



Encouraging Urban Transport Innovation on the Local Level Policy Recommendations



2

Recommendations



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SIXTH FRAMEWORK PROGRAMME

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NICHES at a glance



Looking for new ideas?

Are you looking for new solutions that can help you to tackle unsustainable trends in urban transport? Do you have a vision, of people and goods moving smart and smooth in the city, causing no emissions at all? Would you like to have some tips and ideas on how to reach this?

NICHES wants to help you in finding answers to these questions.

Aim of NICHES

NICHES (New and Innovative Concepts for Helping European Transport Sustainability) is a project supported by the Directorate General for Research of the European Commission.

Its overall aim is to facilitate the coordination of research activities of academic institutions, industry, transport operators and authorities regarding key urban transport innovations that lack broad application. More specifically, NICHES promotes the most promising new urban transport concepts, initiatives and projects (NICHES Concepts, see table 1) to move them from their current “niche” position to a “mainstream” urban transport policy application. The project thus wants to contribute to a more efficient and competitive transport system, a healthier environment and improved quality of life in urban areas.

About this document

This publication wants to help decision makers and technical staff to stimulate innovative transport and mobility solutions in their cities and regions.

This also requires to take into account new **trends and challenges** that constantly arise for cities and regions in Europe. This brochure presents selected examples of such trends and highlights the need for action.

NICHES Concepts, which were defined within 4 thematic areas (see figure in page 3), are at the forefront of urban transport innovation and they are promising solutions that can help to address existing and upcoming challenges. A **vision 2020** illustrates the potential of the NICHES Concepts to contribute to a more sustainable urban transport system and an improved quality of life in urban areas.

In a series of other publications, NICHES provides information on the implementation process of the 12 NICHES Concepts (see NICHES policy notes). It is however not sufficient to look at single solutions. In fact, local transport stakeholders also face the challenge to improve general conditions for enhancing the uptake of transport innovations, considering a range of policy issues.

Table 1: NICHES thematic areas and Concepts

Thematic areas	New seamless mobility services	Innovative approaches in city logistics	New non-polluting and energy-efficient vehicles	Innovative demand management strategies
NICHES Innovative Urban Transport Concepts	Urban Lift-sharing Services	Space Management for Urban Delivery	Policy Strategy for Clean Vehicles	Transportation Management Associations (TMA)
	Public Bicycles	Inner-city Night Delivery	Biogas in Captive Fleets	Local Taxes or Charges, Ring-fenced for Transport
	Call-a-bus Services	Alternative Solutions for Home Delivery	Joint Procurement of Clean Vehicles	City-wide Campaigns

Based on the examination of existing transport innovations, NICHES identified four key areas, where barriers are often found on the local and regional level to make a real step towards a more sustainable urban transport system.

These **areas** are:

- Financial & Economic Issues
- Public Support/ Users & Awareness
- Interorganisational Cooperation & Networks
- Legal, Regulatory & Administrative Issues

Together with experienced urban transport experts, the project developed **policy recommendations** in these four fields. They focus on what should be put forward on local agendas to facilitate the uptake of NICHES Concepts and to enhance the development and implementation of local transport innovations in general.

Clearly, not all relevant issues can be tackled on the local level. NICHES therefore also developed policy recommendations for higher level stakeholders, especially the EU.

The results have been summarised in the document Facilitating Urban Transport Innovation on the European Level - Research and Policy Recommendations, which is available on the NICHES website.

NICHES thematic areas



Innovative demand management strategies

New non-polluting and energy-efficient vehicles



NICHES

12 Innovative Concepts for urban passenger and freight transport



New seamless mobility services

Innovative approaches in city logistics



Trends and challenges



Growing challenges for cities

European regions and cities face the challenge - and opportunity - of constant change. Urban transport is a cross cutting issue that is influenced by a wide range of issues. It is crucial to recognise trends in time and to be open for innovations that may help to respond to them. NICHES Concepts offer potential to tackle growing challenges such as increasing traffic volumes in city centres, the need to guarantee accessibility for all citizens or increasingly complex and difficult to serve travel patterns. Selected examples illustrate in the following some key trends (for a full analysis of relevant trends see the Document Trends and Visions on the NICHES website).



Increasing transport demand and higher volumes of freight transport pose increasing challenges to cities

Photo: Stock.XCHNG



Scarce urban space leads to conflicts between delivery trucks and passenger transport

Photo: PTV Planung Transport Verkehr AG

Increase in urban freight traffic

Freight transport and city logistics are very dynamic areas. Transport volumes in the so-called "last mile" segment have increased steadily over the last years. Deliveries and return consignments are already a remarkable source of traffic in metropolitan areas today, with even further increase predicted for the future. Especially the number of light commercial vehicles (<3.5t), will increase considerably.

NICHES Concepts such as the more efficient use of inner-city space via loading zones and improvements in the coordination of delivery processes via ICT will become increasingly important in dealing with these trends (see policy notes on Space Management for Urban Delivery and Alternative Solutions for Home Delivery).

Ageing society

Most European countries face a significant demographic change. Low birth rates and increasing life expectancy will lead to a growing number of elderly people. This will create new mobility patterns and demand for adequate and tailor-made mobility or delivery services.

Flexible transport provisions as Call-a-bus Services, which have been examined in NICHES, will become more important to provide cost efficient public transport to an ageing society, either as targeted services for the elderly and mobility impaired or as services that are open to the general public.



Call-a-bus Services can help to ensure an accessible public transport system for an ageing society

Photo: AMT/ AMI, Genoa

Global warming

CO₂ emissions from urban road transport are expected to rise alongside transport demand, as transport continues to depend overwhelmingly on petroleum-based fuels. The energy efficiency of vehicles is improving but this is counteracted by both, an increase in the number of vehicles and in average vehicle utilisation.

Among the available biofuels, biogas has the largest potential to reduce emissions of greenhouse gases. The NICHES Concept to introduce Biogas in Captive Fleets is one central part in paving the way for biogas. The two NICHES Concepts Joint Procurement of Clean Vehicles and Policy Strategy for Clean Vehicles are other important measures to get biofuel vehicles into the market (see policy notes for details).



Biogas production (Linköping, Sweden) has a large potential to reduce emissions of greenhouse gases

Photo: Svensk biogas

Major lifestyle changes

The ongoing trends of individualisation and changing lifestyles decisively influence transport demand, leading to more complex travel patterns. Flexible work arrangements, non-traditional family patterns and increased leisure activities are reflected in travel patterns that are becoming more disperse in time and space. Key criteria for the choice of the transport mode are flexibility, speed and reliability, which – in the eyes of many users – can be fulfilled best with the private car.

Better communication about the efficiency of sustainable transport modes, e.g. via City-wide Campaigns, or more flexible transport services (e.g. Public Bicycles, Lift-sharing Services) can be effective measures to respond to this trend.



The Big Wheel campaign in the City of Nottingham highlights user benefits of alternative transport modes

Picture: City of Nottingham

Increasing car use in CEE countries

Far-reaching economic, political and administrative reforms in Central and Eastern European Countries (CEE) had a great impact on the travel behaviour in urban areas. Raising fares and the growth of motorisation accompanied with growing demands regarding the quality of public transport have caused a massive modal shift from public to private transport.

Stopping and, possibly reversing this trend is one of the main challenges confronting governments. The deterioration of public transport has been addressed in many cities and the shift from public to individual transport has slowed down. Also, for many NICHES Concepts interest is rising in Central and Eastern European Countries (for a more detailed analysis on this see the chapter on CEE countries in the NICHES report Trends and Visions).



The change in modal split is a key challenge for many Central and Eastern European cities

Photo: Rupprecht Consult

Imagine: The year 2020...



Innovative urban transport solutions as examined in NICHES can help to make our cities more liveable, more competitive and healthier. Let's have a look at how NICHES Concepts may help a family in a big European agglomeration to organise their daily mobility in the year 2020:

The Niches family is living in the periphery of London. They try to make a well thought-out choice concerning the most appropriate and convenient transport mode for their trips, while aiming at minimising the impact on the environment.

Mrs Niches for example organises her daily commuting via a lift-sharing arrangement (NICHES Concept: **Urban Lift-sharing Services**), as her workplace cannot be easily reached by public transport. Sharing a car helps her to save considerable cost each year and there are no parking problems at the company, as lift sharers have reserved parking spaces.

Mrs Niches (who is very busy) has figured out that she can save a lot of time if she orders some goods via the internet, with its standard 24h delivery service. However, she has recognised a new problem. Indeed she is saving shopping time, but who will go to the pick-up points and bring the parcels home? So she decided to arrange the delivery of all consignments to the locker box (NICHES Concept: **Alternative Solutions for Home Delivery**) located nearby the school of her children, to be picked up by them. And it is not only the Niches family who benefits from the locker boxes system. The parcel delivery company can also save money, time and biogas (NICHES Concept: **Biogas in Captive Fleets**) because it can deliver all parcels to one stop and does not have to search and supply every single customer.

Providing active support to urban freight transport the city administration has decided years ago that part of the road infrastructure is dedicated to transport infrastructure for urban freight deliveries during different hours of the day (NICHES Concept: **Space Management for Urban Delivery**). As a result the whole traffic situation has relaxed and the congestion problems within the city have been reduced. This is also noted by Mr Niches, who is a doctor and needs to visit patients by car all over the city.



Lift-sharing is very popular and helps commuters to save a lot of money

Photo: liftshare.com



Locker boxes can be found in many places and are well used

Photo: DHL Express Germany



Biofuel vehicles are widespread and help to reduce CO₂ emissions

Photo: Per Westergård

He has just bought a brand new Biogas car (NICHES Concept: **Joint Procurement of Clean Vehicles**). The development towards alternative fuels surely went fast during the last years. The debate on climate change really took off 15 years ago, with reports on the effects of climate change on the news almost every day. People started to realise that it was a reality they had to live with, but also that they could do something about it.

This was one of the main triggers for the market of alternative fuels and vehicles to really expand, but it was economic incentives and not people's concern for the environment that made them buy alternatively fuelled cars. In the beginning, the tax was much lower on alternative fuels than on diesel and petrol, making them cheaper. The government also gave a range of other incentives to buy clean vehicles (NICHES Concept: **Policy Strategy for Clean Vehicles**).

Maybe next time Mr Niches will get a fuel cell car. But that will not come into question for a few years. They are still too expensive, and you cannot get fuel hydrogen everywhere yet. Fuel cell cars are becoming more and more common though. Just like in the beginning with biogas, more and more vehicles in captive fleets, such as taxis and buses, have fuel cell power trains.

Many people got rid of their car anyway, as it is cheaper and in many cases more convenient to choose from a diversity of personalised mobility services.

Using these transport services also helps to avoid the congestion charges, which are increasingly applied in diverse locations and larger areas (NICHES Concept: **Road Pricing Schemes**).

They take into consideration externalities linked to the transport sector. Researchers have developed an accepted formula to calculate external costs in order for road pricing charges to work as a signal to car drivers on the real cost of their travel behaviour. These charges reduce congestion and allow for a continuous improvement of the local transport services offered, which are numerous and allow for flexible transport.

People nowadays are more aware of the need to limit car traffic, especially in sensitive inner urban areas. Innovative and sustainable communication strategies are launched, which efficiently build on stakeholders' ideas, highlight benefits for all target groups and stimulate media interest (NICHES Concept: **City-wide Campaigns**). Mobility has also become a topic for television broadcasts. The children of the Niches family particularly enjoy the educational cartoons on children's mobility. They are also having a lot of fun during the mobility education hours at their school.

The Niches family would not want to miss the better quality of life in the city, since there are less cars on the roads and more urban space has been dedicated to pedestrians, cyclists and playgrounds for children.

Especially during summer times, the Niches family likes to go to the city centre and uses **Public Bicycles** (NICHES Concept), to go to the nice parks. The bicycles are available all over the place and accessible via the family's multimodal travel smart card. It is very flexible and fast to go by bike, and it is a lot of fun, too.

Sure, there is still a lot to do, but everyone agrees that the city has made a big step ahead in liveability during the last 15 years.



Congestion charging in central areas helps to contain car traffic. Many taxis and buses already run on alternative fuels

Photo: Transport for London



Public Bicycles make it very convenient to get around

Photo: Clear Channel Norway AS

Urban transport innovation and its diffusion



The vision 2020 on the previous pages highlights the potential of NICHES Concepts to contribute to a more sustainable urban transport system and more liveable cities in general. It is clear that permanent changes and newly evolving trends require ongoing efforts and innovative solutions as response. NICHES has chosen a pragmatic approach to the topic of urban transport innovation.



What is Urban Transport Innovation?

Innovation is usually understood as the process of making improvements by introducing something new. In urban transport this can refer for example to new products, new services, or new processes.

All 12 Concepts examined in NICHES claim to have an innovative character. They are however not all necessarily completely new ideas. From the individual perspective of particular urban transport stakeholders, the ideas are relevant and have not been known before to be mature solutions.

Innovations evolve over time, often taking several years to reach a mature status. Many ideas have existed for decades, but only become viable options through recent new impulses, e.g. in technology or society. Urban Lift-sharing Services for example (see policy note for details), known also as car-pooling, are not a new idea. The broad introduction of the internet however offers new opportunities to network people and reach a critical mass of users.

Hence it is also a subjective perception whether a transport concept is seen as being innovative.

**Urban Lift-sharing Services:
An old idea which received new
impulses through the internet**

Photo: EuropeAlive

The right framework for diffusion

Urban transport innovations and their diffusion are rarely following systematic management approaches and “controlled” implementation on a wide scale. There is no lack of new and promising ideas but they can mostly be found as a patchwork of innovative solutions, only implemented in particular cities, regions or countries.

Therefore NICHES sees a specific need to disseminate knowledge from innovators and early adopters to the majority of European cities that show the right context conditions for uptake.

This brochure highlights that the diffusion of innovations in urban transport requires broad actions on the local level that stimulate the uptake of new ideas. NICHES has analysed success factors and barriers for the implementation of 12 Innovative Concepts. While it became clear that the successful implementation depends to a large degree on smart management and organisation by the directly involved stakeholders (see NICHES policy notes), there are also many crucial framework conditions that need to be tackled in a wider approach on the local level.

Clearly the elaboration of NICHES Integrated Strategies, which combine NICHES Concepts with each other and with other measures, is also a decisive factor for their success (for details on this see the NICHES brochure Guide to Innovative Urban Transport Strategies).

Local Policy Recommendations



The following recommendations build on the analyses of the 12 NICHES Innovative Concepts and the work with urban transport experts. They focus on possibilities for local action to push urban transport innovations, addressing key public and private stakeholders in European cities.

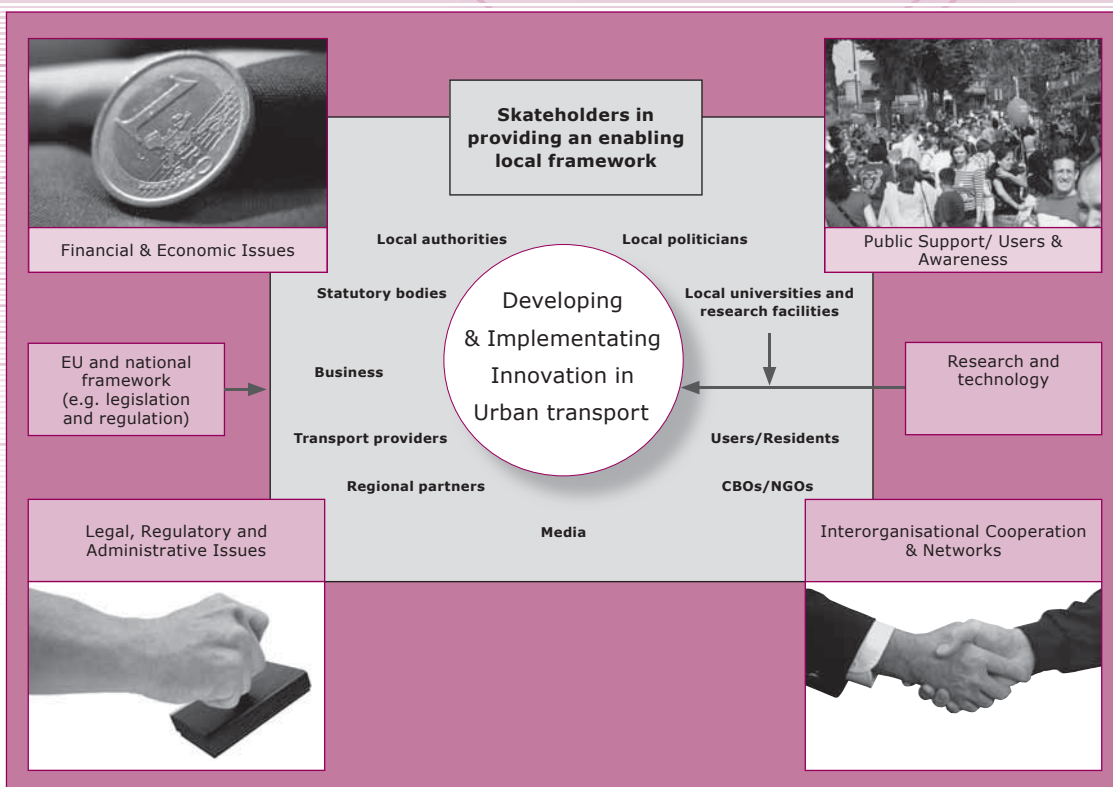
When examining the 12 NICHES Concepts, the following questions proved to be particularly important in this context:

- Financial & Economic Issues:**
 How to achieve and secure funding for urban transport innovations regarding investment, operation and maintenance?
- Public Support/ Users & Awareness:**
 How to generate sufficient support by the general public and by policy makers to successfully implement and run urban transport innovations? How to raise awareness and improve acceptance?
- Interorganisational Cooperation & Networks:**
 How to establish frameworks for interaction and collaboration practices between stakeholders that support a successful implementation of urban transport innovations?
- Legal, Regulatory and Administrative Issues:**
 How do legal & regulatory issues, including administrative structures & practices,

affect the implementation of urban transport innovations, and what changes could be done to create an enabling framework?

Many of the following recommendations have already been practically applied; others are forward thinking exercises that have potential for the future. Most recommendations aim at transport innovations in general, some refer to specific NICHES Concepts.

The framework given by EU and national policies is also crucial when talking about enabling conditions for NICHES Concepts. They are dealt with in another NICHES document, which also covers research and technology, Facilitating Urban Transport Innovation on the European Level - Research and Policy Recommendations (see NICHES website, www.niches-transport.org).



Recommendations: Financial & Economic Issues



The topic

How to achieve and secure funding of urban transport innovations regarding investment, operation and maintenance?

Finding ways of financing innovative urban transport solutions, represented by the 12 NICHES Concepts, proves to be a challenging task.

Different implementation phases (planning, set-up, operation) require specific funding schemes to cover expenses and eventually redistribute revenues - or losses.

Public budgets at all levels are under restraint, so that the funding of new transport solutions faces the difficulty to justify the (economic) efficiency of the money spent in advance.

Funding of new approaches may equally mean a re-allocation of resources from other domains, thus leading to inner administrative conflicts.

In this situation, new business models and the targeted involvement of the private sector can help to reduce the burden on public budgets.

In the following, you will find some key recommendations that have been developed with experts in this field.



How to achieve and secure funding for urban transport innovations?

Photo: Stock.XCHNG

Key recommendations

1. Create a local think tank to enhance urban transport innovations

Considerable efforts from a wide range of stakeholders are still necessary to achieve and secure the funding of urban transport innovations. This includes decision makers, public authorities, commercial stakeholders and users. These stakeholders need to work together to come to sustainable solutions.

To stimulate this, the NICHES experts recommend to create a local think tank that plans urban mobility for the next 20 years.

This local think tank should:

- Be a structure that fosters co-operation between a wide range of public and private stakeholders influencing urban transport;
- Provide a platform to discuss the planning and financing of urban mobility with a mid- to long-term perspective;
- Develop sustainable business models for urban transport that can be applied in the local context;
- Lobby politicians and other decision makers on different levels for funding and implementing promising new solutions that enhance sustainable urban transport;
- Run user surveys to determine evolving user needs and expectations and to

enable adequate responses that provide an added value;

- Dispose of a specific budget to push promising urban transport innovations, especially for start up financing or experiments that prove the viability of new ideas.

The local think tank could:

- Be financed from a mix of public funding, sponsoring, road pricing or new sources such as an eco-lotto;
- Be established as a new independent local agency or be embedded in existing administrative structures (e.g. planning department).

2. Improve the transparency on costs and benefits of existing and new mobility measures and compare the value for money

Better knowledge on costs and benefits of mobility solutions, and related policies (e.g. land use planning), still needs to be made available and communicated by public administrations and operators. This can help to achieve a more efficient use of public money. In many cases the problem is not the lack of money, but the lack of its efficient and well-thought use.

Therefore NICHES experts considered it crucial to improve the transparency on costs and benefits of mobility solutions. Measures should be taken to:

- Compare and show the value for money for different options of urban transport measures;
- Communicate knowledge about the costs and benefits to key stakeholders and the public to encourage better decisions on the most efficient way to spend public money, including the consideration of external costs.

This can help to facilitate the activation of political and public support for innovative urban transport solutions that have an added value over conventional approaches. Many NICHES Concepts provide a higher service quality than traditional solutions (e.g. Call-a-bus Services) while being more cost efficient under certain framework conditions.

Good practice: Call-a-bus Services

The implementation of demand responsive call-a-bus schemes (see policy note for details) offers potential for cost reductions when replacing conventional services in areas or times of low demand, while providing higher service quality.

The German MultiBus for example operates with 4 low-floor minibuses. The cost per year is approximately 400,000 €. The cost advantage compared to the replaced traditional bus service is approximately 40,000€ per year.

Transparency of costs and benefits from such experiences is important to further promote the concept in other places.



Call-a-bus Services offer potential to improve service quality with lower costs

Photo: © Team VK, Heinsberg, MultiBus Project coordination HHS Ingenieur GmbH, Aachen

3. Improve the availability of venture capital for innovations in urban mobility

People who are willing to do “experiments” in the field of urban mobility and to implement innovations need the right opportunities to do this. The access to capital however is still lacking in many cases. A certain risk is included in such activities, which often makes it difficult to obtain the necessary financial back-up especially for the start-up phase. Another reason may be that mostly no big profit margins can be expected in this field.

The EU or national levels already provide some funding for innovative undertakings in the field of urban transport, aiming at encouraging new developments. It seems however that this is not sufficient and should be complemented by the provision of venture capital on the local level. The involvement of the public sector and private financial institutions is needed to fill this gap. This should include a guarantee funds that covers failures. The provision of venture capital via a local “think tank agency” (see recommendation 1) could be an option to manage this.

Financial & Economic Issues (continued)

4. Promote demand management measures (e.g. marketing activities) before investing on the supply side

Existing transport infrastructures and services should be used as efficiently as possible. Demand management measures have a high unexploited potential to contribute to this aim and should be promoted by public authorities and operators, but also private stakeholders (e.g. mobility management in companies). They often provide a better value for money than supply-oriented measures.

In many cases a more efficient use of existing services and infrastructures is possible, e.g. public transport services could be better used if they were better promoted and users were better informed. The NICHES Concept City-wide Campaigns for

example can be an efficient tool to encourage the use of existing transport alternatives (see policy note for details).

Another good practice example is the "Travel smart" direct marketing scheme that helps to better exploit the customer potential for public transport (see good practice box below).

5. Develop an urban development plan and a Sustainable Urban Transport Plan and become aware of the financial implications

The need for a comprehensive and integrated long-term strategy to urban and transport planning can be highlighted as core element to achieve and secure funding for urban transport innovation in the long run.

The basis for the development of an integrated planning strategy should be the participatory development of a broader vision in what kind of city people want to live. Related objectives and targets imply consequences on how to spend public money.

For the field of transport and mobility, local authorities should consider the instrument of Sustainable Urban Transport Planning (SUTP, see links below). It is a suitable instrument to effectively work towards a more sustainable transport system, while being aware of the financial implications. The development of an SUTP includes the development of an action and budget plan, which helps to realistically work towards visions, objectives and targets that have been set for a city or region.

SUTP should be understood as an opportunity to realise a well structured and better integrated planning process. It is not an additional layer of planning activities but builds on existing practices and regulatory frameworks, representing a direction into which current planning practices should be moving continuously in order to enhance sustainable urban transport development. It is a new planning approach that needs to grow from and within existing practices.

Good practice: TravelSmart

TravelSmart is a cost efficient individualised marketing technique. It uses direct contact to provide people with personalised information and advice to make local travel choices, and reduce their levels of car dependency.

TravelSmart works with households offering tailor-made information and support which allows people to walk, cycle and use public transport more often. It delivers real change by making people more aware of their daily travel choices through a process known as Individualised Travel Marketing (ITM).

For more information see:

ELTIS Portal:

www.eltis.org/study_sheet.phtml?study_id=630

Sustrans (UK):

www.sustrans.org.uk/default.asp?sID=1090834131404

SUTP links

You can find more information on Sustainable Urban Transport Plans on the following websites:

PILOT project – Demonstration of the preparation of Sustainable Urban Transport Plans (SUTP) in four European cities: www.pilot-transport.org

SUTP within the EC's Thematic Strategy on the Urban Environment

http://ec.europa.eu/environment/urban/thematic_strategy.htm

Recommendations: Public Support / Users & Awareness



The topic

How to generate sufficient support by the general public and by policy makers to successfully implement and run urban transport innovation? How to raise awareness and improve acceptance?

Political and administrative decision makers are often hesitant to back up new ideas that imply risks, in particular where these tend to affect the basis of their legitimacy (votes, approval by higher tiers). Their actual knowledge of and attitude towards such innovations thus represents a critical lever to set things in motion.

Moreover, to reach potential users and to create demand for innovative products and services also requires considerable

communication efforts as well as a good understanding of user needs and expectations.

Consequently, information and marketing are becoming key elements for implementing innovative transport solutions - from early conception to routine operation.

The following recommendations from NICHES experts are giving hints on how to address these issues on the local level.

Key recommendations

1. Develop a communication strategy = Communicate!

Practitioners working in the transport sector often lack specialised communication skills and knowledge of PR tools.

In many cases it is therefore recommendable to include communication or moderation professionals that are specialised in this field and familiar with appropriate tools. Depending on the local context, public relation professionals may be working in an independent communication unit, which is seen as neutral and objective, or as specialised staff within the transport administration.

The golden triangle for a successful communication is: media, experts, and politicians. Each of these stakeholder groups should be targeted and the power of the media should be recognised. Communication between these three poles should be permanent and based on mutual trust and understanding.

Real experiences and personal stories should be highlighted to both the media and the politicians.

2. Measure and show advantage for all (What's in it for me?)

Communication should address the benefits for users, non-users, businesses and all other stakeholders (including e.g. politicians, citizen action groups, disadvantaged groups).

Transport stakeholders should find a way to monitor both transport and side/additional effects (e.g. social impact). The communication about this should focus on the additional benefits and by-products associated with the transport measure. For example, cycling is an efficient mode of transport that also has a positive effect on personal health. This is for the "head" campaign but one should not forget that campaigns

should also work on the "heart", i.e. the concepts of image. Purely technical approaches should be avoided as they have less impact on the public and other stakeholders.



Participation to the European Mobility Week and Good Going Campaign in 2006

Photo: London Borough of Waltham Forest

Public Support / Users & Awareness (continued)



Big Wheel Campaign in Nottingham

Picture: City of Nottingham

3. Set innovative concepts into a visionary framework

The communication strategy should be planned well in advance. The innovative concepts should be addressed within a broader strategy. It should be made clear that the launch of transport innovation serves a broader vision and strategy for the city. The communication plan will then not only focus on the innovation itself but also give a rational image of the whole transport network and specific modes.

Communication will not sell a product but rather a vision giving several alternatives. Personal advantages, benefits gained through the use of the advertised transport modes, and the efficiency of the whole network and products should be clearly shown.

4. Encourage partnership building

Public support cannot be gained without the help of key stakeholders within the community.

Products and innovation should therefore be developed through partnerships with all public and private sectors sharing responsibilities. All actors involved should strive towards the same goal knowing the personal benefits gained from this approach but also realising the overall benefits for the society as a whole. Fruitful collaboration between actors in the community can lead to a better integration of measures and coherence of actions across all policy areas.

Schools, the health sector and businesses should be involved in the project and be addressed in a relevant manner. A better use of existing networks and forums should be achieved allowing exchange of experiences between public and private sectors and ensuring a mutual sense of trust. The values of CSR (Corporate Social Responsibility) should be strengthened.

5. Develop skill management

Different types of campaigns require different types of campaign teams, but in all cases the team should have a high level of marketing knowledge. Often, it is the lack of marketing skills within the transport sector that impedes a good communication on transport issues.

Training should be continuous and part of any professional development. Training is meant here in a wider sense as it could be academic training but also site visits and staff exchange. It should also be mentioned that training should not be restrained to transport concerns but can be enlarged towards courses on sustainability, social or marketing concern.

Good practice: The Big Wheel Campaign

The government of Nottingham, together with the Greater Nottingham Transport Partnership, entered marketing and promotional actions in order to promote the comprehensive transport network elaborated and covering their whole conurbation (the Big Wheel). The Big Wheel is a great asset for commuters as it offers necessary facilities, real time information, personal travel plans, and maps on the most suitable and pleasant routes. In order for these facilities to be known and broadly used, the Greater Nottingham Transport Partnership developed a brand for the new transport system. This brand was widely disseminated throughout the whole city and ensured a coherent communication strategy. After a year, the knowledge and acceptance of the local transport plan had increased by 27%. 67% of the local public are now aware of the Big Wheel and there is a growing favourability towards integrated transport policies.

For details see the **NICHES policy note City-wide Campaigns**.

Training and education should be provided across all professional sectors (managers, executives, politicians) in order to raise awareness, make people aware of transport challenges and solutions and ensure their participation and receptiveness to campaigns for transport innovations.

There is a strong need for transport planners to change their work habits and work in an integrated manner with other issues.

But also education of children and students in the field of mobility and transport is recommended as a highly valuable action (e.g. mobility education for school kids, academic programmes at Universities). It may take time to see the impact of showing young people the benefits of a sustainable transport system, but can contribute to a better mobility culture in the long run. It is however recommendable to apply such measures only in a balanced way with activities that show a more immediate result.

6. Use the power of show cases = a picture speaks a 1,000 words, a personal visit 10,000

A communication strategy should build on real examples and demonstrations. Pictures and personalised stories have a higher impact on the public than a purely theoretical approach.

Activities such as exchange visits or study tours for politicians and key stakeholders can also be a very effective way to convince decision makers that innovative transport solutions can be implemented in their home town as well. It can help to highlight that transport innovation can be good for a city's image (and the decision makers' own political perspective).



Promoting lift-sharing on a road sign

Photo: liftshare.com

Building up a strong message

- Communicate on real local and personalised stories that sell better to citizens' and the media.
- Give a human touch to the campaign (use pictures). Theoretical approaches should not be predominant.
- Use appropriate wording that is easily understandable by all and do not use transport jargon.
- Give a positive image of alternative modes of transport building on personal advantages and strive towards a rational use of any kind of transport mode.
- Tailor the message to the audience and focus the campaign on the same audience showing personal benefits.
- Do not sell a product but rather sell a vision giving several alternatives.
- Build a special communication plan for businesses with a creation of packages of activities. Communication should be based on concrete facts.
- Use creative methods to convey messages: banners on bridges, back sides of public transport or parking tickets, lifestyle magazines etc.

Recommendations: Interorganisational Cooperation & Networks



The topic

How to establish better frameworks for interaction and collaboration practices?

It proves to be crucial for the implementation and success of innovative urban transport solutions, represented by the 12 NICHES Concepts, to create a co-operative arena that enhances cooperation and networking between relevant stakeholders, and to foster the partnership with key actors – organisations and individuals.

Successful cases illustrate that a sound cooperation of a wide-ranging network of stakeholders has been a decisive factor.

In turn, frequently, the implementation of NICHES Concepts has been slowed down or hindered by conflicts of interest, lack of commitment or fears of competition.

The following recommendations from NICHES experts are giving hints on how to tackle these issues on the local level.

Good practice: Transportation Management Associations (TMAs)

TMAs exist as mature structures in many regions in North America and are good examples of improved cooperation. They...

- are public-private partnerships that address localised transport-related issues;
- operate under a variety of organisational structures and are funded through membership dues and other sources;
- provide an institutional framework for travel demand management programmes and services;
- provide commute trip reduction services to a well-defined and limited area;
- can provide a variety of services according to the needs and expectations of their service area.

For details see the **NICHES policy note on Transportation Management Associations (TMAs)**.

Key recommendations

Targeted co-operations between transport actors are crucial for the successful implementation of urban transport innovation. This however needs an enabling framework, which is at the core of the recommendations, focusing on the creation of a “Local Mobility Forum” and an enhanced co-operation between public bodies on the local and regional level.

1. Create a “Local Mobility Forum”

Interorganisational co-operation should be fostered by the creation of a forum that gathers all mobility stakeholders from local civil society as well as public authorities.

Such a forum should be characterised by:

- An open format, allowing a membership of all interested parties;
- A representation of local civil society, including different (competing) stakeholders;
- The formation of working groups with particular stakeholders for promoting individual concepts (e.g. freight and logistics, alternative fuel).

Success conditions for the work of the forum are:

- The availability of co-operation resources (both public and private);
- Awareness raising and information activities (cf. previous chapter);
- A transparent handling of processes, including active information and media involvement;
- Citizen participation (including e-participation);
- A fully representative composition;
- Spatial dissemination (different districts, area).

Actions to favour the local development of such mobility fora are required on all levels (local, regional, national and EU). They may focus on the provision of incentives, guidance and appropriate regulation.

2. Enhance co-operation between public bodies on the local and regional level

Local authorities frequently do lack a good co-operation between public bodies on the local and regional level, which are in charge or closely linked to urban transport issues. Responsibilities for different transport modes and urban infrastructure (e.g. public transport, parking, road infrastructure) are usually split between different public entities. This often leads to situations where possible synergies are not well exploited.

It is recommended to develop with relevant public actors a common focus on “sustainable mobility”, instead of focusing on single modes or infrastructure. This requires increased (voluntary) co-operation between different public bodies and should include all policy domains concerned (transport, land use, environment, economic, development) to guarantee an integrated planning process.

A way to create the necessary motivation could be to use financial incentives e.g. in the form of the UK Transport Innovation Fund (TIF, see www.dft.gov.uk/pgr/regional/tif). Over time, the UK government allocates more and more money to the TIF while reducing conventional public transport funds to the same degree. Therefore, local actors become increasingly interested in the TIF since it is the most important source for the future. This gradual shift in funding implies a discursive change from “public transport” to “sustainable mobility”.

Many problems related to urban transport need the consideration of a geographical coverage of the functional urban agglomeration (travel-to-work area), to ensure problem adequacy. The starting point for an increased regional co-operation should be existing practices and co-operations in spatial and transport planning. It can be important to involve private key stakeholders as well.

The right set-up of regional co-operation structures should be discussed by all involved stakeholders and can take different forms. Depending on the organisation complexity of the urban agglomeration, a central, hierarchical or networked co-ordination structure may be envisaged.



Interorganisational cooperation needs an enabling framework on local level

Photo: Stock.XCHNG

It is essential to maintain the balance between an effective overall coordination and a good participation on the local level. Possible problems related to a strengthening of the regional level (e.g. lack of closeness to citizens, lack of local knowledge, overruling of small scale local interests), need to be acknowledged to ensure acceptance of the co-operation.

Examples for regional cooperation in different forms

- **Barcelona – Strategic Plans:** Cooperation of municipalities (along with the social and business stakeholders) to reach agreements on participating in and drawing up new instruments that will serve the region in the creation and promotion of new projects. Using instruments of debate and consensus (www.bcn2000.es).
- **The Verband (= «Association») Region Stuttgart** includes an elected regional assembly that covers the central planning policies, including regional planning as well as regional issues of infrastructure, traffic and public transport (www.region-stuttgart.org/vrs/main.jsp?navid=357).
- **Joint Local Transport Plan of the four councils of Bath and North East Somerset/ Bristol City/ North Somerset/ South Gloucestershire:** Developed within the UK approach to local transport planning. Emphasis was put on cross-sector policy coordination, efficient problem-solving and strategy-led implementation in the frame of high-level national policy goals. (www.greaterbristoltransportplan.org).

Interorganisational Cooperation & Networks (continued)

3. Seek a strong political coalition supporting sustainable mobility

Local politicians and other key decision makers (especially private sector representatives) play a central role in the successful set-up of the envisaged forum and improved cooperation structures. Their commitment needs to be ensured from the outset, which requires a careful approach considering the respective strategic interests at stake. A prerequisite is therefore their direct involvement early on in the process, which allows for creating political ownership and taking responsibilities.

4. Look beyond your own city limits and cooperate internationally

Mutual learning from good practice examples and exchange with peers from across Europe can be considered important levers to facilitate the uptake of the ideas for better cooperation structures as well as the implementation of NICHES Concepts. This could be enhanced by encouraging networking of European local and regional authorities.

While local authorities would benefit from such networking efforts and should actively foster them where possible, it is necessary that regional and national governments, as well as the EU level and existing networks help to promote this.

Where the development and application of new technological products is a main element of a policy or measure, industry should also become involved on a larger scale - as the NICHES Concept Joint Procurement of Clean Vehicles illustrates (see good

practice box). A European joint procurement is a difficult task due to the different specifications and languages, but capable of achieving substantial mutual benefits. This implies that actors need to actively seek for the necessary coalitions Europe-wide as well (obviously in conformity with competition rules).

Good practice: Joint procurement by sustainable public transport companies

The ethanol bus buyers' consortium has been working since 2004. The objective of the project is to get at least two producers of ethanol buses on the European market. Scania is the only producer today. This is a standard bus with a slightly modified diesel engine. The fuel consists of 95% ethanol and 5% ignition improver.

Ethanol for fuel is not well known in Europe; thus the project is performed in two steps:

- Initiate demonstration of ethanol bus fleets in cities in Europe.
- Based on their own experience the bus buyers (public transport authorities or operators) decide to take part in the buyers' consortium.

The required number of buses needed in order to succeed with the joint procurement is approximately 1,000. Today ethanol buses are demonstrated in Stupsk (PL), La Spezia (IT), Madrid (ES), Stockholm (SE) and on the way in Nanyang (China) and Sao Paulo (Brazil).

For details see the **NICHES policy note Joint Procurement of Clean Vehicles**.



First ethanol bus in Poland
Photo: Oleg Lomonos, MZK Stupsk

Recommendations: Legal, Regulatory & Administrative Issues

The topic

How do legal & regulatory issues, including administrative structures & practices, affect the implementation of urban transport innovations, and what changes could be done to create an enabling framework?

Legal and regulatory frameworks do not often fit the needs of urban transport innovations as represented by the 12 NICHES Concepts. It frequently proves to be a challenging task to deal with legal requirements or restrictions conceived for traditional urban transport planning and policies. This may imply barriers concerning e.g. licensing, competition, tendering, access (physical or data), as well as taxes and incentives. Public Bicycles (see NICHES policy note) for example can be considered to be part of the public transport system, but in many countries do not qualify as public transport service, with negative consequences for funding opportunities. In the field of clean vehicles there may be national laws that are obstacles for market development, e.g. safety regulations on refuelling of various fuels.

Moreover, administrative structures and practices can also represent substantial obstacles for implementation. In many cases they lack flexibility for coping with new issues inside an established framework of competencies, task divisions, procedures and habits. To start with, it may already be a big problem to find the right contact person(s).



Legal and administrative issues can pose substantial obstacles to the implementation of innovative solutions

Photo: Stock.XCHNG

The recommendations developed with NICHES experts focus on issues that can be well influenced locally. In particular administrative structures and practices can be changed actively by local actors.

The influence of local stakeholders on the area of legislation on the one hand and standardisation on the other hand is somehow limited. It needs to be stressed however that there are good examples (e.g. clean vehicles in Sweden) in which local authorities have convinced the national government to change standards or laws.

As an enabling legal framework and clear standards to implement innovative solutions in urban transport are crucial, also some key recommendations to higher level bodies (national governments and the EU) are listed below.

Need for action on higher levels

Sustainable Urban Transport Plans

Sustainable Urban Transport Plans are recommended as effective instrument to achieve a more sustainable urban transport system (also see page 12). There are good examples of how national legislation has fostered a culture of urban transport planning on the local level (e.g. UK – Local Transport Plans; France – PDUs).

Definitions and standardisation activities

The following is recommended on the EU level to foster the development and implementation of clean vehicles:

- A clear definition of clean fuels and vehicles including Life Cycle Analyses should be provided on the European level to give local authorities possibilities to support clean vehicles in a neutral way;
- Standards for technology and emission checks for clean vehicles should be introduced to gain consistent results in Europe and foster clean vehicle uptake.

Legal, Regulatory & Administrative Issues (continued)

Key recommendations

1. Give soft modes and new mobility concepts a place in city administrations

Soft modes as cycling and walking, but also innovative mobility concepts frequently do not match existing administrative structures and practices, which are mostly focused on road infrastructure or traditional public transport.

Without a clear responsibility within the staff of local authorities and a sufficient budget for soft modes and innovative ideas they will be neglected.

Therefore it is strongly recommended to create adequate administrative structures and practices that help to facilitate the development and implementation of soft modes and innovative measures.

2. Implement monitoring and enforcement of city logistics schemes

This recommendation for good administrative practice is particularly focused on the thematic area of Innovative Approaches in City Logistics (see related policy notes).

This area needs particular attention, because if delivery flows are not known by the authorities it is difficult for them to understand the problems of urban delivery. Existing knowledge is mostly on the operators side, but a sharing of information with local authorities in this context would improve the delivery and as a result the city's transport situation.

Monitoring of city logistic schemes should therefore be the responsibility of local authorities and being taken seriously. This also requires dedicated staff for this field within administrations, which is not available in most cities.

It is also recommended to link this to a well elaborated enforcement strategy on the local level. This is crucial for successfully tackling the topic of urban freight. NICHES Concepts as Inner-city Night Delivery and Space Management for Urban Delivery have a high potential to improve the local traffic situation, but require adequate monitoring and enforcement strategies to successfully work in the long term.

Administrative structures and practices as barrier to Urban Lift-sharing Services

The innovative character of Urban Lift-sharing Services does not match traditional institutional structures. Its "in between" position, being neither individual transport nor conventional public transport, does not match responsibilities in local authorities. This is reflected in the lack of funding opportunities for Urban Lift-sharing Services, which would be helpful at least in the start-up phase. Also, in many cases it is difficult to find a dedicated person in local administrations that can be approached regarding the implementation of a local lift-sharing scheme. This barrier is less pronounced where staff that is responsible for an integrated transport strategy or travel plan coordinators (UK) are involved.

Similar experiences have been made by practitioners working with Call-a-bus Services or Public Bicycle schemes. Also see the **NICHES policy notes Urban Lift-sharing Services, Call-a-bus Services and Public Bicycles**.



Monitoring and enforcement are crucial to deal with urban freight traffic

Photo: PTV AG Planung Transport Verkehr AG

3. Co-operate with champions in urban delivery

This recommendation of good administrative practice focuses particularly on the thematic area Innovative Approaches in City Logistics (see related policy notes).

Task divisions, procedures and habits in urban freight transport are in many cases a barrier to successfully address these fields. Delivery is often seen as a problem for private companies to solve although it should also be considered as a public issue related to public welfare.

More partnerships and a better cooperation between local authorities and private delivery companies should be encouraged to achieve better and more efficient results in the delivery sector.

This is very practical and has in several cases led to both reduced cost and an enhanced environment. Public authorities and private companies should work out possible solutions to decrease the congestion and pollution in the cities in joint efforts. NICHES Concepts related to the thematic area Innovative Approaches in City Logistics offer mature solutions to address these problems.

4. Join with other public entities in procurements

Public authorities are frequently not sufficiently active in linking up with other public entities. It is still not common administrative practice to look beyond the own city limits, and to network with other cities in joint procurement activities (also see page 18).

Joint procurement is a viable option to strengthen the position of cities, when investing in new transport solutions. It can for instance help to



Biogas waste truck in Stockholm

Photo: Per Westergård

considerably lower costs for new vehicles or infrastructure. Fields where joint procurements should be fostered are for example innovative logistics schemes (see related NICHES policy notes) or clean vehicles (see related policy note and good practice box on page 18).

5. Use renewable fuels for public services' vehicles as waste management or public transport

It is recommended as good administrative practice that companies, which work in public services, are obliged in their service agreements to buy more clean vehicles.

Still, even some public bodies that have a clear mandate for sustainable development do not always apply these principles to their own activities and service procurements.

To convince people to change their behaviour it would also be a clear sign if authorities practised the good solutions themselves. This can be a crucial example for private companies or private users and help to increase the critical mass for a breakthrough of innovative solutions.

Good practice: Stockholm municipal fleet

The municipal fleet has given the city hands-on experience of driving, fuelling and service of clean vehicles, which is crucial to having to be trustworthy when discussing with private companies. Setting a good example is also of importance when requiring transport providers to change to clean vehicles. Bad performance by a vehicle model may be disastrous for the reputation of all clean vehicles. It is therefore good to test out new models and technologies in a municipal fleet before promoting them widely to private companies.

Many service providers in Stockholm, e.g. waste disposal companies, also use clean vehicles.

Conclusions



This brochure presents a selected number of recommendations for enhancing the implementation of urban transport innovations on the local level. They have been elaborated with European expert groups.

It needs to be stressed that there are many links between the different issues, and that an integration of different recommendations is needed to enhance the overall conditions for the development, implementation and operation of innovative urban transport solutions.





While it is a challenging task to address a complex array of problems at once, it became clear throughout NICHES that some core actions provide an essential framework for getting things started:

- The establishment of co-ordinating bodies or structures that have a clear mandate to push urban transport innovations;

- The involvement of a wide range of stakeholders on different levels (local, regional, national, EU), including the public; enabling a more targeted co-operation between relevant actors;
- The work with an interdisciplinary approach and team to address multifaceted problems in an adequate manner.

Finally, stakeholders working in urban transport need to develop and follow common visionary goals. The NICHES policy notes on 12 Innovative Concepts (see NICHES website, www.niches-transport.org) highlight success stories of innovative urban transport solutions, driven by people who want to make a change and have such visions.

Table 2: Overview of local policy recommendations

Financial & Economic Issues	Public Support/ Users & Awareness	Interorganisational Cooperation & Networks	Legal, Regulatory & Administrative Issues
			
<ol style="list-style-type: none"> 1. Create a local think tank to enhance urban transport innovations 2. Improve the transparency on costs of benefits 3. Improve availability of venture capital 4. Promote demand management measures before investing on supply side 5. Develop an urban development plan/SUTP 	<ol style="list-style-type: none"> 1. Develop a communication strategy = Communicate! 2. Measure and show advantage for all 3. Set innovative concepts into a visionary framework 4. Encourage partnership building 5. Develop skill management 6. Use the power of show cases 	<ol style="list-style-type: none"> 1. Create a "Local Mobility Forum" 2. Enhance co-operation between public bodies on the local and regional levels 3. Seek a strong political coalition supporting sustainable mobility 4. Look beyond your own city limits and cooperate internationally 	<ol style="list-style-type: none"> 1. Give soft modes and new mobility concepts a place in city administrations 2. Implement monitoring and enforcement of city logistics schemes 3. Co-operate with champions in urban delivery 4. Join with other public entities in procurement 5. Use renewable fuels for public services' vehicles as waste management or public transport

Further Information & Contacts



In the table below you can find the **contact details of the NICHES Consortium partners**, whom you can contact for more information on the NICHES project, its thematic areas and general information on the NICHES Concepts.

You can find all **NICHES brochures with further information on the NICHES website:**

www.niches-transport.org

This report has been prepared with the **support of urban transport experts** (through their participation in the NICHES focus group meetings or through personal interviews carried out by NICHES Consortium members). For further information on the specific Innovative Concepts you can contact the experts involved in the NICHES project. Their contact details are available on **OSMOSE, the portal for urban transport innovation** launched in the framework of NICHES: www.osmose-os.org

Table 3: NICHES Consortium contact details

surname	name	institution /company	CC	e-mail	tel	address	city code	city	website
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New Seamless Mobility Services									
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Innovative Approaches in City Logistics									
Forkert	Silke	PTV Planung Transport Verkehr AG	DE	silke.forkert@ptv.de	+497219651 177	Stumpfstrasse 1	76131	Karlsruhe	www.ptv.de
Wild	Dieter	PTV Planung Transport Verkehr AG	DE	dieter.wild@ptv.de	+497219651 177	Stumpfstrasse 1	76131	Karlsruhe	www.ptv.de
New Non-polluting and Energy-efficient Vehicles									
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The mission of NICHES is:

to stimulate a wide debate on innovative urban transport and mobility between relevant stakeholders from different sectors and disciplines across Europe.

NICHES promotes the most promising new concepts, initiatives and projects, to move them from their current 'niche' position to a 'mainstream' urban transport policy application.

NICHES team

The NICHES consortium is composed of a variety of experts in the field of urban transport, ensuring the knowledge of the academic sector (Warsaw University of Technology), the experience of cities (Stockholm), the expertise of consultants (Rupprecht Consult, PTV Planung Transport Verkehr AG) and the multiplier effect of the networks (POLIS, EUROCITIES, CEMR).



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For more information contact the NICHES consortium partners (contact details available on the last page) or visit:

www.niches-transport.org
www.osmose-os.org

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