

Integrated travel planner at ZTM Warsaw: a result of the knowledge and good practice transfer between CAPRICE project partners



Transfer of knowledge and good practices are key ideas of the CAPRICE project and the whole INTERREG IVC program. As one of the planned activities in this field, the travel planner used by VBB Verkehrsverbund Berlin-Brandenburg was planned in the project application to be introduced by ZTM Warsaw on its website. This travel planner brings numerous benefits for the passengers of VBB for many years. Within the framework of the CAPRICE project, it is now to be tested as a pilot implementation for a period of one year by ZTM in Warsaw.

The main idea of the pilot implementation is to set up a travel planner that would provide fast and actual information for the passengers about the possible connections, with additional features like printable timetable for commuters and from chosen stops. The travel planner integrates the surface local transport services with the metro and with the railways, that are continuously integrated into the Warsaw public transport system since 2005. At the moment, there is a local railway system including 2 routes fully integrated with the ZTM fare system and a ticketing cooperation with the regional railway companies that enables to travel with every mid-term and long-term travelcard by regional trains. This development brings Warsaw nearer to Berlin, Paris and other European metropolitan regions, whose public transport is based on the strong role of the existing metropolitan railway systems. The next step is the integration of the passenger information and that is the point where ZTM makes use of the project partners' experience in this issue.

The travel planner is fully integrated with the ZTM website. The unified design shall help the passengers to identify the program. Besides Polish, it is accessible in 3 other languages: English, German and Russian.

The implementation works started in 2008/2009 with meetings between VBB, ZTM and the travel planner provider company (HaCon). In summer 2009, a demo was set up and tested by ZTM for a whole year. Identified problems were solved during the testing phase.



The most recurring complications were connected with the provision of the railway timetable data, and finally only local trains were included. The regional railway data are still prepared and planned to be introduced during the pilot period. On 29th of June, 2010, the travel planner was published for the passengers and other visitors of the ZTM website.

Now, a pilot period is running until the end of June, 2011, where ZTM will evaluate the work of the travel planner. A survey is planned among the users. Decisions on further usage and development of the pilot implementation will be undertaken in the final phase of the pilot period.

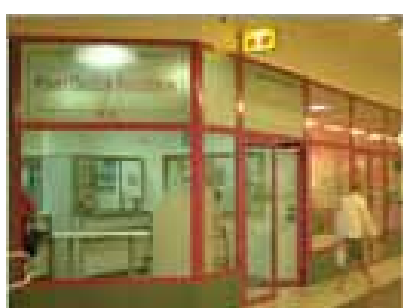
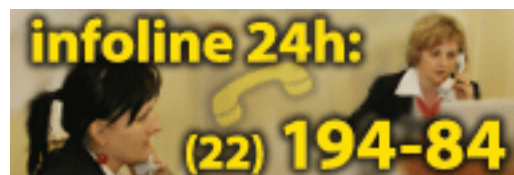
4th CAPRICE workshop in Germany on 'Integrated Passenger Information'



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Partners met in Berlin Rathaus from 17th to 19th March 2010 to exchange their experience and views about 'Integrated passenger information'. The aims of this 4th workshop were to discuss the latest developments of integrated passenger information in public transport in Europe, to identify good practices in the field of passenger information and to draw recommendations for integrated and innovative passenger information.

ZTM Warsaw was the first partner to share its experience about passenger information as well as the developments carried out by the transport authority. This was composed of three main topics such as a voice portal, services centres and mobile information. ZTM Warsaw has a call centre whose aim is to give information to passengers about timetables as the latter may change several times in the same week. The voice portal was implemented within the call centre as it was regarded to be a real opportunity to provide a better self-service to customers. The whole system is integrated with technology of recognizing and synthesizing speech, which assures a self-service through simple dialog between human and computer. The voice portal is available 24 hours a day, 7 days a week and allows many interlocutors to be served at the same time. Implementing a voice portal at ZTM Warsaw has resulted in an automation of calls (up to 30% of the total), savings and reductions of the call centre operational cost, and immediate access to information as it may be delivered within 90 seconds.

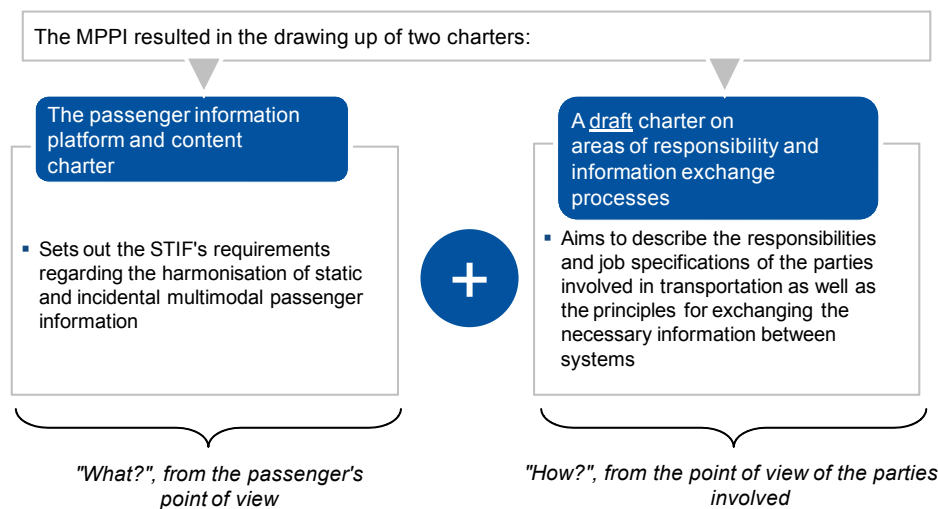


Service centres are chiefly an information and sale network about rules and regulations in public transport, tariffs, discounts and special offers (e.g.: 'Senior Personal Pass', 'Common Ticket'), time schedules, Warsaw City Travelcard. As very popular and helpful places, this is where passengers may complain, ask for requests and/or return tickets. There are currently 8 service centres throughout Warsaw's metropolitan area and this is still expanding.

Mobile information is assured by workers informing people and giving any necessary folders. They

wear a characteristic clothing (reflex waistcoat) in order to be recognised and identified. One action may require until 90 employees in cooperation with other services (especially Movement Inspection). For example, Poland will be the host of the EURO 2012 football event for the first time. This is really a big challenge for ZTM Warsaw and will probably result in the recruitment of about 200 employees working 24 hours a day and 7 days a week.

The STIF took over to present what had been undertaken in Ile-de-France so far. The STIF draws up passenger information policies for the region as a whole (e.g.: definition of the nature of passenger information). These policies are set out in operating agreements and in two general specifications charters: 'The platform and content charter' and 'The areas of responsibility charter' (draft project). Thus, the 80 private regional transport operators make sure that the policies are implemented across the networks thanks to the STIF funding. However, the way the information is displayed varies depending on the operators, both in terms of the information featured on interactive platforms and in terms of static information. In 2007, the STIF drew up its master plan for passenger information (MPPI) and following that strengthened its role as a consultant. Thanks to the MPPI, the STIF was able to improve its management of investments in passenger information.



The platform and content charter shows all the options and the cohesiveness of the STIF network by promoting the understanding of the full range of options and showing the possibilities offered by the network. It also seeks to align the way information is displayed across the entire network. Above all, the platform and content charter takes the passenger's point of view into account:

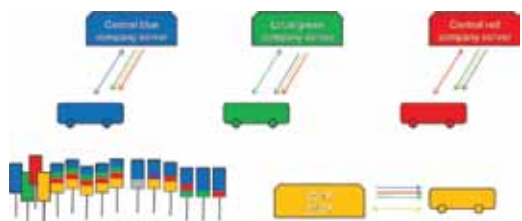
- the human dimension (e.g.: passengers' physical, mental and cognitive limitations): it is not appropriate to tell passengers everything all the time;
- other sources of information (e.g.: travel preparations, remote media, etc.): it is not appropriate to tell passengers everything on site;
- different requirements arise depending on situations: reassurance and adjustments to travel itineraries;
- the content and display must be kept simple in order to make them easily readable when on the move, especially for platforms located in high-traffic areas;
- the information is made as readable as possible given the space constraints. However, different points have been identified: the stop, the vehicle, the station (railway, metro, tram, bus), the interchange hub.

The STIF has started to work on other topics such as Multimodal Information System, Real Time Infor

mation and Multimodal Mapping. The MIS, or regional travel planner, was inherited from the AMIVIF (regional association of elected representatives) with specific challenges: a directly operational project with a direct user service dimension, a service that is monitored and expected by the transport operators, a sharp increase in requests for access to the data and an engine for driving benchmarks.



As far as Real Time Information is concerned, the main objective to be reached is to turn towards a shared system of information among the various operators rather than having a specific (central or local) system for each one of them. However, the challenge is to manage the high number of bilateral exchanges required as well as the responsibility for the display on the ground.



Last but not least, the Multimodal Mapping is one of the main requirements of the MPPI in terms of theoretical information, which does not currently exist. The systematisation of maps showing the full range of public transport options, shown in all scales is the objective as current maps are essentially single-operator. In order to accomplish this, the STIF has been developing a new network plan for the Ile-de-France region and has to:



- finalise the design and the distribution of map showing the transport options for the region, based on the model attached;
- design the first multi-operator maps on an experimental basis according to the different scales;
- draw up guideline recommendations for displaying the information on maps in the aim of informing passengers (readability, choice of scale and scope, networks of utmost importance first, etc.) to complete this specific aspect of the platform and content charter.



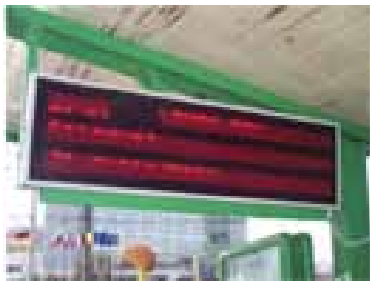
MESP took the opportunity to speak about the different kinds of passenger information systems existing in Vilnius such as public transport stops, internet sites, mobile phones, passenger information centres, public transport vehicles. 14 real time information devices have been installed in the most crowded stops of the metropolitan area.

The use of internet is useful to provide public transport passenger about tickets, prices, discounts, time schedules besides other links. Information about the e-ticket is also available and allows any passenger to deepen the knowledge and the functioning of the project, know how to purchase and refill it as well as knowing what to do in emergency cases (e.g.: loss, theft). Internet sites are also a good means to provide information about parking system and centralised traffic management system.



A route planner is also available for passengers who would like to go from one point to another

through the city of Vilnius. This tool enables to display time schedules of buses and trolleybuses. The route is precisely described (streets and stops) and shown using Google maps. If need be, the passenger may contact the clients information centre through the telephone number displayed online. The Clients information centres, together with the Ticket kiosks, are places where passengers may buy their tickets and get all the information they might need about tickets, public transport networks and MESP activities.

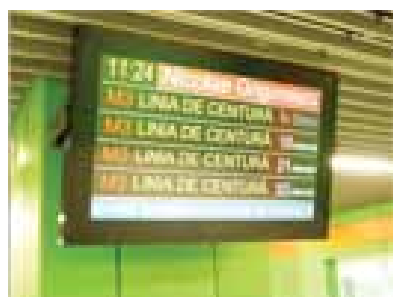


Passenger information in Bucharest is even specific as both main operators are in charge of it in reference to their own transport modes. Other operators (urban maxi-taxis, regional road passenger transport system, railway passenger system) have their own passenger information system, with poor intermodal connection with RATB and METROREX systems. This is all the more difficult to harmonise as the Municipality of Bucharest has limited authority over RATB in this field and the Ministry of Transport has no authority over METROREX in terms of metro and railway passenger information. Consequently, the creation of a transport authority would allow to provide an intermodal passenger information system.

Passenger information at stops is standard and static. The Line number and the station name are displayed on different types of supports. Detailed information is available on-surface network map, line route and traffic timetable in the modernized stations. The dynamic passenger information system is only provided on Line no. 41 and no. 32 tram line (26 stations). Passenger information in vehicles appears on 500 new busses equipped with dynamic information system on 19" TFT displays. This includes the next stop name, the route map, the estimated time to the next stop arrival, the estimated arrival time towards the last station, the connections to on-surface routes at the next stop, the map where the route is outlined with the streets name. 21% of the tram fleet is also provided with passenger information including electronic destination signs outside the vehicle showing line number and destination. The on-board display sign with LED shows the next stop and connections to on-surface routes. Other type of surface transport information may be found on the RATB website: modification of routes, on-surface transport system map, route information including time schedules, on-surface trip planner, tickets and passes.



As far as the Bucharest metro is concerned, static information is available on line 1 and 2 whereas dynamic information is displayed on line 3 and 4. Bombardier trains (44) are equipped with audio and video display information system with LCD inside the train. The information is given for the next stop, platform side, connections with on-surface routes at the next stop. The video display with LED shows destination. IVA trains (33) are provided with audio information system inside the train, information about the next stop and platform side, the video display with LED shows destination.



As a conclusion, the Municipality of Bucharest is lacking a passenger information system properly organised in order to encourage the interchange. Today, there are too many actors without connection and the passenger is not yet the concern of the system for all operators but also for authorities which are

not present enough in the system. Though, some important steps have been crossed and the plans are good. But, there is still the necessity to urge for establishing the Bucharest Metropolitan Transport Authority, in order to centralize, plan and prioritize the efforts in order to achieve a better passenger information system.

The experts from Berlin put the emphasis on VBB travel planner (VBB-Fahrinfo) as it is successful tool with a great availability (> 99%). Such an initiative and equipment is completely adapted to meet the demand of passengers which has been continuously increasing. This is all the more true that the latest developments online have enhanced its efficiency: pearl line and lines of possible interchanges, integration of shortened trips, improved departures times and possibilities of layout.



Meanwhile, the fast-growing of mobile services (e.g.: iPhone) has also to be taken into account in order to even better adapt the travel planner to the current trends of the communication and mobility markets. The travel planner is a barrier-free routing service. Any passenger can then find an online help service that explains all categories: people with reduced mobility, time needed to interchange vehicles, choice of mean of transport, details of barrier-free stations and vehicles, possibility to choose 'via-stations' and to exclude stops, pedestrian and car-routing. Consequently, this resulted in an increase of data management.



Another important issue is the integration of the real time information into the data management system, which is currently in progress at VBB. Indeed, suppliers have different real time information systems throughout the Berlin-Brandenburg area, besides train traffic characteristics (RIS, VAB, Interautomation). This is the reason why the qualification and a continuous cooperation between VBB and all operators are essential. This substantial project will result in an increase of work to maintain the data of systems. Moreover, even if technical systems usually mean real support, they cannot replace staff. Consequently, the new quality of connection management is likely to require additional staff resources both for each operator and VBB.

VBB experts continued their presentation with 2 examples of special passenger information. The first one was about the information panels in the trains. When they are on trains going to the airport, passengers receive real-time-information on the next flights and the check-in-areas of their flights. Otherwise, passengers leaving the airport get real-time-information on connecting railway services at the stations. The second example dealt with passenger information at the future brand new Berlin-Brandenburg airport due to open on 31 October 2011. It is planned that real-time-information panels guide the passenger from the baggage collection point to the railway and bus services providing real-time-information and - in case of disturbances - showing alternative routes of transport. These information panels shall be covering all public transport operators (at the beginning 1 railway operator and 4 bus operators). Therefore the panels shall be operated by the airport and VBB will be in charge of providing the information.



Thus, VBB has been pursuing several aims for 2010:

- integrating unsharp information (called 'HIM') into the travel planner,
- setting up data and communication management,
- finishing XML interface for third party use of travel planner,
- setting up a speech-based information system,
- finding new map basis for passenger information,
- introducing the iPhone-XL version,
- preparing the Information Management of the new Berlin-Brandenburg Airport
- and confirming the reliability of real time information.

CAPRICE recommendations



Recommendations on integrated passenger information were developed from the 4th CAPRICE workshop held in Berlin from 17th to 19th March 2010 during which all partners shared their views and experiences about that issue.

Recommendations at regional and national level

- Public transport networks in capital regions are complex systems. Passengers need guidance through these systems in order to get from one point to another. This is especially crucial for new customers who are not familiar with the network. Integrated passenger information therefore is an essential element of public transport in capital and metropolitan regions.
- Integrated passenger information means that passenger information is common on the whole network regardless of the operator. Passengers want to get the best way from one point to another and usually are not interested in which company is currently carrying them.
- Passenger information itself is a complex system, too. Different customers prefer different information sources. Therefore passenger information should be provided at agencies and service points, via telephone and via internet (for computer as well as mobile devices). The integration of real time information allows passengers to be more flexible on their trips and to better react on delays and / or disturbances in the network.
- Integrated passenger information needs steering from the authority. The authorities at least have to define an operator independent framework and minimum requirements of integrated passenger for the operator. The authorities therefore have to be equipped with sufficient financial and human resources to define these requirements und to take a proactive role in passenger information. The requirements for passenger information should become part of the contracts between the authority and the operator. These could contain the provision of timetable data, real-time information, information on customer services and ticketing.

Recommendations at European level



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- Integrated passenger information systems require a full participation of all transport operators and all modes of transport. Whilst on the regional level authorities understand traveller information more and more as one of their key tasks on the national level information is mostly driven by big national or international railway companies, airlines or coach companies. Therefore co-operation often is difficult and subject to different interests. European policies therefore should set the framework for an open, efficient and customer oriented co-operation between the different players and free information market – to the customers favour.

- Integrated traveller information is a cost-intensive task due to the large amount of money which is needed for implementing data management and exchange systems. To make sure that existing data sources and / or information systems from different suppliers can interact or can be connected European policy should further support the standardisation of data models, exchange formats and interfaces to allow customer oriented cost efficient services to ensure an open market.

- Real-time based traveller information in complex networks is highly ambitious due to the close dependencies of data availability, routing systems and customer's experiences and understanding in the case of delays and disturbances. Here is European support needed for some additional R&D work as a basis for a wider role of real-time based information systems.

- International cross border information is one key element of European integration. The European Union is asked to further support the interconnection of existing and future public transport information systems (which has been started based on the EU-Spirit project – a R&D project within 5th framework) The key idea of EU-Spirit is to connect existing regional, national and international internet based travel planners to a European network allowing passengers to their connections by public transport from one point in the European Union to another. Since the end of the project in 2001 the services has been maintained and developed through the participating service providers.

CAPRICE met latest mobile experiences



CAPRICE met the mobile experience meeting-group (MEM) on 27 and 28 April 2010 in Berlin as a result of the 4th thematic workshop of the project. Inspired by the experiences on travel information that were exchanged during the workshop in Berlin in March 2010, the three CAPRICE partners MESP (Vilnius), ZTM (Warsaw), and VBB (Berlin) decided to meet the mobile experience group. It originates from EU-Spirit (www.eu-spirit.com) and was established in 2007 when EU-Spirit providers detected the need for exchanging experiences on the latest developments, difficulties and trends.

Today, the MEM group meets twice a year at one of the interested parties' location. Experts from the Netherlands, Denmark, Sweden, Norway, and Germany attend regularly.

Mobile passenger information is a very complex and dynamic field. No technology is subject of such strong influences like innovations as the mobile technology currently is. 2 years ago, the usage of mobile data rather was a characteristic of the premium customers. But today the costs for using these services decreased tremendously in European countries - according to the iPhone launch.



But how should the service provider of transport information act on this market segment? An important role in order to form an opinion plays the exchange of experiences among partner institutions. The presentation of Oslo provides several approaches that are now discussed at VBB in Berlin also. The experiences Oslo made with bad weather during wintertime, for instance, resulted in the establishment of a coordination office which is responsible for the supply with mobile services and, thus, occupied 24/7. That is how Oslo ensures the continuous supply of mobile services and disturbances. Real time information services enjoy the customers' high trust.

Beside the content of information, the further development of technical possibilities for mobile devices and an appropriate user interface is essential for the usage of the services. This was demonstrated in the discussion on usability moderated by an external consultant. It is not about displaying the contents of the regular Internet services on mobile devices but to consider the specific user requirements and different basic requirements of mobile navigation behaviour.

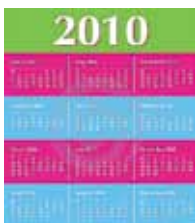
During the workshop, the experts were subject for a field trip (a test through Berlin) at which 3 different applications (mock-ups and programmes) for navigation in short-distance public transport were tested. The principle fact that speech-based services in this field are not helpful for the customer was the basic outcome of the test.



Route planners were rated to be the best applications because it proved to be most useful for the customer. Anyway, the stationary signs on platforms and in stations were still valued as very useful by all subjects with regard to the customer's orientation. Approaches to augment reality, which could support local routing very much, are still in its very early stage of development but will increase in importance in the long run. This topic will definitely be one to be discussed at the next mobile experience group meeting.

MEM is always open for interested transport companies and authorities who like to join and exchange their experiences in this specific field. You can always contact the group via MEM@vbbonline.de. The next mobile experience group meeting will take place on 3 - 4 November in Copenhagen.

European events & meetings



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, CODATU, UITP-European Union and EUROCITIES.

EMTA

- 30 September / 1 October 2010: Board meeting, Barcelona (Spain)
- 11-12 November 2010: Autumn General Meeting, Barcelona (Spain)



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POLIS

16-22 September: Mobility week

21-23 September: Personal Rapid Transit Conference, London Heathrow (UK)

27-29 September: ICT 2010, Brussels (Belgium)

11-13 October: European Transport Conference, Glasgow (UK)

13-14 October: European road safety days, Brussels (Belgium)

13-14 October: Smart freight Final Conference, Trondheim (Norway)

15-17 November: CIMO event 'Congreso Internacional: los Ciudadanos y la gestión de la Movilidad', Madrid (Spain)

16-17 November: European urban freight workshop, Brussels (Belgium)

17-19 November: VANGUARD Technical Training on Mobility Management, Szentendre (Hungary)

18-19 November: Mediate - Access2all Final Conference, London (UK)

25-26 November: Annual Polis Conference, Dresden (Germany)

For more information: www.polis-online.org

CIVITAS

28-29 September: CIVITAS Forum Conference 2010, Malmö (Sweden)

3-4 November: CIVITAS CATALIST Car-Sharing supports Public Transport, Bremen (Germany)

For more information: www.civitas.eu

CODATU

25-27 October: CODATU XIV – Conference on 'Sustainable transport and the quality of life in the city' (Sub-themes: Policy of urban transport, the offer of services of the sustainable transportation, the individual motorized transport, agent of the sustainable urban mobility, how to improve the quality of public transport?, urban transport in major cities in Argentina), Buenos Aires (Argentina)

For more information: www.codatu.org

UITP – European Union

19 September: 125th UITP Anniversary Celebration, including an academic session with high-level political speakers, a parade of old trams and buses in the heart of the city, followed by a reception in an exceptional venue, Brussels (Belgium)

24 September: Workshop on the Sustainable Development Indicators for Public Transport, Nice (France)

18-20 October: 10th Light Rail Conference and Study Tour on 'LRT-Good for people-Good for cities', Madrid (Spain)

25-27 October: 9th Training Programme for Public Transport Managers (1st module), Valencia (Spain)

22-24 November: Training Programme on Public Transport Fundamentals, Brussels (Belgium)

8-10 December: Security Training Programme, Brussels (Belgium)

For more information: www.uitp.org

EUROCITIES

4-5 October: Conference on 'Mobility management and seasonal traffic flows', Athens (Greece)

25-27 October: Mobility Forum Meeting, Utrecht (Netherlands)

For more information: www.eurocities.eu

