as the London congestion charge, Singapore’s Electronic Road Pricing, the congestion charging scheme in Stockholm or the Limited Traffic Zone in Rome.

While RUC has a great potential for reducing congestion in cities, it can be very difficult to implement as it has to accommodate the interests of various stakeholders, including national and local governments, road users, citizens and businesses.

Congestion Charge in Stockholm

In Stockholm, a full-scale congestion charging trial took place between Jan 3rd and July 31st 2006, followed by a referendum in September regarding the future of the congestion charges. The purpose was to reduce congestion in and around the inner city, thereby improving accessibility and environment in the most densely populated areas. The charging system is designed as a toll ring, with the charges varying over the day according to the congestion levels. Charges are highest during morning and afternoon peaks, moderate during mid-day, and zero during nights and weekends. The charge is imposed on vehicles passing any of 18 control points that have been installed around Stockholm’s inner city. Passages are registered automatically and the owner of the vehicle is responsible for ensuring the tax is paid. A referendum was held in Stockholm Municipality in conjunction with the Swedish general elections on 17 September 2006. The result was in favor of the charges (51.3 voted yes and 45.5 voted no). According to the new government, the congestion tax will be reinstalled during the first half year 2007. The Swedish Minister of Infrastructure recently confirmed on a press conference that the revenue will be used to finance a planned orbital motorway bypass, instead of public transport.

London Congestion Charge

In February 2003, London adopted a congestion charging system, charging drivers £5 a day to access central London. The scheme is based upon an area-wide licensing approach and covers 21 square kilometres. The daily charge of £8 per vehicle per day (recently increased from £5) is charged for use of the zone, so that more than one trip by the same vehicle on the same day is allowed, without incurring a further charge over and above £8. The charging period is from 7am – 6.30pm Monday to Friday. The enforcement method is by the use of cameras placed within the charging zone, using automatic number plate recognition technology. All charging revenue is legally bound back into transport improvements in London. The overall effect to date has been the cutting of congestion by 30% within the charging zone.
This shortfall, between the potential of road pricing and the progress of its actual implementation, is the focus of a new project funded by the European Commission Coordination of Urban Road User Charging Organisational Issues (CURACAO for short).

This project aims to promote road user charging as a demand management tool in urban areas, to bridge this knowledge gap and find out what decision makers require in order to progress with a road pricing policy in their city.

The main result of CURACAO will be developing a generic urban blueprint that can serve as a catalyst and enabler for the implementation of road pricing in European cities.

### Rome and the limited traffic zones

From October 2001, as a part of a strategy to improve mobility, access to the historical centre of the city of Rome (the 4.8 km² LTZ) is being controlled by Automated Access Control System and regulated by a flat flare Road Pricing scheme (ACS+RP Scheme) in order to limit private vehicle trips. The system encompasses 22 electronic access gates, a vehicle On-Board Unit (OBU) and smart cards, a communication subsystem and a control centre. Current access permits amount to some 250,000 plates (about 12% of the total vehicles registered in Rome), although currently two-wheeled vehicles are not included in this system. To date, results show a 10% decrease in traffic throughout the day, thanks to a 20% decrease during the restriction period (06.30-18.00). There has also been a 10% increase in two-wheelers, and a 6% increase in public transport use. Data analysis showed that the measure of traffic limitation has led to a reduction of the traffic flow in the complete day and not only in the restriction hours.

### Project Target Group

CURACAO’S target audiences range from cities where pricing schemes are already in place to those engaged in a fact finding exercise. The following end user groups have been identified:

- Cities already having a pricing scheme
- Cities planning / preparing scheme implementation
- Cities seeking information
- Researchers.

A group of 20 cities planning for implementation will be invited to join a User Group. The User Group will be invited to attend CURACAO workshops and will be chaired by Bristol City Council, who coordinated both PROGRESS and EUROPRICE, and will provide input to the direction of the project. The members of the user group were selected through a User Needs Assessment questionnaire aimed at identifying the needs of decision makers and technical experts in cities. Other cities can benefit from CURACAO dissemination activities through email and the website (www.curacaoproject.eu).

### “CURACAO” Products

Cities from the different user groups will have different needs for outputs of the CURACAO project and thus there will be a number of products created during the project:

- State-of-the-art reports based on the latest research findings;
- Guiding paper on good practices - a handbook to support decision makers in the design and implementation of road pricing measures;
- Policy recommendations;
- Targeted Fact sheets (e.g. on possible impacts and overcoming barriers);
- Final report providing guidelines on successful implementation of RUC;
- Online searchable good practices database - The database will contain facts and figures on scheme specification, processes, impacts, barriers and solutions from the CURACAO case studies;
- PR materials (such as a brochure, power point presentation and poster) and 5...
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project newsletters with an FAQ section on the website;
• A categorised contact database containing key stakeholders from the target groups.

All results can be accessible on the project webportal www.curacaoproject.eu with FAQ section on website and links to other RUC websites.

“CURACAO” Events
In order to transfer the RUC experience efficiently different types of events are planned within the project:
• 3 Small events - each year will be a smaller, closed, planning workshop, to provide support to the partner cities from the user group, and potentially to other cities with active commitment to Road User Charging.
• 3 Large events in cities with implemented schemes - the second event each year will be an open workshop held in a city with a real-life demonstration or implemented scheme to be visited.
• 3 site visits to implemented RUC schemes.

Dissemination of the project results and its publicity
CURACAO’s goal is to facilitate the exchange of information, raise awareness and disseminate and promote research results and best practice at a European, national, regional and local level with a focus on the transfer of best practice from the leading cities to other cities across Europe. It involves identification, exchange and dissemination of best practices, setting up of an information and contacts database, also the organisation of external workshops, and participation in conferences and other events. All project related information will be accessible through the project website.

Project partners
The CURACAO project consists of a consortium of fifteen member organisations, coordinated by Transport & Travel Research, a UK transport consultancy. The consortium includes ten expert partners, consisting of commercial consultancies, academic institutions and government agencies, and five cities with direct experience of road pricing schemes, either as demonstrations or full implementations.

ATAC (ITALY)
Bristol City Council (UK)
CERTU (France)
Goudappel Coffeng (Netherlands)
ISIS (Italy)
ITS, University of Leeds (UK)
The Public Roads Administration (Norway)
POLIS
Regional Environmental Center
SINTEF (Norway)
South East of Scotland Transport Partnership (Scotland)
The City of Stockholm (Sweden)
Technical University of Dresden (Germany)
Transport & Travel Research (UK)
Transek (Sweden)

Contact Information
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For more information visit:
www.curacaoproject.eu

CURACAO is funded by the EU