



TREN/A4/103-2/2009

Study on Urban Access Restrictions



Executive Summary

Rome, December 2010





Executive Summary

An increasing number of European cities is engaged in the design and implementation of demand management strategies based upon the concept of 'controlled access', which entails the more or less gradual interdiction of selected urban areas to traffic. The current situation is characterized by a high degree of heterogeneity, for what concerns:

- the objectives of the Access Restriction Schemes (ARS): so far schemes were mainly driven by air quality targets, but other strategic objectives are forcefully emerging (reducing congestion, increasing the overall livability of cities)
- the type of access restriction: i.e. which traffic is specifically targeted? (passengers Vs freight, vehicle technology, time slots, etc.)
- the instruments adopted: they can be regulatory/prescriptive (bans, vehicle standards, etc.) or/and market based (road and/or parking pricing, bonuses, paying permits, incentives, etc), while information based instruments can supplement/facilitate the implementation of both regulatory and economic instruments
- the technical/technological solutions adopted to implement and enforce the schemes

The Action Plan on urban mobility was adopted by the EU on September 30th, 2009. While it implicitly recognizes that the decision on whether or not to adopt an ARS should be left to cities themselves, it repeatedly and forcefully stresses the importance of promoting the exchange of best practices in all areas of urban sustainable mobility. Action 7 of the Action Plan explicitly reads:

"Action 7 — Access to green zones

The Commission will launch a study on the different access rules for the different types of green zones across the EU in order to improve knowledge on how the different systems work in practice. On the basis of the study results, the Commission will facilitate the exchange of good practices."

In line with such strategic objective, this document reports on the results of a study funded by the EC – DG MOVE to investigate the state-of-the-art of Access Restriction Schemes (ARS) in Europe and identify actions in which the European Union could engage to promote better awareness of the ARS concept, of the implementation options and of their effects, and to foster the dissemination and exchange of best practice in this field.

The study has relied on the combination of extensive desk work with direct interaction with stakeholders.

A systematic review of all available sources of information was carried out, including general literature, websites, targeted reports issued by cities, reports of EU funded and other projects dealing with ARS as well as grey literature available through direct contacts with the authors. To supplement the information produced by the review, a detailed questionnaire was designed and submitted to a sample of ca. 300 cities.

Following this first consultation step (exclusively directed to cities), a second questionnaire was designed to serve as the basis for the consultation of stakeholders, including representatives of industry, operators, governmental agencies, researchers, consultants and citizens. Usable responses were received from ca. 60 stakeholders.

Finally, a dedicated workshop was staged in September 2010 to present and discuss the preliminary results of the study, and elicit additional insights from stakeholders through direct interaction.

TREN A4/103-2/2009 2





The fact finding work allowed to acquire a rather extensive and homogenous set of data on existing access restriction schemes, including (i) the scheme objective, i.e. to reduce traffic congestion or to improve city environmental conditions or other aims like raising funds to be invested in enhancing the quality of local transport, (ii) the type of vehicles targeted by the scheme, (iii) the presence of a charge for entering the restricted zone, (iv) the time slot of enforcement, i.e. if the restriction works 24 hours or just during specific time slots, (v) the solution chosen for the identification of vehicles entering the restricted zone (manual/stickers/ITS) and finally, the extent to which information about the scheme existence and rules is made available on the city websites (or on other national websites).

While the nature and functioning of the existing schemes are in general well documented, the study confirmed that the availability of data on the impacts of scheme implementation is extremely limited, and in general of episodic nature. Major efforts are needed to ensure that more and better evidence on ARS evaluation is produced, in order to document their potential benefits and the risks to be addressed. The scarce information available however points at consistently beneficial effects of ARS implementation in terms of traffic reduction, improving of air quality and overall performance of the urban transport systems.

A systematic assessment of the legal basis behind ARS at national level in each EU27 MS was also conducted. The emerging picture is extremely varied, ranging from countries where no specific legal provision exists to deal with access restrictions (although in some cases local rules are issued) to others where road codes and other specific pieces of legislation offer more explicit legal grounds.

An overall summary appraisal of the European ARS experience so far was carried out in the form of a SWOT analysis that presents the Strengths, Weaknesses, Opportunities and Threats of the analyzed schemes.

The SWOT has notably led to conclude that many of the drivers, enablers and barriers experienced by cities that decide to implement an ARS, are common to all types of schemes, irrespective of the specific features of the scheme itself, including the city typology or the extension of the restricted areas. On the other hand, other aspects are geared to the specific options adopted by each ARS type, and accordingly require targeted actions that are hardly transferable to other contexts.

The stakeholders consultation notably showed that ARS are seen as a powerful policy instrument by most stakeholders groups, and that their potential in addressing the major challenges of urban sustainability (notably air quality, congestion, but also the need to forcefully strengthen the role of non motorized modes) is recognized as considerable. Whether associated to a charge or not, whether initially aiming at air quality improvements or at the reduction of congestion, ARS are seen as more effective if they are based on the distinction of vehicles according to EURO classes.

In line and within the spirit of the Urban Action Plan, recommendations primarily concentrate on actions that the EU could undertake in order to make the most of the good practices developed in those EU cities that have already accrued a meaningful experience in the design, implementation and evaluation of schemes. These notably include (i) the development of a harmonised guidance on ARS good practice that would support cities without prescribing standardized solutions (ii) the establishment and maintenance of a single-window information resource on all ARS aspects, (iii) the funding of large ARS demonstrators.

Further practical recommendations are directed to cities, in an attempt to build upon the experience accrued so far and issue practical guidance on primary DOs and DONTs.

TREN A4/103-2/2009 3