UN NOU MOD DE GÂNDIRE STRATEGICĂ – DEZVOLTAREA PLANURILOR DE MOBILITATE URBANĂ DURABILĂ – CAZUL ROMÂNIEI

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Abstract
In the last three years, substantial progress has been made in the development of legal framework and guidance for the preparation of SUMPs, leading to the publication of guidance later in 2013. In Romania the process has started last year, by the development through BERD assistance of the 7 growth poles of Romania, plus Bucharest – Ilfov. The purpose of this paper is to underline the importance of such plans for cities local development and to identify the main areas in which further intervention is needed. The paper reviews stage of SUMPs preparation in Romania, by analysing the tools used, it identifies the barriers encountered in this process. Finally, it highlights the lesson learned, and suggests ways of putting in practice in Romania.

Keywords: Sustainable urban mobility plans, citizens engagement, local development planning

JEL CODES: G32, H83
1. INTRODUCTION

“Transportation is often referred to as the “lifeblood of cities” because it provides the essential link among activities and, in the long run, to a large extent, it helps shape the city” (Vuchic, 1999). To promote sustainable and livable urban environments, private, public and non-motorized transport must functionally complement each other by forming balanced intermodal systems. However, in many cities today, including Romania, transportation is characterized by the dominance of the car and high auto-dependency in travel. As long as there is infrastructure available (road and parking), the car offers freedom of travel, but in the same time it is accompanied with high negative effects on health, environment, tourism. Today, cities and the transportation systems are subject of enormous challenges:

- The world population grows rapidly and this growth is concentrated mainly in cities.
- Today more people live in urban areas than in rural areas.
- It is estimated that in 2030 about 60% percent of the population will live in urban areas while this percentage will reach more than 75% in 2050.
- With the increasing expansion of cities as well as the economic development travel distances are increasing as well.
- The negative effects of transport, such as air pollution, noise and accidents affect the quality of life.

Figure 1 - Challenges for the Transportation Systems
Source: European Commission, 2011

Taking into account all these challenges, at the global level, the municipalities together with the researchers started in the last years to find solutions for a sustainable urban mobility. Considering the specificity of each cities and its development dynamics, it is underlined that solutions shall be tailored made for individual problems, but in the same time it recognized the fact that many cities are similar in their functioning and the solutions should be universal.

Thus, the research objectives are to:

- Present the European evolution of documents related to urban mobility
- Analyse the situation in different countries in which concern the SUMPs
- Explain the Romanian context and the situation of elaboration of SUMP's
- Underlined the main barriers and problems encountered
2. EUROPEAN CONTEXT

2.1. European important developments in the field of transport and urban mobility

The early discussions and agreements related to a common transport policy started in 1957, when the European Economic Community was created (formed by France, Italy, Germany, Belgium, the Netherlands, and Luxembourg). Later on, in 1992 Treaty of Maastricht, further approached the political, institutional, and budgetary foundations for a European Commission transport policy, developing a mechanism of community funding for the pan-European network. Also in 1992, the EC issued its first White Paper on the future development of the common transport policy. Between 1995 and 1998, the European Commission, through some specific initiative (e.g., Citizens Network) developed a first set of policy proposals in the area of urban mobility. Through this initiative, it was underlined the importance of citizen participation in developing strategic documents on urban mobility within municipalities.

In 2007 the EC published the Green Paper on Urban Mobility: 'Towards a new culture for urban mobility'. It set the foundations for a new European agenda for sustainable mobility policy (in which, e.g., legislative initiatives are developed in an integrated, and not fragmented manner) and invited stakeholders to a debate on what support the EU should provide, and how best to provide it (e.g., how to achieve optimal European added-value through the effective promotion of best practices).

The importance of adopting a urban mobility plan has been underlined in the EC Transport White Paper (European Commission, 2011), which emphasizes the importance of "a mixed strategy involving land-use planning, pricing schemes, efficient public transport services and infrastructure for non-motorised modes and charging/refuelling of clean vehicles is needed to reduce congestion and emissions". This White Paper asks EU states to analyse the possibility of making the urban mobility plans a mandatory approach for cities of a certain size, according to national standards based on EU Guidelines. It also suggests to link regional development and cohesion funds to cities and regions that have submitted a current, independently validated Urban Mobility Performance and Sustainability Audit certificate.

2.2. Why EU states needs a new approach of transport?

In the European Countries, there was an increase in passenger transport demand between 2005 and 2012, although overall it has been stable in recent years. However, national trends varied significantly, with demand increasing in 23 countries and decreasing in 10. In 2012, the car was the dominant mode of transport in all countries. Car passenger transport has generally decreased in the last three years (2009
to 2012) with a significant drop in some countries, the reasons being the transport policies and measures adopted and implemented by each countries in the last few years.

Figure 2 - Modal split of passenger transport in 35 European countries in 2012

According to Eurostat, “The transport sector is the fastest growing consumer of energy and producer of greenhouse gases in the European Union.” Namely, the transport sector is responsible for more than 25% of total final energy consumed in the EU (the other sectors being industry, households and services).

Within the transport sector, the great majority of energy (83%) is consumed by road transport, whereas air transport comes second with 13% of total energy consumption in the sector.

Below are presented interesting facts about the mobility sector:

- Passenger cars are responsible for 75% of passenger km travelled
- 50% of car trips are less than 5km, 30% are less than 3km
- Average car occupancy remains close to one
- Urban freight is typically between 20% and 25% of road space use
- Less than 5% of passenger journeys are made by bicycle
- Ownership per household is increasing (+ 38% in average between 1990 and 2004 for the EU 25, and between +14% and +167% per country)
- Less than 10% of passenger journeys are made by public transport

Figure 3 - Facts on mobility sector
Source: European Environment Agency, 2010
Taking into account all these facts, the municipalities at the European level, have started to adopt a transport policy and its subsequent measures, by putting a great accent on the re-shaping of car-dominated cities and transform them into cities that provide efficient and sustainable mobility solutions. However, there are some aspects that needs to be taken into consideration, the cities are very dynamic, but within the cities, the built infrastructure, the land availability are static. So, there are some problems encountered which makes all infrastructural changes very difficult. It is recognized by many scholars that current transport planning is at a point of crisis: it underestimates the key challenges of current planning issues in terms of increasing congestion due to the growth of cities and CO2-emissions (Banister, 2008). The question however is how the concept of sustainable mobility can be defined and implemented. Banister (2008) defined ‘the sustainability mobility paradigm’ in how to achieve a more sustainable mobility system.

There is also a problems of mentality at the level of the population in which concern the culture of car domination, especially in the Eastern European countries, therefore the changes are more difficult and takes time. Thus, involving citizens in the process of elaboration and implementation of sustainable urban mobility plans is compulsory and needed for successful initiative and changes.

3. SUSTAINABLE URBAN MOBILITY PLANS - EU COUNTRIES EXPERIENCE

What is a SUMP? A Sustainable Urban Mobility Plan (SUMP) is a “Strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles.” (www.mobilityplans.eu)

The process for developing a SUMP was set out in the guidelines developed by the EltisPlus project. The process consists in four important stages, such us: analysis of the current situation, setting improvement goals, developing a clear set of actions and an implementation strategy. The plans need to cover all the mobility aspects, both freight and passenger, and the economic aspects al the city development. An important aspect is that the plans must be clearly integrated in the policy context at the national and European level, ensuring that they support these policy objectives.
In Europe, some countries adopted an early stage comprehensive transport policy through continuous guidance for local communities in developing and implementing urban transport plans. In the table below, are mentioned the important steps made by some European countries in this process.

**TABLE 1 - SUMPs IN EU COUNTRIES**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Legal framework</th>
<th>Urban mobility plan - description</th>
<th>Plans in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>Law 340/2000</td>
<td>The Law 340/2000 (art. 22) introd</td>
<td>There are many</td>
</tr>
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</table>
The main barriers encountered in the process of development and implementation of this planning process are related to mentality change, institutional framework, resistance from established planning and engineering officials, and a lack of joint working between sectors, particularly transport and land use, lack of relevant knowledge among officials, lack of coordination between different levels of government and political conservatism. The plans are subjects of continuous improvements and changes, when is needed. The municipalities should have a specialized department, well trained and prepared to coordinate the implementation of projects in due time, with the citizens participation and support.

4. OVERVIEW OF URBAN MOBILITY IN ROMANIA.

The development of Sustainable Urban Mobility Plans (SUMPs) for the major Romanian cities it was agreed, as a priority by the Ministry of Regional Development and Public Administration and the European Commission, and become the frame of urban transport projects to be financed under the Operational Programme Regional Development for the 2014-2020 period with European Regional Development Fund.
The Law no. 190/2013 approving the Government Ordinance no. 7/2011 amending and supplementing Law no. 350/2001 on the regional planning and urbanism, into force since 13.07.2013, stipulates that the Urban Mobility Plan (UMP) is part of the General Urban Plan (GUP).

The SUMP is mandatory for all cities and towns, and optional for communes.

- Within Art. I, paragraph 19, (4) the institutional level of responsibility for the urban mobility planning is defined as follows: For cities rank 1 and 2, the metropolitan territorial development strategy and the metropolitan urban mobility plans are to be initiated by the County Administration or by the core city.

- Within paragraph 46, a new expression is inserted - "Urban Mobility Plan", having the following definition: «Urban Mobility Plan - the strategic territorial planning instrument which correlates the spatial development of settlements in the metropolitan area with the mobility and transport needs of people, goods and commodities.»

The paper is analyzing the stage of elaboration of SUMPs in the 7s Growth poles and Bucharest Ilfov Region. The others 13 urban development poles were analyzed, based on the online available information.

The European Bank for Reconstruction and Development signed in April 2014 an agreement with Ministry of Regional Development and Public Administration for ensuring technical assistance in elaboration of SUMPs for 8 Romanian municipalities (Iasi, Brasov, Craiova, Constanta, Timisoara, Cluj Napoca, Ploiesti, and Bucharest Ilfov region). According to the agreement the process of SUMPs elaboration was estimated at 1 year, until the end of July 2015. The first reports concerning SUMPs were presented in December 2015.

In the table below are summarized the general information about the SUMPs in all the 8 cities/metropolitan areas.

<table>
<thead>
<tr>
<th>No.</th>
<th>Cities</th>
<th>Who elaborate SUMP</th>
<th>Online information available</th>
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</tbody>
</table>
In 2016, the municipalities have started the consultation and debate process, as well as the procedure for obtaining the environment approval from the Environment Agencies (in accordance with law requirements Government Decision no. 1076/2004). In all cities, the technical assistance teams consisted in Romanian and foreign experts, with huge experience in the field. This new approach has some specific features, the public and stakeholders participation it was more take into account and through different methods and techniques, the citizens were involved (e.g. social media – online survey, open office in Timisoara for meetings citizens, working groups meetings.) All plans are proposing considerable changes in which concern the institutional framework, some measures concerned building capacity of municipalities, in terms of specialized departments with well trained and motivated staff.

In the Romanian urban development poles, there is a considerable effort done my municipalities for elaboration of SUMPs. The main barriers for municipalities is the time pressure for having the plans, in order to obtain funding under Regional Operational Programme.

The following table is presenting the status of elaboration of SUMPs in the 13 Urban development Poles:

<table>
<thead>
<tr>
<th>No.</th>
<th>City</th>
<th>Consultant</th>
<th>Source</th>
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</tr>
<tr>
<td>7.</td>
<td>Cluj Napoca</td>
<td>OveArup and Partners Ltd / United Kingdom, Studie Pianificazionedel Territorio(SPT) S.r.l. / Italy</td>
<td><a href="http://gocj.ro/">http://gocj.ro/</a></td>
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<td></td>
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<td><a href="http://gotm.ro/">http://gotm.ro/</a></td>
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</table>

Source: own analysis based on the municipalities’ websites

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The following table is presenting the status of elaboration of SUMPs in the 13 Urban development Poles:
Table 3 – Stage of elaboration of SUMP in the Romanian urban development poles

<table>
<thead>
<tr>
<th>No.</th>
<th>Cities</th>
<th>Online information</th>
<th>Stage</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>First report published in January 2016</td>
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<tr>
<td>2.</td>
<td>Bacau</td>
<td>N/A</td>
<td>The project – not yet started</td>
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<td><a href="http://www.primariabraila.ro/7200/Continut%20site/Plan%20de%20mobilitate.aspx">http://www.primariabraila.ro/7200/Continut%20site/Plan%20de%20mobilitate.aspx</a></td>
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<tr>
<td>4.</td>
<td>Baia Mare</td>
<td><a href="http://www.baiamare.ro/ro/Proiecte/Dezvoltare-urbana/Planul-de-mobilitate-urbana/">http://www.baiamare.ro/ro/Proiecte/Dezvoltare-urbana/Planul-de-mobilitate-urbana/</a></td>
<td>Under implementation</td>
</tr>
<tr>
<td>5.</td>
<td>Deva</td>
<td>No information found</td>
<td>Work in progress</td>
</tr>
<tr>
<td>8.</td>
<td>Pitesti</td>
<td>No online information available</td>
<td>Work in progress – process have started in 2016</td>
</tr>
<tr>
<td>9.</td>
<td>Ramnicu Valcea</td>
<td>No online information available on city hall website</td>
<td>Work in progress - process have started in 2016</td>
</tr>
<tr>
<td>10.</td>
<td>Sibiu</td>
<td><a href="http://www.sibiu.ro/index.php/primaria/mobilitate">http://www.sibiu.ro/index.php/primaria/mobilitate</a></td>
<td>Work in progress, the process have started in 2016</td>
</tr>
<tr>
<td>12.</td>
<td>Satu Mare</td>
<td>No online information available</td>
<td>Work in progress</td>
</tr>
</tbody>
</table>

Source: own analysis based on the municipalities’ websites information

The cities from the West and Centre part of Romania are more active. Some of these cities, like Oradea and Arad are developing mobility plans at the cross border level. Thus, the success of these concept in Romania, depends on the level of involvement of municipalities, their openness to this new tool, which is very useful for their cities development.

In the case of big cities, a challenge is the area covered, all the SUMP drafted referred in their case at the metropolitan level. The political differences, the later reaction of the communities to the new process...
could be negative factors in the process of implementation. A challenge for the metropolitan area, is to develop Metropolitan transport authorities, to tackle all the mobility needs for passengers and freight.

**Process of SUMP’s elaboration – main findings**

The techniques used by the consultants for gathering data and information were the following:

- Surveys e.g. manual turning counts, automatic Traffic Counts, journey time surveys, surveys among car drivers/Public transport users, Public Transport Vehicle Loading Surveys
- Data collection – interviews, questionnaires in traffic and on the streets, online surveys
- Analysis of documents and others information available from statistics and municipalities.

All the cities involved the citizens in the process of elaboration, the most common ways of getting people involved are the following:

- Workshops and public meetings for identifying the current problems and the solutions with NGOs, schools, private sectors – at least 2 meetings were organized in each cities
- The social media – especially facebook, it was used for informing citizens about the stage of elaboration, also an online surveys it was implementing for collecting data.
- The websites of local authorities were used for sharing information to the public.

Problems encountered in the process of collecting data:

- "Terra incognita" travel demand and travel demand behaviour, no information about transport demand, no local information
- Difficult Household surveys- budget and time restrictions cause small samples under big pressure, uncertainties about massive derivations of trip frequencies compared to expected ones
- The less participation of people from the metropolitan areas

The official sources used to deliver data in Romania were:

- National Institute of Statistics and authorities from different administrative levels – complete databases, free of charge or not
- Stakeholders or transport companies – synthetic data from reports, studies, research, synthetic empirical data, of reduced availability.
The analysis of the all SUMPs elaborated for the growth poles and Bucharest Ilfov region showed some common mobility policies proposed, such us:

- **Encouraging walking and cycling.** This refers to policies and measures that promote a mobility shift from motorised means of transport to walking and cycling: the most sustainable modes of transport. Encouraging people to walk and cycle by developing appropriate infrastructure and policies, and educating motorists to act with respect and caution toward pedestrians and cyclists will also likely spontaneously bring people to using these means of transport.

- **Efficient collective transport system.** This refers to policies and measures to make collective (public) transport systems more attractive. Attractiveness can be increased by providing transport systems that are reliable, frequent, comfortable, safe, direct, fast, affordable, accessible, and that reach a high proportion of the urban area. Public transport has long represented an essential and important service for citizens, as many citizens do not have a private car, cannot afford one, or are unable or unwilling to operate one. All municipalities has as an important objective to increase the numbers of passengers of the public transport. In this respect, are proposed projects which covered the metropolitan region.

- **Demand management – Refers to policies and measures which decrease the need to travel and allow for more sustainable options when travel is necessary.** Some examples are: restriction or banning of access of private vehicles to certain zones (esp. in the city centre); a congestion charge—it consists of charging a fee to vehicles that enter selected areas of a city; car-sharing, which intends to reduce the need for people to own a car carpooling, which refers to two or more persons commuting in the same car, thus decreasing economic and environmental costs of motorised vehicle use.

- **Lifestyle and behavioural change (including those of decision-makers) –** Refers to policies and measures that raise awareness among the population on the negative impacts of certain modes of transport and the new more sustainable options available. These policies can also aim to question the very need to travel. Local Governments need to understand that lifestyle and behavioural change promotion needs to necessarily be accompanied by a range of options available to citizens to engage in more sustainable transport habits. Successful implementation requires a high level of acceptance, interest, awareness, understanding of responsibilities and recognition of expected benefits among the different target groups.

- **Technology – Refers to measures and actions that promote the introduction of new technologies to reduce the negative impacts of motorised transport, including cleaner fuels and vehicles.**
Besides the reduction of the number of vehicles on the streets, the use of less polluting and more efficient fuels for both private and public fleets should be targeted in order to improve air quality and reduce the negative impact of transport on the environment. Research and development on technological solutions are today making much progress and a wide range of green fuels and technologies are available, as for example bio-fuels, electric-, hydrogen- and hybrid cars.

- An essential aspect for a good implementation of the SUMPs in the communication and coordination with regional and national (as well as with European) levels of government. These linkages also have the advantage of potentially facilitating the availability of funding for projects at the local level.

5. CONCLUSIONS AND LESSON LEARNED

Cities are in the centre stage and are a crucial actor in shaping the future of the transport sector. By the end of this decade four of every five Europeans will be living in cities. Local governments have a key responsibility in redirecting the way that mobility and accessibility to the urban area are conceptualised.

Moving from the vision to the preparation and implementation of a holistic and functional sustainable urban mobility plan requires a strong structural framework and some specific ingredients for success:

- Political commitment is an important step of this cycle as it sends a ‘green light’ to the different departments and staff, stating that management is determined to make changes. It is also the step where budgets are approved, paving the way for the implementation of the actions. Monitoring, evaluating and reporting the results in a systematic and regular way will, finally, allow a thorough evaluation of the process and the start of a new cycle with increased knowledge about the local situation and progress.

- Organisational integration - One of the conditions necessary for the development of a well-integrated public transport system is that an autonomous, metropolitan authority be given the power to introduce a set of through-service standards (Nash, 1988). To remove the barriers among modes and services provided by different agencies, cooperation must be ensured through an impartial umbrella authority unifying several functions, responsibilities and jurisdictions of the involved operators at several levels.

- Internal and external cooperation. While actions of the strategy is performed at the local level, collaboration of municipalities with other municipalities, regional, national and EU levels of government is necessary in order to align policies and visions and take advantage of processes
that may already be underway at these higher levels. This interaction will also lead to the spreading of sustainable practices beyond the city limits and determine the potential transformation of the sector at national and European levels.

CONCLUSIONS

The experience in Romania showed that its application is only a start and that has to be accompanied by and based on many other undertakings to support the successful use, such as:

- Common data and knowledge (sustained by an active scientific community)
- Adequate standards (would also need more communication between the experts)
- Institutional strengthening and Political will
- Public awareness and public agreement

The municipalities should pay more attention to use SUMP more than a means to obtain funding. They should focus on „People“ and „quality of life“, a hanging mindsets must be part of the package, the SUMP should use as a change process towards a better city and internal cooperation with all stakeholders is needed.

REFERENCES


