

INCLUSION Project

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Innovation Pilot Lab Flanders: implementation and results - Intermediate version

Version: 1.0

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Abstract	<p>The focus of Flanders Pilot Lab will be on lowering certain barriers for job seeking migrants with low income and less mobile elderly people. On one hand we want to work together with different partners (NGO's, app provider and private business) from the STEP project to provide a mobile app for (un)employed migrants with low or no income. We see that this target group experiences a large barrier to use other transport options than a personal owned car. This barrier can be: language, costs, lack of knowledge about PT possibilities. With Olympus app (as MaaS) we want to map their needs and wishes for a better transport service and hopefully approach them with a more digital and innovative way and introduce them to a new world of transport.</p> <p>On the other hand, we have developed another app called Mobitwin app. With this app we want to enhance the Less Mobile Stations service that we currently provide which helps less mobile elderly people access social activities using volunteer drivers. The Mobitwin app will allow this service to be offered by drivers, and planned and booked by passengers in real-time instead of 48 hours in advance through the LMS call centre. This provides more convenience for volunteer drivers and a more responsive service for passengers.</p> <p>We start with a focus on very specific target groups who experience larger barriers to use PT than the general public. If their barriers can be solved than it will be easier to broaden our target groups for people who experience lower or no barriers to use public transport. The objective of the pilot lab is to test these two apps with the target groups to map their needs and wishes for more accessible and acceptable transport.</p>		
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1 Introduction

Taxistop is a partner of the European project INCLUSION. INCLUSION stands for Towards more *'accessible and iNCLUSive mObility solutions for EuropeaN prioritized Areas'*. It is funded by the Horizon 2020 programme which involves 13 partners from various European countries. The project will last for 3 years and will address a number of challenges related to the accessibility of public transport in remote urban/rural areas and neighbourhoods.

The INCLUSION project fits closely with the new Flemish vision on basic accessibility: To offer everyone the opportunity to move in a selective manner with a view to the full participation of everyone in social life. This can be achieved by facilitating the travel requirement to maximize the access to mobility.

INCLUSION expects to:

- understand the main transport challenges in different types of prioritised areas.
- provide an in-depth examination of ten innovative public transport approaches and a wider catalogue of at least forty case studies of accessible, inclusive and equitable transport solutions.
- deliver a set of recommendations and mobility solutions for vulnerable users' communities.

Taxistop will commence two pilot projects in Flanders to test new technologies to make two specific target groups more mobile:

1. Taxistop is working together with the Step project¹ to offer the Olympus App for jobseekers. Step focuses on making the job market more inclusive and accessible for talents who find it hard to find a matching job. We are investigating whether Olympus can offer a sustainable solution when applying for a job with companies that are located in areas that are difficult to reach and the jobseeker has no car of his/her own. That is why the project offers the opportunity to test the Olympus app; allowing job seekers to apply for and reach a new job in a sustainable way.
2. Taxistop has a Less Mobile Stations service where it provides door to door transport for less mobile elderly people in Flanders. The members can call the station to book a trip only two days on advance. Since Taxistop wants to provide more innovative solutions for sustainable and inclusive mobility, Taxistop is organizing the roll-out of the Mobitwin App in Flanders. The Mobitwin App will offer a digital version of the Less Mobile Stations service which matches trip requests for door-to-door transport (in real-time) for older persons and those with mobility impairments with trip offers from volunteer drivers. Taxistop will set up pilot projects at some 'Minder Mobielen Centrales' where both driver and member are using the app.

¹ <http://www.manpowergroup.be/nl/2018/03/27/inclusie-op-de-arbeidsmarkt-het-moet-van-beide-kanten-komen-manpower-groep-intro-web-en-compaan-brengen-hun-expertise-samen-werkzoekenden-en-werkgevers-vinden-elkaar-in-inclusieve-uitzendarbei/>

2 Site description

The focus of the Flanders Pilot Lab is to reduce territorial accessibility barriers for job seeking migrants and less mobile elderly people who live in rural and urban areas in the region of Flanders. These areas are mostly flat areas with an increasing employment, increasing population, mixed and/or improving economy and a very ageing population.

2.1 Site description for testing the Mobitwin app



Figure 1: Flanders Urban Areas

- Area covered: > 2000 Km²
- Population density: > 500 inhab./Km²
- Target group: Elderly, Disabled, Low income
- Population of the target group: between 20 000 and 50 000

We will test the Mobitwin app in rural and urban areas of Flanders with a focus on ageing population. The Less Mobile Stations that we provide are situated throughout Flanders. They focus on less mobile elderly people who often experience isolation because of some barriers related to transport. We want to reduce the barriers of participating in social life and not having the physical mobility to function in daily life by providing an app where the users can plan their own door-to-door transport by themselves.

For the testing of the Mobitwin app we will focus on the city of Ghent (260.000 inhabitants) and Oudenaarde (31.000 inhabitants). There are more Less Mobile Stations in Flanders, so there is a possibility that there will be other cities included by the end of May 2019.



Figure 2: Flanders Ghent Region²

Population: 260000 inhabitants
Area: 156.18km²



Figure 3: Flanders Oudenaarde Region³

Population: 31000 inhabitants
Area: 68.06km²

² Map data ©2019 GeoBasis-DE/BKG (©2009), Google

³ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

2.2 Site description for testing the Olympus app

The testing of the Olympus app for jobseekers covers the area of Flanders in total. The trip location depends on the location of the potential employer. We included the STEP project in INCLUSION because we see that even the regular person in Flanders experiences financial barriers for using PT when seeking for a job. These barriers can grow because of the location of a lot of workplaces. The workplaces are often located in rural areas while a lot of job seeking migrants live in the more urban areas. In addition, these rural areas mostly don't have (free) PT options. If there is an option, then they are mostly not for free for them because the free transport is only for employers and not for job seekers and/or interns. We included the partners of STEP because they reach thousands of job seekers a year all over Flanders, most of them migrants. Even they experience barriers for meeting with these job seekers because of the lack of PT options. By uniting these different actors we want to overcome the transport barrier to accessing locations.



Figure 4: Flanders Urban Areas



Figure 5: Flanders Region⁴

Area covered: > 2000 Km²

Population density: > 500 inhab./Km²

Target group: Jobseekers, migrants

⁴ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

3 Mobility demand

The mobility demand for both of the target groups is to have an on-demand/customised transport service that is cost efficient. The goal of using these services is more inclusion in daily/social life on the one hand and creating access to more job opportunities on the other hand.

3.1 Mobility demand for Mobitwin

This pilot focuses on elderly and disabled people who have a high mobility demand since they are dependent on others. The demand is limited to social activities. Users can request a ride towards their social activities in real-time. The previous system only allowed a trip to be booked two days in advance. There is no limit to the number of trips that can be made.

When looking at the number of the Less Mobile Stations we note that there are 226 municipalities in total in Flanders who offer the service. In total, 377,610 rides were made. The service currently counts 38,010 members and 2,846 voluntary drivers.⁵

If we focus on the cities that we are currently working with:

- The number of the Less Mobile Station in Ghent where we will test the app, we note that there are 189 members and 28 voluntary drivers. This gives a total number of 2262 rides which is 106236 km.
- The number of the Less Mobile Station in Oudenaarde where we will test the app, we note that there are 160 members and 22 voluntary drivers. This gives a total number of 2018 rides which is 41465 km.

These cities are mostly urban sites, but have also rural regions where public transport is harder to reach. Currently we are still negotiating with Less Mobile Stations in other cities and regions so it is possible that we will have a larger reach to test the app by May 2019.

3.2 Mobility demand for Olympus

Another pilot lab will focus on jobseekers who have difficulties trying to reach the labour market. The mobility demand here is also high since they often need to apply for a job at companies that are located in rural areas. We work together with partners of the STEP project who have direct communication opportunities with the target group. But even then, the target group experiences barriers to reach our partners too who are actually consulting them when looking for a job. So there is a big demand for more customised transport services that is more cost efficient for people who have very limited income and find PT fares a major

⁵ <https://www.mindermobielencentrale.be/nl>

barrier to use. For this pilot lab, we are aiming at 100 persons to test the app. With the budget provided they can order a limited number of trips. We provide €30 per person which is credited to their account in the App. Depending on what kind of transport they use they could do a maximum of 10 trips.

Here we give some examples why our target group experiences (financial) barriers to reach our partners from STEP. In these examples we start the journey from one and the same spot: Zele. Zele is a Township in Flanders with a population of 20916 people. The township provides a train station and several bus stops.



Figure 6: Zele, township in Flanders Region⁶

Example 1:

Journey from Zele to Compaan in Ghent by PT. Cost: 14,40 euro⁷

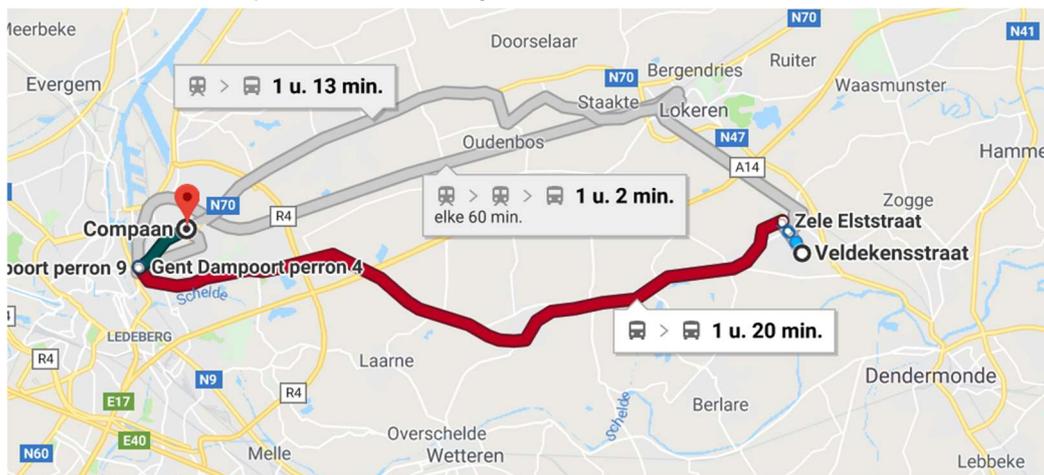


Figure 7: Example journey to STEP partner Compaan by public transport⁸

Journey from Zele to Compaan in Ghent by car. Cost: 5.00 euro⁹

⁶ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

⁷ <https://www.belgiantrain.be/nl?journey=0>

<https://www.delijn.be/nl/vervoerbewijzen/ticket-op-gsm/>

⁸ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

⁹ <http://bit.ly/costsbycar1>

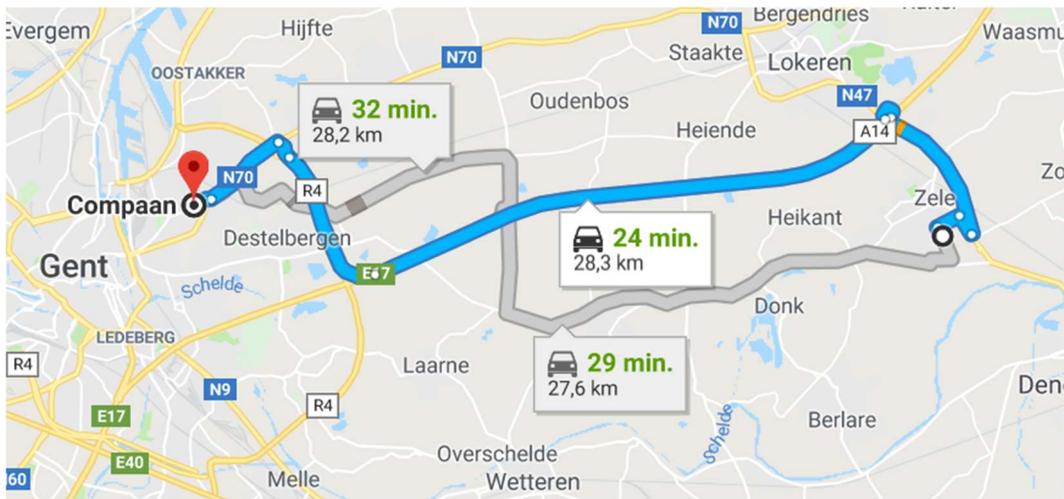


Figure 8: Example journey to STEP partner Compaan by car¹⁰

Example 2:

Journey from Zele to GroepIntro (most close settlement) by PT. Cost: 11,40 euro¹¹

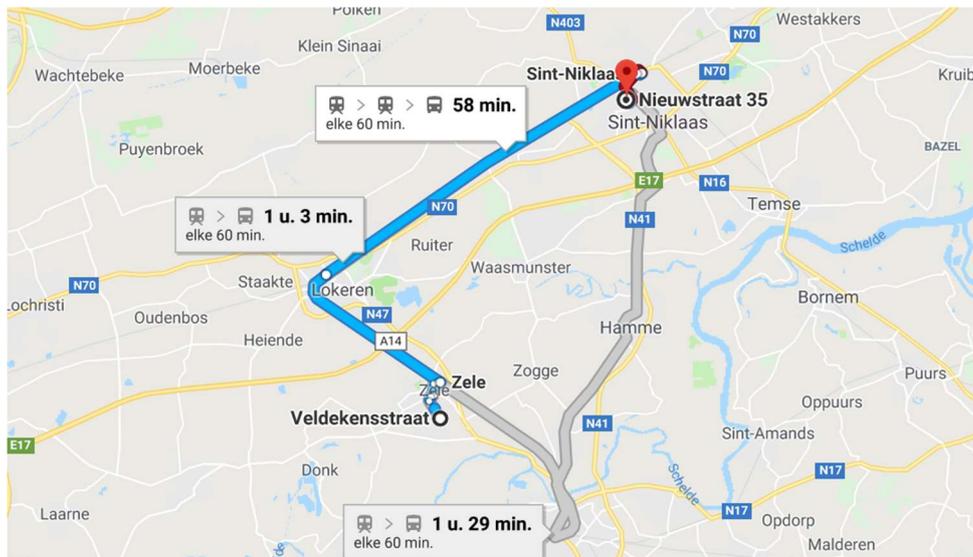


Figure 9: Example journey to STEP partner GroepIntro by public transport¹²

Journey from Zele to GroepIntro (most close settlement) by car. Cost: 3.30 euro¹³

¹⁰ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

¹¹ <https://www.belgiantrain.be/nl?journey=0>

<https://www.delijn.be/nl/vervoerbewijzen/ticket-op-gsm/>

¹² Map data ©2019 GeoBasis-DE/BKG (©2009), Google

¹³ <http://bit.ly/costbycar2>

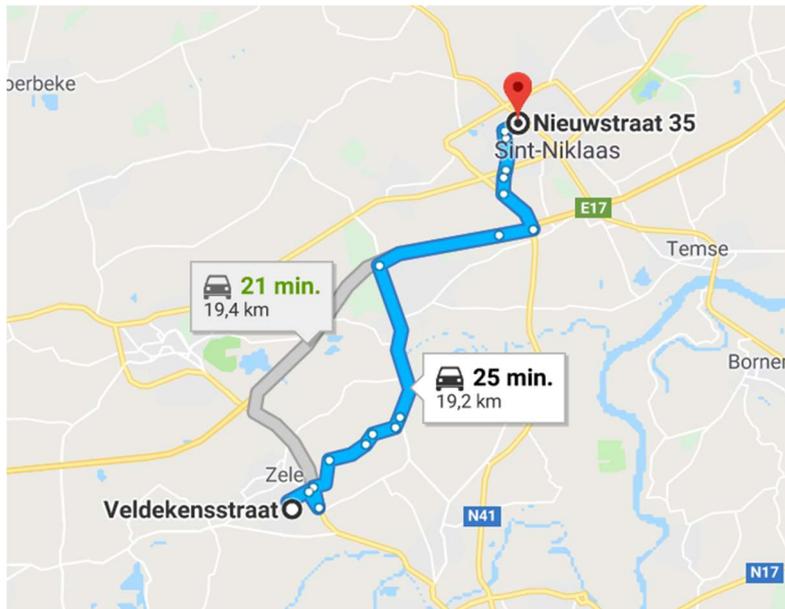


Figure 10: Example journey to STEP partner GroepIntro by car¹⁴

Example 3:

Journey from Zele to Web VZW by public transport. Cost: 29,20 euro¹⁵

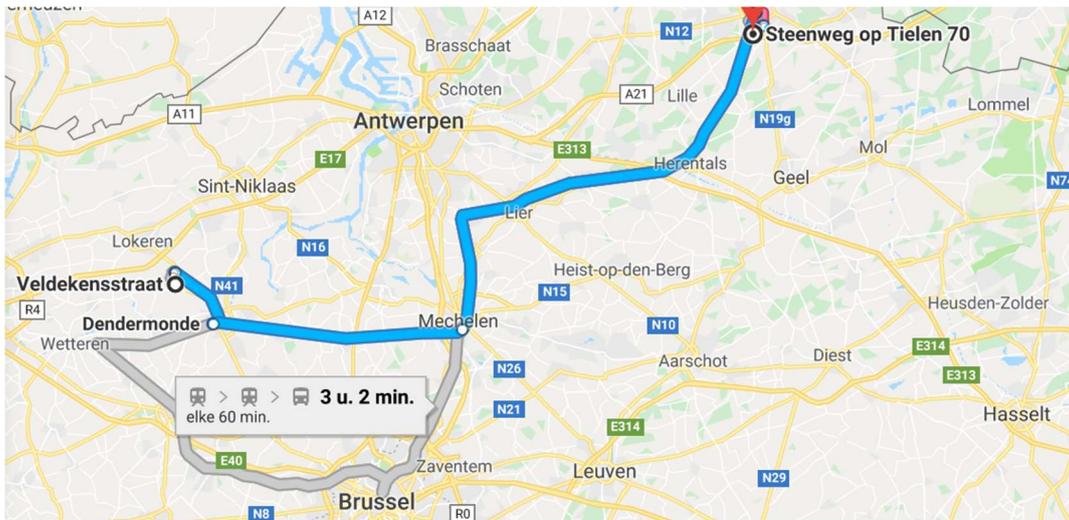


Figure 11: Example journey to STEP partner Web VZW by public transport¹⁶

Journey from Zele to Web VZW by car. Cost: 6,87 euro¹⁷

¹⁴ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

¹⁵ <https://www.belgiantrain.be/nl?journey=0>

<https://www.delijn.be/nl/vervoerbewijzen/ticket-op-gsm/>

¹⁶ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

¹⁷ <http://bit.ly/costbycar3>

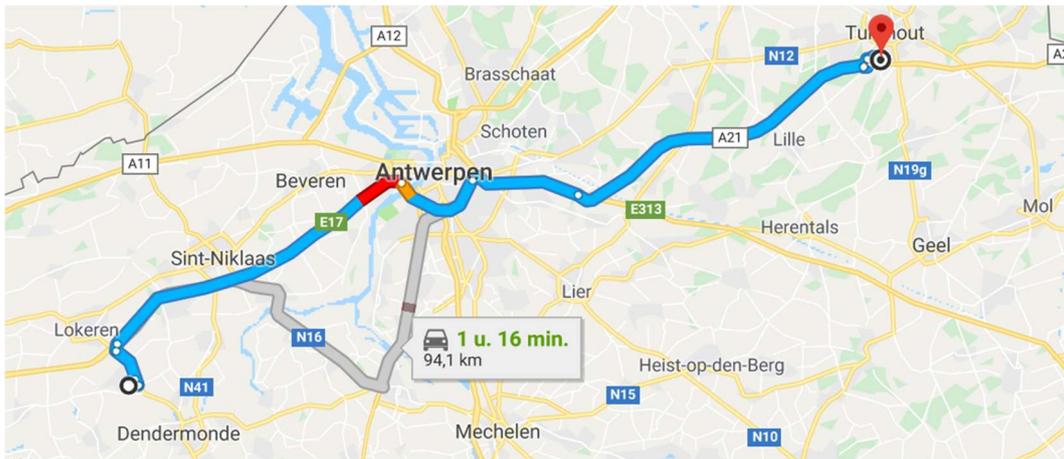


Figure 12: Example journey to STEP partner Web VZW by car¹⁸

¹⁸ Map data ©2019 GeoBasis-DE/BKG (©2009), Google

4 Mobility service operated in the site and stakeholders involved

With the introduction of the Mobitwin app and Olympus app we want to provide the target groups the most efficient and diverse transport possibilities in real time wherever they are in Flanders. For the Less Mobile Service users we created our own app (Mobitwin) which members and drivers can easily download. For The second pilot lab we work together with Olympus Mobility (partner STEP project) to provide an Olympus app. Below we explain how both apps work.

4.1 Mobitwin app

The Mobitwin app is in fact the new digital version of the Less Mobile Stations. It has 2 different versions: 1 for the driver and 1 for the passenger.

This is what the app looks like for passengers:

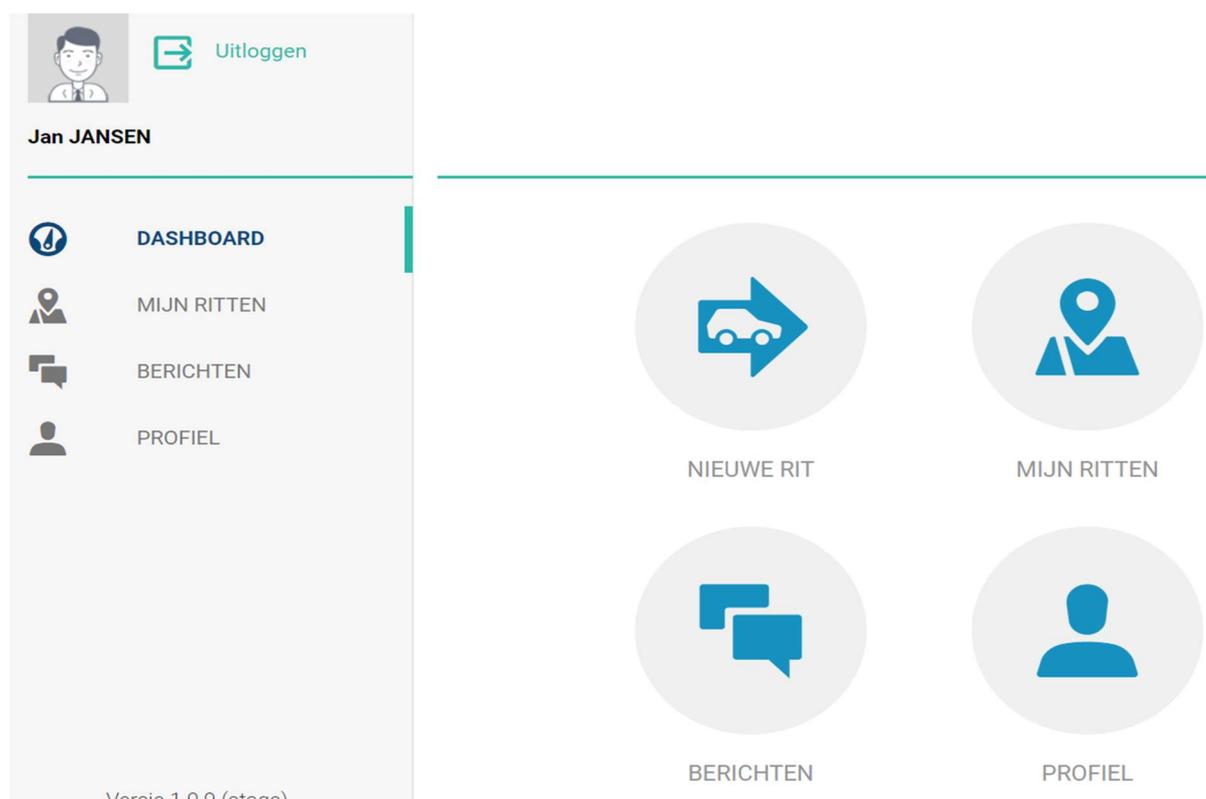


Figure 13: Example dashboard Mobitwin app for passengers¹⁹

The app has 4 functionalities:

- The user can view its profile:

¹⁹ Source: Mobitwin app



238218

Voornaam: Jan
Achternaam: JANSEN

Telefoon: _____

GSM
Verplicht veld

Geboortedatum: 06-12-1973

Rijksregisternummer: 73.12.06-001.78

Geslacht: man

Taal: NL

VOLGENDE

Figure 14: Example profile Mobitwin app for passengers²⁰

- The user can see the history of all the rides:

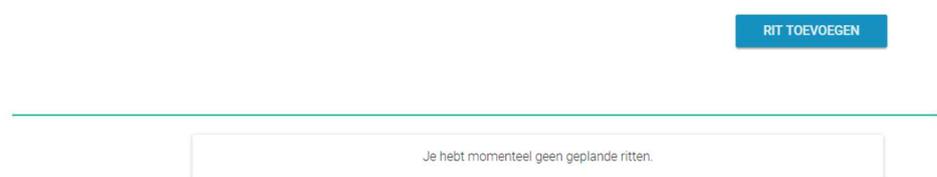
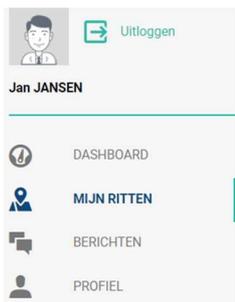


Figure 15: Example history of all rides Mobitwin app for passengers²¹

- The user can see notifications of incoming messages. This is not a chat option yet users can communicate via phone since a phone number can be given. Users and drivers always can rely of the classic system by calling the person responsible of the Less Mobile Station to inform a delay or cancellation.

²⁰ Source: Mobitwin app

²¹ Source: Mobitwin app

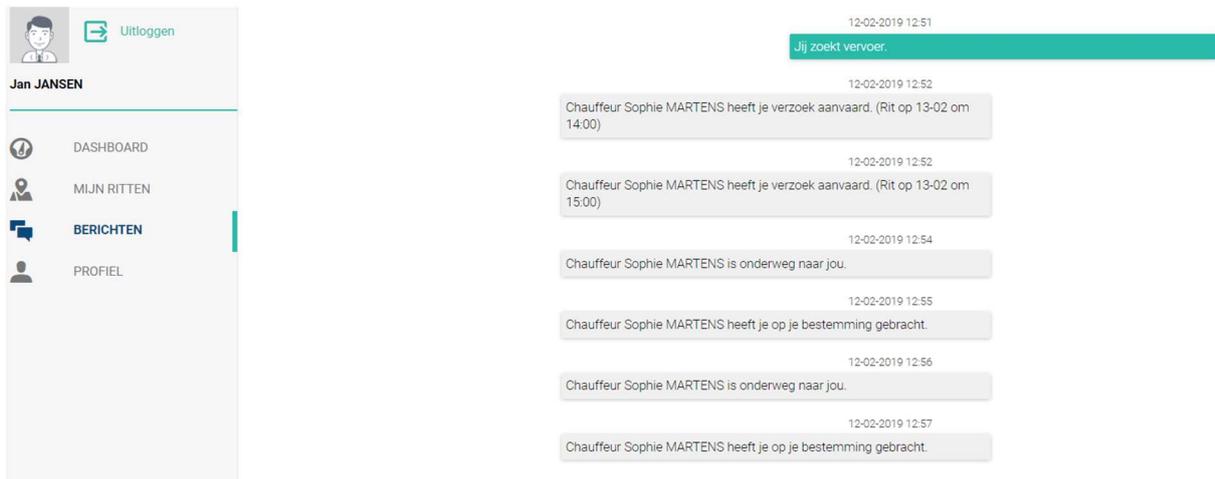


Figure 16: Example notifications Mobitwin app for passengers²²

- The main functionality is to order a ride:

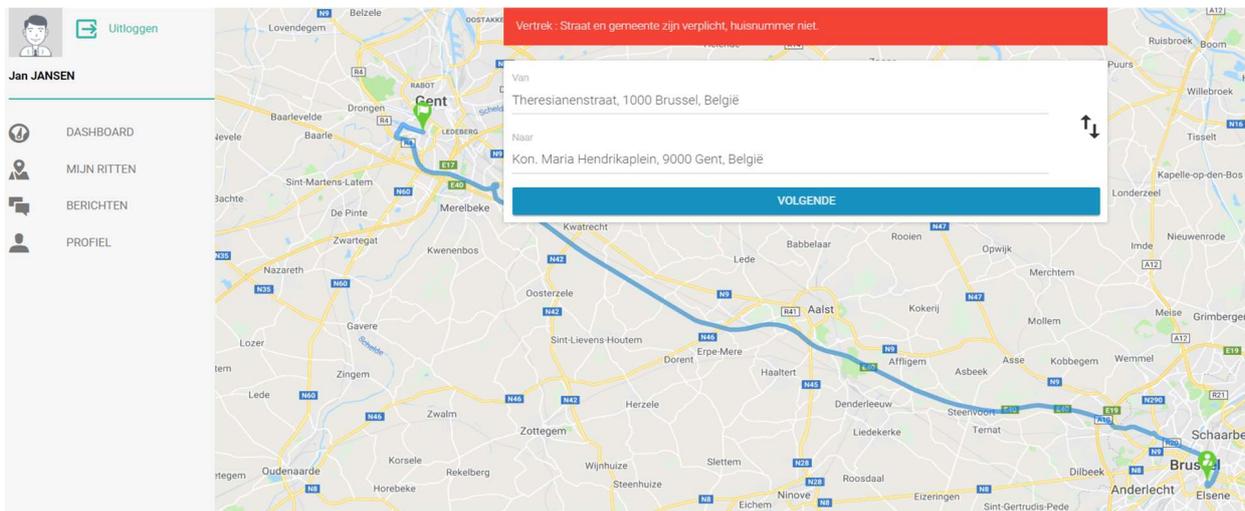


Figure 17: Example 1 ordering a ride Mobitwin app for passengers²³

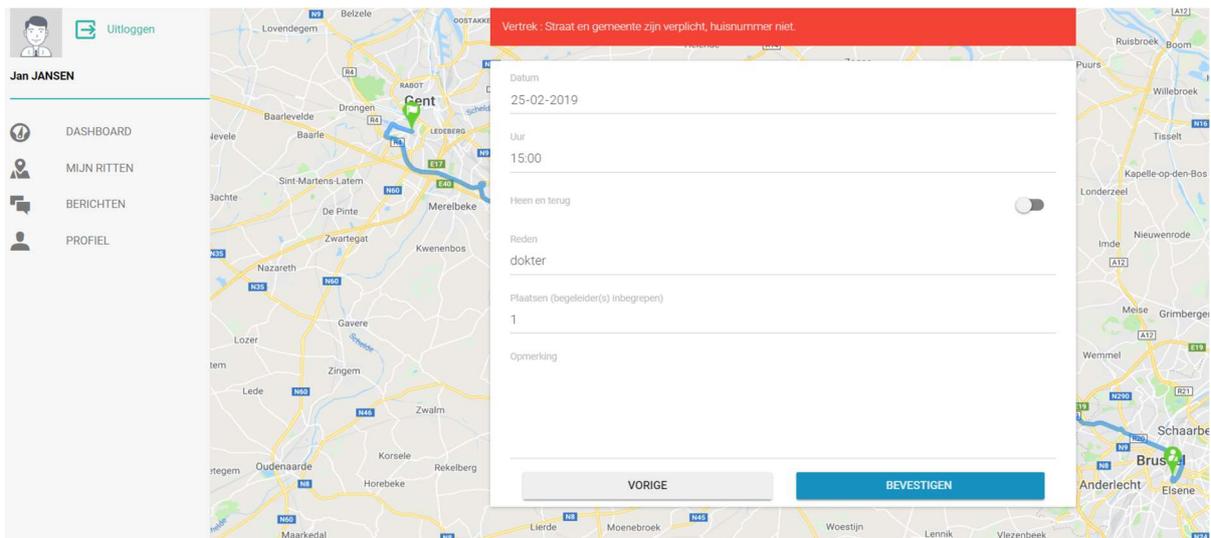


Figure 18: Example 2 ordering a ride Mobitwin app for passengers²⁴

²² Source: Mobitwin app

²³ Source: Mobitwin app

²⁴ Source: Mobitwin app

This is what the app looks like for drivers:

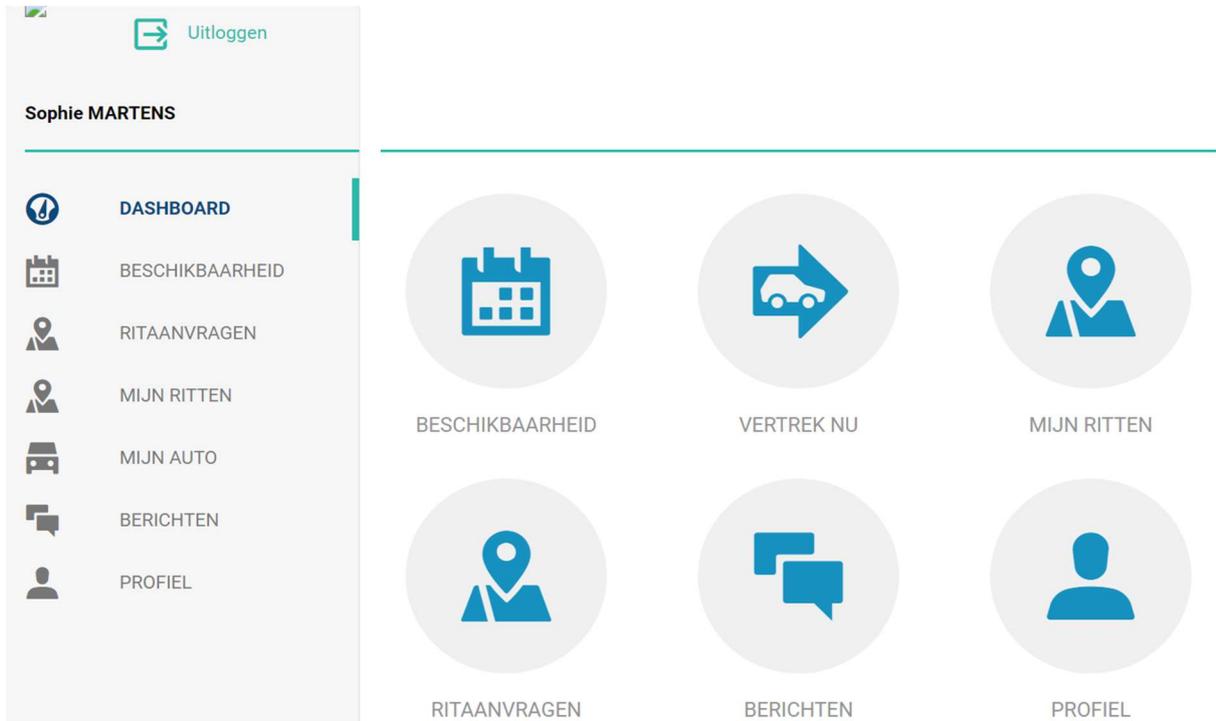


Figure 19: Example dashboard Mobitwin app for drivers²⁵

The options that are added for drivers are "My Car" ("Mijn auto"), "Availability" ("Beschikbaarheid") and "Leave Now" ("Vertek nu"):

- The driver selects his/her availability in the app:



Figure 20: Example availability driver Mobitwin app for drivers²⁶

- If this is confirmed the user can book a ride. If not the driver will not be allowed to accept rides.

²⁵ Source: Mobitwin app

²⁶ Source: Mobitwin app

The option “My Car”. Here more information is provided on the owner’s car.

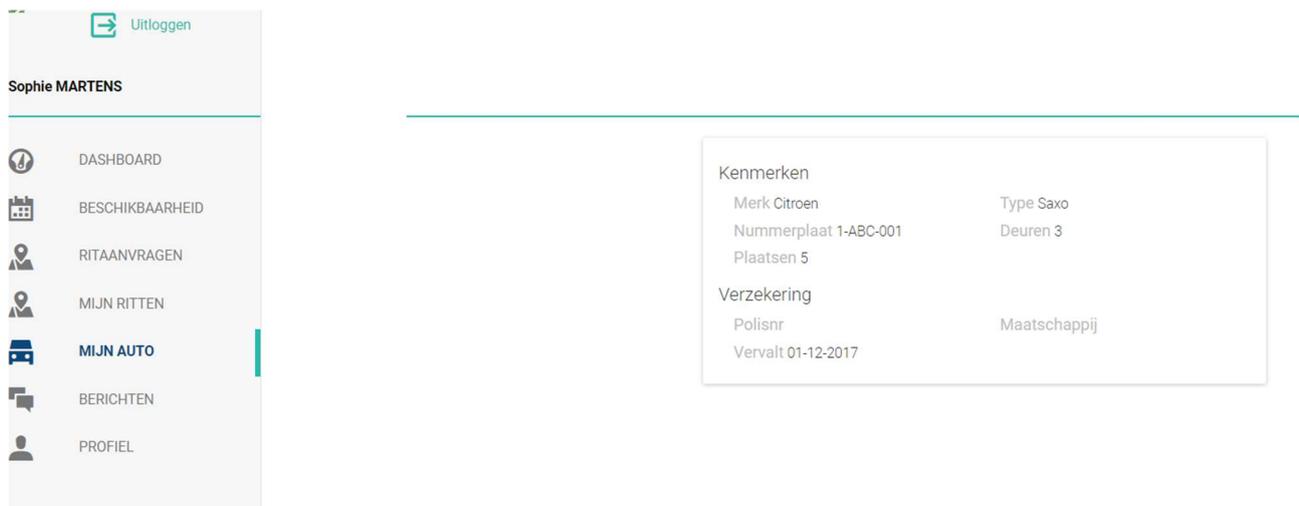


Figure 21: Example option ‘my ride’ Mobitwin app for drivers²⁷

- The option ‘leave now’ allows the driver to inform the passenger s/he has started the ride. The user pays a cost per km to the driver. The cost varies between 30 and 35 cents per km. The payment is not done via the app but the member receives an invoice afterwards.

4.2 Olympus mobility app:

The Olympus app is an (MaaS) app provided by employers to be used by their employees. Taxistop adds users so they can download and use the app. Taxistop also adds €30 budget to be spent in the app on trips. Users can use the app as long as they have a budget. If the budget reaches 0 then the app cannot be used anymore. A bank account or credit card is not needed to use the app.

²⁷ Source: Mobitwin app

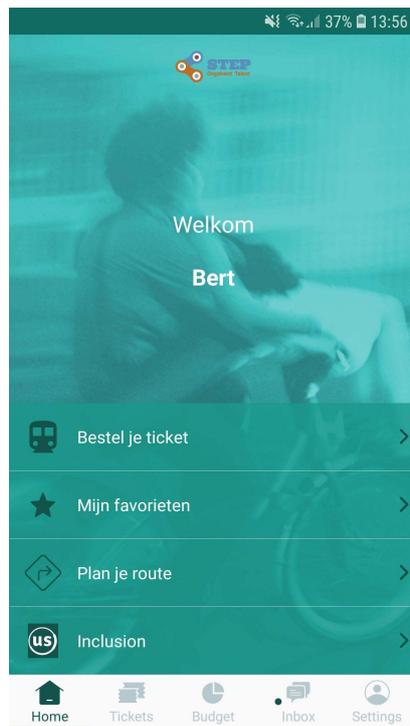


Figure 22: Example dashboard Olympus Mobility app²⁸

The following modes of transport are included (Figure 22):

- **NMBS** is the national railway company of Belgium. You can order tickets in the app.
- **De Lijn** is a company run by the Flemish government in Belgium to provide public transportation. You can order bus tickets and tickets for the tram (Figure 24).
- **MIVB** is the Brussels public transport service. You can order tickets for the MIVB.
- **Blue-Bike** is a bike sharing service with stations all over Flanders. You have to return the bike to the station after the ride. You can pay for a 24h voucher to use the Blue-Bike (Figure 23).
- **Velo:** Velo is a bike-sharing service provided by the City of Antwerp. The bikes are available 365 days per year and 24 hours per day. The different Velo stations are located within walking distance from each other (max 400 m) in an area that includes the city centre of Antwerp and the surrounding districts Berchem, Borgerhout, Deurne, Hoboken, Merksem and Wilrijk (Figure 23).

²⁸ Source: Olympus Mobility app

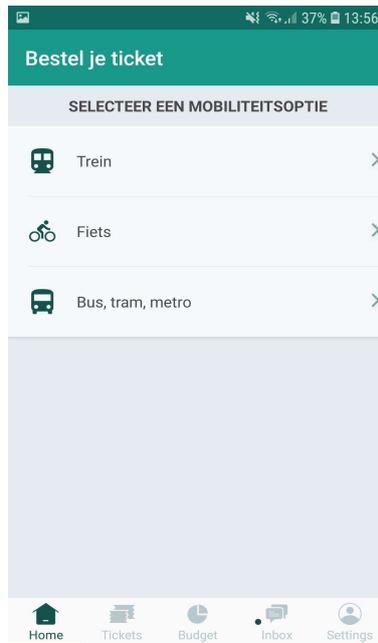


Figure 23: Example modes of Mobility app transport Olympus Mobility app²⁹

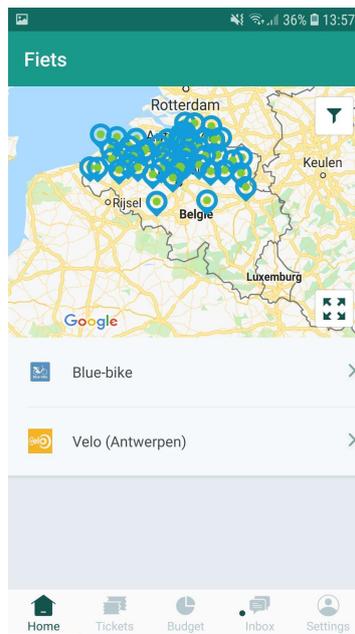


Figure 24: Example Velo services Olympus Mobility app³⁰

²⁹ Source: Olympus Mobility app

³⁰ Source: Olympus Mobility app

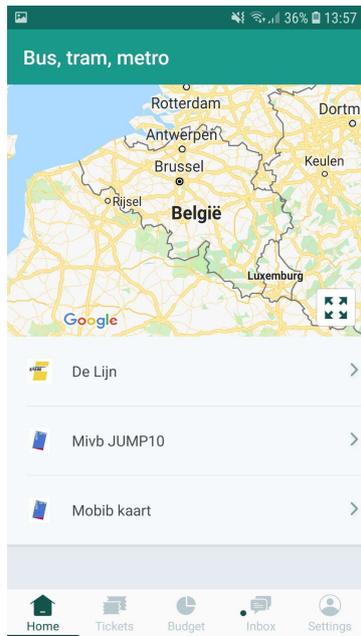


Figure 25: Example 'De Lijn' Olympus Mobility app³¹

Users can order a ticket via the app and look at the remaining budget (Figure 25).

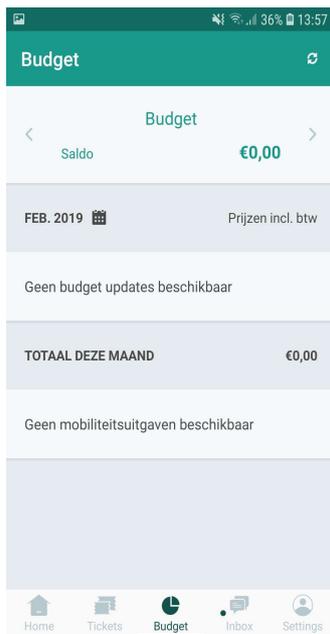


Figure 26: Example budget Olympus Mobility app³²

³¹ Source: Olympus Mobility app

³² Source: Olympus Mobility app

5 Target groups for Pilot Labs

As explained in the previous sections, we have decided to keep our focus on two different target groups in the different pilot labs: Less mobile elderly people and (un)employed migrants with low income. The Less Mobile Stations is a service that we implemented throughout Belgium where we provide transport for less mobile elderly people. The Olympus Mobility app is an app that was developed within the STEP project. Taxistop is a very involved partner/provider with both of the pilot labs where the situation of the target groups is communicated directly and clearly.

5.1 Mobitwin

With Mobitwin app we want to reach the target group of the Less Mobile Stations: People who are less mobile and have a low income. By low income we decided that members cannot earn 2 times the living wage in Belgium. As previously written, the pilot lab takes the ageing population in account and focuses on the target group that is mainly elderly people (65+ years old). The unmet mobility needs in the pilot is the on-demand ride sharing. The current system allows the target group to book a ride two days in advance. The Mobitwin app will enable the target group to book rides up until the time of travel.

5.2 STEP-Olympus project

Here our main target group is migrant job seekers, which coincides with the target group of the STEP project. The STEP project is a project of Manpower together with ngo's Compaan, Groepintro and Web. The target group experiences difficulties in finding work, has very low income and often have a language deficiency. Within the pilot we will try to tackle these issues. The ngo's will train job seekers during this project. When the jobseekers are ready for the job market, Manpower provides job opportunities. The unanswered need in the current mobility offer is clear travel information and the possibility to have all options in one app. On the other hand there is also a financial barrier that job seekers experience when they want to go to a company for a job interview or even when they want to go to one of our partners for consultation. With Olympus Mobility app we want to give them the most (cost)efficient transport possibilities in one app and a travel budget to spend through the app. We aim at 100 users within the target group to use the app.

6 Identification of the Pilot Lab actions

After describing the sites and defining the target groups, this section presents the actions for both of the pilot labs.

6.1 Mobitwin app

Specific needs to be addressed:

The system was invented for people who are less mobile and have a low income. The focus during the test period will be on elderly people. We hope to reach a wider target group in the future. These people are at risk to get socially isolated because they can't go wherever they want, whenever they want. There is no transport option in real time. This need exists in both rural and urban areas.

Requirements analysis:

Mobitwin is an app and basically the digital version of the current 'Less Mobile Stations' service. It is a system based on voluntary drivers. Currently users can book a ride by calling a Less Mobile Station up to two days in advance of travel. For the Mobitwin app we have developed the digital functions using partner experience. Through interaction with the different Less Mobile Services we received feedback from the potential users (both elderly passengers and volunteer drivers). The app was then developed to provide a digital and more responsive version of the service we already provide. The big difference is that the Mobitwin app allows users to book a ride on-demand right up to time of travel.

Below you can find a mind map including the stakeholders involved with the Mobitwin app.



Figure 27: Mindmap Stakeholders Pilot Lab Mobitwin App

Actions to be implemented in the Pilot:

- Test our Mobitwin app in Ghent and Oudenaarde in Flanders.
- Convince other LMS's to test the app
- Get feedback from test persons so we can optimize the accessibility of the app.

Solutions to be demonstrated in the Pilot:

Mobitwin is an app and basically the digital version of the current 'Less Mobile Stations' service. Mobitwin allows users to book a ride on-demand right up to time of travel. Some LMS's experience planning the trips of the users as an extra burden for their work. By making them test the app we want to discharge them from planning the trips.

6.2 Olympus app

Specific needs to be addressed:

The Olympus app is removing two of the main barriers which limit migrant job seekers accessing opportunities: lack of information on transport options to reach work locations and lack of money to pay for these transport services prior to them receiving their first payment for working. Most of the workplaces are located in rural areas where there are limited PT possibilities. If there is any possibility, than the target group experiences a large financial barrier. This forces a lot of people to use PT 'illegally' (without paying) or to use a car, or in most cases they simply can't access the opportunity.

Requirements analysis:

For the Olympus app we relied on partner experience. We work together with different NGOs who are specialized in accessibility to the job market. Olympus was founded as a B2B platform, bringing together supply and demand of mobility services. Central in using the platform is the Olympus app. Below you can find a mindmap with all the stakeholders of STEP project, who are also involved as stakeholders in the INCLUSION pilot lab:



Figure 28: Mindmap Stakeholders Pilot Lab Olympus Mobility App

Actions to be implemented in the Pilot:

- Testing MaaS app (Olympus) for jobseekers with a migrant background: Users can order tickets of multiple mobility providers, such as public transport (bus, metro, tram, train) and bike-sharing.
- Central to this action is the provision of a mobility budget via the app to migrant job seekers. This person-centred mobility budget amounts to 30 Euros for each individual migrant and is funded from the INCLUSION project.

Solutions to be demonstrated in the Pilot:

With this pilot we hope to create a case with the aim to provide inclusive mobility in the job market. This case can be used to show companies how they can help job applicants with new mobility solutions. This can be very useful for companies which are difficult to reach without the owned (private) car.

7 Design of the Pilot Lab

7.1 Mobitwin app

Pilot Area

The pilot area covers Flanders, both rural and urban areas.

Service Design

- Communicating with the members and drivers of the Less Mobile Stations and receiving feedback from the target group in the consultation phase on the different functionalities of the Mobitwin app which are desirable
- Development of the Mobitwin app based on the user needs consultation, needs of both members and drivers.
- Providing training for the drivers and members who will use the app.
- Testing the app
- Further communication with users to receive feedback during the months when they are testing.
- Promoting the app
- Launch a campaign to recruit voluntary drivers

New Service Customers

By providing the Mobitwin app we want to give less mobile elderly people the chance to plan trips on real time instead of waiting for two days. This will give them space to be included in the daily/social life.

ITS specifications

Traveler information system of the Mobitwin app can help the Less Mobile Stations by giving a fast overview of all the trips members and/or drivers have taken. The same system enables us to follow the amount of trips, new members and new drivers so we can see how the app has influenced the accessibility of the services. The app also provides the opportunity for members and drivers to plan their own trip (in real time). This makes them more independent and gives them more real time movement.

- Fleet/vehicle description: **Owned cars of voluntary drivers**
- Booking procedure: **Via an app/website**
- Payment modalities: **Invoice afterwards**
- Actors involved, role and responsibilities: **Mobitwin: Taxistop is the leader of the pilot. The Less Mobile Services (LMS) are a service and partner which we need to work together with to test Mobitwin.**
- System Architecture: **Software**
- Technical specifications: **Web-based app**

- Functional specifications: **On-demand ride sharing service**

- Operative specifications: **iOS/Android + website**
- Target clients: **Less mobile people with low income. These are mainly elderly people.**

Definition of internal processes/procedures

In order to make Mobitwin app more accessible for the target group, we need to be able to get feedback from them.

When one of the Less Mobile Stations notifies that there is a potential user/driver, these are the next steps:

- All LMS providers in Oudenaarde and Ghent will be informed about and trained in the use of the App, and they will promote its use to their existing members (i.e. 189 members and 28 voluntary drivers in Ghent, and 160 members and 22 voluntary drivers in Oudenaarde). This will be expanded to more LMS areas where possible.
- Taxistop gets feedback from the users and partners and takes their feedback to optimize the app.

Once we get specific feedback on the app. It will be necessary to do A+B tests to see how the app has influenced the life of the users.

Any changes/adaptation to institutional/regulatory level

- Less Mobile Stations is a private service provided to both private and public services to:
 - Decrease social isolation of less mobile elderly people
 - Reduce car overcrowding
 - Avoiding extra workloads for the LMS's
 - Provide more on-demand transport services

7.2 Olympus App

Pilot Area

The pilot area for the Olympus Mobility app covers all Flanders region. There is a focus on migrant jobseekers and potential employers who are mostly located in rural areas.

Service Design

Members can buy a ticket, using a pre-loaded budget, for public transport and bike-sharing. The app provides an easy way to buy tickets and to discover multiple modes of transport. Also, the lowest price is provided for the transport modes.

New Service Customers

User can find different transport modes in one app that provides them the most cost-efficient way of public transport.

ITS specifications

- Fleet/vehicle description: **Public transport and bike-sharing**
- Booking procedure: **Tickets via Olympus app**
- Payment modalities: **MaaS app: free budget of €30 for jobseekers**
- Integration within mobility offer: **MaaS: integrating public transport and bike sharing**
- **Taxistop is working together within the Step project (Divergent, vzw Compaan, Groep-intro, web, Taxistop). The Step project is being led by Manpower and the NGOs involved. Taxistop provides an app to secure the mobility needs of the job applicants.**
- Target clients: **Migrants**
- Involved actors: **Employers and NGOs**
- Value proposition: **Inclusion, providing mobility solutions for job applicants**

Definition of internal processes/procedures

- Receiving feedback from the target group on functions needed/desired
- Develop new functionalities/features of the Olympus app
- Providing training for the users
- Recruitment of the users by STEP project stakeholders: identify and approve potential of peers who use the app
- Testing the app
- Further communication with users to receive feedback during the months when they are testing.

Any changes/adaptation to institutional/regulatory level

- It might be interesting that the government provides (beside the integration courses) courses about Public Transport and how to use it.
- A lot of people are extremely willing to use the PT more, but the financial barrier keeps them away from doing it. In Belgium, PT is mostly a government service. With this pilot lab, we hope to create some advocacy and make the government aware of the financial issue faced by migrant and low income jobseekers.

8 Actors to be involved in the Pilot Lab, roles and responsibilities

8.1 Olympus app

NGOs

- Vzw Compaan
- Web
- Divergent
- Groep Intro

Private organisation

- Olympus Mobility is the service provider of the Olympus app.

Taxistop is the Pilot Lab leader.

The NGOs are included in the STEP project where they provide training for job applicants. Taxistop will provide mobility solutions for the job applicants. Olympus Mobility provides the app for the pilot. Taxistop will also provide budget for the test persons.



Figure 29: Mindmap Stakeholders Pilot Lab Olympus Mobility App

8.2 Mobitwin app

Taxistop is the founder of the Less Mobile Stations and the developer of the Mobitwin app. The Less Mobile Stations will help to recruit the volunteer drivers and elderly passengers from their existing members. Together we will test the Mobitwin app.



Figure 30: Mindmap Stakeholders Pilot Lab Mobitwin App

9 Timeplan for the demo operation (M19-M34)

9.1 Mobitwin app

	M 1 9	M 2 0	M 2 1	M 2 2	M 2 3	M 2 4	M 2 5	M 2 6	M 2 7	M 2 8	M 2 9	M 3 0	M 3 1	M 3 2	M 3 3	M 3 4
Support persons who are testing the app	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Communicating with the members and drivers of the Less Mobile Stations and receiving feedback from the target group	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Development of the Mobitwin app based on the user needs consultation	x	x	x													
Launch a campaign to recruit drivers				x	x	x	x	x	x	x	x	x	x	x	x	x
Test our Mobitwin app in several cities in Flanders			x	x	x	x	x	x	x	x	x	x	x	x	x	x
Promoting the app				x	x	x	x	x	x	x	x	x	x	x	x	x

Table 1 – Timeplan for Mobitwin app

9.2 Olympus app

	M 1 9	M 2 0	M 2 1	M 2 2	M 2 3	M 2 4	M 2 5	M 2 6	M 2 7	M 2 8	M 2 9	M 3 0	M 3 1	M 3 2	M 3 3	M 3 4
Support persons who are testing the app	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Provide updates to the STEP project leaders	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Communicate with partners of STEP projects to increase usage of app	x	x	x	x	x											
Communicate with target group (jobseekers to increase usage of app)		x	x	x	x	x										
Testing MaaS app (Olympus) for jobseekers with a migrant background				x	x	x	x	x	x	x	x	x	x	x	x	x

Table 2 – Timeplan for Olympus app

10 Risk assessment

We identify two main risks, one for each pilot site:

10.1 Mobitwin app

The friendly usability of the Mobitwin app by elderly persons who may not be familiar with advanced IT technologies.

To tackle this issue we have written a manual and are providing training. During the training we also receive feedback which can be very useful to update the app.

If the users don't own a smartphone they could perhaps phone the LMS where a member of staff can use the App on their behalf, hence still benefitting from the real time booking.

There might also be a risk that insufficient volunteer drivers offer their availability through the app and therefore users don't find any suitable drivers for their trip requests. To mitigate against this we have included a campaign to recruit drivers to share their availability using the app. Yet the users can always rely on the classic system of calling a hotline to order a ride, but might have to wait for two days.

10.2 Olympus app

Language can be a barrier in the training of jobseekers to MaaS as most are immigrants who may not be proficient in the local language.

The app is provided in three languages: Dutch, French or English. Yet this still may not be clear for the persons who will test the app. Therefore employers can always be informed and help the test persons to use the app.

11 INCLUSION consortium



For further information

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12 Annex A: Flanders Local Pilot Action Plan

1. Object of the Pilot Lab		
1.1	Actions (to be) demonstrated in the Pilot Lab – Overview	<ul style="list-style-type: none"> • Testing MaaS app (Olympus) for jobseekers with a migrant background. Olympus was founded as a B2B platform, bringing together supply and demand of mobility services. Central in using the platform is the Olympus app. Users can order tickets of multiple mobility providers. During the pilot the jobseekers can order tickets for public transport (bus, metro, tram, train) and bike-sharing. • Test our Mobitwin app in several cities in Flanders. Mobitwin is an app and basically the digital version of the current 'Less Mobile Stations'. The system was invented for people who are less mobile and have a low income. It is a system based on voluntary drivers. Users can book a ride by calling a Less Mobile Station two days in advance. Mobitwin allows users to book a ride on demand.
1.2	What will be demonstrated in the Pilot Lab?	<input type="checkbox"/> Improvement of mobility services <input checked="" type="checkbox"/> Provision of new “customers oriented” services <input checked="" type="checkbox"/> Implementation of innovative ITS supporting mobility services operation/offer <input checked="" type="checkbox"/> Other (please specify): Create a case with the aim to provide inclusive mobility in the job market. This case can be used to show companies how they can help job applicants with new mobility solutions. This can be very useful for companies which are very difficult to reach without the owned car.
1.3 (a)	In case the answer to 1.2) is “improvement of mobility services”, please detail which is the change involved in the mobility offer	<input type="checkbox"/> Launch of a new mobility service <ul style="list-style-type: none"> <input type="checkbox"/> Opening a restricted service to target groups: <input type="checkbox"/> Opening a restricted service to the general public <input type="checkbox"/> Other (please specify)..... <input checked="" type="checkbox"/> Enhancement of a mobility service already operated <ul style="list-style-type: none"> <input type="checkbox"/> Extension in terms of covered area <input type="checkbox"/> Extension in terms of covered time <input type="checkbox"/> Enforcement of vehicles/fleet (number, typology, performance/quality)

		<input checked="" type="checkbox"/> (please specify) Providing an app (Mobitwin) for members of the less mobile services. Launching Olympus app to jobseekers: public transport and bike-sharing combined in one application
1.3 (b)	In case the answer to 1.2) is "Provision of new "customers oriented" services", please detail which is the new/enhanced service offered	<input type="checkbox"/> New or enhanced access modalities to services (i.e. service registration/membership, booking, etc.) <input type="checkbox"/> New or enhanced payment methods <input type="checkbox"/> New or enhanced passenger information services <input type="checkbox"/> New or enhanced customer handling and support <input checked="" type="checkbox"/> Other (please specify) New apps for specific target groups.
1.3 (d)	In case the answer to 1.2) is "implementation of ITS supporting systems", please detail which is the ITS involved	<input checked="" type="checkbox"/> Service planning (matching of demand/offer, scheduling of "on demand" services, etc.) <input type="checkbox"/> Platform for sharing/networking of resources, Transport Operators, etc. <input type="checkbox"/> Users information systems <input checked="" type="checkbox"/> E-ticketing <input type="checkbox"/> Fleet Monitoring system <input type="checkbox"/> Aid driver tools <input type="checkbox"/> Data mining system <input type="checkbox"/> Expert knowledge system <input type="checkbox"/> Back office application, business intelligence <input type="checkbox"/> Other (please specify).....
1.3 (e)	In case the answer to 1.2) is "new funding/business models", please specify	<p><i>We did not select this but we aim to create a model with the aim for inclusion. We set up two pilot labs with the sole purpose to create a case to help specific target groups with their daily trips. One pilot lab focuses on finding a job. The other focuses on daily trips of people who have the risk of being isolated.</i></p> <p><i>Currently Taxistop provides budget for the Olympus app. But in the future this could be potential employers who will provide funds for the app.</i></p>

		<i>Members of the Less Mobile Services pay a membership fee. Also we provide an insurance package to the Less Mobile Services. That way we can set up the software for the users. We are not making any profit but we can keep improving the app.</i>
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2. Pre-feasibility analysis

2.1	Please describe the current status of needs analysis and the actions already carried out for the identification of requirements the demo actions will comply with. Is the analysis of the requirements completed?	<p>The needs analysis was provided but can still be updated. If we receive feedback from the target group, the analysis of the requirement can change.</p> <p>For the Olympus app we relied on partner experience. We work together with different NGO's who are specialized in accessibility to the job market.</p> <p>For the Mobitwin app we are using partner experience and customer feedbacks. The app was developed for a service we already provide. In interaction with the different Less Mobile Services we received feedback from the potential users. This is necessary for the testing period.</p>
2.2	Please resume the main results of the requirements analysis	<p>Two main needs are identified:</p> <p>The friendly usability of the Mobitwin APP by elderly not surely familiar with most advanced IT technologies.</p> <p>Language can be a barrier in the training of jobseekers to MaaS as most of them are immigrants who have often a language deficiency</p>
2.3	Please describe the actions to be carried out in the future to complete the requirements analysis and the milestones	We are focussing on going in interaction with the target group to see what their needs are. This is a process we can learn and benefit from.

3. Design of Pilot Lab

3.1	Please describe the current status of design activities of Pilot Lab actions. Is the design completed?	The design is completed but can still be adjusted if we detect circumstances where the pilot lab is not going in the right direction. By detecting we mean receiving feedback from the user group. E.g.: We will add new functions or delete functions in the Mobitwin app taking in account the feedback from the users.
3.2	Please resume the main results of the design of the Pilot Lab - Mobitwin	<p>3.2.1 Design of new mobility services/ Definition of improvements to a mobility service already under operation / Service integration</p> <p>Access modalities:</p>

- Receiving feedback from the target group by contacting them. We will receive feedback during the months when they are testing.
- Improving the Mobitwin app
- Testing the app
- Providing training for the users
- Communicating with the user group
- Launching a campaign to recruit the drivers
- Different functionalities of the Mobitwin app:

The app is slightly different for drivers in comparison to members (passengers):

Members can order a ride in the app, change their profile and see the history of all the rides.

Drivers can change their availability to drive, see incoming requests, accept or decline requests, see the history of all the rides, send real-time information to the passengers and update their profile.

The needs of the passengers is to order a ride which are coped by adding an on demand service for the members.

Service model: covered area, opening time, service scheme, routing, scheduling, pick up-drop off points, interchange points, etc.

Fleet/vehicle description: **Owned cars of voluntary drivers**

Booking procedure: **Via an app/website**

Payment modalities: **Mobitwin: Payment is due by less mobile stations**

Integration within mobility offer:

Institutional/regulatory issues:.....

Actors involved, role and responsibilities:

- **Mobitwin: Taxistop and less mobile services. Taxistop is the leader of the pilot. The less mobile services are a partner which we need to work together with to test Mobitwin.**

		<p>Other (please specify).....</p> <hr/> <p>3.2.2 Design of new customers services: N/A Service specifications:..... Management procedure for the operation of the service:..... Data/resources required:..... Institutional/regulatory issues:..... Actors involved, role and responsibilities:..... Other (please specify).....</p> <hr/> <p>3.2.3 Specifications of new internal processes: N/A Description of the processes:..... Resources required/involved:..... Supporting data/tools/material:..... Allocation of responsibilities..... Other (please specify).....</p> <hr/> <p>3.2.4 Definition of ITS specifications: N/A System Architecture: Software Technical specifications: Web based app Functional specifications: On-demand ride sharing service Operative specifications: iOS/Google Play + website</p> <hr/> <p>3.2.5 Definition of new funding/business models/commercial agreements Target clients: disabled people with low income Involved actors: Value proposition: Sustained costs: n/a Funding/ Revenues: n/a Commercial agreements with mobility operators: Commercial agreements with other (no transport) organizations: Other (please specify).....</p>
3.2	Please resume the main results of the design of the Pilot Lab - Olympus	<p>3.2.1 Design of new mobility services/ Definition of improvements to a mobility service already under operation / Service integration</p> <p>Access modalities:</p> <ul style="list-style-type: none"> - Receiving feedback from the target group

		<ul style="list-style-type: none"> - Testing the app - Providing training for the users - Functionalities of the Olympus app: <p>Members can buy a ticket for public transport and bike-sharing. The app is an easy way for buying tickets and to discover multiple modes of transport. Also the lowest price is provided for the transport modes.</p> <p>Service model: covered area, opening time, service scheme, routing, scheduling, pick up-drop off points, interchange points, etc.</p> <p>Fleet/vehicle description: Public transport and bike-sharing</p> <p>Booking procedure: Tickets via Olympus app</p> <p>Payment modalities: MaaS app: free budget for jobseekers</p> <p>Integration within mobility offer: MaaS: integrating public transport and bike sharing</p> <p>Institutional/regulatory issues:.....</p> <p>Actors involved, role and responsibilities:</p> <ul style="list-style-type: none"> - Step project (Manpower, vzw Compaan, Groep-intro, web, Taxistop). The Step project is being led by Manpower and the ngo's involved. Taxistop provides an app to secure the mobility needs of the job applicants. <p>Other (please specify).....</p>
		<p>3.2.2 Design of new customers services: N/A</p> <p>Service specifications:.....</p> <p>Management procedure for the operation of the service:.....</p> <p>Data/resources required:.....</p> <p>Institutional/regulatory issues:.....</p> <p>Actors involved, role and responsibilities:.....</p> <p>Other (please specify).....</p>
		<p>3.2.3 Specifications of new internal processes: N/A</p>

		<p>Description of the processes:..... Resources required/involved:..... Supporting data/tools/material:..... Allocation of responsibilities..... Other (please specify).....</p> <hr/> <p>3.2.4 Definition of ITS specifications: N/A System Architecture: Software Technical specifications: App Functional specifications: MaaS app, on demand ticketing service for multiple mobility services Operative specifications: Google Play + iOS</p> <hr/> <p>3.2.5 Definition of new funding/business models/commercial agreements</p> <p>Target clients: migrants</p> <p>Involved actors: Employers and ngo's</p> <p>Value proposition: Inclusion, providing mobility solutions for job applicants</p> <p>Sustained costs: n/a</p> <p>Funding/ Revenues: n/a</p> <p>Commercial agreements with mobility operators: Olympus</p> <p>Commercial agreements with other (no transport) organizations:</p> <p>Other (please specify).....</p>
<p>3.3</p>	<p>Please describe the actions to be carried out in the future to complete the design of the Pilot Lab and the milestones</p>	<ul style="list-style-type: none"> - Optimizing the mobitwin app - Provide a manual in coordination with the user group. E.g. we will let blind people give feedback on the manual. - Update the app according to feedback of user group - Also we received very valuable input during the Stakeholder Forum meeting. Based on the input we will try to focus more on the needs of the target groups since they can be very different. We will focus not only on online tools but also try to make the link with offline existing practices.

	<p>There might also be a a risk that insufficient volunteer drivers offer their availability through the app and therefore users don't find any suitable drivers for their trip requests.</p>	<p>Rely on classic system by calling a hotline to order a ride.</p>
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