

When in Rome

ITS Solutions talks to leading CURACAO Consortium members about some of the main acceptance issues that have emerged Europe-wide around road user charging.



The fruits of traffic restriction – a peaceful street in Rome's Trastevere district.

The EU-supported CURACAO (Co-ordination of Urban Road-user Charging Organisational issues) project aims to coordinate research into, and monitor the results of implementing, road user charging (RUC) as a demand management tool in urban areas of Europe. Launched in May 2006 in Stockholm (Sweden), it is building on the achievements of three precursor projects - EU PRoGRESS, CUPID and EUROPRICE.

The 15-member project consortium brings together ten expert partners and five city representatives with direct experience of road pricing schemes, either as demonstrations or full implementations, from eight European countries: France, Germany, Hungary, Italy, the Netherlands, Norway, Sweden and the UK. The coordinator is UK consultancy Transport & Travel Research.

CURACAO is currently working with cities across the continent that are interested in pursuing RUC to identify the barriers they face, and present evidence on ways of overcoming these. One of the most significant of them is the question of public and business acceptance.

The issue has been extensively reviewed as part of the first CURACAO State of the Art

Report (SoAR), drawn up using evidence assembled over the first year of the project for presenting as a draft to the first CURACAO User Group meeting held on 21-22 March 2007 in London. Following discussion at this meeting, the report will be finalised and published on the CURACAO website (www.cura-caoproject.eu) from April 2007.

For this article, *ITS Solutions* talked to leading CURACAO Consortium members about some of the main RUC acceptance issues that have emerged Europe-wide during the development of the report. It summarises material from the draft SoAR, from a chapter on Acceptability co-written by Dr Jens Schade, Tina Gehlert and Professor Dr Bernhard Schlag of the Technical University of Dresden, Germany.

Charging messages from across Europe

Lack of public and political acceptability of the principle of paying to drive is now the main barrier to implementing urban road user charging (RUC) in Europe. For most commentators, this outranks the institutional obstacles that remain important in many countries.

In a poll of 22 European cities, 20 have

ranked acceptability as 'very important', especially in the context of negative media reporting. Another recent survey made RUC the least favoured form of travel demand management, supported by only 20% of respondents.

The problem is that, even if technological and political innovations such as RUC result in substantial societal benefits, failure adequately to canvass the opinions of those most concerned can lead to 'irrational' resistance. On such a sensitive topic as peoples' right to personal mobility, the introduction of RUC could lead to active opposition that might extend beyond protests and demonstrations as far as sabotage.

For European national and regional governments that have identified RUC as a key tool for managing growing congestion problems, acceptance is a serious challenge. In 2002, the Netherlands failed in its bid to introduce the world's first nationwide RUC scheme for lack of public support.

More recently, the UK Government – which has funded ten local authority areas to explore innovative solutions to congestion, including RUC – has been backfooted by the success, on its own website, of an electronic petition that



A camera monitoring Rome's access-controlled limited traffic zone.

gained nearly 1.8 million subscribers in a matter of weeks. This forced ministers into the early release of a city zoning plan that would ensure drivers' privacy -- one of the objectors' main concerns, the other being that RUC amounts to an additional tax on road users.

So, what are the messages coming from Europe? One of the strongest relates specifically to this perception of RUC as a tax. The principal result of studies that have investigated the preferred use of charging revenues is that hypothecation for transport improvements significantly increases its acceptability.

London is a prime example, with Mayor Ken Livingstone able to pledge from the outset that net revenues from congestion charging would be invested solely in specific enhancements to transport, notably in improving its bus services. Edinburgh, by contrast, went into a referendum -- which it lost -- with plans for charging-funded public transport improvements insufficiently developed and therefore difficult to sell.

Experience from Norway's successfully-implemented urban RUC schemes also indicates that RUC designed to raise funds for

infrastructural and environmental improvements is more acceptable than when aimed at managing demand.

The assumption is that, once an RUC scheme is introduced, its effectiveness -- in terms of time savings and environmental improvements -- becomes clear and positively influences drivers. Some research, however, suggests the risk of over-estimating such attitudes, and the exact relationship between projected scheme benefits and acceptability needs further research.

Some experience also suggests that if an RUC proposal does gain initial support, its acceptability decreases the closer and more specific its introduction becomes, increasing again after implementation. Again, however, the precise reasons for these shifts are so far unclear.

Another important factor is the level of charge. European experience suggests that this should start low, and be increased over time as necessary.

Next, the charging system needs to be clear. While economists see dynamic road pricing as the best way of overcoming urban congestion, there is evidence that drivers prefer simple price structures, because they want to know what their journey will cost before they start.

Well-planned communication with the driving public is therefore essential. Experience from Singapore, which pioneered urban RUC, suggests that variable charges, if they are well-advertised, are acceptable as a means of reducing peak congestion -- but the whole area needs some empirical research.

Political aspects

Politicians can negatively influence RUC implementation, not only by active opposition, but also by avoiding making any clear commitment -- which will act as a benchmark for other stakeholders and risk them becoming more negative. A political champion who takes ownership of the concept -- like London Mayor Livingstone -- can clearly make all the difference.

But most politicians are fearful about losing future elections. Even if there is strong enough political support to go ahead with RUC, they can easily be disheartened if they find public support eroding.

Public opinion is obviously the most important source of information for politicians to draw on, the key factors being problem perception, fairness and revenue allocation. Presentation of the benefits of a proposed scheme therefore needs to incorporate evidence of public acceptance.

One way of divorcing RUC from the election cycle is to hold a referendum, although an early one runs the greater risk of failure (as was the case in Edinburgh). The alternative is the Stockholm approach of holding one after the introduction of congestion charging on a trial basis.

While this carries a large financial risk, it provides a better chance of winning the day, given evidence that public support tends to increase once a scheme is up and running and people start to feel its benefits. In the event, Stockholm's referendum had only a narrow margin in favour overall, and there was less support in neighbouring municipalities.

Business aspects

Business attitudes to urban congestion charging tend to range from wary scepticism to downright opposition. Retailers located within a proposed charging zone are generally among its most vociferous opponents, as they fear losing customers.

Allaying their fears can involve convincing them that public transport alternatives will provide viable alternatives to car use (and, possibly, using a proportion of charging revenues to reduce fares); or introducing measures such as investing in promotional campaigns, or reducing parking charges during the main shopping hours.

They are also, naturally, concerned over the risk of increased costs of deliveries, and this needs to be taken into account in scheme design. Overall, however, the evidence suggests that they should gain from the reduced congestion.

Among European cities that have implemented congestion charging, London continues to show mixed reactions from the business community. Trondheim (Norway) showed no overall distortion of trade or competition resulting from its toll ring; while Rome experienced a 5% drop in numbers of retailers reacting negatively to its access-controlled limited traffic zone post-implementation.

In Stockholm, the proportion of businesses that were negative fell from 65% to 45%, while those that were positive rose from 20% to 35%. Attitudes to a permanent scheme moved in the same way; the negatives fell from 65% to 50%, while the positives rose from 20% to 30%.

Media aspects

The media is often overlooked as a factor in RUC policy implementation. However, by selective choice and presentation of issues, it can profoundly influence the opinions of all relevant stakeholders as well as of the general public – as it did in Edinburgh.

Overall, media coverage of RUC has been negative and, at best, neutral and is unlikely to be instinctively supportive of the implementation process. Stories about people who will be forced to change their travel behaviour, and thus their daily lives, are far more to the taste of the mass media than abstract measurements of improvements in air quality or the physical environment.

Politicians and other decision-makers obvi-

Key acceptability-enhancing issues – a French view

1. The project must serve to implement, and be consistent with, a broader transport policy.
2. It is important to seek unwavering, broad-based political support.
3. The institutional tiers involved should establish sound negotiating capabilities.
4. The public must be persuaded that there are no other viable solutions.
5. The project's objectives should be in keeping with the main requirements expressed by the public.
6. The decision-making process should be devised to ensure transparency and facilitate interaction with stakeholders.
7. Adopting a step-by-step approach makes it possible to adapt the project and keep in step with public awareness.
8. The project should be kept as simple as possible.
9. Issues of fairness should be addressed.
10. Investing effort in communications and marketing makes for better project development and promotion.
11. Revenues should be reinvested in transportation and alternatives to car-based transport proposed.
12. Specially discounted rates should be charged when the system enters service.

Taken from the first international edition of *Urban Road Pricing: the question of acceptability*, published in March 2007 by French governmental planning and transportation technical services agency, and CURACAO consortium member, CERTU.

ously have to take the possible reactions of the media into account all the way through the process. They need to avoid, as far as possible, saying anything that encourages emotional presentation of the topic, and may even have to accept departures from their initial policies.

Key issues for acceptance

If congestion charging is presented in the context of delivering transport system improvements or meeting other major public concerns, support increases considerably.

The technology needs to be seen as workable, and easy and convenient for drivers to use, as any likely or possible problems will be highlighted by the media.

Technology also means that privacy need no longer be a major obstacle. But the driving public has to be convinced of the fact.

The scale of likely impacts on the local economy is difficult to estimate accurately in advance. Relevant factors include the resulting image of the charged area, eg that it is more attractive to visit, and its relationship with competing centres. This uncertainty is one of the main reasons for reluctance on the part of city authorities to introduce road pricing, and for low levels of business acceptance prior to implementation.

Modelling of a proposed scheme has to predict the impact of RUC on individuals and their journeys, as disaggregated by eg income, location, time of day and purpose of journey. Ideally, it should also identify impacts on people with special needs, eg disabled drivers, and provide for any necessary exemptions to be included in the scheme design.

CURACAO has already identified four sig-

nificant gaps in the process of scheme modelling and prediction:

- Distance-based and cordon schemes can generally be modelled reasonably accurately; but, because conventional modelling makes per-trip assumptions, it is difficult to model area-based charging;
- Modelling of exemptions or discounts is difficult if not impossible;
- RUC models tend to be static and are unable to handle dynamic changes, eg predicting the influx of traffic into the charged area at the end of the charging period; and.
- Modelling the impact of eg monthly passes is difficult, as these would affect travel patterns at zero marginal cost to the driver.

These issues need to be addressed, in the interests of delivering schemes that will be acceptable to the driving public.

Apart from modelling, CURACAO has also identified two further key research gaps. One concerns the dynamics of acceptability, as manifested in cities that have implemented, or proposed to implement, congestion charging. We need to know more about the causes of changing levels of acceptance, and how these can be used positively to help the implementation process.

The second concerns the role of the referendum as a means of encouraging public participation and increasing the credibility of the implementation process. Two cities have so far made use of it, with mixed results, and we have insufficient knowledge of the circumstances in which it can best be used.

A lost referendum will not only mean the end of a specific proposal. It will also, given the sensitivity of the subject and the consequent media attention, impair the prospects of other schemes elsewhere in Europe.