



Warsaw's transportation strategy



The Transportation Strategy of Warsaw is a complete strategic document. On the basis of an in-depth diagnosis of the current status of the transportation system and a SWOT* analysis, it sets overall objectives that form the Transport Policy of the City of Warsaw. Afterwards, particular tasks are described in every field of the transportation system. The completion of these tasks is the condition for a successful implementation of the

Policy. The Transportation Strategy was prepared by highly competent scientists and experts involved in the everyday organization of the Warsaw transportation system. The document was accepted by the City Council of the Capital City of Warsaw in July 2009 by a full acceptance of the Council Members. All these facts let us assume that the realization of the strategy will continue and its results will be sustainable.

* SWOT: Strengths, Weaknesses, Opportunities and Threats

Background

The strategic planning of the transport development has a long tradition in Warsaw. As the first city of Poland, the City Council of Warsaw accepted the first Transport Policy for Warsaw in 1995. The fulfilment of this policy is ongoing and in the following years other strategic spatial planning documents followed, which resulted in a significant influence on the transport development. In the middle of the first decade of the 21st century, it was clear that a new strategic paper dedicated to transport was necessary. On the one hand, the transport policy from 1995 became less topical and on the other hand, newer documents were too general regarding transport. Besides these facts, the need for a new strategy resulted from the increasing congestion related to the Warsaw road traffic as well as the requirements of the European Union for a strategic approach regarding the usage of the structural funds. Consequently, the works on the planned new transportation strategy of Warsaw started in 2005. Among the chapters of the Strategy an actualization of the transport policy was planned. The authors' team was made up of scientists from the Warsaw Technical University and of experts from the Transport Department of the Warsaw City Hall. The Strategy was accepted by the City Council of the Capital City of Warsaw on 9th July 2009 by a full acceptance of the Council members (100% of votes).



The structure of the Strategy

The Strategy is split into 5 chapters:



1. The diagnosis of the current status gives an overview about the current problems and challenges of the Warsaw transportation system.
2. The SWOT analysis shows the strong and weak sides of the transportation system and the external opportunities and threats.
3. After this analysis, the third chapter of the Strategy deals with an actualization of the Transport Policy for Warsaw. The Policy provides a brief description of the general objectives of the City regarding transportation.
4. The main part of the Strategy is a development plan describing in a detailed way the tasks of the City to be done in order to fulfill the objectives of the Policy (point 3.)
5. At the end of the document, indicators are provided to manage and control the implementation of the Strategy. Rules for dissemination and promotion are also described there.

The Transport Policy and the Transport Development Plan are the main parts. The Transport Policy defines 6 general objectives:

- Ensuring of the accessibility of the city in internal and external connections;
- Increasing the comfort of travelling, especially increasing the accessibility for mobility impaired inhabitants;
- Stimulating the economic growth and improving the spatial order;
- Increasing the traffic safety and the personal safety of the traffic participants;
- Improving the status of the natural environment;
- Increasing the prestige and the status of the City of Warsaw.



The Transport Development Plan (Chapter 4 of the document) reflects on the objectives defined in the Policy. The Plan has 4 main parts: detailed tasks regarding public transport development, road network investments, activities in the field of traffic safety and the improvement of the bicycle traffic. In the last part of the present article, the tasks regarding the development of the public transport system will be described in details.

Public Transport Development

1. Setting up of a common metropolitan transport authority: for the time being, the responsibility for the organization of the public transport is split between the particular municipalities of the Warsaw agglomeration. There is one large unit, the City of Warsaw and many small towns and villages in the surroundings of the capital city. Warsaw has a bilateral contract with many of them (currently 29), which is the basis for the organization of the suburban public transport with this municipality. Nevertheless, this system is very fragmented and heavy to manage. That is the reason why Warsaw's strategic goal is to set up a common organization with the participation of all interested municipalities. This organization could replace the system of bilateral agreements.

2. Modernization and development of the tram network: Warsaw's tram network is more than 100 year-old (the electronic trams exist since 1908). Unlike many Western – and Eastern-European cities, the capital of Poland did not terminate its tram network in the 60's and 70's, although there were measures to do so and some parts of the network disappeared. The existing tram network of more than 120 km (more than 90% of the tracks are separated from the car traffic) is a very good basis for an effective and fast transportation system. The main issue is that the tram network as well as the vehicle fleet is old or in bad technical condition. This is why investments are



required to replace them. Another issue is the lack of priority for tram traffic at intersections. Thus, the strategy aims to solve these problems through the modernization of the key tracks and giving priority to the trams. Some of these actions have already taken place. Indeed, during the 2007-2013 period, Warsaw has been modernizing the 4 key tram tracks which cross the city centre. As a consequence, this will turn the profile of the tram network into a modern and highly effective transport mode.



3. Further development of the metro system: the construction of the first metro line in Warsaw was finished in 2008 after 25 years of building including many phases. The strategy states the need of further development of the metro network. This is in line with the preparation works of the 2nd metro line, which already began before 2008. During the 2010-2013 period the central part of the 2nd metro line will be constructed and will be enlarged in the direction of the western and north-eastern suburbs afterwards. As the fastest, safest and most convenient transport mode the metro has a key role in increasing the modal split of public transport, thus even the very high efforts on the construction works may be seen as justified.

4. Improvement of the railway transport: Warsaw has a very good railway network with electrified and recently modernized core lines leaving from the city towards 7 different directions. There is a city tunnel under the city centre, which allows all trains to stop on every important station without having to change heads in stations. Furthermore, regional and national traffic are separated in the city tunnel. Contrary to these very good conditions, railways did not play any huge role in Warsaw's public transport until the beginning of the first decade of the 21st century. The strategy sets the objective of a better usage of the huge capacity of the railway network. This will be reached by an integration of the fare systems between railways and other public transport modes, by a better coordination of timetables and finally, by the fitting of the railway infrastructure to the needs of the local public transport. All of these goals are partly completed: most of the public transport tickets can be used in regional trains, there is a local railway operator founded in 2005 serving only local and suburban traffic and along the modernized tracks new stops are built.



5. Integration of different transport modes: a better integration is needed not only for railways but between other transport modes as well. The main objectives of the Strategy in this field are the following: construction of multi-modal nodes, timetable coordination, integrated passenger information and fare integration.



6. Development of the city and suburban bus transport: more than 50% of the journeys done by public transport are due to buses. The bus mode plays a key role in all the districts without effective railway-based public transport (metro, trains or trams) and in the most suburban towns and villages without railway connections with Warsaw. The biggest needs of this transport mode are connected with the priority in the road traffic since congestion caused by cars results in irregularities of the bus traffic and makes this mode of transport less popular. The priority can be ensured by introducing new bus lanes – at the moment there are approximately only 40 km of bus lanes on the whole bus network counting approx. 1,150 km.

7. Modernization of the tram and bus rolling stock: after the transition period at the beginning of the 1990's, bus and tram fleets were not renewed with a proper speed. That lack of replacement resulted in a too long exploitation of the vehicle fleet and, as a consequence, in an increasing average age of the fleet (some of the trams have been used for over 50 years, some of the buses for over 25 years). A faster change of the old fleet began after 2005. Over 40% of the bus fleet were replaced and 200 new low-floor trams were purchased to replace the 40% oldest trams. The strategic goal is to keep up a regular and sustainable replacement speed of the fleet and to decrease the average age of the fleet to an acceptable level.



8. Rationalization of the route network: Warsaw currently has a route network which consists of many direct lines with a bad frequency. Although in the last years the tendency to create routes with a high frequency on the core directions was clear, the network is still very fragmented. On the one hand, this network architecture makes a good coordination very hard because of the different origins and destinations of the numerous routes serving the core directions. On the other hand, the habits of the public transport passengers, especially elderly people regarding direct connections are still very strong and hard to change. The strategy sets the long-term goal to eliminate direct connections with a low ridership, increase the number of the fleet and as a consequence the frequency on core routes with a couple of complementary lines connecting the latter with the further located lower density areas. This process would lead to a more effective usage of the existing vehicle fleet and then to a more convenient travelling by public transport.

The new plan for urban mobility policies for Ile-de-France: an action plan resulting in a partnership and combined approach

A framework document for the transport policy

In Ile-de-France, transport and town planning fall within the domain of several agents. The Ile-de-France regional urban mobility plan ('Plan de Déplacements Urbains* d'Île-de-France' – PDUIF in French) aims to coordinate the various policies at a regional



level for all modes of transport – public transport, private vehicles, two-wheel motorised vehicles, as well as walking, cycling and parking policies and road use. It concerns the transport of people as well as the transport of goods and deliveries. Finally, it also approaches the aspect of town planning in its association with the requirements of transport.

* In France, urban mobility plans are mandatory documents for towns of more than 100,000 inhabitants, since the law on air quality and the rational use of energy (1996).

The PDUIF therefore consists of an action framework for all transport agents whatever the level of their decision-making, to assist them in making coherent choices regionally and in terms of time, as well as ensuring that these are financially feasible.

The first PDUIF, approved in 2000, was set up by the national government in association with the region and the Ile-de-France Transport Authority (Syndicat des Transports d’Île-de-France – STIF in French). Since the law ‘Libertés et Responsabilité Locales’ (freedom and responsibility at a local level) was introduced in 2005, the responsibility for evaluating the PDUIF, the decision to revise it and the drawing up of the new document, is once again in the remit of the STIF. It then falls to the Ile-de-France region to halt the PDUIF, gather the opinions of the bodies responsible for transport, submit the public enquiry plan, and finally to find out the state view. At the end of this process, the Regional Council will approve the new PDUIF.



The PDUIF has a central role in the hierarchy of planning documents. It must be compatible with the master plan for the Ile-de-France region (‘Schéma Directeur de la Région Île-de-France’ – SDRIF in French), whereby it may decline the transport section in an operational sense. The town planning documents set up at a local level by the district or groupings of districts must be made compatible with the PDUIF within 3 years from the approval of the latter.

A partnership and combined approach

The evaluation of PDUIF 2000, has shown that almost half of activities attributed to the PDUIF have been initiated, mainly those in the field of public transport. But the activities of the PDUIF have a bearing upon numerous topics beyond public transport. In reality, the activities that have been put into practice are those for which the financing and responsibility of their implementation had been clearly defined.

To resolve the difficulties of implementation, identified when evaluating the PDUIF, all partners concerned have been involved since the drafting of the new PDUIF.



A committee of partners has been set up, which brings together all the agents for mobility in Ile-de-France: State, Region, departments, association of town halls of Ile-de-France, passenger transport companies, chambers of commerce, facilities managers, transport-related institutions, environmental protection associations, transport users, persons with reduced mobility, professional goods transport associations and taxis, trade unions and employers’ organisations.

Besides the partnership committee, the STIF has put in place a consultation process to mobilise and bring all parties involved in mobility in Ile-de-France into the debate: the general public, economic agents and local communities. This consultation process took place between September 2009 and April 2010 with a first collection of contributions followed by a debating period:

- 9,000 contributions from the general public, gathered via a questionnaire on the dedicated Internet site;

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- 5 workshops enabling the views of specific sections of the general public to be heard (young residents of the quarters, peri-urban residents, users of two-wheeled motorised vehicles and car drivers), invited to make their contributions within the workshops;
- 300 responses to a questionnaire sent to partners (districts, towns, departments and other main partners of the STIF).

These contributions came to inform the debates:

- 4 seminars with 200 representatives of the economic sphere;
- 1 day of debate with 150 elected representatives;
- 1 working seminar with engineers from public bodies for inter-district cooperation (bringing together French districts).

This approach was worked out closely with the technical working groups, which were able to complete the drafting of the action plan based on the results of the consultation.

Maintaining the action plan

The new PDUIF is an action plan based around nine challenges.

- 1 Acting on the urban forms and urban development
- 2 Making public transport more attractive
- 3 Restoring walking as a major item in the mobility chain
- 4 Giving a new lease of life to cycling
- 5 Acting on the conditions of use of the individual motorized modes of transport
- 6 Making the whole mobility chain accessible
- 7 Rationalizing the organisation of the goods flow and encouraging the modal transfer
- 8 Convincing the key players and stimulating the will to act together
- 9 Arousing citizens awareness

Challenges 2 to 7 are related to the public roads which are the support for all the mobility modes. The objective is then to put in place a true multi-modal sharing of the public roads.

This action plan is accompanied by a system of governance aimed at mobilising all agents. Indeed, the PDUIF, besides being a strategic planning document, is an approach that is to be realised over a period from now to 2020. The new PDUIF will rely on a steering committee that notably combines the Region, the departments, the representatives of the districts and the State. Each year this committee must meet to assess the progress of implementation but also to decide on corrective measures if necessary, or to integrate new activities.

The ambition of the new PDUIF is also to maintain an ongoing consultation with the partners and thus to enable all partners each year, particularly EPCI (inter-municipalities), to meet and discuss the annual status of the implementation and exchange good practices.

Bucharest Traffic Management System (BTMS)

The implementation of a fully integrated UTC* system (Public Transport Management System and traffic surveillance CCTV** system) by the Bucharest Municipality started in 2007. This system provides centralized area – wide traffic UTC with public transport priority at approximately 100 signalized junctions and pedestrian crossings within the inner ring and the central area of the capital city. The

remaining 263 urban intersections regulated by traffic lights shall be integrated subsequently.

* Urban Traffic Control

** Closed Circuit TeleVision (for cameras installed at junctions)



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The following main works categories have been carried out as part of the system implementation:

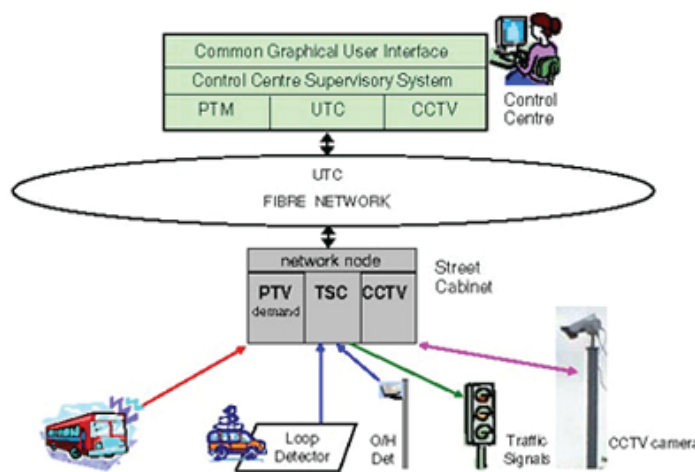
- conducting adaptive traffic survey in 2 intersections;
- providing 100 intersections with state-of-the-art traffic light equipment;
- developing a fibre optic communication system between intersections;
- equipping 300 RATB-owned vehicles with system specific equipment;
- implementing a traffic control unit;
- providing specific traffic control software;
- preparing specific documentations and projects.



BTMS includes a requirement to carry out physical improvements at a number of junctions, as well as the introduction of an adaptive traffic UTC sub-system. The UTC sub-system will provide coordination between signalized junctions to optimize the network in response to traffic demand and also give traffic signal priority to selected late running public transport vehicles. The metropolitan road network under pressure includes the inner ring road and the north-south routes that pass directly through the city centre. It is intended that these routes will form the initial Bucharest UTC controlled area of approximately 100 junctions. BTMS comprises three main sub-system elements: UTC, PTM*** and CCTV.

*** Public Transport Management

Bucharest Traffic Management System UTC / CCTV schematic



The integrated Control Centre Supervision System (CCSS) is made up of system support modules including traffic control strategy selection, performance monitoring, reporting, fault management and communications network management. CCSS also includes a traffic and travel information module to provide passengers with network and service information via Internet.

The PTM sub-system co-operates with the UTC sub-system and traffic signal controllers in order to provide priority to (for example) selected late running public transport vehicles. PTM includes automa

tic vehicle location by GPS****, with this information transmitted from individual vehicles over a digital radio (TETRA*****) voice/data network to the control centre and to a remote RATB control office. The PTM sub-system also offers potential for a future expansion including information displays at bus stops and on board vehicles.



**** Global Positioning System (used on public transport vehicles for PTM)

***** Terrestrial Trunked Radio (voice and data communication for PTM)

BTMS monitors and controls the main arteries of the city and it is expected – based on results from other European cities – that adaptive traffic UTC combined with public transport priority will deliver excellent benefits to passengers.

Several tests to analyze how these systems have made public transport more efficient were carried out in April 2010. This concerned the circulation of vehicles on two bus lines. In comparison with April 2009, the half-trip duration dropped by 15% and the variation from the planned headway did not exceed 50% (in case of no vehicle-failure or lack of personnel). It comes out that the benefits of public transport are clear and numerous (reduction in time for a half-trip with direct impact on the increase of hourly transport capacity, cut in operational and personnel costs as well as enhancement of service quality by offering a fixed headway in connection with transport demand and real-time passenger information).



For these reasons, the extension of this system over the entire vehicle fleet is important and is to be achieved by 2011. Therefore, three distinct stages are planned for introducing BTMS: a) 770 buses, b) 300 trams and c) 266 trolleybuses besides the enhancement of fleet monitoring conditions within the Public Transport Management Dispatch Unit.

6th CAPRICE Workshop in Romania on 'Urban mobility planning and integration of PT services in urban road traffic management, sustainable mobility and demand responsive public transport'



The sixth workshop of the CAPRICE project was hosted by Primăria Municipiului București (Bucharest Municipality) during three days from 8 to 10 September 2010. The aims of the workshop were to exchange different experiences about sustainable urban mobility planning in European capital regions including public transport issues. At the end of the workshop, several good practices were identified in the field of planning and recommendations for a sustainable urban mobility were drawn.

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The **Bucharest Municipality** has no Metropolitan Public Transport Authority. Operators are depending on different authorities (Municipality and Ministry of Transport). The long term planning activity is fulfilled separately by the operators, with results in limited outcome.

A first Urban Transport Master Plan Bucharest was decided at the end of the 1990's. In response to the request of the Government of Romania, the Government of Japan decided to conduct the 'Comprehensive Urban Transport Study of Bucharest City and its Metropolitan Area in Romania'. Accordingly, the Japan International Cooperation Agency (JICA), the official agency responsible for the implementation of the technical cooperation program on behalf of the Government of Japan carried out the study and the scope of work was agreed in February 1998. The full-scale site study in Romania began in July 1998 and the inception report of the study was submitted in September 1998.

The objectives of this Master Plan were as follows:

1. to formulate a Comprehensive Urban Transport Master Plan of Bucharest City and its Metropolitan Area for the period up to 2015;
2. to conduct a further study on priority projects and programs which should be implemented within two or three years after the completion of the study;
3. to carry out technology transfer through the implementation of the study.

The Transport Master Plan elaborated by JICA in 1998 was recently updated. The updated Master Plan estimates the impact of implementing the priority projects and the development strategies for the transport system for each scenario or project package and measures for developing an efficient transport system for two time horizons, 2013 and 2027. For each time horizon, four development scenarios have been considered. Each scenario considers the socio-economic developments for Bucharest, the Metropolitan Area and at the national level, the foreseen developments for the public transport including the metro, as well as the specific strategies and measures to encourage the use of public transport and to reduce the use of the car.

Approach of the Updated Master Plan: the study is carried out at strategic level, and 80 zones are considered for Bucharest administrative area, 32 zones for the influence area – Ilfov County, further each Romanian county is considered as a separate zone, and the EU countries are considered in different external zones by group of countries. This approach makes possible the integration of the urban area in the metropolitan one, making also the connection between Bucharest and Romanian counties, as well as with other EU countries.



As far as urban road traffic management is concerned, it is important to note that the Bucharest Traffic Control Centre is to be extended to the entire town area with the priority for public transport vehicles. Separate and special lanes for buses, trolleybuses and tramways are now in operation for few lines whereas multimodal stations are in operation in some areas.

Public Transport Management (PTM) has been implemented on 230 buses, 38 trolleys and 34 trams. PTM provides automatic control and regulation and replies to the transit company needs through the automatic service identification, vehicle location, fleet status monitoring, service regularity control,



macro-irregularity management, network pictorial maintenance, at stops and on-board user information, user information services, transport service planning as well as fleet management.

A study for introducing one way streets and special lanes for public transport vehicles has been considered. The Bucharest Public Transport network lacks dedicated lanes for public transport and partially lacks adaptive traffic lights for priority in intersections. Thus, finding relevant streets suitable for one way based on the traffic mobility turns out to be essential. All Bucharest city centre will then be organized with one way streets, pedestrian streets and special lanes for public transport and bicycles.

As far as demand responsive public transport is concerned, recent extensions of the surface public transport are under way or planned, mainly for bus and tramway networks (e.g.: new commercial areas, inner ring, creation of a second ring). In this context, a project has been carried out to develop the public transport network within the metropolitan area of Bucharest City and define the further development stages until 2025.

ZTM Warsaw outlined public transport planning in macro scale through several strategic documents.

The Strategy of the city development to 2020 describes Warsaw's main priorities in the field of upgrading level of inhabitant's life, increasing safety level, developing science and economy and creating a new spatial order. This Act creates 5 main goals for the nearest future focusing on the importance of public transport (PT).

The Study on grounds and directions of the spatial management considers the territory of Warsaw city (inside its boundaries) and deals with spatial order and development issues. It describes the main functions of each area in the city, the target networks (roads system, PT system and technical infrastructure), the density of a built-up area (3 main zones), the minimum accessibility to PT's stops (300m, 400m and 500m) as well as ecological aspects. Albeit every municipality has to prepare that kind of study as a basis for detailed local and land use plans, it is not binding legally.



Local Development Plans (Land use plans) are partial plans (small areas of city) and legally binding documents of local law. They stand for the most detailed and descriptive documents prepared in accordance with the Study on grounds and directions of the spatial management. Each plan describes streets dedicated to PT, places of crossroads, places of PT junctions, density of a build-up, target destination of territories, minimum and maximum amount of parking spaces and many other points that are not concerned with PT.

Afterwards, the 'Sustainable Transport Development Strategy For the years to 2015 and further' was explained according to the background. The reasons to develop the strategy were the need of a planned and sustainable development of the transport system, the negative effects of the growth of the individual motorization and the use of EU structural funds. The goals of the strategy are to provide actual information of the current situation (diagnosis), to set general and specific objectives (Transport policy) and to define particular tasks to be fulfilled (Transport development plan).



The strategy defines particular tasks such as the setting up of a common metropolitan transport authority, the modernisation and the development of the tram network (4 large projects are to be modernized by 2015), the further development of the metro system (construction of the 2nd metro line east-west) and the improvement of the railway transport through the integration of the railways with other transport modes and the setting up of a metropolitan railway system. Other particular tasks cover the integration of different transport modes, the development of the city and suburban bus transport, the modernisation of the tram and bus rolling stock, the change of the old part of the fleet (a few hundreds of buses and trams) as well as the rationalization of the route network for a higher frequency through 'core lines' and 'feeder lines' in order to meet the demand.

The implementation and the coordination of the overall strategy was a long way to go for the Warsaw City Hall's Road and Transport Department in charge of it. A first draft of the Strategy (made by a group of experts from the Warsaw Technology University was set up between 2005 and 2007, leading then to Public consultations in 2008 and to the acceptance by the City Council one year later.

As far as public transport and traffic management are concerned, bus lanes are the most popular way to prioritize public transport in Warsaw (19 localizations, over 36,4km length, typical bus lanes along right sides of the streets, a relatively high social acceptance). Despite being very typical in Warsaw's crossroad areas, the lack of bus lanes continuity turns out to be a significant problem, resulting from a decrease of the cost when a new lane is created (no changes in traffic lights).



As for sustainable mobility and alternative transport modes in Warsaw, cycling seems to be one of the most relevant assets for the future. It becomes more and more popular, resulting from fashion and popularity among young people ('cycling is cool'), media campaign, increased length of cycling routes. The City of Warsaw strives to support cycling through the setting up of standards for building and organization of new cycling routes and pathways and their building; the setting up of bike parking areas within the city centre and next to public institutions; the setting up of a B+R (Bike & Ride) system parallel to P+R (Park & Ride).

A public rent-a-bike system has been planned in Warsaw based on proven schemes like Velib' in Paris. The main idea is a public-private partnership where the obligations of the private operator will be clearly defined within the framework of a tendering process (underway). Many possible bidders have been identified: JCDecaux, ClearChannel, AMS, etc. The main issue is the localization of the rental stations (neither too far nor too close to each other). The rental will be made possible with the help of the Warsaw City Travel card.

The Green Stream Cluster might be the second best solution in terms of alternative transport mode in Warsaw. This cluster is a scientific group where the City of Warsaw takes a supporting role. The goal is to promote sustainable energy sources and reduce the dependence from gasoline and to this end electric buses in the Warsaw public transport network are to be tested. The achievements of the Cluster include the production of 20 electric vehicles, the infrastructure for charging accumulators, the



setting up of a monitoring and control network, the setting up of standards for a workshop of electronic cars as well as the construction of a prototype of an electronic car and motorbike.



STIF took over to present Urban and Transport Planning documents in Ile-de-France where different actors are responsible for planning at different levels: State, Region, Département (French Counties) and Cities. Plans are linked to legal compatibility requirements and two major ones serve as reference frame: the Urban Master Plan and the Urban Mobility Plan.

From a historical point of view, urban planning in Ile-de-France was marked by several milestones. In France, regional planning has been a legal requirement since 1932. Urban master plans in Ile-de-France date back to 1965. The Urban Master Plan in Ile-de-France has many features. The Regional Council is now in charge of the elaboration of the Plan in association with the State. A global strategy has been set for Ile-de-France development until 2030 dealing with economic development, housing, transport, environment and the location of major infrastructures and public facilities. Its content is twofold with a prescriptive document that sets general rules of land use on the one hand (this is opposable to local land use plans) and a guide for regional development on the other hand.

The challenges are also numerous...:

- promoting territorial equity and enhancing social cohesion;
- anticipating and answering major evolutions and crisis, such as climate change or increase of the price of fossil energies;
- promoting dynamism and maintain the worldwide influence of Ile-de-France.

... as well as the objectives:

- building 60 000 housing units per year to offer accommodation for all inhabitants in the region;
- providing major amenities and services of high quality;
- preserving, valorising natural resources and facilitating access to a high quality environment;
- stimulating economic activity and creating employment to promote international influence;
- promoting a new transport policy in accordance with the land use project.

Urban mobility plans are a legal requirement. In 1996 the French law on 'Air quality and rational use of energy' was promulgated and mandatory for all urban areas of more than 100,000 inhabitants as they must elaborate an urban mobility plan.

The law makes an exception for the French Region 'Ile-de-France' as the plan applies to the whole region. The first plan was designed by the State together with the Regional Council, STIF, the City of Paris in association with other local authorities, transport operators, interest groups. It was adopted at the end of 2000 after a public consultation. Since the French 'Decentralization' law (2004), STIF has been responsible for the evaluation and the revision of the Plan on behalf of the Regional Council. The plan is eventually approved by the Regional Council and requires the agreement of the national State.

The 2000 Urban Mobility Plan ('Plan de Déplacements Urbains Ile-de-France' – PDUIF in French) launched a new transport policy and fixed minimal targets to be reached within five years:



- 3% reduction in private car traffic;
- 2% increase in the use of public transport;
- 10% increase in the proportion of walk trips for trips shorter than 1 km and for home to school trips; 100 % increase of the number of bicycle trips;
- 3% increase in the proportion of freight carried by rail or inland waterways.



However, the main weakness of the PDUIF was its governance. After 6 years of implementation, only a few of the planned actions had been achieved. Some projects have been stopped because of the disruption in state financing. The Plan was elaborated at the regional level but many of its provisions are to be implemented at the local level. Thus, local territorial entities encountered difficulties to appropriate it. Moreover, consultative process takes much more time than expected. As a result, in 2007, STIF decided to revise the plan.



The roadmap for the new PDUIF is split in two parts: short-term and medium-term operational actions. A longer period than the current Urban Mobility Plan allows implementing actions effectively (deadline 2020). Its scope covers all the transit policies (infrastructures, operation and quality of service) in observance of the authorities of the various players. Strategic objectives are broken down into region-specific operational actions. Finally, actions should be evaluated in relation to the planned objectives and through ongoing monitoring.

The objectives of the new PDUIF aim to manage the changing context. New urban challenges in Ile-de-France arose: 60,000 housing units built every year and fight against urban sprawl by encouraging urban density in city centres or population centres in existing urban hubs. Changes in the energy field are also to be taken into account as the supply of fossil fuel is decreasing, energy prices are rising and commitments to reduce greenhouse gas emissions expected. Social expectations have also changed. The awareness of sustainable development has increased as well as the use of the car, which is becoming apparent in Ile-de-France and in the rest of France. Society and lifestyles are also evolving with the ageing of the population and the change in patterns and times of transport.

The revision of the PDUIF is made possible through a consultative process aiming at making the key players involved: those who will approve the plan, those who will have their say about the plan, those who will implement it and people at large.

The process for planning new public transport services is an application of the urban master plan and urban mobility plan. This means a reinforced, more efficient rail network, a modern metro system at the heart of the city, structured transport offers such as tramways and TZen (innovative concept of bus with a high-level of service) as well as an attractive bus network. New transport services are implemented after their appropriateness and feasibility has been assessed through preliminary studies. 'Sector studies' are also conducted by the STIF each year to identify the most relevant projects in the different areas where development is expected or where public transport needs to be improved.



As far as sustainable mobility is concerned, recent mobility surveys helped to observe many changes in citizens' behaviour. From the intermodality point of view, specific master plans were implemented to guarantee satisfactory level of service and efficiency (e.g.: main bus stations, Park & Ride at train stations).



Car pooling may become a major mode of transport for areas where it is not possible to implement bus services. Car sharing services in Ile-de-France are concentrated in the central urban area (Paris and some neighbouring municipalities). Another project in Paris has seen the light of day: Autolib'. The goal is to create 1,000 stations (700 inside Paris, 300 in neighbouring cities) equipped with 3,000 electrical cars thus offering a 24 hours a day and 7 days a week self-service.

Public bicycle rental programmes ('Rent-a-bike' systems) have also been developed. They contribute to a new image of the use of bicycle, and to promote this mode of transport. About 25,000 bicycles are now available for rent 24 hours a day and 7 days a week in Ile-de-France. For example, Velib' is a public bicycle rental programme in Paris launched in 2007. In 2009, it counted around 24,000 bicycles with 1,600 automated rental stations each of them equipped with fifteen or more bikes/spaces.



As far as the demand responsive public transport is concerned, the STIF can delegate competences and grant subsidies to authorities wishing to set up on-demand transport services in their area according to the following principles: services are offered per seat (not on a distance basis for instance), users reserve their journey in advance, pick-up and drop-off must be made at identified points (not necessarily door-to-door). The cost of on-demand transport is similar to the cost per kilometre of the regular lines. But, it is generally costlier per journey due to the limited number of passengers. Financing of on-demand services is mainly – not to say exclusively – borne by the local authorities.

Nevertheless, there is a notable yet specific exception with the 'Filéo' service which is a highly specific on-demand transport service which complements the regular transport services in the Roissy Charles-de-Gaulle airport area. This service is activated by making a reservation via the 24-hour reservation centre. The aim is to offer a mode of transport to the population of the neighbouring areas, of whom a considerable number do not have a car, which is at once flexible and reliable, allowing them to access to work at flexible times. Recent innovations have been set up: possibility of using the internet, text message confirmation of the depart time, geolocalisation of vehicles...

VBB started their presentation outlining the current situation in the whole Berlin and Brandenburg area and always highlighted the differences between each Land.

Planning strategies in Berlin aim at developing public transport as a full alternative to the private car and supporting the integration between public transport, bicycle, walking and car sharing. In Brandenburg, such strategies were designed to sustain pt as part of the services of general interest*, to enable quick access between the cities of Brandenburg and Berlin for commuters (railways), to ensure

the transport of school children within the districts and to guarantee a minimum standard of mobility for everyone.

* Services of general interest are defined as 'market and non-market services which the public authorities class as being of general interest and subject to specific public service obligations'.



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The responsibilities for planning are shared differently between both Länder. Railway matters are politically and officially assumed by the Transport department of Berlin and the Transport department of the state of Brandenburg. All planning tasks are carried out by VBB in the name of Berlin and Brandenburg. The responsibility for Public transport (Bus, Metro and Tram) falls to the Transport department of Berlin and to the districts / large cities in Brandenburg. VBB gives advice and initiates new public transport services and coordinates services between two districts / large cities and between Berlin and Brandenburg.

Planning documents in Berlin are of two different kinds. The first document is the Public transport plan ('Nahverkehrsplan'). It is valid for five years (currently 2010-14 is being set up) and defines the service level of public transport. It is not legally binding but the authority sets up its rules for the public transport development. The second document is the City development plan - transport ('Stadtentwicklungsplan Verkehr') which is a long term planning document for all modes of transport on the horizon of 2030 (20 years). Both documents are set up with broad stakeholder and expert participation processes (around one year). After participation and finalisation the documents are approved by the City's council. VBB is involved in the process but the main work is done by the authority (with the help of consultancies).

Planning documents in Brandenburg include the public transport plan of the Land Brandenburg and Public transport plans of the districts (and larger cities). The former document is set up for five years, concerns regional railways mainly and is mostly provided by VBB. Indeed, due to most railway lines running through Berlin co-ordination with Berlin is essential. The latter document is no more an obligation. Nevertheless, most districts kept that instrument which defines the local bus and tram services in Brandenburg and is helpful if different bus operators apply for concessions. VBB is involved in the processes.



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Planning issues are currently underway in Berlin and Brandenburg. One common project is the connection of the new Berlin-Brandenburg-Airport has (from June 2012) and another is the renewal of the railway services for the next tendering period (more or less 3+10 years) as railway contracts are running out by 2012-2015.

In Berlin, several issues are being dealt with such as increasing tangential bus-connections in Berlin, increasing commercial speed of buses and trams (trend is decreasing), increasing the metro's frequency on Sundays (from 10 to 5 minutes) as well as reducing the bus services at off-peak periods (e.g. starting later).

In Brandenburg, school transport is a basis for local transport. Due to demographic change the number of pupils is decreasing heavily, which leads to re-defining the role of public transport and thin

king about new customer groups. Allocation of public transport services between Berlin's suburban areas and the rural parts of Brandenburg is also a relevant matter as well as demand responsive services.



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Notwithstanding, priority has been given to public transport. In the last years several priority lanes for buses and trams were built and several traffic lights were equipped with priority circuits. Nevertheless the average speed of buses trams decreased in the last years and even on roads with equipped traffic lights the average speed did not lead to faster services. Prioritisation did not follow a systematic approach and the success of the traffic lights is not monitored efficiently (some traffic lights in reality even slow down public transport and give priority to the cars...). A more systematic approach shall be developed for the next years.

As far as the integration of public transport with other modes of transport is concerned, Berlin is currently involved in two research projects, one on public city bicycles and their integration in public transport and one on electric cars and bikes as addition to public transport. The idea is to fill missing links in transport chains. Customers shall use bike or electric car to go to the next station and from there use public transport. The car / bike would be charged as part of the public transport chain. In reality there is the risk of setting up a rival system to public transport at the expense of feeder buses to the railway lines.

Demand-responsive services are mainly concentrated in Brandenburg where they were introduced in the last years. Those services are understood as services of general interest to guarantee a minimum of mobility in rural and suburban areas (and on some night services in Berlin). Demand-responsive services are used in Brandenburg to substitute normal bus services with extremely low passenger figures.



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Demand-responsive services may appear as alternative services whereof one specific case is the Rufbus (Call-a-bus). It is a fully flexible service within one area (like taxi). But demand can be bundled (unlike taxi). The Rufbus has dispatching rules: service area and service times are limited; the service has to be booked in time by phone (e.g. 60 minutes before travelling). The service is only offered between bus stops and not from house to house. However, there are some limitations for the passenger. S/He has to book the journey by phone in time. In order to bundle the request the passenger may not be carried on the most direct route (other passengers can be picked up during the journey). S/He can be directed to existing bus services on parts of the journey. In some areas s/he has to pay a small supplement to the normal ticket price.

Alternative services are also illustrated through the example of the Bürgerbus = Citizens' bus which is a regular bus service (timetable, running on a line, normal bus concession). Citizens drive the bus on a voluntary basis (unpaid for their fellow citizens). The service has to be initiated by the citizens who recruit the voluntary drivers. The Citizens' bus offers additional services, is more flexible and reflects the demands of the passengers, makes operating costs lower. It strengthens voluntary commitment and social networks close to the citizen. Finally, in order to avoid difficulties with the unions, the model is only used for additional services and only on a small scale.

MESP Vilnius brought up the rear of the workshop setting out the main goals and objectives of public transport planning in Lithuania's capital city. The most important challenges to take up are as follows:

- meeting passenger needs and the current flows,
- rational use of municipal funds for public transport,
- merging the most attractive centres into shortest way and reduce travel time,
- reducing the environmental impact of vehicles,
- responding to market changes,
- strict compliance with passenger schedules,
- offering accurate information to passengers,
- optimal use of public transport vehicle capacity,
- rational development of public transport system, ensuring its accessibility to all urban residents,
- ensuring public transport priority,
- implementing a unified public transport ticketing system,
- encouraging public transport use in the population.



The modification of Vilnius city street network, the creation of big shopping centres in various parts of the city, the rapid expansion and creation of residential areas, the industry growth and redistribution are among the main causes of the change in passenger flows.

The documentation related to public transport planning covers the Vilnius city as a whole except some routes outside the city's boundary. Documents includes the Vilnius territory Master Plan until 2015 (key development document of the city communication system), the Strategic Plan 2001-2011, Lithuanian standards with reference to European standards as well as Regulations on transport system planning and transport of passengers.

Planning process is made up of 6 steps: 1) questioning, complaints, notes, passenger flow research 2) surveys 3) discussions of results and conclusions 4) discussions in workshops with the authority 5) working process 6) start.



Surveys are (regularly) carried out to establish a distribution of passengers between the different modes of transport serving the city. Every year, questioning is made at public transport stops and through the internet web page www.vilniustransport.lt. The questionnaire is made up of questions about trip, changes, tickets, trip time and comfort. When all the data are analysed, MESP has to capsulate conclusions and suggestions aiming at improving the

quality of public transport, changing the network and schedules. Thus, taking the passenger's opinion and the results of the questionnaires into account enables to make public transport better for all customers.

Research work about passengers' flows is essential to find out the real number of passengers carried by public transport and study any change in time. This ensures an effective and quality public transport system. Findings of such a work provide summaries and proposals for improving the route network while identifying the demand for transport services and planning the incomes. It also makes it possible to compare passenger traffic trends and plan urban transport.

New Public transport and innovative services are usually initiated by MESP. Passengers can send their suggestions and comments to contribute to the innovation thought. Foreign partners often serve as Good Practice examples for the implementation of new successful services. However, major influence in public transport is exerted by political power. But before the introduction of any innovation, passengers often are questioned to verify that they support this idea.



A recent innovation example in Vilnius can be illustrated with the front door entrance. The comprehensive experience of other European cities served as reference as well as the results of passenger boarding through the front door to provide tangible benefits to both travellers and the public transport companies. As a result, there have been less drunk and aggressive passengers and the number of passengers without a ticket has decreased. This is the implementation of a change, that's to say a big step towards a high-quality, efficient, modern and comfortable public transport system.

The renewal of trolleybuses and buses depots is planned and the Vilnius municipality has been considering the purchase of new vehicles. Thus, several vehicles from Byelorussia and Ukraine are being tested by the trolleybus operator. New eco-friendly buses are to be bought in the short-run.

The Vilnius municipality has also been thinking about a 'Rent a bike' project including 20-25 rental points and the purchase of approximately 200 bicycles for a total cost of EUR 580,000. Tendering documents are being prepared.

As far as Regulations supporting clean vehicles and reduction of emission are concerned, the City of Vilnius worked out a Strategic Plan valid from 2002 until 2011. The first task is to minimize the negative impact of transport traffic on the environment by promoting the usage of ecological fuel and giving the priority to the electric means of transport. The second task is to ensure the development of sustainable mobility by improving public transport and developing non-motorized transport as well as walking.

The Air pollution reduction action programme 2008-2011 is another useful document at the disposal of the City of Vilnius the goals of which are manifold:

- reducing travel by car, improving vehicles technical conditions and increasing the share of eco fuel,
- implementing a coordinated traffic system,
- developing public transport lanes, increasing the share of clean vehicles and trolleybus network,
- preparing the implementation of a Park & Ride system,
- developing a bicycle network,
- implementing a congestion charging tax,
- buying new or transform used vehicles, adapting buses to biofuel or natural gas.



Demand responsive public transport was the last aspect to be dealt with by MESP Vilnius. This concerns seasonal routes (e.g.: cemetery, gardens), requested routes (e.g.: New Year, City events like song and student festival, Easter, Christmas, All Saints' Day), routes during peak hours only, night routes as well as the development of a specific network adapted for people with reduced mobility.

European events & meetings



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SPECIAL ANNOUNCEMENT !

CAPRICE Project final conference was held in Paris on Thursday 17th March 2011. More information on CAPRICE website.

A large series of events related to public transport in urban areas is regularly organised or promoted by different institutions, networks and associations at European and international level such as EMTA, POLIS, CIVITAS, UITP-European Union and EUROCITIES.

EMTA

- From 1st March: CRTM Madrid 25th Anniversary, Madrid (Spain)
- 31 March – 1 April: Spring General meeting, Madrid (Spain)

For more information: www.emta.com

POLIS

- 07 April: Niches+ Final Conference, London (United Kingdom)
- 07-08 April: Mobil.TUM 2011 Conference, Munich (Germany)
- 08 April: AENEAS Final Conference on Green Mobility for Active Ageing, Brussels (Belgium)
- 08-11 May: ICT 2011, 18th International Conference on Telecommunications, Ayia Napa (Cyprus)
- 12-13 May: CityMobil final conference, La Rochelle (France)
- 14-22 May: Automotive Week 2011 in the Eindhoven-Helmond Region (Netherlands)
- 18-20 May: REAL CORPS 2011 Conference, Essen (Germany)
- 18-22 May: Challenge Bibendum, Berlin (Germany)
- 25-27 May: International Transport Forum, Leipzig (Germany)
- 26-27 May: Integrated Planning seminar CIVITAS VANGUARD and CATALIST, Bucharest (Romania)
- 05-07 June: Transports Public 2012, European mobility exhibition, Paris (France)
- 06-09 June: ITS European Congress, Lyon (France)
- 06-11 June: ECEEE Summer Study, Belambra Presqu'île de Giens (France)
- 16-17 June: CIVITAS VANGUARD training on clean vehicles procurement, San Sebastian (Spain)
- 24 June: Air Quality Conference - CITEAIR II final event, Rome (Italy)
- 29 June – 1 July: IEEE Forum on Integrated and Sustainable Transportation System, Vienna (Austria)
- 14-16 September: EPA (European Parking Association) Congress, Turin (Italy)
- 10-12 October: European Transport Conference, Glasgow (United Kingdom)
- 8-10 November: Intelligent Cities Expo, Hamburg (Germany)

For more information: www.polis-online.org



European Union
European Regional Development Fund



CIVITAS

- 31 March: Technical event on 'Traveller information', START project, Paris (France)
- 12-13 April: CIVITAS CATALIST workshop 'Engineering of the bicycle traffic within the scope of designing, organization of traffic and spatial planning', Szczecin (Poland)
- 10 May: Technical workshop about 'Biofuels for collective transport', Lille (France)
- 17-18 May: CIVITAS Training on 'Organising an individualised social marketing campaign for sustainable transport solutions in cities', Toulouse (France)
- 18 May: MOBILITIAMOCI: Innovazioni per la mobilità, Treviso (Italy)
- 23-26 May: Youth on the Move student's congress, Brno (The Czech Republic)
- 26-27 May: High Level Training Workshop on Integrated Planning, Bucharest (Romania)
- 15 June: Second Annual Sustainable Mobility Convention, London (United Kingdom)
- 15-16 June: Clean Fuels, Clean Vehicles, Clean City, Donostia - San Sebastián (Spain)
- 28-29 June: Cycling Study Tour, Ghent (Belgium)
- 17-19 October: CIVITAS Forum Conference 2011, Funchal (Portugal)

For more information: www.civitas.eu

CODATU

For more information: www.codatu.org

UITP – European Union

- 10-14 April: 59th UITP World Congress and Exhibition 'Boosting public transport: Action!', Dubai (United Arab Emirates)
- 6-7 October: Conference on 'Urban Governance: Getting People on Board! Innovative governance and demand management to achieve sustainable mobility in your city', Gothenburg (Sweden)
- 24-26 October: 10th UITP Training Programme for Public Transport Managers, 1st Module: Organisation and Financing, Munich (Germany)
- 7-8 November: Conference on 'Making Public Transport part of a modern urban lifestyle? Yes, we can!', Venice (Italy)
- 21-23 November: Training programme on 'Public Transport Fundamentals', Brussels (Belgium)
- 7-9 December: Training programme on 'Public Transport Security', Brussels (Belgium)

For more information: www.uitp.org

EUROCITIES

- 31 March – 1 April: Mobility Forum Meeting, Budapest (Hungary)
- 11-15 April: EU Sustainable Energy Week 2011 in Brussels and other locations in Europe
- 18-20 May: ECOMM 2011, 15th Edition of the European Conference on Mobility Management, Toulouse (France)
- 06-07 June: Mobility Forum Meeting, Oslo (Norway)
- 27-28 June: Barrier-free Cities for All Working Group Meeting, Vienna (Austria)

For more information: www.eurocities.eu

