Output factsheet: Pilot actions

<table>
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<tr>
<th>Project index number and acronym</th>
<th>CE55 RUMOBIL</th>
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<tr>
<td>Lead partner</td>
<td>Ministry for Regional Development and Transport Saxony-Anhalt</td>
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<tr>
<td>Output number and title</td>
<td>GPS transmitters for Koleje Mazowieckie</td>
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<td>Responsible partner (PP name and number)</td>
<td>MAZOWIECKIE VOIVODESHIP 02</td>
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<tr>
<td>Project website</td>
<td><a href="http://interreg-central.eu/rumobil">http://interreg-central.eu/rumobil</a></td>
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<td>Delivery date</td>
<td>2018-11-30</td>
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**Summary description of the pilot action explaining its experimental nature and demonstration character**

The aim of the pilot project was: implementation of the passenger information system (GPS transmitters, app, interactive kiosk), that this will allow to effectively plan your trip. A passenger on his mobile device (phone / tablet), as well as a desktop computer and infokiosk has the opportunity to check where his train is currently located, Does it go according to timetable or if he can leave home don’t wait too long for a train stop. The Passenger Information System is an innovative project because it is based on the operation of GPS transmitters, so the position of the train is given in real time.

The GPS sets were assembled at the headquarters of 9 DMC Mazowieckie Voivodeship. The equipment was equipped with a GPS antenna, and GSM enabled the proper operation of devices and data transmission from vehicles moving along the routes covered by the pilot project. The devices made it possible to log into the train and choose the appropriate train number (directly on the device or device connected to the keyboard with the display).

Mobile application is available on devices running Windows, IOS and Android. It was required that the application was available for all passengers Koleje Mazowieckie without limit and without charge. The application had to make it possible to search the train, the location of the train (train location) on the interactive map indicating the time of the last data update and the speed of the vehicle. The application was designed to show the delay of the train (if such occurred) a description of the DMU type and difficulties. The application had to make it possible to check the current timetable of all trains Koleje Mazowieckie.

The project purchased 2 interactive kiosk.
NUTS region(s) concerned by the pilot action (relevant NUTS level)

Nuts0: PL, Polska
Nuts1: PL1, Region Centralny
Nuts2: PL12, Mazowieckie
Nuts3: PL12C, Płocki,

North-western part of Mazovia which will be carried out the greater part of the pilot project is located in the sub-region of Płock. These are mainly agricultural areas, underdeveloped where the average population density is approx. 60 peoples/km². Region is characterized by a high rate of motorization approx. 700 cars per 1000 inhabitants. The most important towns in the region are Płock and Sierpc. Płock population of approx. 123 thousand inhabitants is the historical capital of Mazovia and capital of Polish in the years 1079-1138. Through the city flows the longest river in Poland - Wisła. In the suburbs they’re located petrochemical plants, which are the most important and the largest employer in the region. Płock away from Warsaw with approx. 120 km.

Sierpc population of approx. 20 thousand inhabitants and away from Warsaw with approx. 130 km. In the city there is the Museum of the Mazovian Village. The exhibition includes: 11 peasant farms from the late nineteenth and early twentieth century, reconstructed manor house, eighteenth-century wooden church, wooden windmill representing the oldest and most popular areas of Europe type windmills.

Expected impact and benefits of the pilot action for the concerned territory and target groups

Public transport is ensured by railway track and buses. Railway line no. 33 provides connections on the route Kutno - Płock - Sierpc while the line no. 27 connects Sierpc of Nasielsk. The length of the route is 174 km. Small trains (DMU) run at this track regularly. Between Sierpc and Nasielsk is 12 stops and runs 6 trains during working days (at the weekend less). The maximum speed is 60 km per hour. Between Sierpc and Kutno is 13 stops and runs 9 trains during working days (at the weekend less). The maximum speed is 80 km per hour.

Railway station building in Sierpc is devastated and inaccessible to travelers. The bus station is away from the railway line is approx. 800 m, which causes that it isn’t integrated interchange. In Płock railway station building was modernized in 2015. Currently serves as the point of multimodal hub that supports rail, bus and public transport. Also, the new station is located in Nasielsk. It is a modular station, built in 2015. Other stops/stations require upgrading.

The number of passengers is small (on average approx. 10 people on the train). This is linked to a high rate of motorization, poor quality of railway infrastructure and public stops as well as the lack of reliable information about the train running.
Sustainability of the pilot action results and transferability to other territories and stakeholders

Pilot project - tracking system "tropKM", which lasted a year, ended on July 31, 2018. In total during the pilot the application was installed 7,830 times and was in use 115,600 times. At the end of the pilot project, the number of active installations was 2,500.

As part of the RUMOBIL survey which was carried out in October 2018 among passengers using "tropKM", more than 75% use the app on the phone. Almost 40% rate very well information about the planned train operation, and more than 47% rate the ease of use of the application very well. Over 45% of respondents believe that the application facilitates travel planning.

Purchase (GPS devices, application and info kiosks), assembly and service (annual) tracking system "tropKM" had cost about 38,000 EURO. In return, we received an IT tool that enabled better and more efficient travel planning. The project's success resulted in decisions regarding the implementation of "tropKM" on the other lines operated by Mazowieckie Railways (Koleje Mazowieckie – KM). As part of the pilot project, the system was installed on 9 rail vehicles and covered railway lines with a total length of 170 km. The implementation of the vehicle tracking system on the remaining railway lines will result in the installation of new GPS devices on additional 260 vehicles and service of railway lines with a total length of 1700 km.

In our opinion, the results that have been achieved during the pilot period, suggest that the tracking trains system may be launched by other project partners or external stakeholders.

Lessons learned from the implementation of the pilot action and added value of transnational cooperation
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.

References to relevant deliverables and web-links
If applicable, pictures or images to be provided as annex

Link 2 - https://www.facebook.com/KolejeMazowieckieKM/videos/vb.1995559677363104/2053686264883778/?type=2&theater
Link 4 - http://powiat.sierpc.pl/bezplatna-aplikacja-sledzenia-pociagow-kolei-mazowieckich-tropkm/#more-37833
Link 9 - https://dziennikplocki.pl/?p=277210