

D.T2.4.3 PILOT FINAL REPORT

Report summarising implementation of pilot in Mazovia region

Version 1
October 2018

FINAL REPORT

Period March 2018 - June 2018

General data	
Project partner	MAZOWIECKIE VOIVODESHIP
Pilot name	GPS transmitters for Koleje Mazowieckie
Pilot location	THE NORTH WESTERN PART OF MAZOVIA: TWO RAILWAY LINES: NASIELSK – SIERPC, SIERPC – KUTNO
Person(s) responsible for pilot implementation	Katarzyna Jędruszczak, Magdalena Prządka – Głodek, Agnieszka Szuba, Dominik Antonowicz
Pilot starting date	1 August 2017
Pilot ending date (if applicable)	31 July 2018
Author of the interim report	Dominik Antonowicz

Reported period

Steps undertaken in period March 2018 – July 2018

From March to the end of the piloting, on 31 July 2018, the pilot project functioned correctly. In April, the application provider updated the system introducing minor modifications improving the functionality of the application for mobile devices. In May we started talks with the Mazowieckie Railways - our closest stakeholder regarding the future of the tracking system "tropKM". Together, we decided that the pilot was very good and it should be continued. In August, Mazowieckie Railways signed a contract with the system provider for the assembly of GPS devices in other railways vehicles and the implementation of the system on the remaining lines. The procedure of



expanding the activity and functionality of the train tracking system is currently in progress.

Difficulties encountered and solutions found in reporting period

During the period covered by the report, there weren't serious technical problems related to the pilot project. Still, from time to time we had problems with system availability in kiosks. Most often it was related to the lack of internet or voltage drops in the power grid which automatically blocked the devices. At the moment of reporting the problem, the contractor removed the failure within 24 hours. In May, due to renovation works on one of the railway lines, a train tracking system on line 33 wasn't available for a period of two weeks (distance of 87 kilometers - bus communication started). The tracks aren't owned by Mazowieckie Railways and their renovations resulted from the schedules set by the railway infrastructure manager.

Final results

Resource requirements (planned versus actual)

In the period from August 2017 to July 2018, we had the following tasks related to the pilot project:

 Purchase of gps devices, applications, infokiosks and maintenance and servicing of the IT system during the pilot period.

As part of the public tender, a contractor was selected that provided all equipment and services. The value of the project was PLN 164 283,72 (about EUR 38 125), including min.

- Delivery, assembly and servicing of gps devices PLN 27 896,40 (approx. EUR 6 487),
- Purchase of two kiosks PLN 65 608.20 (approx. EUR 15 257),
- Delivery of the application together with the maintenance of PLN 60 270 (approx.14 016 Euro).

Initially, the budget of the RUMOBIL project was planned for activities related to the pilotage of 40,000 Euro.

Three people worked together to prepare the tender procedures and during the implementation of the delivery and assembly contract for the project. The total time spent on implementing the pilot project is estimated at around 150 hours.

Completion of the pilot project implementation,

The pilot project ended on July 31. After the end of the pilot period, the application is still active and continues to be used by passengers when planning their trip. The costs related to the completion of the pilot project concern the final settlement of the contract with the



implementation of the "tropKM" system and amounted to approx. EUR 2,000. (The amount is included in the price proposed by the contractor).

Preparation of a public campaign (part 1),

Public campaign "tropKM" was prepared from the end of August 2017. We ordered 100 posters and 1,000 leaflets that were distributed and hung in the area covered by the project. The cost of promotional activities amounted to approx. 150 EUR. Three people were involved in the preparation of the public campaign. We received additional support from our stakeholder - Mazowieckie Railways, whose employees hung posters at the railway stops.

Preparation of a public campaign (part 2),

Public campaign "tropKM" was prepared from the end of April to mid-May. We ordered 100 posters and 2,000 leaflets that were distributed and hung in the area covered by the project. In addition, we commissioned the preparation of a short 50-second promotional spot, which was available on websites and in selected trains of Mazowieckie Railways. The cost of promotional activities amounted to approx. 1700 EUR. Four people were involved in the preparation of the public campaign. We received additional support from our stakeholder - Mazowieckie Railways, whose employees hung posters at the railway stops.

The total expenditure planned for the public campaign in the budget of the RUMOBIL project amounted to 3 850 EUR.

Interfaces and dependencies with other groups – stakeholders

The assumption for the RUMOBIL project was to encourage representatives of local governments, who know the local community best and know about the transport needs of their residents. In principle, these stakeholders were supposed to collect information about the needs related to mobility of residents in the commune/poviat who they represented, and to provide the local community with information created for the purposes of the RUMOBIL project.

During the project it turned out that not all stakeholders are as active as we expected. Some poviats or communes had their own transport policies prepared, which made it easier to perform tasks related to the implementation of the project. We collected the rest of the data on our own, also with the help of Mazowieckie Railways, which performed for us in 2016 and 2018 a passenger counting survey and a RUMOBIL questionnaire.

The Mazowieckie Railways showed the greatest involvement in the implementation of the pilot project. As it was mentioned earlier, Mazowieckie Railways helped in the distribution of promotional materials. In addition, Mazowieckie Railways agreed to expand the operation of the train tracking system (after the end of the pilot period) on the remaining routes operates. Other stakeholders showed varied involvement in the project implementation. Some stakeholder have put promotional materials on their websites and in public buildings. Others didn't even get involved in promotional activities. Lack of involvement on the part of some stakeholders may be a bit surprising, especially as these are representatives of local governments, for whom it should significantly be important to help residents to be able to move with public transport.



Risks and risk mitigation

The risk which was calculated in the implementation of the pilot project concerns the correct operation of the train tracking system "tropKM". Our concerns were related to the fact that as part of the tendering procedure, we will choose a contractor who will provide a system that frequently failing and a fault. In addition, the issue of the contractor's time reaction to the failures and irregularities in the system's operation and info kiosks was also an important issue. In the contract, we had the time entered in which the contractor should remove the failure and contractual penalties for non-compliance with the terms of the contract. Frequent system failures or a long-term lack of availability to infokiosks would significantly reduce the reliability and functionality of "tropKM". During the pilot period, the availability of the system for travelers is estimated at around 99%, and the availability of information kiosks at the level of 97%. Another risk was the temporary suspension of railway traffic in the area covered by the project, due to the repair work carried out by the infrastructure manager. In the period covered by the report, there were about 14 days of interruption of running trains on the line No. 33. The train tracking system was functional but could not be used due to the suspension of train traffic and the introduction of a replacement bus service.

Achievement of pilot project objectives

The main objective of the project was to increase the number of passengers transported by rail by creating a passenger information system based on tracking train traffic. At the moment, we do not know whether the share of passengers has increased (we are in the process of conducting detailed surveys of customer attendance and surveys - the results will be available in 2 weeks). We have certainly achieved the goal of creating the tropKM application and its correct operation. In the first two months of system operation, the application was installed 2 300 times and was in use 11 500 times. After 12 months of system operation, the application was installed 7 830 times and was in use 115 600 times. Currently, the number of active installations is 2 500 users. On average monthly, the system recorded over 10 000 inquiry related to train traffic in the RUMOBIL project area. In our opinion, we consider the number of queries as the achievement of the project's goal. Especially considering the limited range of the system.

Lessons learnt and recommendations.

The area covered by the pilot project is special due to the high rate of individual motorisation, which is growing every year. The residents' mobility realized through their own car and the insufficient offer of public mass transport may have an impact on the final assessment of the implementation of the project carried out in the Mazowsze region. Making our tracking system "tropKM" available will not cause the number of traveling travelers to increase significantly. During the whole period of the pilot project, we had to deal with the temporary suspension of



train traffic on lines covered by the pilot due to modernization works carried out by the infrastructure manager. In addition, we wanted to change the tariff system so as to lower the toll price and attract new customers. For various reasons, there wasn't reduction in ticket prices during the pilot period. We also wanted to increase the transport offer (the number of trains being started), however, due to the technical condition of the infrastructure in the course of the project, it wasn't possible. The biggest advantage of our pilot project is the functionality and reliability of the "tropKM" application. Tracing system tests at the beginning and at the end of the project were very good, which meant that the project will be implemented on the remaining lines operated by Mazowieckie Railways. As a negative experience, we can demonstrate the involvement of some stakeholders in the project implementation. Maybe there was too little mobilization on our part or maybe not everyone understood the project's ideas and had a negative attitude towards its implementation.

Photos



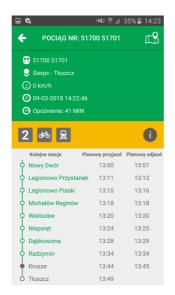




Fig. 1, 2, 3- tropkm aplication - phone screenshots







Fig. 4, 5, 6 - activities promoting the project

Links to promotional materials and activities

Link 1 – https://www.mazovia.pl/nagrania/art,71,spot-promujacy-bezplatna-aplikacje-sledzenia-pociagow-kolei-mazowieckich-tropkm.html



https://www.facebook.com/KolejeMazowieckieKM/videos/vb.1995559677363104/2053686264883 778/?type=2&theater

- Link 3 https://sierpc.pl/index.php?option=com content&view=article&id=2841:bezplatna-aplikacja-sledzenia-pociagow-kolei-mazowieckich-tropkm&catid=137&Itemid=430
- Link 4 http://powiat.sierpc.pl/bezplatna-aplikacja-sledzenia-pociagow-kolei-mazowieckich-tropkm/#more-37833
- Link 5 http://powiat-plock.pl/ogloszenia/2105-rumobil-mobilnosc-na-obszarach-wiejskich-weuropejskich-regionach-dotknietych-zmianami-demograficznymi
- Link 6 http://plonsk.pl/aktualnosci/bezplatna-aplikacja-sledzenia-pociagow-kolei-mazowieckich-tropkm.html
- Link 7 http://petronews.pl/bezplatna-aplikacja-sledzenia-pociagow-kolei-mazowieckich-tropkm/
- Link 8 http://gostynin24.pl/index.php/item/1115-bezplatna-aplikacja-sledzenia-pociagow-kolei-mazowieckich-tropkm
- Link 9 https://dziennikplocki.pl/?p=277210