

1 INTRODUCTION

The aim of CURAÇAO is to promote and support the fairer and more efficient pricing of road use in urban areas throughout Europe. The project is doing this by working with cities interested in pursuing road pricing to identify the barriers to their doing so, and providing evidence on ways of overcoming those barriers. That evidence is being provided in two forms: through a series of case studies and in an annually updated State of the Art Report, both of which will be disseminated through the project website (<http://www.curacaoproject.eu>) and a series of workshops.

This is the first version of the State of the Art Report, and is based on evidence collated from research and practice over the period to the end of 2006. It addresses a series of issues which were included in the proposal for the project, together with others which were identified in a survey of End User Cities in July 2006. This document is organised around the resulting list of issues thus identified

1. the possible objectives of road pricing schemes (Chapter 2)
2. the ways in which road pricing schemes can be designed to meet those objectives (Chapter 3)
3. the technologies available to support such scheme designs (Chapter 4)
4. techniques for predicting the effects of road pricing schemes (Chapter 5)
5. techniques for appraising/evaluating the effects of road pricing schemes (Chapter 6)
6. specific evidence of impacts on the economy (Chapter 7),
7. the environment (Chapter 8)
8. and equity (Chapter 9)
9. factors affecting the acceptability of road pricing schemes (Chapter 10)
10. the potential transferability of experience from one city to another. (Chapter 11)

Of these, issues 1, 2, 3, 4, 7 and 8 were included in the original proposal; issues 5 and 6 were added later. The specific issue of environmental impacts was only raised in late 2006, and is not addressed in this version of the report. It has also been decided to defer coverage of technologies until the second version of this Report, pending consideration among end user cities of the level of information needed on what is an increasingly complex topic.

Figure 1-1 illustrates the linkages between these ten topics. Determination of objectives is the essential pre-requisite for scheme design, and also forms the basis for subsequent appraisal of alternative schemes. Once schemes have been designed it is possible to predict their effects and hence to appraise their performance against the agreed objectives, and to assess their acceptability. The available technologies will contribute to scheme design, and will also have direct implications for acceptability. Within the overall appraisal, this Report places particular emphasis on environmental, economic and equity impacts, all of which will also affect acceptability. Finally all of these issues will be factors in assessing the transferability of performance and practice from one city to another.

These issues are covered in the order listed above in the next ten sections of the report. While this is generally a logical order in which to consider them, it should be noted that there will be some feedback between them. For example, problems identified at the appraisal stage could justify changes in scheme design, while factors which make a scheme less acceptable could lead to changes either in the scheme design or the underlying objectives. These feedback issues are raised as they arise, and summarised in the concluding section.

Each section is structured around a series of questions which cities might ask, and answers to those questions based on available evidence. End User Cities were asked to comment on an initial list of these questions in November 2006. The resulting list of questions reflects their suggestions and concerns. A few of the issues which they raised then, concerned with legislation, business processes, administration and enforcement are being considered within the separate work package on case studies, since it is anticipated that the evidence will be more practical and city-specific in nature. It may prove appropriate to incorporate these issues into future versions of the State of the Art Report.

Each question is answered based on research and practical evidence available to the study team, and information sources are provided as appropriate. Given the number of consultancy studies into road pricing, it is probable that there will be other relevant evidence of which the study team is unaware.

We would very much welcome information on other evidence which could be included in future versions of the Report. We also have a small budget available to commission inputs from outside Europe on experience which might be relevant to European cities, and suggestions for gaps which might be filled in this way would be helpful.

We hope that this first edition of the State of the Art Report will prove helpful to cities considering the introduction of road pricing. We would be grateful for comments, and suggestions for enhancements which might be made in future versions. In particular:

- Are there other issues which we might usefully cover?
- Are there other questions which we should attempt to answer for the issues which we do consider?
- Is there other evidence of which you are aware which could be incorporated?
- Are there particular issues on which you would welcome evidence from outside Europe?

Please send any comments and suggestions to Andrew Koh at the Institute for Transport Studies at the University of Leeds, England: a.koh@its.leeds.ac.uk.