

ACCEPTABILITY OF TRANSPORT PRICING STRATEGIES

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INVESTOR IN PEOPLE

FOREWORD

Esko Niskanen, Coordinator Project MC-ICAM

The European Union has emphasised transport pricing as a promising approach to deal with urgent problems in urban traffic such as congestion or environmental damage etc. The EU has stressed the importance of policy reform in pricing of transportation so that the prices could better allow for the problems. However, practical experience from Europe and all over the world as well as findings of many studies and research projects have shown that public and political acceptability of urban road pricing in which users would bear the full marginal social cost of their activities is very low.

This fact raises several interesting questions: How can the different levels of public and political acceptability of pricing vs. other, non-price means of travel demand management be explained? Which factors lie behind the low acceptability, and how could acceptability be increased? What would be an optimal implementation strategy, in terms of optimal policy packaging and phasing of the introduction of individual measures?

MC-ICAM ("Implementation of Marginal Cost Pricing in Transport - Integrated Conceptual and Applied Model Analysis") is a research project funded by the European Union which has examined these questions. In particular, it has examined optimal implementation paths from a current situation with non-optimal pricing (level and structure of prices) of transportation to a situation with socially optimal pricing. It has evaluated alternative implementation or transition paths by examining how they affect social welfare over time, the technological and institutional changes which they require (or generate), and the public and political support which they induce over time.

This book is based on the *MC-ICAM* conference "*Acceptability of transport pricing strategies*", held 23-24 May 2002 in Dresden. The conference was directed to policymakers/politicians, transport experts, academics and consultants. The overall aim was to bring together the most advanced state of the art and to contribute to an interdisciplinary exchange for developing a commonly agreed theoretical and methodological framework for acceptance studies, which would cover all relevant aspects of acceptance, integrating economic, psychological, sociological and political points of view. More specific aims were to identify key factors behind the lack of public and political acceptability, and, based on these analyses, to propose policy recommendations for implementing transport pricing. This would

mean developing both new and innovative approaches to policy packaging and phasing as well as intelligent marketing strategies for the implementation of road user charging.

The conference succeeded in serving these goals very well. It provoked useful discussions between scientists from different research fields and disciplines as well as between practitioners and academics. This book can convey to the reader the results and spirit of the conference, and will provide him/her new thoughts and insights for further consideration, whether in research or practical policymaking.

Helsinki, February 2003

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ACCEPTABILITY OF TRANSPORT PRICING STRATEGIES: AN INTRODUCTION

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INTRODUCTION

The problems related to transport and the associated challenges for the next decade for the European states are immense (European Commission, 2001). The continuing integration within Europe and the accompanying increase in transport demand will make additional investment in infrastructure necessary. The need for funds will continue to rise, while the limits of public budgets have already been reached. A solution to the enormous traffic congestion problems, to safety and environmental problems is urgently required. The severe transport and environmental problems in many urban areas are strongly related to the great dominance of private car use for passenger transport .

The various problems of mobility will not be solved only through technological measures or by appealing to citizens' sense of responsibility. Only through fundamental changes in the factors determining citizen's travel behaviour will it be possible to reduce the demand for private car use and to achieve a better distribution of traffic by altering the temporal and spatial demand, above all in urban areas.

In transportation studies, a classical distinction is made between four types of measures for influencing mobility behaviour, usually known as the "4 E's":

- *Enforcement*: legal measures, above all rules and regulations, which, as guidelines for behaviour to ensure safety, have been worked out in traffic in greater detail than in most areas of life;

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- *Engineering*: a change in the transportation systems and transport means available, relating both to roads and tracks for the various types of vehicle and to the vehicles themselves;
- *Education*: measures of driver training, explanation and information, primarily for children and for drivers, but, in an extended sense as mobility marketing also for all users;
- *Encouragement* or *Economy*: incentive systems, intended to vary the cost-benefit calculation of users.

In practice, however, these types of measure cannot be strictly distinguished. For example, explanation and information are always necessary when a new measure is introduced. Furthermore, variation of transport prices is closely related to the availability of particular means of transport. There has been a traditional emphasis on legal measures for directing behaviour in transport. However, this is clearly limited when the intention is to influence not only driving behaviour, but also mobility behaviour as a whole. In many areas of life, economic incentive systems have often proven to be the most effective means of influencing behaviour on a collective level. The general goal is to create general conditions which provide market participants with room to manoeuvre, and which render continual intervention unnecessary, since the individual actors govern themselves in their own interests and, at the same time, in the societal interest. These boundary conditions are mainly created by the prices for the goods under demand.

However, the question remains how it is possible to influence people without regulating their decisions and prescribing what to do. How can a collective change in the behaviour of millions of transport users be affected without compulsion, without strict regulation and enforcement? Apart from any moral interpretation, it is clear that the attempt to enforce such behavioural control failed drastically in the countries of Eastern Europe. It is always easier in cases where the affected people strive for such a change, i.e. if the interests of society benefit from individual intentions going in the same direction. This does not seem to be the case for pricing measures in road traffic – in fact, often the opposite is true: such measures are very often flatly rejected. In most European countries, the traditional perception dominates that the roads are a good which is free to use. On the other hand, there is a widespread awareness for traffic related problems. For road users, the ideal seems to be to continue to behave as before, but without the negative consequences. Many people feel that this is an illusion – but a dearly-held illusion, which is difficult to abandon. Why? This behaviour has clear advantages for the individual in the short-term, while the negative consequences tend to be of a long-term nature and affect society in general, not necessarily the polluter himself. This lacking contingency between behaviour and its consequences misleads individual perception: the individual does not see himself/herself as responsible for causing the problems. This “Allmende dilemma” (Hardin, 1968) or social trap (Platt, 1973) can be broken – by making the consequences of the behaviour visible for the individual. This is the aim of road user charging (RUC), which applies the central postulate of operant conditioning, namely contingent linking between

behaviour and its consequences. It is easier if these consequences are positive, i.e. the user has some benefit. Furthermore, an effective solution must ensure that punishment is not the only experience, since otherwise this would lead only to avoidance behaviour and the search for alternatives satisfying individual goals. A push & pull & publicity package solution is therefore required in order to change human mobility behaviour in a long-term and sustainable way.

The shift from a publicly-funded transport system to a transport system financed by the users to a greater extent will have long-term and perceivable effects on the users of the system. In this way it can be seen to be effective, but in general there is great uncertainty about the effects of the current policies. This results in questions for those affected, for example:

- How and to what extent will the changes affect me?
- How much will I have to change my behaviour and my habits?
- Will the changes entail high costs and considerable effort? Will I be worse off later on?
- How are the costs (and benefits) distributed?

It is not surprising that the anticipation of comparatively fundamental changes may result in strong opposition from those affected, the users of the transport systems. This is not a new situation for democratic societies, arising as it does in many areas of society (e.g. social welfare systems). The central question applies to the way of dealing with the opposition of those affected. Should it merely be ignored, and the recommendations of the experts implemented? Or, as is often the case at present, should political decision-making be determined by public opinion, as reflected in opinion polls?

Research into risk perception has shown that there is a clear difference in the perception of risk (e.g. of nuclear energy) between experts and laypeople (Renn, 1998). While experts generally prefer an objective understanding of risk (probability of damage occurring multiplied by expected extent), laypeople often apply different associations and feelings to the evaluation of risks, and therefore arrive at completely different results. And people's perceptions guide their behaviour no matter if its based on inaccurate assumptions. When it is important for the implementation and efficiency of innovations for these to be accepted by a certain proportion of the population, the views of the population must be better understood. This is the focus of acceptance research.

The fears of the population must be taken seriously, presented and taken into account. This may result in significant changes for the systems being implemented. If the acceptance of those affected is a necessary but not sufficient precondition for the effectiveness of a particular measure, there is no alternative to acceptance research. The conditions of the observed acceptance phenomena can be identified and the measures can be adapted so as to better meet