



Transport
Innovation
Deployment
for Europe



GUIDELINES FOR IMPLEMENTERS

Marketing research as an optimisation tool in public transport

TIDE is a Coordination Action funded by the European Commission's DG Research and Innovation under the 7th Framework Programme for Research and Development.



What is it about?



Inside metro in Copenhagen, Denmark

Source: www.eltis.org

Example: Skånetrafiken, Sweden

Skånetrafiken is a public transport authority, being responsible for urban public transport (operating in 10 cities) and regional public transport, including the regional railway system. Its main task is to plan and develop the traffic for 1.25 million inhabitants.

Skånetrafiken has a marketing information system which is adjusted to its vast tasks and different levels of management (tactical and strategic). Its main elements are 3 recurrent market research studies which are conducted regularly, including:

- monthly survey about attitudes of customers and non-customers;
- focused study on perceived quality (twice a year);
- an extensive survey regarding travel habits (every 5 years).

These surveys are supported by other data coming from (e.g.) the sales department. Based on the Skånetrafiken experience, the key success factor is strong and stable position of marketing research within the organisational structure, which means that results are the basis for decisions taken at operational and strategic level.

Characteristics

Although marketing research is a mature solution in the business sector, it offers a lot of possibilities when developed in public transport. Marketing research includes the collection of data and information about the market and its environment and enterprises. It could be used for evaluation and improvement purposes and for predicting future changes in transport behaviour.

Carrying out such research on a regular basis can also be seen as an effective way of recognising future and current market needs. Marketing research is also used to recognise the volume and structure of demand and incomes for public transport when different partners (cities) are involved in organisation and financing of public transport services (a metropolitan dimension). Marketing research data provides valuable supporting tool for transport modelling and for sustainable urban mobility planning.

Key benefits

Marketing research in public transport:

- improves the efficiency of public expenditure (better evaluation and monitoring of quality of services);
- is a flexible tool — it may be used in public transport systems of different size and scope;
- can be enhanced with IT solutions creating new opportunities for application and implementation of marketing information systems (i.e. with ITS);
- is associated with the creation of public transport management bodies.

Check list

City size	Any
Costs	Depends on the scope of the research and organisational potential (availability of skilled staff). Small research on customer satisfaction might cost below 10 000 EUR, while vast research on travel behaviour of citizens or on complex satisfaction of passengers may exceed 200 000 EUR.
Implementation time	Depends on the scope of the research, the legal framework and the organisational structure (not less than 12 months) .
Stakeholders involved	Public transport authority, other public authorities (different departments of city administration), public transport operator(s), marketing research companies and universities, citizens, non-government organisations (i.e. trade unions, passenger’s associations, etc...). According to specific research targets other stakeholders are possible including companies, schools and trade centres.
Undesirable secondary effects	None — unless marketing research reveals unrepresentative results due to (e.g.) having a biased sample.

“The results of marketing research conducted amongst the citizens of Gdynia are essential for the shape of public transport supply which, ultimately, is designed for the people. Thus, the opinions held by the public are important to the city’s authorities.”

**Dr ing. arch. Marek Stępa,
deputy Lord Mayor of Gdynia,
Poland**

“The marketing research techniques will help BKK to create our first publicly owned, multimodal, integrated traffic model for Budapest Metropolitan region, which will be updated regularly with the help of data provided by these techniques.”

**László Sándor Kerényi,
Head of Transport Strategy,
BKK Centre for Budapest Transport,
Hungary**



BKK Budapest city busses

Source: Tupungato

Benefits & Costs

Benefits

Flexibility, easy-to-use and the possibility to use external resources makes marketing research relatively easy to implement and allows public transport services to be optimised.

Properly implemented and managed, marketing research brings long-term benefits, with better knowledge on passengers, their perception of quality and their transportation behaviour.

Marketing research might be used for management at the operational as well as at the strategic level.

Note: Marketing research is a methodology supporting the implementation of measures, in the same way that cost-benefit analysis (CBA) is a 'support' methodology. Marketing research reduces/avoids mistakes which otherwise can occur when public services are planned and executed. It also provides a more precise targeting and could bring valuable information about new services. The only direct issue related to CBA is fare optimisation. Marketing research may have two uses here:

- as a tool for fare optimisation for particular market segments;
- as a tool for revenue sharing schemes when services are offered by different public transport bodies.

Costs

These depend on scale, method, scope, frequency and local labour costs (as they are labour intensive). For example, data gathering in marketing research in Gdynia, Poland, provided by the external specialist company costs around 25000 EUR but design of research, data processing and preparation of the final report are performed in-house by the public transport authority — ZKM Gdynia. It has a specialised unit within its internal structure which is responsible for tasks mentioned (2,5 persons, also responsible for other marketing activities).

ZVV (Zürcher Verkehrsverbund, Zürich, Switzerland) is the public transportation association in the greater Zurich area. ZVV is a public transport authority responsible for strategic management of public transport. For evaluation of contracted operators, ZVV organizes (every 2 years) marketing research focused on customer satisfaction. The survey is distributed to 9000 passengers being sampled in a representative way. The complex questionnaire includes approximately 70 questions along with overall customer satisfaction. The response rate is about 80%. Such a survey conducted by an external company costs ca. 200 000 EUR.

The main costs factors in marketing research are:

- data collection (costs are dependent on scope and data complexity);
- data sampling (important but undervalued stage in marketing research process);
- data processing (staff and software needed if made by own resources).

Users & Stakeholders

Users and target groups

Target groups are rather an effect of marketing research activity. Among main target groups when marketing research is planned are:

- public transport users, who benefit with better alignment of public transport to their needs when marketing research is properly executed and its results are transferred into practical solutions;
- non-public transport users, especially users of cars;
- specific target groups, depending on city's specificity (i.e. elderly people who might have different perception of quality of public transport services).

As a result of marketing research, particular market segments might be developed. I.e. SL (organizer of public transport) divided Stockholm's citizens into segments based on such features like motorization status, age and frequency of travelling by public transport.



In 2000 results from marketing research were fundamental to the decision to maintain and develop trolleybus transport in Gdynia, Poland, which is now one of the most innovative and modern systems of electric public transport systems in Europe.

Picture by M. Wotek

Key stakeholders for implementation

Key role in implementation process depends on model of organisation of public transport market. If public transport authority exists, it is the key stakeholder, especially if it has to be responsible for marketing research. Also, the support of political bodies is needed to develop a real model of decision making, of which marketing research is an important element. Operator(s), other public transport authorities (from neighbourhood) might also be an important stakeholder when implementation process is taking place.

Marketing research supporting strategic decisions on public transport in Gdynia, Poland

In Gdynia, Poland, marketing research has been conducted by the public transport authority ZKM every two years since 1994. It provides data on modal split, travel behaviour and preferences and the quality of public transport modes. The research is conducted through the individual personal interview method on a representative sample of 1% of the Gdynia's population aged 16–75 (almost 2000 people in 2010) taking into account gender, age and number of inhabitants in particular districts of Gdynia.

Other marketing research, providing data on the volume and structure of demand and income is carried out every year. These studies play an important role in financial settlements of operations between different administrative units (i.e. the city of Gdynia and surrounding municipalities). In 2000 results from marketing research were fundamental to the decision to maintain and develop trolleybus transport in Gdynia which is now one of the most innovative and modern systems of electric public transport systems in Europe.

Assessing the potential for your city



Wheelchair and public transport use

Source: www.eltis.org



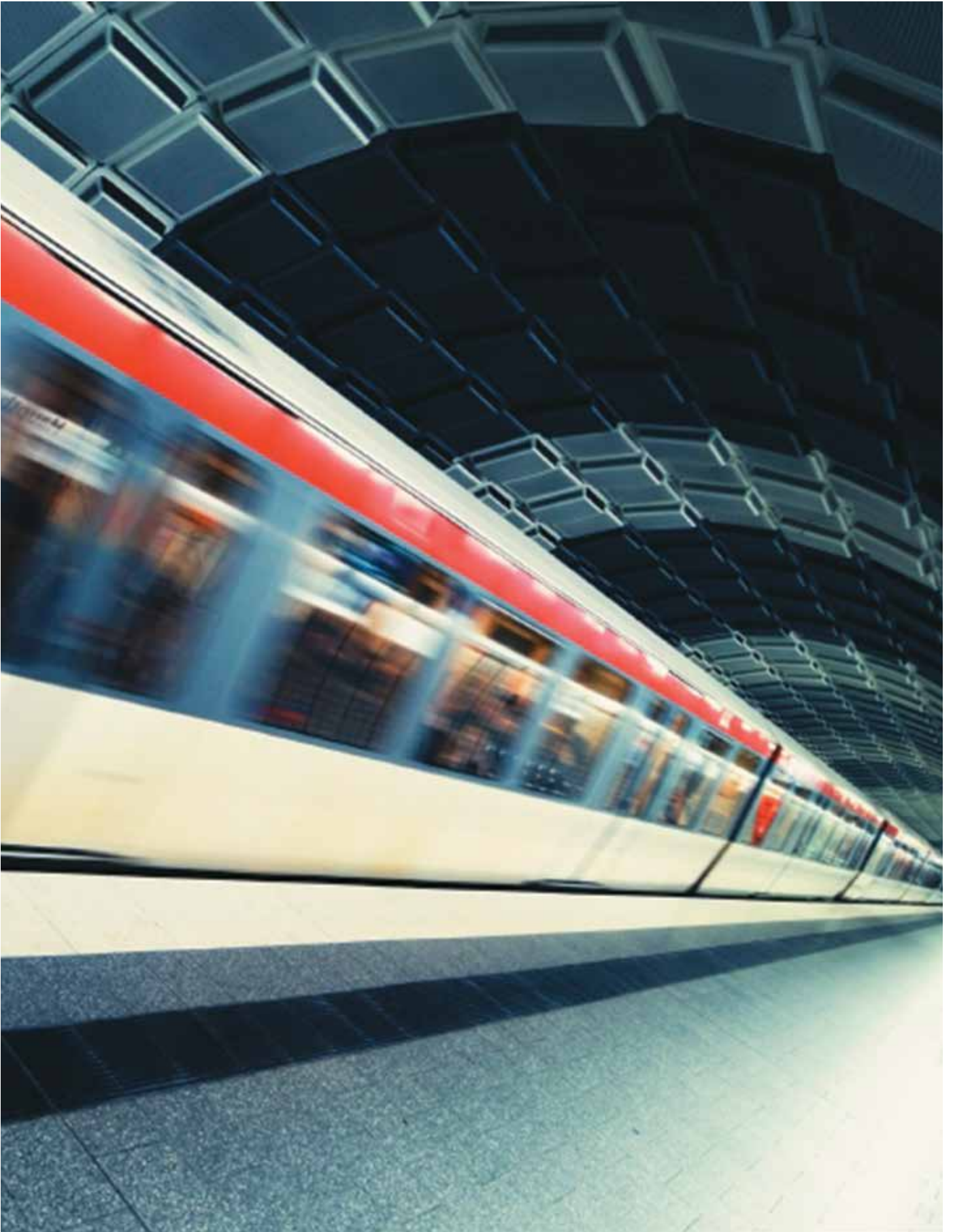
King's Garden Metro station in Stockholm

Source: Jan Miko

Is this something for us?

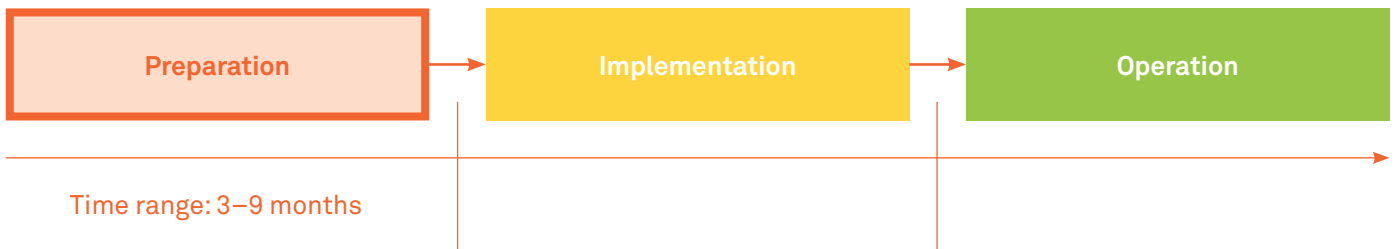
Marketing research might be useful tool to gather evidence to help decision-making in a number of areas, for example where:

- there is a contract between transport authority and operator(s);
- there is a need to implement quality measures into contract between operator(s) and contracting authority;
- there is a potential conflict between municipalities in case of cost and revenue allocation;
- there is a need to make a strategic decision (i.e. introduction of new mode of public transport like trams, trolleybuses, etc.);
- there is a need of redevelopment of public transport supply (i.e. improvement of spatial layout of lines and punctuality, coordination of timetable, etc.).



From plan to reality

Preparation



Preparation stage

Activities that help to create the right pre-conditions and involve the necessary stakeholders for putting the marketing research successfully into practice are specific and should be tailored to the individual situation. However, there are some universal issues that should be checked when deploying this measure:

- analysis of the organisational model of the public transport market (defining stakeholders and their scope of responsibilities and tasks);
- analysis of current marketing research activities of particular stakeholders (i.e. transport operators, public authority, public transport authority, etc.);
- analysis if the integration of the measures is possible in existing structures or if it needs to develop a new unit within public transport authority or operator.

Key aspects at this stage

A minimum set of stakeholders at this stage includes:

- political authorities;
- public transport authorities;
- operator(s).

Success factors and barriers at this stage

Marketing research might be used in public transport systems of different size and scope, also with strong external support, especially in the initial phase of its development. Such cooperation also brings experience and unique competences to “internal” staff responsible for marketing research.

Success factors:

- clear set of tasks that need the support of marketing research (i.e. contracting);
- proper competence and definition of responsible units and stakeholders.

Integration with other areas of public transport business (i.e. contracting, evaluation of quality of services, usefulness for strategic issues) is essential to make marketing research an important component of management. It can bring many interfaces with other activities, therefore it is an important task to secure it at the implementation stage.

Barriers:

- legal and financing barriers;
- fear of the expenses that are “not urgent”.

A new integrated traffic model will be developed based on the results of marketing research in Budapest, Hungary

BKK Centre for Budapest Transport is creating feasibility studies and cost–benefit analyses in order to prepare the Hungarian Capital’s large scale development projects according to the requirements of the European Union. BKK use these studies to select and prioritize the possible alternatives of each project and the projects themselves. All of these studies are based on present and forecast data about the transport system. Due to the complexity of these projects the impact area is usually as large as districts, sometimes agglomerated, therefore a macroscopic traffic model is used.

Data from household surveys carried out up to two decades ago is already out–dated and not suitable for modelling purposes any more. To get up–to–date data about the transport system of Budapest, BKK is currently (2013–2014) implementing a large scale household survey which is covering 5000 households within Budapest and 2000 households in the agglomeration, including around 15000 citizens.

This action is the first step in the development of a transport measurement system in the Hungarian Capital. A systematic approach will be implemented from 2014 in order to keep the new traffic model up–to–date, including planned traffic counting and further to use of marketing research techniques. BKK plans to conduct household surveys every 5 years in order to upgrade the basic information on travel behaviour.



BKK Budapest, a public transport authority that has already implemented an integrated approach in transport

Source: Art Konovalov

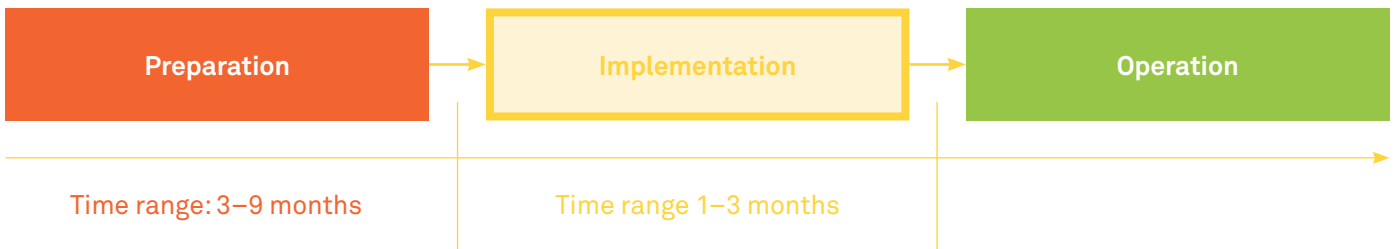
Ready for implementation?



Clear organisational structure	
Tasks and responsibilities within public transport authority precisely assigned	
Need of knowledge about volume of demand and its structure	
Need of knowledge about perception of public transport services among important groups of stakeholders (i.e. passengers, politicians, media, etc.)	
Need of reorganisation/ redevelopment of public transport services	

From plan to reality

Implementation



Establishing a unit within an organisational structure of a transport authority is a very important step towards implementation and further operation of this measure. Clear and transparent assignment of responsibilities would make marketing research a valid tool of management and the decision-making process.

Up-scaling of this measure might be done gradually. Marketing research might be implemented in stages, focusing on different parts of the city, different lines or different groups of citizens (i.e. public transport customers, users of monthly tickets, citizens of different motorised status). There is a vast scope of methods which are possible to implement (interviews, observations, experiments, etc.) as well as many technological possibilities. Part of more complicated tasks (i.e. sampling) might be contracted to external, specialised companies.

The stakeholder analysis made in the previous stage is still valid and should be used.

Success factors and barriers at this stage

Different organisational structures of public transport authorities accompanied by varied models of public transport markets makes marketing research a very “individual” issue which should be adjusted to the individual set of tasks and resources of a particular organisation. Simple benchmarking and duplication of solutions may lead to insufficient allocation of resources and lack of desired results.

Success factors:

- clear organisational structure;
- phasing of development of marketing research.

Barriers:

- legal and financing barriers (if unrecognised earlier);
- lack of trained staff;
- fear of subcontracting part of the tasks, especially in the initial phase.

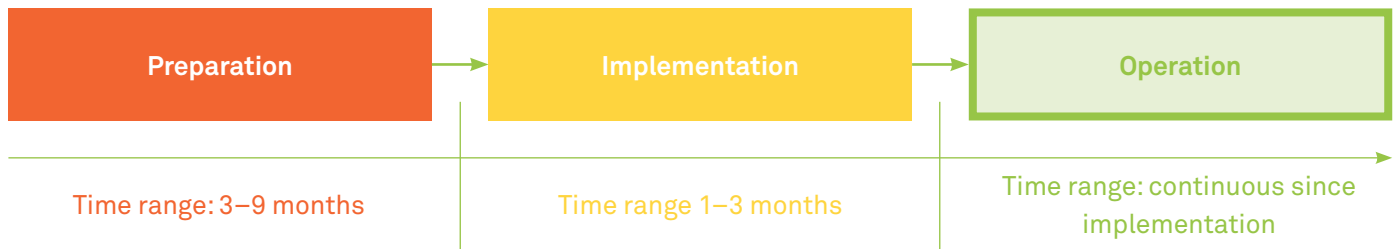
Marketing research as quality control tool in Bologna, Italy

“The possibility for the transport authority to collect data directly from users allows the authority to organize the control activity in order to evaluate all quality targets foreseen in the service contract.”

Dora Ramazzotti — General Affairs Manager, Reti e Mobilità Srl, Bologna

From plan to reality

Operation



Key aspects at this stage: transparency

Decisions made by public transport authorities (or political authorities) should be justified by “real” data, therefore marketing information system is a key success factor. One of the most important elements of a marketing information system is marketing research, which might be used at different levels of decision-making processes.

Political decision on maintaining and further development of the trolleybus system, taken by political authorities in the City of Gdynia, Poland, in 2000, was based on the results of marketing research. Currently, Gdynia’s trolleybus system is one of the most modern in Europe with plans for its expansion based on innovative solutions using modern batteries and electric energy storage systems.

There might be a possibility to start cooperation with another stakeholder in future, including statistical offices (regional or national level) and universities, to get interesting and profiled data.

Success factors and barriers at this stage

A key success factor is the detail obtained by marketing research and its flexibility according to a particular set of tasks of the public transport authority and its financial potential. Marketing research should also have strong and stable position within the organisational structure, to inform decisions taken at operational and strategic levels.

One of the most common barriers in the case of marketing research on the public transport market is a lack of existing data and legal obstacles resulting from personal data protection. It makes sampling very difficult and may lead to decisions that diminish the role of marketing research.

Success factors:

- good cooperation procedures;
- proper scale of operation;
- complexity of research;
- proper competence of the authority.

Barriers:

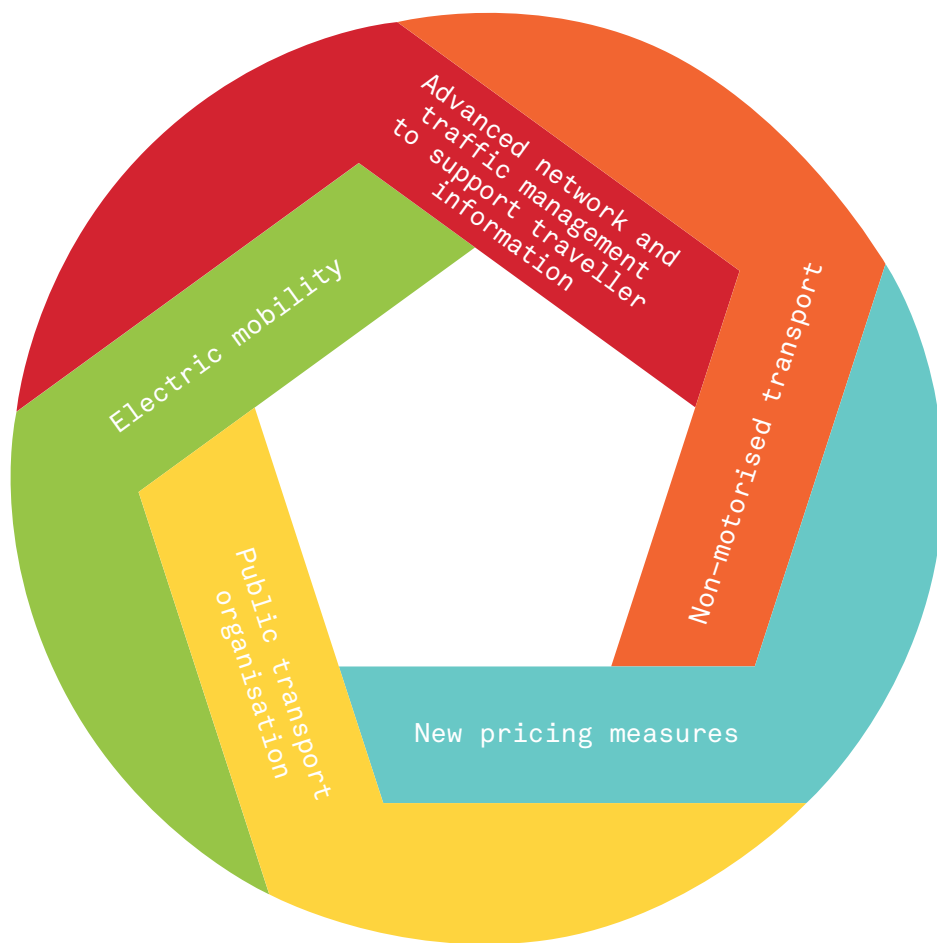
- subcontracting all tasks without proper monitoring;
- organisational barriers leading to lower application of research.

Complexity of marketing research organized by SL, Sweden

SL (Storstockholms Lokaltrafik) is the organisation managing all of land-based public transport modes in the metropolitan area of Stockholm, Sweden.

Large scaled traveller satisfaction surveys are organized by SL involving about 8000 travellers each month across all traveller segments interviewed. It provides constant information about the perception of the quality of public transport services.

Another important element of marketing research organized by SL is a mystery shopping survey which is used to follow up the agreements with traffic operators being contracted by SL.



Further information & contacts

Further information

- **SPUTNIC project on strategies for public transport in cities:**
www.sputnicproject.eu
- **Website of transport authority in Gdynia:**
www.zkmgdynia.pl/
- **Website of SEGMENT project:**
www.segmentproject.eu
- **Website of METPEX project:**
www.metpex.eu

Further TIDE training on this measure:

Webinars and e-learning courses

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UNIWERSYTET GDAŃSKI

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About TIDE — Transport Innovation Deployment for Europe

The European TIDE project aims to foster a more favourable climate for cities and regions to integrate innovations in their urban mobility policies. This should lead to increased acceptance and take-up of new urban transport solutions and technologies. TIDE will help cities and regions to address common challenges in a collaborative and integrated way.

Why should you care about innovation?

On several occasions, European cities have indicated that innovation can help to tackle challenges resulting from the economic crisis. Innovation can save costs as well as contribute to reaching urban policy goals. Still, cities lack resources to conclude a full innovation cycle.

Innovative ideas usually start in one or just a few places before they reach wider coverage. TIDE will help cities and regions across Europe to shorten the path towards the implementation of innovative measures by showing that it is not necessary to re-invent the wheel and much more effective to exchange on innovation and transfer successful solutions from one European region to another. TIDE thus offers a cost-efficient way of spreading innovation throughout Europe

Our mission — Guided by your needs!

TIDE will enhance the broad take-up of 15 innovative urban transport and mobility measures throughout Europe and will make a visible contribution to establishing them as mainstream measures. The TIDE partnership is making a range of new and feasible solutions more easily accessible, to address key challenges of urban transport such as energy efficiency, decarbonisation, demographic change, safety, access for all, and new economic and financial conditions.

TIDE focuses on fostering awareness, advancing expertise via tried and new tools, practical work with cities, and costs and benefits. The needs of practitioners in European cities are thereby a guiding principle. TIDE is actively supporting 15 committed cities to develop implementation scenarios for innovative urban transport measures, setting the example to an even wider group of take-up candidates. These measures cover the following five TIDE themes: new pricing measures, non-motorised transport, advanced network and traffic management to support traveller information, electric mobility, and public transport organisation.

The TIDE innovative transport measures

TIDE covers fifteen innovative measures across the five TIDE–themes.

New pricing measures	<ul style="list-style-type: none"> • Road user charging in urban areas • Parking charge policies • Efficient and convenient pricing and charging for multimodal trips
Non–motorised transport	<ul style="list-style-type: none"> • Bicycle parking schemes • Creating people–friendly streets and public spaces • Fast cycling lanes
Advanced network and traffic management to support traveller information	<ul style="list-style-type: none"> • Open data server for applications–based traveller information • User–friendly human machine interface for traveller information • Advanced priority systems for public transport
Electric mobility	<ul style="list-style-type: none"> • Clean city logistics • Financing schemes for charging stations • Inductive charging for public transport
Public transport organisation	<ul style="list-style-type: none"> • Creation of public transport management bodies for metropolitan areas • Contracting of services focused on improving passenger satisfaction and efficiency • Marketing research as optimisation tool in public transport

The **TIDE Innovation Toolbox** brochure highlights these fifteen inspiring transport measures and illustrates them with good practice examples, listing characteristics and benefits, key aspects for implementation, and useful references.

The **TIDE Practitioner Handbooks** on Transferability and Impact Assessment provide methods and examples to help understand the local potential for innovative measures in urban transport.

The **Guidelines for Implementers** are ten individual implementation guideline brochures addressing the full implementation process of ten of the fifteen TIDE innovative measures, as well as their costs and benefits, stakeholders to be involved, etc., illustrated with good practice examples.





The mission of the TIDE project

is to enhance the broad transfer and take-up of 15 innovative urban transport and mobility measures throughout Europe and to make a visible contribution to establish them as mainstream measures.

TIDE focuses on 15 innovative measures in five thematic clusters: financing models and pricing measures, non-motorised transport, network and traffic management to support traveller information, electric vehicles and public transport organisation. Sustainable Urban Mobility Plans are a horizontal topic to integrate the cluster activities.

The TIDE team

The TIDE consortium is composed of a variety of experts in the field of urban transport, bringing in the knowledge of the academic sector, the experience of cities, the expertise of consultants and the multiplier effect of European networks.



Donostia Udaia
Ayuntamiento de San Sebastián



City of Rotterdam



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KÖZPONT

Milano



Comune
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