European Commission

Sustainable Urban Mobility:

European Policy, Practice and Solutions

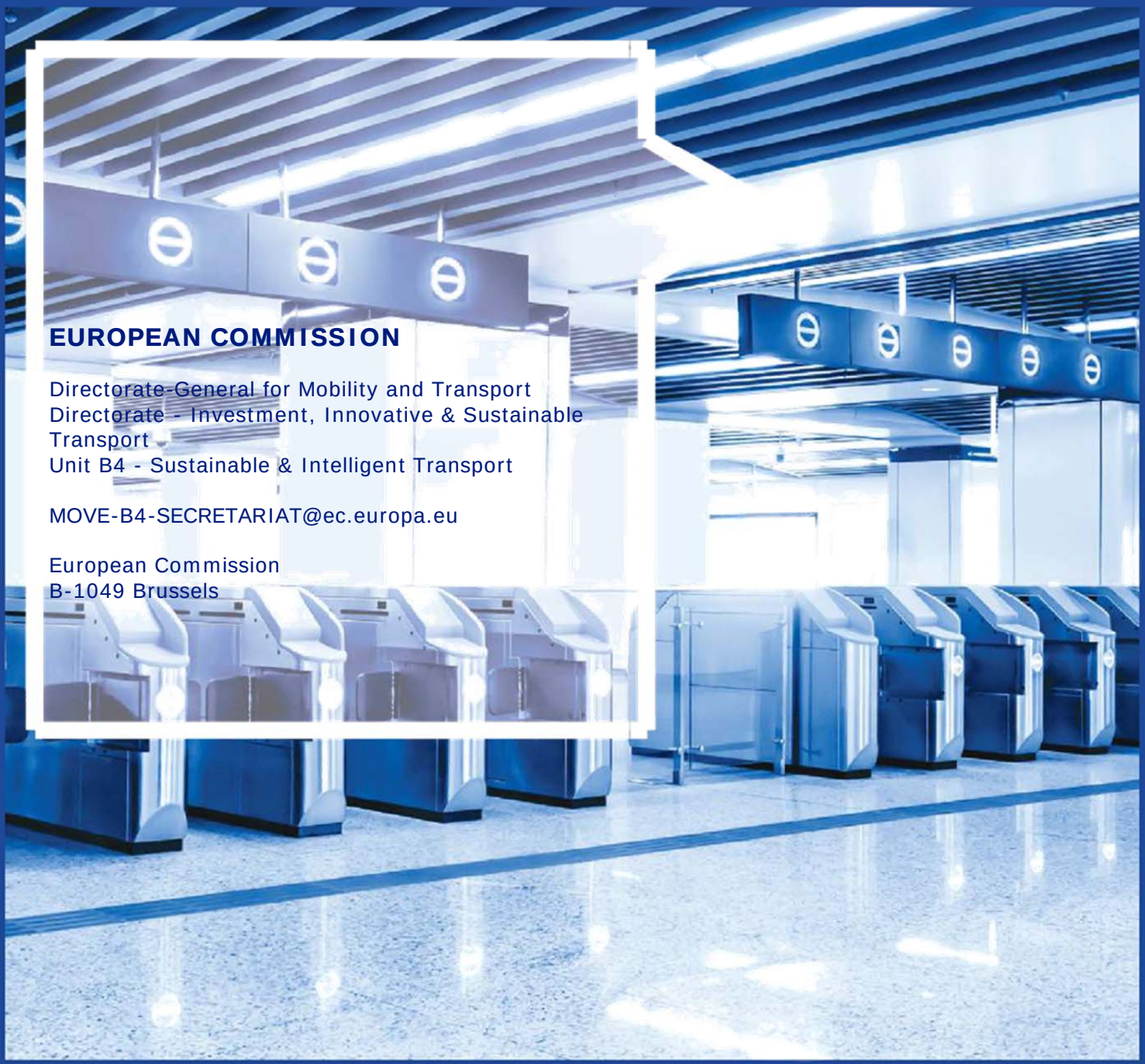

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Table of contents

Introduction: EU urban mobility approach

In 2010, 73% of European citizens lived in urban areas. This percentage is expected to increase to over 80% by 2050. In some countries (Belgium, Denmark, Luxembourg, Malta, Sweden, The Netherlands) the urbanisation rate will rise to over 90%. Urban areas are the “engine” of economic growth and employment, as around 85% of the EU's GDP is generated in European cities. However, due to the extensive economic activities in urban areas, many European cities face multiple problems related to or caused by transport and traffic. Social transformation has rapidly increased mobility levels, and the growth of private car use has been accompanied by increased urban sprawl and commuting, whereas public transport networks in many cases have not expanded at the same rate.

Congestion, air pollution, safety and noise pollution are examples of commonly shared problems in European cities. Besides the direct impact of traffic, urban transport also affects social development, social exclusion and accessibility for people with reduced mobility. The need for sustainable transport is increasingly recognized and receives more and more attention. European cities face the challenge of needing to enhance mobility, ensure accessibility and create high quality and efficient transport systems while, at the same time, reducing congestion, pollution and accidents.

Transport is essential to economic growth and welfare as well as to the quality of life in urban areas, in terms of fostering social cohesion, addressing health problems and adapting to demographic developments.

Dependence on fossil fuels will become one of the most important concerns for the future. Oil is becoming scarcer and suppliers more uncertain, which could jeopardize people's mobility and, therefore, the national and international economy. Together with the EU's aim to reduce greenhouse gas emissions to 80-95% below their 1990 level by 2050, the use of fossil fuel in transport, therefore, needs to be reduced significantly.

In most EU Member States, senior citizens are the fastest growing segment of the population. It is expected that by 2050, the number of over 80 year-olds will have tripled, and about 25% of the population will be over 65 years old. This development changes and increases the demand for mobility in countries that face the prospect of an ageing population. Urban mobility policies should and will pay increasing attention to the support of senior citizens, to enable lifelong mobility as well as safe and suitable transport.

Cities in developing countries increasingly face the same problems caused by transport and traffic as EU Member States. Sustainable urbanisation is widely acknowledged as a key global challenge for the 21st century, particularly in developing countries. In order to tackle these challenges within Europe, and ensure competitive and resource efficient urban mobility, the European Commission published its Urban Mobility Package in 2013. EU experience and expertise in the area of urban mobility (particularly regarding energy efficiency and climate change) is available to support sustainable mobility in countries outside the EU, facing similar issues. An important concept in addressing the challenges related to (mainly) urban areas, is that of Sustainable Urban Mobility Plans (SUMPs), which are the focus of an annex of the Urban Mobility Package. The concept of SUMPs relates to a functional urban area and its surroundings, focussing on the people within this area rather than directly on the transport, with the aim of creating a shift towards cleaner and more sustainable transport modes and alternatives to car use and ownership.

The topic of Sustainable Urban Mobility Plans (SUMPs) is examined in greater depth in the next chapter: both the development process and the elements of a SUMP.

Sustainable urban mobility planning methods in Europe: a new approach

For several years the European Commission has actively promoted the concept of sustainable urban mobility planning. Through the funding of a range of projects related to the topic, stakeholders and experts have been brought together to analyse existing approaches, discuss problem areas and identify best practice. In 2013 this resulted in the publication of guidelines for the development and implementation of Sustainable Urban Mobility Plans (SUMPs)[1]. These guidelines provide local authorities with a structured approach on how to develop and implement strategies for urban mobility based on thorough analysis of the current situation, combined with a clear vision for sustainable development of the urban and neighbouring areas under consideration. Thereby, SUMPs can help cities make efficient use of existing transport infrastructure and services and ensure a cost-effective deployment of the proposed measures.

The SUMP concept is not a rigid definition of what urban planning should be like, or a one-size-fits-all approach to urban mobility planning. It is rather a set of guiding principles that can be adapted to the specific circumstances of the urban area under consideration. The European Commission defines a Sustainable Urban Mobility Plan as a plan aiming to improve the accessibility of urban areas and providing high-quality and sustainable mobility and transport to, through and within the urban area. It focuses on the needs of the "functioning city" and its hinterland rather than on a municipal administrative region[2]. It aims to build on existing planning practices and ensure integration as well as participation and evaluation principles. People are the main focus of SUMPs; whether it concerns commuters, business people, consumers, customers or any other role, preparing a SUMP means "Planning for People".

This people-centric approach is one of the main differences from more traditional transport planning, which tend to focus on traffic and infrastructure rather than people and their mobility needs. The main characteristics of a SUMP are:

[1] http://www.eltis.org/mobility-plans
[2] COM(2013) 913 final, Urban Mobility Packkage 2013, ANNEX 1, Brussels, 17.12.2013

Additional differences as well as the main characteristics are explained in more detail in the introduction to the SUMP guidelines.

The benefits of the SUMP approach are diverse. The following list provides the ten principal reasons for drafting and implementing a Sustainable Urban Mobility Plan:

1) **Improving quality of life:** There is strong evidence that sustainable urban mobility planning increases the quality of life in urban areas.
2) **Saving costs and creating economic benefit:** Mobility has a strong influence on the local economy. Reduced congestion and a healthier environment help to sustainably reduce costs to the local community and attract new businesses and investors; they create a more attractive business case.
3) **Contributing to improved health and environment:** More sustainable mobility translates into better air quality, less noise and more active forms of travelling, such as walking and cycling.
4) **Making mobility seamless and improving access:** Sustainable urban mobility planning is an excellent tool to create multi-modal door-to-door transport solutions.
5) **Making more effective use of limited resources:** SUMPs change the focus from solely road-based infrastructure to a balanced mix of measures including lower cost mobility management measures, ensuring the most cost-effective use of funds available.
6) **Winning public support:** Involvement of stakeholders is a basic principle of a SUMP, ensuring a high level of "public legitimacy", thereby reducing the risk of opposition to the implementation of ambitious policies.
7) **Preparing better plans:** Planning with the involvement and the expertise of different departments ensures a balanced development of all relevant transport modes while encouraging a shift towards more sustainable modes. It thereby caters for all users with regard to their accessibility and mobility needs.
8) **Fulfilling legal obligations effectively:** Cities often face many, sometimes competing, legal requirements. A SUMP provides an effective way to respond through one comprehensive strategy.
9) **Using synergies, increasing relevance:** A SUMP inspires a collaborative planning culture across different policy areas and sectors, and between different governance levels. It takes into account the connections between the urban area and its surroundings and possibly even the (inter)national transport network.
10) **Moving towards a new mobility culture:** Examples show that sustainable urban mobility planning creates a common vision of a new mobility culture; a vision supported by politicians, the general public and institutions, which can include less-attractive elements and provide long-term benefits.

A SUMP consists of two elements: a process, captured in a planning cycle, and the different tools available in achieving sustainable urban mobility. These are described in the next sections.

SUMP process: The planning cycle

The planning process for a Sustainable Urban Mobility Plan describes the logical rather than sequential steps for a complete and continuously improving planning process. The process consists of 4 phases containing in total 11 main steps, which in turn are made up of 32 activities. Together, the steps form a planning cycle which allows for a continuous improvement process of the mobility planning (see more at: http://www.eltis.org/mobility-plans).

The phases, steps and their respective activities are depicted in the following figure:

Planning cycle for a sustainable urban mobility plan

These 4 phases, 11 steps and 32 activities can be summarized as follows:

Phase 1: Preparing well

Step 1: Determine the potential for a successful sustainable urban mobility plan

Consisting of steps such as committing to the overall principles of sustainable mobility, conducting a self-assessment and identifying key-stakeholders. This first step is aimed at determining the potential of developing a successful SUMP for the urban area.

Step 1 consists of the following activities:

Step 2: Define the development process and scope of the plan

No two Sustainable Urban Mobility Plans are identical: each is tailor made for the local situation. This also applies to the development process of the SUMP. A key step in the process is to define the geographical scope. This scope ideally addresses the entire urban agglomeration. Stakeholder cooperation and policy integration are also to be included during this phase. The phase is ideally concluded with an agreement on the work plan and management arrangements for the remainder of the process and the SUMP itself.

Step 2 consists of the following activities:

Step 3: Analyse the mobility situation and develop scenarios

This last step of this "preparing well" phase is to analyse the mobility situation and develop scenarios of possible future mobility situations. This provides the basis for the steps in the next phase, setting rational and transparent goals. The step starts with a thorough analysis of the problems and opportunities in the field of urban transport and mobility. This helps to develop a clear understanding of what urban mobility could look like in the future.

Step 3 consists of the following activities:

Phase 2: Rational and transparent goal setting

Step 4: Develop a common vision of mobility and beyond

Phase 2 gets you started with the main steps of developing a SUMP. The phase starts with the development of a common vision: a cornerstone of the SUMP. This step provides the basis for all subsequent steps that will define concrete targets and measures. Creating a common ownership of the vision can only be achieved if the stakeholders and the public accept the vision created in this step.

Step 4 consists of the following activities:

Step 5: Set priorities and measurable targets

A vision alone is not enough to describe the desired effect; it needs to be clarified by specific objectives indicating the type of change that is needed. These objectives also need to be measurable, in order to review the progress made as a consequence of implementing the SUMP.

Step 5 consists of the following activities:

Step 6: Develop effective packages of measures

This step and its results are at the core of sustainable urban mobility planning, resulting in an effective package of measures. The selection of measures should build on discussions with key stakeholders, take into account experience from other local authorities with similar policies, ensure value for money and exploit synergies between measures as much as possible. The measures should respond to the questions: what, how, where and when?

Step 6 consists of the following activities:

Phase 3: Developing the plan

Step 7: Agree on clear responsibilities and allocate funding

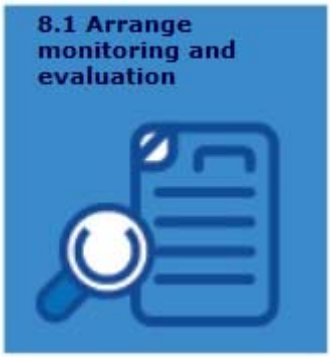
The determination of clear responsibilities and the preparation of an action and budget plan are closely connected to the selection of measures. This step is key to the SUMP and requires formal approval by all key stakeholders. This step should respond to the questions: who and how much?

Step 7 consists of the following activities:

Step 8: Build monitoring and assessment into the plan

Monitoring and evaluation need to be built into the SUMP in order to keep track of the progress of the planning process and implementation of measures. They also enable learning from the planning experience, to understand what works well, and to build a business case and evidence base for the wider application of similar measures in the future.

Step 8 consists of the following activities:



Step 9: Adopt Sustainable Urban Mobility Plan

The actual Sustainable Urban Mobility Plan summarises the outcome of all previous activities, and the document is created during this step. Following a final quality check, the document needs to be formally adopted, including the action and budget plan, by political representatives. To make the SUMP a success, the plan should also be widely accepted among stakeholders and the public.

Step 9 consists of the following activities:

Phase 4: Implementing the plan

Step 10: Ensure proper management and communication (when implementing the plan)

This step is the start of the implementation phase, the last phase in the process. The SUMP provides a framework for the implementation activities, but does not describe in detail how the measures will be implemented. Management cycles are needed to refine targets and to plan, detail, manage, communicate and monitor the implementation of the measures. These management cycles will be much shorter than the planning process and need to be flexible enough to adapt to new situations. The cycles need to be institutionalised in the organisation that is in charge of implementing a measure.

Step 10 consists of the following activities:

Step 11: Lessons learned

The evaluation results from the previous activity (step 10.3) and should regularly feed back into the process to optimise both the process and the implementation. A certain flexibility is required while updating the plan to ensure that new developments and insight are taken into account during this step. If not, the plan might lose in effectiveness over time.

The step consists of the following activity:

Next to the steps described in the guidelines there are several possibilities for performing a quality check for a SUMP. Aside from self-assessment and peer review methodologies, Quality Management Systems (QMS) and labels can be used. Apart from general QMS such as ISO9001, there are also specific quality management systems that deal with (aspects of) sustainable mobility. For instance, Bypad (www.bypad.org) can be used for cycling aspects and MaxQ (available via www.epomm.eu) can be used for mobility management. Ecomobility SHIFT (www.ecomobility.org/shift/), QUEST (www.quest-project.eu) and ADVANCE (eu-advance.eu/) provide possibilities for the assessment of the quality of a city's entire sustainable urban mobility policy.

Since November 2015 an online SUMP Self-Assessment Tool developed in the framework of the EU co-funded project CH4LLENGE has been available for all cities (www.rupprecht-academy.eu/course/index.php?categoryid=15). This online tool enables planning authorities to measure their progress towards achieving a genuine Sustainable Urban Mobility Plan.

The annex of the 2013 European Commission Communication "Together Towards Competitive and Resource-efficient Urban Mobility" on Sustainable Urban Mobility Plans[3], sets out guiding principles for a successful SUMP. In brief these principles are:

· *Long-term vision and clear implementation*

A Sustainable Urban Mobility Plan presents, or is linked to, an existing, long-term strategy for the future development of the urban area and, in this context, for the future development of transport and mobility infrastructure and services. A Sustainable Urban Mobility Plan equally includes a delivery plan for short-term implementation of the strategy.

[3] ec.europa.eu/transport/themes/urban/doc/ump/com(2013)913-annex_en.pdf

· *Assessment of current and future performance*

The development of a Sustainable Urban Mobility Plan should build on the careful assessment of the present and future performance of the urban transport system.

· *Balanced and integrated development of all modes*

A Sustainable Urban Mobility Plan fosters the balanced development of all relevant transport modes, while encouraging a shift towards more sustainable modes. The plan puts forward an integrated set of technical, infrastructure, policy-based, and soft measures to improve performance and cost-effectiveness with regard to the declared goal and specific objectives.

· *Horizontal and vertical integration*

The development and implementation of a Sustainable Urban Mobility Plan follows an integrated approach with a high level of cooperation, coordination and consultation between the different levels of government and relevant authorities. The Local Planning Authority should put in place appropriate structures and procedures.

· *Monitoring, review and reporting*

The implementation of a Sustainable Urban Mobility Plan should be closely monitored.

· *Quality assurance*

Local Planning Authorities should have mechanisms to ensure the quality and validate compliance of the Sustainable Urban Mobility Plan with the requirements of the Sustainable Urban Mobility Plan concept.

The urban mobility tools and measures

There are many sustainable urban mobility tools and measures available that cities can consider and implement. This section describes several tools and measures as well as the main EU supported projects (Eltis The urban mobility observatory, and the CIVITAS initiative) which both provide a wealth of knowledge, best practice and tools on sustainable urban mobility. The best practice in this section is derived from the Eltis and CIVITAS websites.

EU supported "flagships" on urban mobility

There are two EU supported "flagship" initiatives on sustainable urban mobility which provide a wealth of information.

Eltis The urban mobility observatory

Eltis (www.eltis.org) financed by the European Union, facilitates the exchange of information, knowledge and experience in the field of sustainable urban mobility in Europe. It serves professionals working in the area of transport and related disciplines including urban and regional development, health, energy and environmental sciences. Created over 10 years ago, Eltis is now Europe's main observatory on urban mobility. The dedicated MOBILITY PLANS section serves as an information hub of on how to develop and implement Sustainable Urban Mobility Plans.

CIVITAS Initiative

The CIVITAS initiative was launched in 2002, with the aim of redefining transport measures and policies, in order to create cleaner and better transport in cities. The initiative has tested over 800 innovative sustainable urban mobility measures in over 60 European metropolitan areas. For more information on the CIVITAS initiative see http://www.civitas.eu

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Cycling

Being a non-motorized form of transport, cycling has many advantages. Bicycles do not use fuel, do not emit emissions or air pollutants and have a positive impact on public health. These are just a few examples of the benefits of cycling over motorised transport; not contributing to congestion, energy security and social inclusion are other relevant benefits. Cycling is particularly suited for short to moderate distances and is highly appropriate for daily use.

Within the CIVITAS initiative, one of the thematic groups of measures focusses on walking and cycling enhancements/services. The initiative supports the development, implementation and testing of demand management measures and the dissemination of lessons learned among cities. Between 2002 and 2012 the initiative has implemented 27 innovative measures for walking and cycling in 20 different countries. These measures include new cycle routes and improved networks with cycling tunnels, bridges or dedicated lanes, and also with shared space concepts as well as public and shared cycling schemes.

Two examples of CIVITAS cycling projects are the city cycle routes in Iasi (Romania) and the parking facilities for bicycles in the city centre of Utrecht (the Netherlands). The Iasi city cycle routes consist of 10 kilometres of cycle routes supported by a promotional campaign to encourage the public to take up cycling. As a result, public awareness of the measure has significantly increased (from 15% to 66% in three years) and less people perceive the city centre as dangerous for cyclists. Numbers on the actual usage show an increase of close to 50%, at least for part of the route. For more information on the Iasi project, please visit www.civitas.eu/content/city-cycle-routes

The Utrecht parking facilities project aims to overcome the increasing bike parking issues in the city centre. Utrecht faces an increasing demand for bike parking facilities, due to a new residential area for 90,000 new residents (Leidsche Rijn) as well as to the redevelopment of the central train station area. To ensure that people remain positive about cycling in the city and to encourage longer cycling trips up to 7.5 kilometres, Utrecht plans to create 3,500 additional parking facilities for bikes. Together with a range of stakeholders such as regional authorities, interest groups and environmental organisations, the city is working on an integrated action plan for bicycle parking in the city centre. The plan will take into account different target groups, as some cyclists prefer guarded locations to prevent loss or damage whereas others are happy to leave their bike unguarded. Some 3,000 will be guarded and around 400 unguarded. Furthermore, facilities for cargo bikes will be created and improved. The project has, so far, resulted in preventing the loss of guarded parking space, in ensuring extra parking places in public area and in a 4% growth of bicycle use, from 51% to 55% of residents cycling in the city. The contribution of the project to the overall modal split in the city remains unknown at this stage, as the action plan is still ongoing. For more information about the Utrecht project, please visit www.civitas.eu/content/parking-facilities-bicycles-city-centre

Local public transport

A high-quality, affordable, modern and energy-efficient local public transport system that is well integrated with other modes is key to reducing car traffic and related emissions and congestion and creating an appealing urban environment.
The use of local public transport has shown a steady increase: from 2000 to 2012 the number of journeys by bus, tram and metro grew from 45,6 billion journeys to 49,5 billion (source UITP).

In most European countries responsibility for local public transport (planning, development, tendering, operating) is decentralised to cities, regions or both. In most cases cities are also responsible for local infrastructure (bus/tram stops, dedicated public transport lanes, traffic light priority etc.). Therefore most cities have all necessary tools to create high quality public transport systems in their cities. A high quality local public transport system can be defined as a system that is perceived by the public and the media to be reliable, frequent, good-value, reasonably comfortable (throughout the journey), reasonably fast, accessible for the elderly and passengers with disabilities, clean, reasonably priced, operating at convenient times, and suitable for most core journeys between key traffic generators (including residential areas) and the town / city centre. (see also http://www.proceedproject.eu/)

A public transport system providing accessible, comfortable, fast and high quality connections from door to door is a precondition for substantial use of public transport. Marketing (including pricing) can be equally important to increase the use of a public transport system.

There is much knowledge and expertise in Europe on all aspects of local public transport from market analysis, to planning and implementing network and infrastructure, to clean fleets, financing, operation and management and marketing.
The EU has helped cities wishing to improve their local public transport system with a large range of projects,for example the PROCEED project, where guidelines were developed for high quality local public transport in small and medium sized cities. Or the MEDIATE project, which developed a methodology for describing the accessibility of transport in Europe. The 3IBS project was conceived to continue striving for the increased performance, accessibility and efficiency of urban bus systems; and the running project ZeEUS focuses on the uptake of zero emission (electric) urban bus systems.

Besides these research projects, the EU has supported many demonstration projects within CIVITAS focusing on different items, such as accessibility, clean fleets, intermodality, ticketing and tariffs and service improvements plus the exchange of best practice and innovative solutions between European cities. Accessibility and marketing are explored in greater depth below. Intermodality and clean vehicles will be highlighted later in this booklet. Ticketing and tariffs, and service improvements represent specific aspects of marketing and should fit within the overall marketing strategy aiming to keep existing customers and attract new ones.

Acessibility

For many senior citizens and people with disabilities or reduced mobility, public transport is the only option for independent travel. Accessibility of the transport service is a precondition to participate in society. Given the ageing population trend this is an aspect that will become increasingly important. Creating a fully accessible public transport network requires the adaptation of public roads, bus stops, ticketing machines,vehicles, etc. Many cities in Europe are working in this area.

Within a CIVITAS demonstration project the Urban Community of La Rochelle (France) devised an accessibility scheme in close partnership with representatives of associations of people with reduced mobility, visual, hearing, or mental impairments . The aim was to adapt public transport infrastructure and equipment throughout the La Rochelle Urban Community in order to ensure accessibility for everyone, including persons with disabilities or reduced mobility. Low-floor buses were fitted with on-board audio-visual information displays; bus stops were improved with higher platforms to close the gap between the pavement and the vehicle, with real-time information, improved signage, and the addition of pictograms on the public transport network maps to indicate fully accessible bus stops; and the bus station was refurbished and fitted with automatic doors and fully accessible information and ticket sales desks, and an accessibility guide was published for blind and partially-sighted travellers. For more information, please visit www.civitas.eu/content/better-infrastructure-public-transport

In Brighton & Hove (UK) audio devices known as React units or talking bus stops were installed to relay the information displayed on Real Time Information (RTI) signage. An evaluation showed an increase in bus trips and a very high satisfaction rate. For more information, please visit www.civitas.eu/content/public-transport-information-blind-and-partially-sighted-people

Marketing

Marketing is a relatively new phenomenon in public transport. Most cities do not have an overall integrated marketing strategy. It comprises all elements of the public transport system. It is essential for public transport that marketing is a marketing of services. The marketing of services is characterized by the four Ps (Product, Price, Place and Promotion), but it also has three additional Ps:

· **Process:** a smooth process in ticket sales, promotion, handling of complaints, etc.
· **Personnel:** pleasant personnel with an eye for customer wishes.
· **Politics:** the related fields of politics can be very important for public transport: pedestrian areas in inner cities, traffic management, planning of new business in residential areas, etc.

Marketing requires a shift from supply-oriented to customer-oriented management. In-depth knowledge of the “customer” is a necessity for this. Marketing is not a fixed, isolated task. It is part of a constant cycle in which there are central elements:

· Analysing basic external data of trends and clients
· Analysing the internal performance of the company
· Segmentation, targeting, making choices
· Implementing strategies

Many innovative marketing examples can be found in European cities.

Widespread car-use and a constantly congested city centre in Nysa (Poland) led to the development of a revolutionary programme where car owners can use the city's public buses for free. Since the scheme started in May 2012, the number of cars entering the city has decreased, the amount of people using public transport is up and the air quality in the area has improved. And, as most car drivers did not buy tickets previously, the loss in earnings related to bus ticket sales has not been significant enough to be a problem for Nysa's municipal office. For more information, please visit www.eltis.org/discover/case-studies/free-public-transport-car-drivers-nysa-poland

Graz (Austria) has 800 bus and tram stops, most of which were not user friendly. Within the CIVITAS initiatitve, the city of Graz started to improve the stop infrastructure for public transport passengers, thus increasing the level of user satisfaction and the number of users. After the project over 25% of public transport stops in Graz could be regarded as high-quality stops, and 120 were equipped with real-time information displays.

In a survey among public transport passengers, 59% stated that the reconstruction of the new customer-friendly stop in the Andritz district of Graz had increased the attractiveness of public transport. For more information, please visit
www.civitas.eu/content/passenger-friendly-bus-and-tram-stops

The city of Coimbra (Portugal) wanted to make public transport faster, more comfortable, and easier to use. Within the CIVITAS initiative the city implemented a new ticketing system covering several transport operators and using technology that allows for contactless validation. Moreover, the new ticketing system offers a wider range of products and such a system helps reduce fraud. The main aim of the measure was to attract new public transport users.
The result was an increase in average operating revenue due to a shift from private cars to public transport (+ 1,2% PT users) and a decrease of the average operating costs. For more information, please visit www.civitas.eu/content/new-ticketing-system-coimbra-0

Car- and bike-sharing

A relatively new but quickly growing form of demand management is represented by sharing programmes for cars and bikes. Sharing systems allow for an on-demand car or bicycle service where the user does not own the vehicle. This means that the benefits of door-to-door transportation can be achieved, whilst avoiding the expenses of full ownership. Furthermore, less parking space is required as less vehicles are required to service mobility needs.

For car-sharing programmes, there are multiple benefits compared to privatly-owned vehicles. For instance different types of vehicles can be part of the same pool from which members of the scheme can acquire vehicles, allowing for the choice of the most appropriate vehicle for any given journey. Payment is often performed on a pay-as-you-drive principle, allowing for payment per hour or even per minute. This payment-per-usage means participants of the car-sharing programmes are encouraged to limit their kilometres. When the number of kilometres per year is relatively low (as a rule-of-thumb 10,000 kilometres per year is sometimes mentioned) the transport costs are often lower compared to full-ownership.

The car-sharing programme of the German city of Bremen was designed to transform the mobility system in favour of sustainable modes of transport. The first on-street “mobile.punkt” station opened in 2003 with a node connecting cycling, public transport and car-sharing. Having continuously extended to over 50 locations across the city (recognisable by three metre high poles), the programme has around 11,000 members and has replaced over 2,000 private cars. The most important success factors of the scheme include the proximity of public transport stations and convincing practicalities such as an online booking system, a round-the-clock call centre and easy card access. More information on the scheme can be found in the Case Study section of Eltis The urban mobility observatory (www.eltis.org) and on mobilpunkt-bremen.de

Bike-sharing programmes are often considered as an alternative to private bike ownership, and linked to public transport as a last mile option. Not owning the bike means avoiding parking, storage and maintenance requirements and the risk of theft or vandalism. There are several forms of bike-sharing, ranging from freely accessible bikes (made famous by the 1960's White Bicycle Plan in Amsterdam, Netherlands) to on demand technology-based systems, including location finder apps, digital payment and electric bikes.

Many bike-sharing programmes exist around the world, with some of the largest in the Chinese cities of Wuhan and Hangzhou. In 2012, the Belgian city of Ghent introduced the world's first cargo-bike-sharing scheme. Launched as a pilot project in May 2012, 4 cargo bikes were introduced into an existing car-sharing scheme. After paying a deposit (€100) and a starting fee (€35), which is reimbursed by the city council), the bikes can be rented by the hour (€1,75) or for a full day (€15). The bike-scheme removes the main barriers to purchasing a cargo bike: the high purchasing costs and the need for substantial parking space at home.

Integration of transport modes / intermodality

Intermodal transport consists of at least two different modes during one door-to-door journey. Improving intermodal transport requires the development of seamless integrated transport chains. This requires door-to-door information and ticketing, smooth interchanges at train and bus stations, integration of long distance and regional transport with the “last mile urban trip”. These topics are covered by EU supported projects like NODES (New tOols for Design and OpEration of Urban Transport InterchangeS) or CLOSER (Connecting LOng and Short-distance networks for Efficient tRansport)[4].

Many CIVITAS demonstration projects focus on topics like park and ride, public transport and bikes, improvement of public transport interchanges and provide very good innovative examples on how to improve intermodal urban transport chains.

An example is the measure implemented in Tel Aviv, Israel, aimed to improve cooperation between municipal and private organisations. The measure aims to tackle issues related to high-density business areas, making them more accessible by stimulating the use of collective transport modes to cover the last mile of door-to-door travel to work. The measure was introduced in the Kiryat Atidim area: a high-tech and business park including a private hospital, with only two train stations nearby and limited accessibility by car. An agreement was reached between several of the private employers and some taxi operators, to set-up a shuttle service during rush hours. This initiative was used as a basis for identifying the mobility needs of employees and visitors. It also served as a first step to expand the service as a cooperation between private parties and the municipality to make high-density employment areas more accessible and supportive of transit transport. The measure itself consists of information gathering, mapping of relevant stakeholders and the coordination between them: the municipality, private employers, train, bus, taxi and bicycle operators. This is to result in the design and implementation of improved accessibility to and from the major transportation facilities and employment centres. Some of the innovative aspects of the measure are:

- Multimodal Transportation Plan for the high-density employment areas combining stakeholder participation with innovative transport modelling
- Optimal resource allocation in terms of the available modes and parkir
- Turning intermodality into reality shifting the balance between modes by looking beyond the traditional place of each particular mode and securing intermodality
- Identifying potential incentives for companies considering travel plan initiatives

For more info please visit the CIVITAS website: www.civitas.eu

[4] See also: www.nodes-interchanges.eu/ or www.closer-project.eu/

Mobility management

Mobility management aims to promote the use of sustainable transport modes. Mobility management consists of “soft” measures like awareness-raising, information, communication and marketing campaigns. Through EU funded projects like MAX (Successful Travel Awareness Campaigns and Mobility Management Strategies) and demonstration projects within the CIVITAS initative, the EU has actively supported the development and uptake of this rather low cost measure by cities and organisations.

An example of the use of awareness-raising for sustainable transport is the e-mobility promotion measure of the German city of Stuttgart. Stuttgart faces serious air quality and noise issues in some areas of the city centre. There is an extensive strategy in place to reduce emissions, including a comprehensive charging infrastructure of over 300 charging points for both two- and four wheelers. However, local residents still don't buy or use e-vehicles in a sufficient number, to limit emission results. The new measure aims to introduce e-mobility into the everyday life of local residents through a decentralised campaign for public awareness on e-mobility. The city is organising a series of public information events in selected city districts for specific target groups: senior citizens, students and migrants. Given the city's topography, with altitude differences of over 300 metres, the use of conventional bikes is difficult. The use of electric bikes (Pedelecs) can be an attractive alternative transport mode, especially for young people, given the cost advantages compared to purchasing a car. Future steps include the inclusion of e-mobility in the urban planning process, as well as training events on the use of electric vehicles for several of the target groups. For more information please visit the CIVITAS webpage: www.civitas.eu

Clean and energy-efficient vehicles

Clean and energy efficient vehicles play an important role within the EU policy objectives of reducing energy consumption, emission of CO_2 and pollutants.

Clean transport systems can fully meet the energy demand of the transport sector. Alternative low-carbon fuels should gradually substitute fossil fuels for transport propulsion in the long term.

A large number of policy measures has been adopted at EU, national and regional level in order to support the development and supply of clean vehicles, for example through regulatory initiatives and funding for research, innovation and demonstration.

The EU Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles (2009/33/EC) requires that environmental impact linked to operation over the lifetime of vehicles is taken into account in public procurement purchase decisions. The Directive is expected to accelerate a broad market introduction of clean and energy-efficient road transport. Increased sales will help reduce costs through economies of scale, resulting in progressive improvement in the energy and environmental performance of the whole vehicle fleet. The European Commission will propose a revision in 2017.

The project “clean fleet” is worth mentioning in this respect. This project assisted public authorities and fleet operators with the implementation of the Clean Vehicles Directive and the procurement or leasing of clean and energy-efficient vehicles. For more information, please visit www.clean-fleets.eu/home/

Urban freight / city logistics

Urban logistics are essential to the efficient functioning of cities. This comprises transportation methods, handling and storage of goods, management of inventory, waste and returns, as well as home delivery services. The European Commission has substantially contributed to the development of knowledge, expertise and uptake of sustainable urban logistics concepts. Examples include SMARTFUSION (Smart Urban Freight Solutions) or TURBLOG-WW (Transferability of Urban Logistics Concepts and Practices from a World Wide Perspective), CIVITAS demonstration projects and the best practice and tools to be found on Eltis The urban mobility observatory.

A very innovative approach to sustainable urban logistics is the ECOLOGISTICS scheme in the Italian city of Parma. The system consists of a central urban distribution centre, with two operating logistic functionalities: a consolidated last-mile delivery service operated by local authorities (ECO CITY), and a system of permits and certifications of green vehicles and platforms of other freight transport operators. Operators thereby choose the system they prefer, whether their own certified green vehicles or the ECO CITY service. The system ran as a pilot for two years, following which the ECO CITY service was funded by fares paid by those requesting the service rather than their own logistical service. One of the key success factors of the project lies in the participatory approach adopted by the Municipality for designing and gradually implementing the scheme with the collaboration of trade associations and operators. The original planning board has become a monitoring committee that meets twice a month to discuss and resolve problems related to the scheme. For more information on the system please visit Eltis The urban mobility observatory: www.eltis.org

Traffic and demand management

Traffic and demand management refers to measures to improve the flow and efficiency of traffic such as parking management, reallocating urban space in favour of sustainable modes (including shared space), access controls, road pricing, traffic guidance and signal control strategies. The EU can provide significant expertise on all these aspects when it comes to planning, technical solutions and implementation. Intelligent Transportation Systems (ITS)[5] are increasingly being deployed in urban areas[6]. ITS services range from traffic control through public transport information/integrated ticketing to travel demand management. In the future connected, cooperative and automated mobility will play a significant role in enhancing traffic management in urban areas. EU supported projects like CONDUITES (intelligent transportation systems) and NICHES+ (innovative urban mobility concepts) are worth mentioning in this respect, as well as several CIVITAS demonstration projects and the wealth of best practices and tools which can be found on Eltis The urban mobility observatory.

[5] See also: http://ec.europa.eu/transport/themes/its/road/action_plan_en
[6] See also: https://ec.europa.eu/transport/themes/its/road/action_plan/its_for_urban_areas_en

A good example is the real-time traffic information system in the Hungarian city of Budapest. Smart technology systems were installed at the busiest entry-points of the city, with the aim of diverting traffic away from congested areas, such as bottlenecks in the road network and the bridges over the River Danube which runs through the city. This measure consists of camera's being installed at the busiest road intrersections and on the bridges across the Danube. The cameras are connected to an intelligent system, which can recognise number plates and calculate the actual journey time between two points. Based on this information, an automated system provides car drivers via electronic signs with the real-time travel estimated travel times. This allows drivers to make an informed choice about their route options.

The test phase of the system was concluded in June 2013, with positive results: the system worked reliably and initial feedback from road users was positive. The system is operated by two operating entities (the local transport centre and the national motorway agency), which cooperate well together. Further information is needed to determine whether the system reduces congestion and to what extent. For more information please visit Eltis The urban mobility observatory: www.eltis.org

Transport planning and land use

Creating sustainable urban mobility often starts with sustainable planning regarding transport and land use. As shown in the SUMP process described in the previous section, planning policy integration ensuring an effective plan is an important element of creating a SUMP.

An example of integrated planning to ensure sustainable mobility is the Plan for Spatial Development of the Dutch City of Rotterdam. The plan consists of a new approach to integrated planning for three strategic transport interchanges. One of these interchanges is the Alexander railway station in the eastern part of the city centre. The railway station is located near bus and metro lines, a large shopping centre, a park and ride facility and several leisure facilities, including a newly built cinema. The measure consisted of the construction of a master plan for the area, taking into account the mixed functions. The focus of the master plan was on combining economic functions close to transport infrastructure, whilst taking into account restrictions on accessibility, external safety and traffic related air and noise pollution. Cooperation between government and private partners proved to be an important driver for the acceptance of the project.

Access regulation

Many cities face environmental issues, such as air quality and congestion, to a large extent caused by motorized vehicles. The quantity and type of local traffic can be managed by demand management rules, also known as access regulation measures or traffic restrictions. These measures are often based on economic incentives, regulations on the type of vehicle or trip that can enter an area, or on environmental regulation which sets strict limits for certain urban areas. The website Urban Access Regulations (urbanaccessregulations.eu) provides a complete overview of Low Emission Zones, Urban Road Tolls, Traffic Limited Zones and Traffic Restrictions in Europe. Four examples of access regulations are shortly highlighted here: low emission zones, parking policies, congestion charging and limited traffic zones.

Low emission zones

Many cities struggle to reduce emissions to meet the EU Air Quality Limit Values. Emission zoning is a way to restrict access by the most polluting vehicles to a specific area within a city. Designating a certain area as a low emission zone (LEZ) or environmental zone can result in a substantial decrease of emissions within the LEZ.

The city of Aalborg (Denmark) faced air quality issues, specifically related to particulate matter. Although being important for everyday life, heavy goods vehicles (HGVs) are also major contributors to the negative impacts of the transport sector, especially in terms of particulate matter (PM) emissions. In an attempt to radically decrease road transport emissions, Aalborg introduced an environmental zone within the ring road around the city centre and by the fjord north of the centre in February 2009. To enter the zone HGVs and buses needed to comply with Euro 3 standards or have a certified diesel particulate filter fitted. Since 2010 the standard is Euro4 or a diesel particulate filter. Initially, Danish vehicles were required to display a low-emission zone label on their windscreen and international vehicles were required to provide vehicle documentation. In 2010 a licence plate registration system was introduced for Danish vehicles, and as of 2011 foreign vehicles are required to carry an environmental zone sticker. An important element of the measure was the cooperation with, and timely involvement of transport companies. Target groups were informed via leaflets, posters and a dedicated website.

To monitor the results of the measure, the city cooperated with the National Environmental Research Centre (DMU), which developed an air quality model for the city. The model shows that, based on licence plate registrations, the emissions in the zone and surrounding areas have decreased as a result of the measure, due to an increase in Euro 4 and higher vehicles. Furthermore, the image of the City of Aalborg has improved as an environmentally conscious city.

Parking policies

Parking is regulated in most European cities. Nonetheless before introduction there is usually much opposition and political debate. In general it is an unpopular and politically sensitive measure, but it has proven to be effective. Empirical research shows that public perception changes after the actual implementation of parking measures. Once the positive impact of regulation and charging becomes obvious, public support increases significantly; and initial fear of local retailers that their clientele will decline, have proved to be groundless. Parking regulation is an important push factor to complement to policies and initiatives increasing the attractiveness of sustainable modes. Various studies have demonstrated the significant impact made by parking regulation on car use.

Parking regulation includes all forms of parking measures intended to control the availability or price of parking spaces. The policy aims of these parking measures range from traffic management goals, to accessibility for business and shoppers, to land use, etc. as well as generating revenues for the city. Revenues from parking is generally sufficient to cover the investment and operational costs of parking, but does not usually reflect the (full) external costs.

In Europe a large industry has developed, offering all services related to parking: planning, organisation, enforcement, equipment, management, operation, etc. Innovative user-friendly solutions like pay by phone, dynamic parking guidance etc. are already widespread.

Zürich (Switzerland) is a good example of parking policy being part of a comprehensive approach to mobility planning[7]. Zürich has been actively managing publically and privately provided parking provision in the city, since the early 1990s as part of its overall transport policy to control car traffic and promote public transport. Public transport use in Zürich has consequently risen above the national average. Furthermore, Zürich has an attractive and liveable city centre and, its parking policy has made a positive impact on the economic development of the city.

[7] see also: http://push-pull-parking.eu/

Congestion charging

Another measure to influence the number of vehicles within an urban area, is the introduction of a congestion charge. This financial instrument is a price incentive for car users to switch to other modes of transport. The measure consist of levying a toll or charge on certain roads which (without the charge) are often congested - most usually in city centres.

Alongside London (UK), Bergen (Norway), Stockholm (Sweden) and Singapore, the Swedish city of Göteborg, the Italian city of Milan and the Maltese capital of Valetta have introduced congestion charging schemes. Norway has road tolls going into its main cities, as part of the national motorway charge. Of particular note is that Milan's AREA C (as the charging scheme is called) evolved from a previous combined environmental zone and road charging scheme, in which vehicles were banned or permanently charged for accessing the area. The change followed a referendum in 2011 in which almost 80% of the voters indicated that they were in favour of more restrictive conditions in the environmental zone if the restrictions resulted in a better quality of life within the city. Milan ranked third amongst large European cities for high particulate matter levels, and has one of the world's highest rates of car ownership. Milans scheme covers about eight square kilometres within the historical centre, and is highly attractive due to the activities and services located there: on average some 500,000 people per day travel into the area.

The Milan charging scheme comprises a charge for all vehicles except bicycles, scooters, electric vehicles and vehicles for people with reduced mobility. There are several exemptions, for instance for residents and registered duty vehicles. Vehicles entering the area are monitored by a system of 43 electronic gates equipped with Automatic Number Plate Recognition technology (ANPR). Seven of the gates are solely for public transport vehicles. All revenue from the scheme is invested in projects enhancing sustainable mobility such as Park&Ride, metro facilities, a bike-sharing scheme and public transport (fleet renewal and increased frequency).
Area C periodically tightens its standards to ensure it remains effective. As of 13 February 2017 it also bans for non-electric delivery vehicles between 08:00 and 10:00, using Area C to work towards the EU's goals of CO2-free city logistics in major urban centres by 2030.

In terms of environmental outcomes the scheme proved to be very successful during the first six months of operations (January to June 2012):

- Average traffic reduction: -34% (-46.133 vehicles entering Area C);
- Average traffic reduction outside Area C: -6,9%;
- Reduction in the numbers of most polluting vehicles: -49% (-2.400 vehicles entering Area C per day);
- Increase of cleaner vehicles: +6,1% (from 9,6% to 16,6% of the total vehicles entering Area C);
- Increase in public transport running speed: +7% (bus); +4,7% (tram);
- Reduction in number of accidents: -28%;
- Reduction of pollutant emissions from traffic in AREA C: PM10 exhaust -19%; PM10 total -18%; NOx -10% and CO2 -22%.

Limited Traffic Zones

Access regulation schemes or limited traffic zones allow cities to regulate access by other methods than payment or emissions. These include for example areas where:

- all but certain vehicles or trips are banned;
- a permit is required to drive into;
- access is only allowed at certain times of the day;
- restriction of the maximum weight lorry allowed, or lorry through traffic bans.

They can be enforced by cameras, physical barriers or police/city officers. These are also known as Traffic Restrictions, Access Restrictions, Permit Schemes or in Italy ZTLs. There are over 200 camera enforced ZTLs in Italy, often where are narrow streets, and / or there would otherwise be many tourist vehicles making the city unattractive for those same tourists.

For more information please visit the case study section of Eltis The urban mobility observatory: www.eltis.org or urbanaccessregulations.eu

European Mobility Week[8]

European Mobility Week (EMW) is recognized as a flagship EC campaign, having been established in 2002. 2.427 local authorities from 51 countries worldwide registered their participation in 2016.

The campaign supports the Commission goal of decarbonising transport in line with #EnergyUnion, whilst also taking into account the Digital Single Market.

It helps local authorities and other campaigners to induce behavioural change promoting sustainable mobility; and serves as an excellent policy tool for the broad dissemination of information on selected transport priorities. The 2017 annual theme is 'Clean, shared and intelligent mobility'.

Cities are encouraged to hold one or more car-free days, to organize a full week of activities based on the annual theme, and to promote (often many) permanent measures in favour of sustainable mobility, eg cycle paths, bicycle parking, contactless payment facilities, road safety measures, modernized infrastructure for pedestrians / people with disabilities, public transport interchanges, pedestrian zones, clean fuels infrastructure, etc.

While the main Week addresses local authorities, a broad range of stakeholders are encouraged to register their 'Mobility Actions' all year round.

EC Delegations and Representation Offices are kindly requested to inform towns and cities about European Mobility Week, and to encourage them to participate with their own week of events from 16-22 September every year. In countries where National Coordinators have been appointed, it is essential to ensure they are involved as key players: http://www.mobilityweek.eu/contact/

[8] See also: www.mobilityweek.eu/

EU funding and possibilities for cooperation

There are several programmes and funding schemes that allow non-EU parties to cooperate in EU-funded projects and acquire funding for urban mobility projects and initiatives.
This section provides a short overview of some of these initiatives, including possibilities for cooperation on urban transport related themes. For more detailed information on funding of urban mobility projects and initiatives, please visit Eltis The urban mobility observatory (www.eltis.org) or submit questions related to funding to the Eltis Helpdesk.
Funding and cooperation options for non-EU stakeholders are provided by programmes managed by:

- The European Commission: Directorate-General for International Cooperation and Development (DG DEVCO) and Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR)
- The European Investment Bank (EIB)
- The European Bank for Reconstruction and Development (EBRD)

In addition, there are several specific funding schemes where stakeholders from outside the EU are eligible, such as the Horizon2020 programme.

EU Framework Programme for Research and Innovation:

Horizon 2020[9]

The Horizon 2020 programme is the largest EU research and innovation programmes, with total funding of nearly €80 billion from 2014 to 2020. It is part of the Innovation Union, the European strategy to create an innovation-friendly environment that makes it easier for innovations to be turned into products and services. The Horizon 2020 programme aims to support economic growth from research and innovation, with an emphasis on three pillars: excellent science, industrial leadership and tackling societal challenges. The objective of the programme "is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation".
Organisations (public, private, NGOs etc.) based in non-EU countries can also participate in the Horizon 2020 programme, and this often happens when they join EU-based consortia. For the sections of the programme flagged as being particularly suitable for international cooperation, consortia are encouraged to include third country partners. Participants from third countries however, are not always automatically eligible for funding. For specific rules on third country participation, please refer to the Guide to Participation by non-EU countries[10] Parties seeking partnership are invited to seek contact with partner search services, such as the National Contact Points or entities like *CORDIS*[11]. For questions with regard to urban mobility, the Eltis Helpdesk[12] can also be contacted.

[9] See also: https://ec.europa.eu/programmes/horizon2020/
[10] See also: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-3cpart_en.pdf
[11] See also: http://cordis.europa.eu/ (CORDIS: the European Commission's public repository and portal to disseminate information on all EU-funded research projects and their results).
[12] See also: www.eltis.org

External cooperation

Directorate-General for International Cooperation and Development: EuropeAid[13]

The role of *DG Devco*, known as *EuropeAid*, is to design the EU's development policies and deliver aid throughout the world. Responsibility for implmenting the funds lies with the DG's headquarters in Brussels, or with the EU delegations and representation offices[14]: EU representations in partner countries. EU delegations and representation offices (about 140 in total) can be found all over the world and are grouped by the following regions:

- Africa, Caribbean and the Pacific (e.g. South Africa, Malawi and Thaiti)
- Asia & Central Asia
- Latin America
- The Gulf Region
- EU Neighbourhood and Non-EU European Countries

EuropeAid also has several worldwide thematic instruments and programmes, such as the nuclear safety cooperation instrument and the migration and asylum programme. The reservation of funds for regional and country-based external cooperation programmes and for the implementation of thematic programmes is based on Annual Action Programmes (AAPs). These specify the objectives, the fields of intervention, the expected results, the management procedures and the total amount of financing. The grants which are awarded on an annual basis are identified through Annual Work Programmes for Grants (AWP). Topics eligible for grant support can be found on EuropeAid's “calls for proposal & procurement notices” webpage[15].

Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR)[16]

Aside from its development funds, the EU manages the Instrument for Pre-accession Assistance (IPA) to support reforms in the “enlargement countries” with financial and technical assistance[17]. For other neighbouring countries, the European Neighbourhood Instrument (ENI) covering the period 2014-2020 is the main financial instrument for implementing the European Neighbourhood Policy (ENP). The ENI provides the bulk of EU funding to the ENP partner countries in different areas, including transport.

[13] See also: http://ec.europa.eu/europeaid/
[14] https://eeas.europa.eu/headquarters/headquarters-homepage/area/geo_en
[15] See also: https://webgate.ec.europa.eu/europeaid/online-services/
[16] See also: https://ec.europa.eu/neighbourhood-enlargement/
[17] See also: https://ec.europa.eu/neighbourhood-enlargement/instruments/overview_en

European Investment Bank (EIB)[18]

The EIB supports the EU's action outside the EU mainly through loans. Although mainly active within the EU, 10% of the bank's loans go to projects outside the European Union. Lending is managed by means of external mandates for activities in different regions of the world:

- ***Enlargement countries***:
  Candidate and potential candidate countries to become members of the EU in the Western Balkans, as well as Turkey
- ***European Free Trade Association countries***:
  Norway, Iceland, Liechtenstein (also part of the European Economic Area) and Switzerland
- ***Neighbouring countries***:
  Countries adjacent to the EU in the Southern Mediterranean basin (including Maghreb and Middle Eastern countries) to the eastern borders of the EU
- ***Central Asia:***
  Countries include Kazakhstan, Tajikistan and Kyrgyzstan
- ***Development and cooperation countries***:
  - Africa, the Caribbean and the Pacific (e.g. South Africa, Malawi and Tahiti)
  - Asia and Latin America (ALA): lending is currently managed under the ALA IV mandate of the EIB (for countries such as China and Brazil)

For Asia and Latin American, the EIB gives priority to the following types of project:

- Climate change mitigation and adaptation (e.g. renewable energy, energy efficiency, urban transport and other projects reducing CO_2 emissions);
- The development of a social and economic infrastructure, including water and sanitation;
- Local private sector development, in particular support to SMEs.

[18] See also: http://www.eib.org/

The European Bank for Reconstruction and Development (EBRD)[19]

The EBRD is an international financial institution that invests in projects, engages in policy dialogues, and provides technical advice that builds open and democratic market economies. The bank mainly invests in and cooperates with private sector/commercial companies, providing project financing for the financial sector and the real economy, including new ventures and also investments.

Ownership of the EBRD is spread across 65 countries and two intergovernmental institutions: the European Union and the European Investment Bank. In order to promote its goals, the EBRD maintains close political dialogue with governments, authorities and representatives of civil society, and cooperates with international organisations such as the OECD, the IMF, the World Bank and UN agencies.

Apart from EU funding, there are multiple other possibilities for third countries and cities to acquire funding, via organisations like the World Bank, the Asian Development Bank and the Inter-American Development Bank. Each of these has specific programmes in place for urban mobility, or related topics such as transport, sustainability and urban development. For more information please visit these organisations' websites (to be found in the following section: sources for further information).

[19] See also: http://www.ebrd.com/

Sources for further information

Organisations / programmes for cooperation and funding

ORGANISATION / PROGRAMME	WEBSITE
Asian Development Bank	www.adb.org/
CIVITAS Initiative	www.civitas.eu/
CORDIS	cordis.europa.eu/
Eltis The urban mobility observatory	eltis.org/
EU research and innovation funding	ec.europa.eu/research/
EU-China Dialogue on Smart Cities	eu-chinasmartcities.eu/
EuropeAid	ec.europa.eu/europeaid/
European Bank for Reconstruction and Development (EBRD)	www.ebrd.com/
European Commission: legislation summaries	ec.europa.eu/legislation_summaries/
European Commission: urban mobility	ec.europa.eu/transport/themes/urban/urban_mobility/
European Mobility Week	www.mobilityweek.eu/
European Investment Bank (EIB)	www.eib.org/
Horizon2020	ec.europa.eu/programmes/horizon2020/
Inter-American Development Bank	www.iadb.org/
INTERREG Programme	www.interreg4c.eu/
OECD	www.oecd.org/
Smart Cities and Communities	www.ec.europa.eu/eip/smartcities/
Sustainable Urban Mobility Plans (SUMPs)	www.eltis.org/mobility-plans/
World Bank	www.worldbank.org/

More specific associations

TOPIC	ORGANISATION	WEBSITE
Public Transport	UITP - Advancing Public Transport	www.uitp.org/
Cycling	European Cyclists' Federation	www.ecf.com/
Walking	Federation of European Pedestrian Organisations	www.pedestrians-europe.org/
Parking	European Parking Association (EPA)	www.europeanparking.eu/
Clean Vehicles		
Electric	AVERE	www.avere.org/
Hydrogen	HyER	hyer.eu/
Natural Gas	NGVA	www.ngva.eu/

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