DIFFERENT – USER REACTION AND EFFICIENT DIFFERENTIATION OF CHARGES AND TOLLS

CLIENT: *European Commission, DG TREN*

YEARS: *2006 –2008*

DESCRIPTIONS OF ACTIVITIES

The DIFFERENT project was a research study supported by the European Commission and developed within the VI Framework Programme.

Objectives of the project

The main objectives of the DIFFERENT project were:

- to improve the understanding of user reactions to differentiated prices;
- to develop a scientifically sound approach to determine efficient differentiation of infrastructure cost based charging schemes and methods to assess their impact on user behaviour;
- to analyse and demonstrate the benefits and effectiveness of differentiated charging and taxation schemes as a means to manage mobility, externalities, equity aspects and to obtain revenues and recover infrastructure costs;
- to provide policy recommendations in general and, in particular, for the Common European Transport Policy.

The potential scope of price differentiation is broad and includes dimensions such as:

- time, for example in the case of congestion or noise nuisance;
- place, for example depending on congestion level or region;
- type of infrastructure, to represent differences in quality supplied;
- type of user and/or type of goods, to capture willingness to pay of clients;
- type of vehicle and axle loads to take for instance maintenance costs into account.

Project approach

A key issue in putting differentiated charges into practice is the need to understand user reactions to differentiated prices, and this will be investigated in DIFFERENT through empirical as well as interrelated theoretical work. The main emphasis of the DIFFERENT project was on the empirical work, based on real-world case studies. Hence a range of cases where price differentiation is actually applied have been studied. However, since in some sectors real world cases are scarce or lacking, use was also made of Stated and Revealed Preference research. In addition, models were used to analyse the effects of price differentiation, in particular with regard to long-term consequences.

The role of TRT

Within the project, TRT was the leading partner for the Assessment of the effects of differentiated charges on road freight operators. TRT also coordinated the modelling exercises to simulate the impact of differentiated toll schemes on interurban roads.

Main outcomes

The result of this project was a great deal of evidence and lessons from the application of differentiated transport charges in several markets and suggestions for the design and implementation of new differentiated infrastructure charging schemes in the real world. With special reference to interurban road charging, main conclusions were the following:

- Differentiation of road tolls is effective. Its application
  induces perceptible changes in demand behaviour.
- Inter-urban road tolls differentiation is generally accepted and perceived as a fair measure.
- In the shorter term, the impact is generally low: some re-routing can be expected and the road haulage sector is encouraged to improve efficiency.
- Mode shift on non-road alternatives is quite unlikely
  especially for freight.
- Inter-urban charge differentiation seems not an effective policy for environmental purposes in the short term.
- A trade-off between alternative targets of toll differentiation exists: e.g. the most preferable scheme to raise funds in case of project financing may well be not the best scheme for improving the level of service of the network.

The specific context of application does matter: In non-congested corridors charge differentiation can raise money, but there is little room for social benefits, which can be achieved only if constraints are placed on the use of revenues. In congested areas the level of service of the road network can be improved, but this generally imply the charging of ordinary roads, which is politically challenging.

More information on the project web-site:
www.different-project.eu/