European Union initiatives for sustainable urban transport

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Abstract: Urban areas are very important in terms of the competitiveness of the European economy, as they constitute a living environment for nearly 80% of EU citizens. In recent years, the nuisance arising from the operation of transport in urban areas has been of growing concern. The huge volume of negative externalities, especially air pollution, greenhouse gas emissions, noise, and congestion create the need for a new European-wide integrated approach to the organization of urban transport systems. EU support for local authorities, while respecting the principle of subsidiarity, is characterized in various forms briefly in this article.

Keywords: European Union, Common Transport Policy, external costs of transport, urban transport, sustainable urban transport systems

1. Introduction

The vast majority of European Union citizens, as much as 80%, live in urban areas. This leads to various consequences. On one hand, it causes the city to play a key role when it comes to the competitiveness of the European economy. Urban and agglomeration areas are responsible for producing nearly 85% of EU GDP. They create jobs in virtually all occupations, provide conditions for the development of entrepreneurship, attract a variety of investments, provide scientific, cultural, industrial centers etc., as well as development centers (Jacobs, 1986). All these aspects combine the infinite number of socio-economic functions performed by the urban areas. However, what should not be forgotten is that they primarily constitute the living environment for nearly 80% of EU citizens. In recent years, the nuisance arising from the operation of transport in urban areas has been of growing concern. The huge volume of negative externalities, especially air pollution, greenhouse gas emissions, noise, and congestion create the need for a new European-wide integrated approach to the organization of urban transport systems. EU support for local authorities, while respecting the principle of subsidiarity, is characterized in various forms briefly in this article.

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environment for a vast number of people. Meanwhile, such high levels of social-economic processes turns out to lead to a reduction in the quality of this environment. Transportation plays a crucial role in this field. Without transport, which on one side is the key factor in the development process, the functions of urban areas would disappear (Szołtysek, 2007: 48). On the other hand, transport is responsible for the majority of pejorative phenomena affecting the living conditions of residents. Negative externalities of transport\(^2\) are primarily congestion, air pollution, water and soil pollution, greenhouse gas emissions assumed to cause climate change, accidents, noise and vibration, land occupation and destruction of landscape (the effect of visual intrusion). European agglomerations and cities are particularly vulnerable to congestion, popularly known as traffic jams, causing among others delayed travel time, increase of the cost of fuel, operating costs and vehicle exploitation, reducing the degree of reliability of transport operations and increasing the hassle of traveling (European Commission, 2008b: 23-24). Congestion on roads and at airports contributes to increased fuel consumption in Europe by 6% (European Commission, 2003: 4). Furthermore, congestion contributes to the intensity of other categories of external costs of transport, such as air pollution, noise and greenhouse gas emissions\(^3\). The most crowded European cities are presented in Table 1.

Table 1. Average speed in the most congested European cities\(^4\)

<table>
<thead>
<tr>
<th>Lp.</th>
<th>City</th>
<th>Average speed in miles per hour</th>
<th>Average speed in kilometers per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>London (England)</td>
<td>11.8 mph</td>
<td>18.9 kn/h</td>
</tr>
<tr>
<td>2</td>
<td>Berlin (Germany)</td>
<td>15.0 mph</td>
<td>24.0 kn/h</td>
</tr>
<tr>
<td>3</td>
<td>Warsaw (Poland)</td>
<td>16.1 mph</td>
<td>25.8 kn/h</td>
</tr>
<tr>
<td>4</td>
<td>Manchester (England)</td>
<td>17.4 mph</td>
<td>27.8 kn/h</td>
</tr>
<tr>
<td>5</td>
<td>Edinburgh (Scotland)</td>
<td>18.5 mph</td>
<td>29.6 kn/h</td>
</tr>
<tr>
<td>6</td>
<td>Rome (Italy)</td>
<td>18.7 mph</td>
<td>29.9 kn/h</td>
</tr>
<tr>
<td>7</td>
<td>Glasgow (Scotland)</td>
<td>19.0 mph</td>
<td>30.4 kn/h</td>
</tr>
<tr>
<td>8</td>
<td>Bristol (England)</td>
<td>19.6 mph</td>
<td>31.4 kn/h</td>
</tr>
<tr>
<td>9</td>
<td>Paris (France)</td>
<td>198 mph</td>
<td>31.7 kn/h</td>
</tr>
<tr>
<td>10</td>
<td>Belfast (Northern Ireland)</td>
<td>19.9 mph</td>
<td>31.8 kn/h</td>
</tr>
</tbody>
</table>

Source: (Olson and Nolan, 2009).

\(^2\) External effects of transport can be defined as "those affecting the economic activity of manufacturers, including manufacturers and transport services, and shippers - consumers of these services, which have sometimes unintentional or intentional effects on other members of the community (Szczeńiański, 2002: 82)." Externalities can have a positive dimension, as well as negative. In the second case they constitute the so-called external costs, reducing the level of social welfare (Paradowska, 2006: 44).

\(^3\) Congestion in cities contributes in particular to air pollution with regards to carbon monoxide, nitrogen oxides, carbon dioxide, particulates and ozone (percentage of total traffic emissions of these substances - not including ground level ozone - is 64%, 69%, 33% and 33% respectively) (Transportation creates air pollution).

\(^4\) The average speed was calculated by the portal keepmoving.co.uk in 30 major cities in Europe, based on data obtained through the GPS system in the period from June to September 2007.
As already mentioned, transport, especially road transport, is a major contributor to air pollution. Currently, about 20-30% of the European cities population lives in areas where the EU limits for the level of pollution are exceeded (EEA, 2007: 5). Figure 1 shows the proportion of urban population in Europe that is exposed to concentrations of air pollutants above the acceptable limits. According to the results of research conducted by the World Health Organization (WHO) and the EU, polluted air in Europe causes every year around 400,000 premature deaths, and over 100,000 people require hospitalization due to serious lung diseases (DG Environment, 2005). Traffic incidents are on the second place in terms of the number of accidents in the cities, where one third of fatal accidents and their victims are pedestrians, cyclists and motorcyclists. In Europe, more than 65% of all traffic accidents take place in urban areas (European Parliament, 2005: 2). Transportation is also responsible for about 21% of greenhouse gas emissions in the Community and is the only sector for which this indicator is constantly growing. The share of road transport emissions in the whole sector is 93% and up to 12% is derived solely from the exhausts of cars (EEA, 2008).

Figure 1. Percentage of the urban population in EEA-32\(^5\) potentially exposed to pollutant concentrations over selected limit/target values

![Graph showing percentage of urban population exposed to pollutants](image)

Source: (EEA, 2007: 7).

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\(^5\) EEA (The European Environment Agency) is one of the agencies of the European Union, bringing together the EU member States as well as Iceland, Liechtenstein, Norway, Switzerland and Turkey. The main task consists of supporting the EEA in pursuit of sustainable development and in efforts to protect the environment (see: EEA, www.eea.europa.eu).
Detrimental to the health of Europeans is also the noise generated by transport. WHO studies show that during the day about 40% of Community citizens are exposed to road traffic noise at a level exceeding 55 dBA,\textsuperscript{6} and 20% at the level above 65 dBA. In certain areas the noise level during the day oscillates around 75-80 dBA (Berglund \textit{et al.}, 1999: viii).

Among other things, disadvantages of high traffic density in urban centers described above causes that more and more people are choosing to move to the outskirts or to suburban areas, where living conditions are assumed to be better - less pollution, noise and more green space. However, this phenomenon, called urban sprawl, expansion or spread of cities,\textsuperscript{7} leads to an increase in nuisance arising from transport, because today it is most closely associated with dependence on the car and means increased number of travels. The development of individual motorisation not only accelerated the process of urban expansion, but also influenced the increase of congestion in cities, as well as the increase in the land use for road transport infrastructure (in European cities it occupies about 15% of the total surface (Fularz, 2003)), an increase in the number of accidents etc.

Serious worsening in recent years of the detrimental impact of transport on the city environment, associated with the dynamic and often uncontrolled growth of individual motorisation, to a large extent negatively affected the quality of life in urban areas. This problem has also become a topic of discussion within the European Union, which has decided to take action to improve the environment in European cities. One of the key elements of sustainable urban development policy is sustainable transport in cities across Europe.

2. **Sustainable urban transport policy at the European level**

In accordance with the EU Community Law Principle of Subsidiarity, any action should be implemented at the administrative level as close to the citizen as possible, where it can be and are performed most efficiently (Wawejduk). For this reason, policy regarding urban transport systems in the Member States remains at the discretion of local authorities, who are "closest" to the problem, with special expertise on the individual circumstances of the city or agglomeration, and therefore the greatest potential for development of successful plans and tools (COM (2007)

\textsuperscript{6} Different types of medical disorders causing noise at the level of 55-75 dBA (see: Suchecki, 2006; Kopta, 2000).

\textsuperscript{7} "Urban sprawl" is often also referred to as suburbanisation or exurbanisation. While the reasons for this phenomenon are varied, the principal one may be the desire to improve the living conditions of the urban population (Fularz, 2008).
551 final, 2007). The results of local politics across Europe are diverse - in many urban areas effective plans for sustainable transport have been developed, while in other areas this issue is neglected or dealt with in an insufficient way. Among other things, this is why the European Union since the mid 1990s has taken at the Community level the measures to support the municipal authorities, working out various kinds of arrangements, financial assistance, research and training. Figure 2 shows the main documents of the UE policy aimed at creating sustainable transport in cities.

Figure 2. EU’s main documents regarding the sustainable transport policy in urban areas

Source: author’s own elaboration.

Initiatives associated with making transport in cities more sustainable were taken in the early 1990s. In 1990, the Green Paper on the Urban Environment (COM (1990) 218 final) was published, in which for the first time an integrated approach and action plan at the European level
was proposed. In 1991, the Expert Group on the Urban Environment was established. Two years later a Sustainable Cities Project begun and in 1996 the EU Expert Group produced a report "European sustainable cities", which is a sign of support for the local authority Agenda 21. In 1997 The Communicate "Towards an urban agenda in the European Union" (COM (1997) 197 final, 1997) was published, and a year later the Communicate "Sustainable urban development in the European Union: a framework for action" (COM (1998) 605 final, 1998), in which for the first time a truly balanced approach to the development of cities and urban policy was presented. Part of the policy objectives set out in the Communicate was adopted at the Thematic Strategy in 2006. Finally, in 2001, the Group of Experts on Urban Environment produced a report "Towards More Sustainable Urban Land Use: Advice to the European Commission for Policy and Action" (see: Community activities in the urban environment, http://ec.europa.eu/environment/urban/policy_initiatives.htm). None of these actions was strictly conducted under the common transport policy. However, individual documents addressed development issues and the need to influence the functioning of transport systems in cities as one of the greatest aspects responsible for the quality of urban environment and sustainable development of urban areas.

Already in the 1990s, documents and studies published in the European Union showed negative trends in the development of urban transport in the form of uncontrolled growth of individual motorisation and negligence connected with the insufficient use of alternative forms of travelling, including the most environmentally friendly - walking and riding a bicycle. The need to promote and develop public transport was underlined, as well as the need of development and implementation of instruments that would eliminate or reduce consumption patterns based on private cars and contribute to the increase in use of alternative means of transport, development of more advanced and cleaner vehicles, support for local authorities in the form of funds and appropriate models, information exchange, etc. A key role of transport in sustainable urban development is not only to limit its adverse impact on the environment, human health and life. It is also about increasing the availability of various retail outlets, educational, cultural and health centres, etc., especially for people with disabilities, based on a well-organized supply for commuting to and from work / college / school, etc., which help to prevent social exclusion.

In the late 1990s released two important documents related to the creation of the Citizens Network were released. This initiative aimed at developing a modern and attractive public transport, tailored to the needs of passengers, which in an efficient manner would be combined
with other transport modes in an intermodal system. In the Green Paper, "The Citizens' Network. Fulfilling the potential of public passenger transport in Europe," it has been pointed out that the progressive increase in demand for passenger transport is manifested primarily through the increased use of private cars, leading to an increase in congestion, accidents and air pollution, especially in urban areas. However, efficient public transport needs 5 times less energy per passenger, emits from 4 to 8 times less pollution, is characterised by less land use and generates less noise. It was stressed that the development of the Citizens Network in relation to transport behaviour relies on good practice and working out an appropriate model for public transport, inter alia, by combining the various alternative forms of transport in the urban environment. It also requires the introduction of a deliberate, integrated charging system, passenger information system, terminals, the priority for public transport and a number of other solutions. The EU's role in such ventures is mainly disseminating knowledge and good practice, organizing research, so that transport services in an optimal way meet the needs of users, and promote the development of public transport through Community instruments as well as assistance in developing policy instruments at lower levels. In this way, the Community has undertaken to promote public transport in Europe, inter alia in order to contribute to the reduction of external costs of transport and improve the quality of the urban environment (see: COM (1995) 601 final, 1995). In 1998 a Communicate was produced (not published in the EU Official Journal) from the Commission for the Council, European Parliament, the Economic and Social Committee and the Committee of the Regions titled "Developing the citizens' network – Why local and regional passenger transport is important and how the European Commission is helping to bring it about" (COM(1998) 431 final, 1998). It presents an overview of the characteristics of local and regional passenger transport system that could be achieved by providing appropriate tools for public authorities, transport providers and groups of users, as well as by defining the legal framework that would promote sustainable mobility (in particular by resigning from the dominant model of individual motorization). With regard to the practical methods to increase the degree of sustainable transport systems at the regional and local level, particular attention was paid to improvement of the attractiveness and quality of public transport. This in order to better correspond to the changing needs of transport, among other things by stimulating cycling and walking, rationalization of transport demand (including changing the distance between home and work or study), active traffic management, the elimination of psychological barriers associated with the use of
alternative means of transport for the car, as well as the integration of transport strategies in Spatial Planning, economic development and social cohesion policy. The combination of all these actions should contribute to a personal transportation system working on a door to door basis, which residents could use as an integrated Citizens Network. Further steps to create an integrated system of local and regional passenger transport in the form of the Civitizens Network while respecting the principle of subsidiarity took the form of three-year program focusing on four key areas:

• encouraging the exchange of information through the development of initiatives such as ELTIS, POLIS and UITP,

• benchmarking stimulating local and regional transport systems in different countries,

• establishing political and legal frameworks which would facilitate the promotion of public transport and the implementation of the postulate of sustainable mobility as one of the top priorities of the common transport policy,

• efficient use of Community financial instruments.\(^8\)

A document setting the framework of the common transport policy for the current decade is the White Paper "European transport policy for 2010: time to decide" It raised the issue of unsustainable development trends in urban transport. In the chapter on transport users' location as the heart of transport policy a point associated with the rationalization of urban transport was included. It stressed the need to reduce individual transport in cities, primarily by promoting public transport and alternative means of transport to the car. It was noted that the principle of subsidiarity limits the actions of the Community mainly to the diversification of energy sources for transport, and promote good practice. However, in relation to certain matters, such as a diversified energy use in transport, the EU takes over the role of the legislature. The key measures of the Community in the aspect of good practice and promotion of sustainable development of urban transport systems in the White Book involve the assistance in the form of Community funds for pioneering cities to take up the challenges of limiting the number of private cars, identification and dissemination of solutions in the field of urban transport, in particular the use of urban and regional railways, as well as contributing to the increase in use of less polluting vehicles and public transport.

\(^8\) For example, under the Fifth Framework Programme different projects have been developed closely related to the European Citizen Network, which are primarily Sustainable mobility and intermodality, The city of tomorrow and Cultural heritage, and Systems and services for the citizen (see: CORDIS, cordis.europa.eu).
A very important document in terms of aspirations of the Community to develop sustainable transport systems in cities is a Communicate from the Commission to the Council and European Parliament on Strategy on the Urban Environment (COM (2005) 718 final, 2005). It was stated once again, that actions will be the most effective on the local level. However, for the achievement of sustainable development of urban areas cooperation at all levels - regional, national and European level is also needed. The value added by the European Union consists mainly of supporting good practice, financial support for investment, research and training, assistance in establishing national advisory points for cities, promoting cooperation and coordination between relevant administrative bodies, as well as between different European cities. Due to the multilevel nature of governance structures within the Community and the principle of subsidiarity, it has been established that legislation is not the best method to achieve the objective, especially since the majority of Member States and local authorities expressed unfavourable opinion in the debate before the publication of the Communicate regarding the introduction of binding to the European Union's Environmental Management Strategy and plans for sustainable development of urban transport. The overall objective of the Strategy will be to encourage local authorities to a more integrated management of urban environment. In relation to transport systems the advantages of the development and implementation of sustainable urban transport plans have been highlighted and the Community announced to provide guidance of a technical character that will be helpful in creating such plans and examples of good practice. In 2007 the manual referring to the Thematic Strategy on Sustainable Urban Transport Plans (SUTPs) was issued along with an annex including examples of good practice from across Europe (European Commission, 2007). It describes the main risks arising from current trends in urban transport development, the main challenges associated with it, and presents the key elements of sustainable transport development plans and the types of assistance that local authorities can draw from the Union. In an extensive appendix there are major research programs, various types of projects, guidelines, manuals and initiatives on urban transport listed, with reference to their results, databases and web portals. It also shows the main elements of the plans for sustainable urban transport in the context of experience, knowledge and examples originating from various European cities. These priorities are coordination of land use in transport planning.

9 In some Member States these plans in whole or in part are mandatory, e.g. in France, Great Britain, Cyprus, the Czech Republic and Italy (European Commission, 2007).
reduction of traffic, promotion of cycling and walking, promotion and improvement of public transport, charging for road infrastructure in urban areas, limiting the availability of the most polluting cars, the management of parking areas, promotion of low emission and low noise vehicles, traffic management and so-called "Soft and smart measures", or other measures aimed at changing behavior of users. Such a large list of available projects, initiatives and databases, the individual achievements of the cities, and technical requirements is a very useful knowledge compendium needed to create sustainable urban transport plans. Its usefulness is increased by the fact that it imposes no specific solutions, hence, based on the gathered experience and information, interested local authorities are able to develop a plan tailored to the individual conditions of the area.

In 2006, the Community published a Mid-Term Review of the White Paper from 2001 titled “Keep Europe moving - Sustainable mobility for our continent”, in which the Union has defined the current efforts to develop sustainable urban transport as efficient and well-founded and announced further studies on those spheres in which the principle of subsidiarity can reach a consensus on developing joint solutions at European, national, regional and local level. In the document the necessity to publish a Green Paper on urban transport was underlined. Its main purpose should be to determine the level of value added of the EU action on sustainable urban transport for local authorities.

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10 These include for example travel plans, awareness of society, car sharing, information of public transport, mobility centers, car clubs, teleworking, etc.
**EUROPEAN UNION INITIATIVES FOR SUSTAINABLE URBAN TRANSPORT**

**Figure 3. Core issues presented in the Green Paper – "Towards a new culture for urban mobility"**

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>CREATING A NEW URBAN MOBILITY CULTURE</th>
<th>FINANCIAL RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems</td>
<td>Improving knowledge</td>
<td>Freight opportunities for local authorities</td>
</tr>
<tr>
<td>Congestion in towns and cities</td>
<td>- cooperation and partnership solutions</td>
<td>- Charging for infrastructure</td>
</tr>
<tr>
<td>Predominance of oil as a transport fuel, which generates CO₂, air pollutant emissions and noise</td>
<td>- education, workshops, trainings, public awareness campaigns</td>
<td>- Fees for public transport quality</td>
</tr>
<tr>
<td>Not enough free space In Urban areas, constant increase in freight and passenger flows, substantial limits to the development of the infrastructure</td>
<td>- cooperation between cities in regional policy projects</td>
<td>- Public/Private Partnership</td>
</tr>
<tr>
<td>All people with reduced mobility, elderly, families with children etc. should have easy access to urban transport infrastructure</td>
<td>- A lot of accidents, low personal security in public transport</td>
<td>- Parking fees</td>
</tr>
<tr>
<td>A lot of accidents, low personal security in public transport</td>
<td></td>
<td>European financial support</td>
</tr>
</tbody>
</table>

**Data collection**
- Big gaps in urban mobility statistics at the EU level and often lack of common definitions are main barriers for the policy development and for finding common solutions
- There is a need of creating a system of data collection at the European level

**Proposals of / for the EU**
- Awareness campaigns, primarily in order to change transport user’s behaviour
- Development of an annual European conference on "advanced urban transport solutions"
- Establishing an observatory, based on its general experience with collection, harmonisation and exploitation of statistics at European level

**Debate**
- How could existing financial instruments such as structural and cohesion funds be better used in a coherent way to support integrated and sustainable urban transport?
- How could economic instruments, in particular market-based instruments, support clean and energy efficient urban transport?
- How could targeted research activities help more in integrating urban constraints and urban traffic development?
- How would towns and cities be encouraged to use urban charging? Is there a need for a general framework and/or guidance for urban charging? Should the revenues be earmarked to improve collective urban transport? Should external costs be internalised?
- What added value could, in the longer term, targeted European support for financing clean and energy efficient urban transport, bring?

The Green Paper - "Towards a new culture for urban mobility" (COM (2007) 551 final) appeared in 2007 and, in addition to the above-described Thematic Strategy and the manual of creating SUTPs, is one of the landmark documents connected with the development of European sustainable transport policy in cities. Despite the fact that each city is different and specific, all cities face similar problems in the field of transport. For this reason not only the cooperation between local authorities should be developed. The European Union is willing to determine the nature and form of the policy of urban transport development, which will then be implemented at the local level in accordance with the principle of subsidiarity. The Green Paper is an invitation to debate on the assessment of the EU’s contribution to the creation of such a policy, and the key issues that were raised in it are presented in Figure 3. The document provides a total of 25 questions related to the direction of future work in this field. Consultations initiated by the Paper lasted until the spring of 2008, and one of their effects was to be announced in the autumn of the same year in the "Action Plan on urban mobility", which contains a number of specific efforts to balance the transport in urban areas, together with the times of their implementation and responsibilities of individual entities. "Action Plan on urban mobility" was ultimately published in October 2009 (see: EUR-LEX, eur-lex.europa.eu).

Table 2. Overview of actions included in "Action Plan on urban mobility"

<table>
<thead>
<tr>
<th>Action</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Launch in 2009</strong></td>
<td></td>
</tr>
<tr>
<td>Accelerating the take-up of sustainable urban mobility plans</td>
<td>1</td>
</tr>
<tr>
<td>Improving travel information</td>
<td>6</td>
</tr>
<tr>
<td>Access to green zones</td>
<td>7</td>
</tr>
<tr>
<td>Research and demonstration projects for lower and zero emission vehicles</td>
<td>10</td>
</tr>
<tr>
<td>Internet guide on clean and energy-efficient vehicles</td>
<td>11</td>
</tr>
<tr>
<td>Information exchange on urban pricing schemes</td>
<td>13</td>
</tr>
<tr>
<td>Optimising existing funding sources</td>
<td>14</td>
</tr>
<tr>
<td>Setting up an urban mobility observatory</td>
<td>17</td>
</tr>
<tr>
<td><strong>Launch in 2010</strong></td>
<td></td>
</tr>
<tr>
<td>Transport for healthy urban environments</td>
<td>3</td>
</tr>
<tr>
<td>Platform on passenger rights in urban public transport</td>
<td>4</td>
</tr>
<tr>
<td>Campaigns on sustainable mobility behaviour</td>
<td>8</td>
</tr>
<tr>
<td>Energy-efficient driving as part of driving education</td>
<td>9</td>
</tr>
<tr>
<td>Analysing the needs for future funding</td>
<td>15</td>
</tr>
<tr>
<td>Upgrading data and statistics</td>
<td>16</td>
</tr>
<tr>
<td>Contributing to international dialogue and information exchange</td>
<td>18</td>
</tr>
<tr>
<td><strong>Launch in 2011</strong></td>
<td></td>
</tr>
<tr>
<td>Sustainable urban mobility and regional policy</td>
<td>2</td>
</tr>
<tr>
<td>Improving accessibility for persons with reduced mobility</td>
<td>5</td>
</tr>
<tr>
<td>Study on urban aspects of the internalisation of external costs</td>
<td>12</td>
</tr>
<tr>
<td><strong>Launch in 2012</strong></td>
<td></td>
</tr>
<tr>
<td>Urban freight transport</td>
<td>19</td>
</tr>
<tr>
<td>Intelligent transport systems (ITS) for urban mobility</td>
<td>20</td>
</tr>
</tbody>
</table>

The above-mentioned documents, developing a European policy for sustainable urban transport while respecting the principle of subsidiarity, shows one of the domains in which the added value at EU level is reflected, namely the promotion of good practice, dissemination of knowledge, facilitated cooperation between local authorities, support in conducting research and gathering information, etc. Table 3 shows selected initiatives, projects and programs coordinated or supported by the Community. A large role is played by the European Local Transport Information System - ELTIS), CIVITAS Initiative as well as the program Intelligent Energy. Numerous projects have been funded within Framework Programmes of the EU, which have made significant contribution to sustainable transport in European cities by way of improvements of the functioning of transport in urban areas.11

Table 3. Selected EU’s initiatives connected with sustainable urban transport

<table>
<thead>
<tr>
<th>Name</th>
<th>Website</th>
<th>Short characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTIS – European Local Transport Information System</td>
<td>[<a href="http://www.eltis.org">www.eltis.org</a>]</td>
<td>ELTIS is an initiative of the European Commission General Directorate for Energy and Transport and is supervised by an international group of transport-related organizations. The main goal is to provide information and promote exchange of knowledge and practical experience in the field of regional and urban transport in Europe.</td>
</tr>
<tr>
<td>CIVITAS</td>
<td>[<a href="http://www.civitas-initiative.eu">www.civitas-initiative.eu</a>]</td>
<td>CIVITAS (City-VITALity-Sustainability) is an initiative launched by the European Commission, aimed to help European cities to achieve a more sustainable, clean and energy-efficient transport system by implementation and evaluation of an integrated set of measures based on the experience and technical and political knowledge. The CIVITAS Commission intends to make a &quot;breakthrough&quot; in decision-making by supporting the creation of urban transport strategies. In 2008, under the 7th Framework Programme, started CIVITAS PLUS.</td>
</tr>
<tr>
<td>Intelligent Energy Europe Programme (STEER)</td>
<td>[ec.europa.eu/energy/intelligent/projects]</td>
<td>The main objective of the project is more sustainable energy use in transport, the diversification of energy sources, including the introduction of renewable energy sources, as well as the popularization of energy-efficient vehicles and supporting the local authorities responsible for transport in terms of knowledge and experience.</td>
</tr>
<tr>
<td>The European Academy of the Urban Environment EA.UE</td>
<td>[<a href="http://www.eaue.de">www.eaue.de</a>]</td>
<td>EA.UE was founded in 1992 by the European Parliament and the Senate of Berlin. Its activities focus on improving the exchange of experience between decision-makers from all spheres of sustainable urban development, mainly by way of conferences, research, studies, publications, and SUBURBAN database.</td>
</tr>
<tr>
<td>PROPOLIS</td>
<td>[www1.wsgroup.fi/lt/propolis/]</td>
<td>Propolis (Planning and Research of Policies for Land Use and Transport for Increasing Urban Sustainability) is a research project supported by the European Commission under the 5th Framework Programme, contributing to the implementation of key action &quot;The City of Tomorrow and Cultural Heritage&quot;. Its main objective was to develop tools and solutions in the field of Spatial Planning together with the transport policy for sustainable urban development.</td>
</tr>
<tr>
<td>URBACT</td>
<td>[urbact.eu]</td>
<td>URBACT Programme is funded by the European Regional Development Fund. Its main objective is to facilitate and support information exchange between European cities, as well as disseminate knowledge on all aspects of sustainable urban development. Currently there is a second edition of the Programme (2007-2013).</td>
</tr>
</tbody>
</table>

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11 Within each priority actions for existing frameworks have been numerous projects and initiatives conducted that have contributed to a more sustainable transport in certain European cities. For example, under the 5th Framework Programme the CIVITAS I Initiative and under the 6th Framework Program the CIVITAS II Initiative have been performed. Much attention is paid to urban transport in the 7th Framework Programme (2007-2013). The research focuses on, inter alia, areas such as alternative fuels and their applications in transportation, new generations of urban vehicles, new concepts of movement, non-polluting means of transport, transport demand management, as well as measures to support development of policy and its implementation (see: CORDIS, cordis.europa.eu).
Although the European Union, in accordance with the subsidiarity principle, does not create strict legislation in relation to sustainable urban transport, many legal acts concerning the relationship “transport – environment” and “transport – human health and life” support the increase in the environmental quality of urban areas and the level of sustainability of urban transport systems. Examples of this type of documents are presented in Table 4.\textsuperscript{12}

Table 4. Some examples of the EU’s legislation influencing the level of sustainability in urban transport

<table>
<thead>
<tr>
<th>Name of the document</th>
<th>Impact on urban areas</th>
</tr>
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<tbody>
<tr>
<td>Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise.</td>
<td>Requires Member States to draw up noise maps for agglomeration with a population of over 250 thousand, for all major roads which have more than 6 million vehicle passages a year, major railways with a net movement of more than 60 thousand train passages per year and major airports within their territory. Noise maps are the basis for the authorities to develop strategies to protect the public from the harmful effects.</td>
</tr>
<tr>
<td>Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.</td>
<td>Requires the reduction by the year 2020 of PM pollution in urban areas by about 20%. For all countries the acceptable limit of the content of PM 2.5 is a maximum of 25 micrograms/m\textsuperscript{3}. This ratio should be achieved by 2015, and possibly even 2010.</td>
</tr>
<tr>
<td>Proposal for a Directive of the European Parliament and of the Council on the inland transport of dangerous goods (COM (2006) 852 final).</td>
<td>Includes regulations of the transport of dangerous goods by road, rail and inland waterway. Requires inter alia, that the journey takes place as far away from urban areas as possible. Records of the Directive should have been transposed into national law by all Member States by 30 June 2009.</td>
</tr>
<tr>
<td>Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles</td>
<td>The draft of the directive was adopted in late 2008 by the European Parliament. According to it, public authorities will have to take into account not only the price but also the impact of purchased</td>
</tr>
</tbody>
</table>

\textsuperscript{12} The information contained in this article do not cover all of examples of EU legislation, which more or less influence the transport and the level of sustainability. More documents can be found on the EUR-Lex: eur-lex.europa.eu.
**EUROPEAN UNION INITIATIVES FOR SUSTAINABLE URBAN TRANSPORT**

<table>
<thead>
<tr>
<th>Community guidelines of 1 April 2008 on State aid for environmental protection (Official Journal C 82 of 1.4.2008) (Text with EEA relevance).</th>
<th>Specifies the form of assistance for the purchase of new transport vehicles which meet more strict standards than the EU norms or which contribute to increase in the level of environmental protection when there are no Community standards.</th>
</tr>
</thead>
</table>

Source: author's own elaboration.

Discussing the issue of development of sustainable transport systems policy in European cities the Leipzig Charter on Sustainable European Cities should also be mentioned. The document was adopted at the informal meeting of EU Member States ministers in Leipzig in May 2007 on the Urban Development and Territorial Cohesion. In the Leipzig Charter, ministers committed themselves, inter alia, to promote energy savings in transport and high quality public transport, which will be effective and cost efficient for residents (see: Structural actions in support of urban issues, ec.europa.eu/regiona1_policy/themes/urban_en.htm). Aalborg Commitments also play a very large role in the common effort of European cities towards sustainable development. They have been adopted by delegates at the Aalborg +10 Conference in 2004 and they are aimed at supporting the implementation of the Aalborg Charter, adopted in 1994 by hundreds of European local authorities. The purpose of the Aalborg Commitments, inter alia, is the strengthening of Local Agenda 21, but primarily the integration and cooperation of local governments in Europe in order to improve the effectiveness of policies for sustainable local development. Aalborg process proceeds in parallel with the work of the European Union, which additionally provides financial support (among other things, under the 6th Framework Programme). Sustainable mobility is one of the 10 commitments (see: Aalborg Commitments, www.aalborgplus10.dk).

3. Conclusions

Sustainable development, including sustainable transport policy and sustainable urban development, is now one of the priority areas for EU’s actions. Respecting the subsidiarity principle requires that actions aimed at sustainable mobility in cities are carried out primarily by local authorities who are knowledgeable about the specific local conditions and appropriate tools. In reality, however, sustainable development of urban transport takes place in a more efficient manner through harmonization of projects at European, national, regional and local levels. The European Union has the experience, knowledge, financial resources and the potential for creating
policies and tools that can help local authorities, despite the differences in the various European cities. The value added of Community action is manifested primarily through:

- promotion of good practice,
- supporting and facilitating cooperation between local authorities across Europe,
- research in the field of sustainable transport solutions for a number of different aspects (e.g., alternative fuels, eco-friendly and energy efficient vehicles, the use of ITS, etc.),
- developing and promoting of existing tools, options, through guides and manuals,
- guidelines for the establishment of Sustainable Urban Transport Plans (SUTP) by local authorities,
- numerous research projects, programmes and initiatives for sustainable urban mobility,
- financial support,
- legislation not directly related to the sustainable development of urban transport systems, however, significantly influencing their quality.

Dynamic growth in demand for transport, the dominance of road transport, the phenomenon of urban sprawl and other processes affecting the increase in nuisances resulting from transport in cities makes it in many cases that local authorities are unable to cope alone with this problem. European Union initiatives represent an opportunity to meet these challenges.

**Literature**

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EUROPEAN UNION INITIATIVES FOR SUSTAINABLE URBAN TRANSPORT


Inicjatywy Unii Europejskiej na rzecz zrównoważonego transportu w miastach

Streszczenie

Obszary miejskie są niezwykle istotne z punktu widzenia konkurencyjności gospodarki europejskiej, stanowią też środowisko życia dla blisko 80% obywateli Wspólnoty. W ostatnich latach coraz bardziej palącym problemem stają się uciążliwości wynikające z funkcjonowania transportu na terenach zurbanizowanych. Ogromne natężenie negatywnych efektów zewnętrznych, w tym zwłaszcza zanieczyszczeń powietrza, emisji gazów cieplarnianych i hałasu, a także kongestia sprawiają, że potrzebne jest nowe, zintegrowane w skali europejskiej podejście do zagadnień kształtowania i organizacji miejskich systemów transportowych. Wsparcie UE dla władz lokalnych, przy poszanowaniu zasady subsydiarności, przybiera różne formy, scharakteryzowane pokrótce w niniejszym artykule.

Słowa kluczowe: Unia Europejska, Wspólna Polityka Transportowa, koszty zewnętrzne transportu, transport miejski, zrównoważone miejskie systemy transportowe.