



Case study on pilot

Partner: Oradea Local Transport Company

Title of the pilot/Case study: Testing flexible fare systems & e-ticketing

Task Force 2: Testing flexible fare systems & e-ticketing

Version (FINAL)

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Case Study

Executive Summary

Oradea Transport Local SA prepared in 2013 the extension of local public transport services into Metropolitan Area to insure a strong connection of people from neighbourhood of Municipality of Oradea. The commuters, who daily access the opportunities offered by the city (schools, universities, a lot of working possibilities, cultural and commercial needs) represent the most important category of passengers.

Through the implementation of ATTAC pilot project it were procured the necessary equipments and softwares that enabled the extension in the Metropolitan area. It was an analysis of solving modalities, the results were implemented into the software of municipal system. The ticket sale, the execution of transport, included traffic management and the e-ticketing system (validation), control of tickets, the whole PT system were proposed to be modernised. Before the ticket fare system, it was a very complicated fare system that contributed to the lack of integration and attractiveness of PT service. For example, only in Bors and Sanmartin communes there were available 17 type of tickets. After renewal of fare system in parallel of introducing electronic ticketing system in Metropolitan area, we modified and simplified the ticket fares. It was introduced the combined monthly ticket for metropolitan connection valid for trip to Oradea (between the commune and the City) and inside the city for all lines of OTL.

General Context

Oradea, Bihor county seat with a population of approx. 200,000 inhabitants, 250,000 in the metropolitan area, is a strong urban pole that polarizes the socio - economic development at regional level.

Oradea is located at the intersection of the parallel 47 ° 03'05 "N 21 ° 56'25 meridian 'east longitude. The main road access routes are: E60 (DN1 - from Cluj Napoca, respectively customs Bors), E 79 (DN 76 from Hunedoara) E671 (DN 19 from Satu Mare and DN 79 from Arad), and a number of roads county - DJ 797 (Sîntandrei) and DJ 767F (Paleu).

Transit movements and penetration through and to Oradea and the needs generated by the municipality is carried mainly by road, which leads to heavy traffic on city roads.

In our city licensing authority is Transregio Intercommunity Development Association and the carrier is Oradea Transport Local SA.

The Pilot

Pilot implementations will be integrated activities of TFs. The feasibility of urban public/collective transp. solutions defined for the 3 themes will be tested as pilots or pilot studies. This testing is crucial as it serves the purpose of examining the applicability of ideas in various local environments, whereby giving credence to joint efforts to find solutions to local challenges. The definition of pilots builds on the joint pilot generation process carried out during the project preparation phase. The fine tuning and preparation of pilots and pilot studies will be helped by the BP surveys, which will give a detailed picture on the existing

tools & methods. The first MobiLABs described in act.4.1 will help the preparation, and the MobiLAB process described in 4.1. will ensure joint design, monitoring and evaluation of pilots.

The pilot expectations and objectives

Location of the pilot activities and context: City of Oradea and a part of its metropolitan area (Bors and Sinmartin communes).

The aim of the pilot: To test flexible fare systems with the help of e-ticketing system

- **TRAFFIC:** significant reduction of congestion that occurs on the main thorough fares of the city and indeed even in moments of utmost importance for dowry for the citizens involved in the active life of the community;
- **CITIZEN RIGHTS:** reducing the negative impact of traffic (city perimeter and access roads from villages belonging to) the health, safety and security of citizens;
- **ACCESIBILITY:** providing the public transport system for all citizens, a corresponding spatial accessibility;
- **POLLUTION:** reduce air pollution and noise pollution;
- **PT NETWORK:** reduction of energy consumption of transport field by optimizing the local transport network;
- **EFFICIENCY:** improve the efficiency and cost-effectiveness of passenger transport, taking into account external construction purposes;
- **LIFE QUALITY:** increasing the attractiveness and quality of the urban and suburban environment.

User needs and requirements: Oradea Transport Local SA prepared in 2013 the extension of local public transport services into Metropolitan Area to insure a strong connection of people from neighbourhood of Municipality of Oradea. The commuters, who daily access the opportunities offered by the city (schools, universities, a lot of working possibilities, cultural and commercial needs) represent the most important category of passengers. It was an analysis of solving modalities, the results were implemented into the software of municipal system. The ticket sale, the execution of transport, included traffic management and the e-ticketing system (validation), control of tickets, the whole PT system were proposed to be modernised. Before the ticket fare system, it was a very complicated fare system that contributed to the lack of integration and attractiveness of PT service. For example, only in Bors and Sanmartin communes there were available 17 type of tickets. After renewal of fare system in parallel of introducing electronic ticketing system in Metropolitan area, we modified and simplified the ticket fares. It was introduced the combined monthly ticket for metropolitan connection valid for trip to Oradea and inside the city for all lines of OTL.

Expectations from the city: The necessity to provide punctual solutions for the intersections located along the main arteries that cross the city from South to North, solutions which lead to the increase of traffic capacity and implicitly to the traffic streamlining; the necessity to adjust the traffic light systems to operate in real time values and to correlate them in a specialized traffic management system in order to optimize the crossing time network traffic light intersections throughout the entire municipality; strict supervision of construction field and the uncontrolled urban expansion – involve in a way, even social exclusion for the

areas placed at a longer distance from the city centre (referring also to the suburbs and the associated communes); necessity to increase the degree of attractiveness of public transport in order to discourage travelling by private means of transportation, which would lead to a traffic relaxation and reduction of pollution; creating bus dedicated lanes in order to allow transportation vehicles to reach speeds that would transform the public transport service into a preferred one by the citizens, thus convincing them to give up their own vehicles; the parking places don't have implemented progressive taxation systems that discourage the displacements of the citizens towards the city centre with their own car; in almost all significant intersections it is permitted to take the left direction (which is the greatest time consumer, as well as a space consumer, and therefore it can be argued that the management is a prerequisite for the emergence of congestion); the supplying transport is carried out during the day, exactly when the social activities are intense and may leave traces on the time availability of all road users and also on the availability of the street space; there are not enough bicycle lanes and respecting the bicycle markings is a voluntary "question", almost ignored;

Stakeholder involvement

Oradea Local Transport Company organized on a regular basis Mobility Forums and Press Conferences that enabled to explain to the stakeholders (researchers in the field of Territorial Planning from the University of Oradea, representatives of local and central authorities, associations of customers and mass-media) the functioning of the e-ticketing system.

Pilot governance

The pilot project was entirely coordinated and monitored by the management of the Oradea Local Transport Company and the thematic experts involved in the WP 4. Furthermore, it was organized regular meetings with the contractor (RADCOM S.A.) in order to better tune the implementing of the pilot project.

In particular these information should be available from your archive, from activities carried out during the MobiLABs (especially at local level), Small Scale Investment Workshops and Mobility forums as they are related to activities with local stakeholders.

Pilot activities

The first phase was consisting in elaborating the terms of references in order to procure the necessary equipments and software that enabled the implementing of the pilot project whose aim was related to the testing of flexible fares with the help of e-ticketing system. This stage involved mainly the evaluation of needs in correlation with the extension strategy of the Oradea Local Transport Company in the Oradea Metropolitan Area. The second phase was focused on organizing the public procurement procedure for the acquiring of the specific equipments and software. Further to the signing of the contract and the establishing of the main implementing steps, it were delivered the necessary equipments that were installed on the buses and tramways.

The third phase was related to the testing of the e-ticketing system that was done at the level of the Oradea Local Transport Company.

The fourth phase implied the launching of the operational phase that enabled to all the citizen to procure and use monthly transport subscription via the e-ticketing system both at the municipal level and the metropolitan one.

Pilot results & KPIs

- Types of tickets: How many types of tickets are available for the same service

In Oradea City, there is 1 ticket available for 2 trips, 1 card (electronic wallet) for non regular passengers and 1 card representing monthly subscription for regular passengers.

Further the implementing of the pilot project, the existing fares in each locality from the metropolitan area were simplified, all the citizen having to pay an integrated fare (including the city of Oradea and the respective commune). The pilot project enabled to cancel the fares barriers that existed before, (when the citizen had to pay 2 tickets to come to Oradea) proposing an integrated transport offer that reduced the costs for the passengers and increased the attractiveness of the PT network.

- Number of different transport companies
 - Specify the number of Transport Companies which operates in the local context, and their dimension: Oradea Transport Local is the only local operator who has been delegated the local public transport service through delegated management.
 - Specify if each company has a different type of ticket: it's not the case
 - Specify if already exist an integrated ticket valid for different companies: no

Financial Sustainability

The planning and implementing of the e-ticketing system through ATTAC project in order to test of flexible fares was followed by the introducing on a full scale of the above mentioned system both at the City level and its metropolitan area. The pilot project enabled therefore to test the feasibility (from a technical and tactical point of view of introducing such a system in correlation with the extension strategy of the Oradea Local Transport Company in the Oradea Metropolitan Area.

The estimated return on investment is positive whilst the payback period will be in 5 years. Regarding the available funding sources, the Municipality of Oradea (which own 100% the Oradea Local Transport Company)is committed to support the PT system and to put the basis of an integrated metropolitan transport system, therefore securing the necessary funds from its own local budget and applying for various non reimbursable EU funds (Regional Operational Programme, etc) in order to increase the investments in PT service.

Plans for future full scale implementation and long term sustainability

The e-ticketing system will be available on all the 3 localities where the Oradea Local Transport Company will operate(Oradea, Bors and Sinmartin).

Furthermore, based on the existing of the e-ticketing system and the partnerships with private operators, flexible fares could be offered to all the commuters coming to Oradea from all the localities of the Oradea Metropolitan Area, therefore increasing the attractiveness of local transport and the economic sustainability.

Conclusions & Recommendations

The implementing of the pilot activity on testing of flexible fares with the help of e-ticketing system enabled to Oradea Local Transport Company to improve the planning and coordination of the main aspects that are involved in the operating process (ticket sale, the execution of transport, included traffic management and the e-ticketing system, control of tickets) of a Public Transport network. In this sense,

the simplifying of the existing fares for the citizen from Oradea Metropolitan Area, the collecting of mobility data for ensuring a proper PT offer whilst introducing of various subscription formulas for the citizen from the City of Oradea, allowed gaining of new clients and increase the attractiveness of the PT service.

These measures are accompanied by a strong commitment of local authorities to increase the level of investments, on the medium and long term, in the PT sector. In this context, it is also to be underlined the synergy with the next programming period 2014-2020, in the frame of which PT has been allocated an important place.

Attachments

- Press/media releases (already reported to the LP)
- pictures (from Mobilab 2, organized in Oradea, already reported to the LP)
- presentations (enclosed)