INCLUSION Project

Deliverable D4.7

Innovation Pilot Lab Budapest: implementation and results - Intermediate version

Version: 1.0

Author(s): Patrik Tóth, Andor Háznagy, András Vágány

The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the INEA nor the European Commission are responsible for any use that may be made of the information contained therein.

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 770115
Budapest the aim of the INCLUSION project is to increase the service level for the people with reduced mobility. To reach this goal, the BKK will have 2 pilot actions. A new training program will be developed and piloted in order to contribute to a more competent staff behaviour and therefore a more inclusive environment. Furthermore an online, public platform will be created to help us to understand the needs, barriers and problems of the target group. The BKK will measure the effects before and after the pilot actions. After the sensitisation training the passenger satisfaction rate will be progressed. With the usage of the public platform a new social connection will evolve between the target group and the BKK and we will know more about the problems of the people with reduced mobility.
Contents

1 Introduction ......................................................................................................................... 5
2 Site description ...................................................................................................................... 6
3 Mobility demand ................................................................................................................... 9
4 Mobility service operated in the site and stakeholders involved ..................................... 11
   4.1 Conventional Public Transport in Budapest .................................................................. 11
   4.2 Bicycle facilities and public bike sharing system of Budapest ..................................... 14
   4.3 Car sharing system of Budapest ................................................................................... 14
5 Target groups for Pilot Labs ............................................................................................... 16
6 Identification of the Pilot Lab actions .................................................................................. 17
   6.1 Pilot 1: Development of a curriculum and implementation of a sensitisation training of public transport employees ................................................................. 18
   6.2 Pilot 2: Public campaign ............................................................................................... 19
7 Design of the Pilot Lab ......................................................................................................... 20
   7.1 Pilot 1: Development of a curriculum and implementation of a sensitisation training of public transport employees ................................................................. 20
   7.2 Pilot 2: Public campaign ............................................................................................... 20
8 Actors to be involved in the Pilot Lab, roles and responsibilities ....................................... 22
9 Timeplan for the demo operation (M19-M34) .................................................................... 23
10 Risk assessment ................................................................................................................... 25
11 INCLUSION consortium .................................................................................................... 27
Annex A: Budapest Local Pilot Action Plan ........................................................................... 28
Annex B: Questions at public announcement webpage ....................................................... 37
Annex C: Training program for re-education and sensitisation of staff ............................... 38
List of figures

Figure 1: An overview of Budapest city ........................................................................................................................ 6
Figure 2: Budapest's urban structure ............................................................................................................................ 7
Figure 3: Railway network of Budapest and vicinity ................................................................................................ 8
Figure 4: Trip based modal split - working day .......................................................................................................... 9
Figure 5: Distance based modal split - working day ............................................................................................. 10
Figure 6: Daytime transport services - Key routes ................................................................................................. 12
Figure 7: Sectoral distribution of BKK performance in Budapest (working day, based on passenger km) .......................................................... 13
Figure 8: Sectoral distribution of BKK passenger traffic in Budapest ................................................................ 13
Figure 9: Territory of the MOL Limo car sharing service in Budapest ............................................................ 15
Figure 10: Local stakeholder workshop ...................................................................................................................... 18

List of tables

Table 1: Participants of local stakeholder workshop ............................................................................................. 18
Table 2: List of local Stakeholders ......................................................................................................................... 22
Table 3: Implementation Plan of the Pilot Lab ........................................................................................................ 23
Table 4: Contingency plan of Budapest pilot ........................................................................................................ 25
1 Introduction

The equality of access to the public transport system should be standard in all modes of the transport system. Sometimes there are some imperfection to the accessibility, especially in Budapest, where not all public transport lines and vehicles are fully accessible. To solve this problem, the BKK started the search for knowing the problems of the people with reduced mobility and would like to educate the public transport staff to increase the service level of the public transport system.

Budapest is the capital city of Hungary, an important hub of Central-Eastern Europe. It has an extensive public transport system. The number of daily passenger is 4 535 000 boarding passenger on a working day. The public transport network consists of 4 metro lines, 36 tram lines, 238 bus lines, 15 trolleybus lines and 3 boat lines. Providing equal and accessible transport services for all is key priority for BKK, the integrated mobility manager of Budapest. The goal is to match the infrastructure improvements of the recent years with accessible, inclusive mobility environment.

As approximately 10-15% of all public transport users are somehow reduced in their mobility (disabled, visually impaired, passengers with luggage, temporarily disabled people, or even people who do not speak the country’s language) thus it is vital to involve all people. The general comprehension about accessibility is that it is an additional expenditure that is for solely for disabled people. Better understanding the needs with involving campaign and retrain staff to change attitude from comprehending a passenger with disability as a problem to an inclusive, equity environment which stimulates everyone to help passengers with reduced mobility and create a more effective system.

The focus of INCLUSION Pilot Lab in Budapest will be on launching campaign to better understand the needs of people with reduced mobility and on training the public transport staff to create a stimulus environment for social inclusion (assisting people with reduced mobility during their trips) cooperate with local stakeholders and NGOs. Recent improvements in the accessibility of the built infrastructure are yet to be matched with similar improvements in social inclusion. Furthermore, encouraging cooperation among all stakeholders of people who needs assistance is also an important aim.
2 Site description

Budapest is economic and political centre of Hungary, being the largest metropolitan area in Central Eastern Europe. Budapest is the seventh largest city in the European Union. It is considered a financial hub in Central Europe with a developed service sector. Budapest is a leading city in Central Eastern Europe in the implementation of transport management organisational schemes, in charge of integration of different transport modes, and of building organisational capacity for the implementation of sustainable measures.

![An overview of Budapest city](image)

*Figure 1: An overview of Budapest city*

(Source: BKK)

After 2007, the decrease of Budapest’s population came to a halt (currently equalling 1,734,000 and almost 3 million people live in the metropolitan area of the city), owing to international immigration, improved mortality indicators and longer expected lifetimes. At the same time, unfavourable changes are accelerating in the population’s age composition, with the number of infants increasing and the ratio of elderly people growing. Both the number and ratio of the productive population will begin to decrease in the near future. These aggregated trends put an increased burden on the current economy and affect the shaping of future processes.

The economy is thriving nowadays in Hungary. Unemployment rate is low, approx. 4%, and growth of GDP is 5%, and 40% of Hungary’s GDP is produced in Budapest. Currently urban development is considered to be a reactive science of secondary importance compared to economic development. Viewing urban development as an investment instead of treating it like a mere expenditure could turn around this approach. In an economic sense, the role of urban development is to expand economic wealth and community values comprehensively by treating residential, business, work and recreational spaces and the natural and built environment as a whole.

The size of Budapest is 525 km² and divided into two parts, Buda side as western hilly side of the city and Pest side as eastern flat side of the city. The river Danube separates them. There are five different zone exist in Budapest based on build landscape and land use (Figure 2).
The population of the Budapest’s suburban has increased in the last decades and the half of the population are commuting to the city every day for work. There are 3 suburban railway, which leaves the border of the city, and 11 railway lines, which connect the suburban cities with the downtown of Budapest (Figure 3). But the horizontal public transport connections are missing between the cities and there are not enough P+R and B+R opportunity near to the railway stations. Therefore 60% of the travellers are using their own car to commute to the city centre, which is a big mobility issue to Budapest.
Figure 3: Railway network of Budapest and vicinity
(Source: BKK)
3 Mobility demand

Mobility is an important issue in Budapest nowadays, due to 1.75 million inhabitants live in the city and almost 3 million people live in the metropolitan area of Budapest. It has a big economical footprint, 40% of GDP of Hungary is produced in the city.

The main residential areas are located in the transitional zone of Budapest. But most of place of work are in the inner zone. This territorial inequality and the lack of the horizontal high capacity public transport connections are increasing the mobility demand in the downtown.

The whole agglomeration around Budapest (Pest County including 80 settlements) has 800,000 inhabitants and generates 400,000 car trips/weekday (which is 2/3 of all trips). The main transport challenges of Budapest are inner city congestion, parking problems, lack of high quality intermodal interchanges and poor connections between specific parts of the city. In generally, 60% of people commute by car and 40% of people commute by Public transport (railway or bus).

Public transport system is essential part of everyday transport in Budapest. As earlier mentioned, Budapest has massive public transport system. Budapest Mobility Plan as the Sustainable Urban Mobility Plan of Budapest contains targets, measures and indicators for a sustainable and better transportation system in Budapest. Therefore, both trip-based (Figure 4) and distance-based (Figure 5) modal split have target for 2030. Modal Split in Budapest comes from household survey data.

![Figure 4: Trip based modal split - working day](Source: BKK)
Figure 5: Distance based modal split - working day

(Source: BKK)
4 Mobility service operated in the site and stakeholders involved

4.1 Conventional Public Transport in Budapest

BKK – Centre for Budapest Transport is the public transport authority of Budapest. The company is 100% owned by the Municipality of Budapest and appointed as the responsible, integrated mobility manager of the city. The company provides service in Budapest and its agglomeration and has a great variety of clients (dwellers of Budapest, commuters from Budapest metropolitan area and visitors of the city). BKK as PT authority has public service contracts with every PT operators. Budapest Transport Ltd. (BKV) is responsible for every tram, metro and trolleybus line and several dedicated urban bus lines. Volánbusz and VT-Transmann are responsible for the rest of urban bus lines. MÁV-HÉV, part of Hungarian State Railway (a.k.a. MÁV), is the PT operator of special suburban railway (a.k.a. HÉV) lines. However, MÁV-HÉV has public service contract with Ministry for Innovation and Technology.

As the integrated mobility manager of Budapest, BKK provides complex transport services, BKK operates 4 metro lines, 36 tram lines, 238 bus lines (2 of them on demand bus lines), 15 trolleybus lines, cogwheel railway, funicular railway, cable chair, 3 public transport boat lines. Night transport services also available for users in Budapest. BKK has 41 nightbus lines and 1 night tram line.

BKV operates a door-to-door public transport system for disabled people with special small buses. The service is available in whole Budapest.

The Figure 6 shows the key routes of daytime transport service in Budapest.
Figure 6: Daytime transport services - Key routes

(Source: BKK)

The Figure 7 and the Figure 8 are shown the division of labour among public transport modes in Budapest. Annual passenger performance of BKK is 5437074000 passenger km.
In the last years the fleet of public transport vehicles was renewed. Nowadays 90% of the buses are low-floor vehicles, and most of the bus stops are accessible. The world busiest tram line is on Budapest with 400000 daily passenger. On this tram lines are only low-floor trams. The other most frequented tramlines are partly operating by accessible trams. The newest metro line, the metro line M4, is fully accessible, and the metro line M3 is going to be after its reconstruction.
4.2 Bicycle facilities and public bike sharing system of Budapest

The length of dedicated bicycle routes are 317 km in Budapest. It contains bicycle roads, lanes and tracks. The Hungarian Cyclists’ Club is the most significant civil organisation in the Hungarian cycling society. They made a nationwide survey about the cycling habits. 6% of the citizens travel by bike every day, 16% of them use it regularly and 51% use it sometimes.

BKK is the operator of public bike-sharing system, which called MOL Bubi. The public bike-sharing system consists of 127 docking stations and 1,546 bicycles. MOL Bubi can be used with a quarterly, annual or a semi-annual pass using a 24-hour, 72-hour or 7-day ticket every day around the clock.

4.3 Car sharing system of Budapest

Two private company offer car sharing service in Budapest. GreenGo operates with 300 electric cars, and MOL Limo operates 100 electric cars and 350 conventional cars. They operate in free-floating system, and the services are available in the vast majority of Budapest. The Figure 9 shows the operating zone of the MOL Limo.
Figure 9: Territory of the MOL Limo car sharing service in Budapest

(Source: MOL Limo)
5 Target groups for Pilot Labs

The public transport system in Budapest is only partly accessible for everyone. The BKK would like to improve the service level for every possible travellers. Budapest focuses on social groups that are reduced in their mobility and do not have equal opportunity to access and use public transport:

- Blind- and visually impaired,
  - according to the microcensus in 2016, 1713 blind people live in Budapest,
  - it is estimated that roughly 15 000 people in Budapest are visually impaired,
- disabled,
  - it is estimated that there are roughly 50 000 disabled people in Budapest
- people with luggage or baby buggy,
- people who do not speak Hungarian language
  - tourists: 4,2 millions in 2018,
  - foreigners living in Budapest: it is estimated that there are several thousands foreigners live in Budapest who do not speak Hungarian.

We approached our target groups, in order to identify some of possible unmet need in the current mobility offer:

- efficient platform for reporting barriers, problems,
- staff behaviour,
- access of customer points,
- physical barriers at stops, stations and public space,
- usage of tactile,
- dedicated place on vehicles for guide dogs,
- awareness raising about the tactile pavements,
- awareness raising about the usage of the elevators at metro stations (lack of clear priority for disabled people),
- English passenger information at vehicle replacement,
- passenger information, penalty fare payment information in English.
6 Identification of the Pilot Lab actions

As approximately 10-15% of all public transport users are somehow reduced in their mobility (disabled, visually impaired, passengers with luggage, temporarily disabled people, or even people who do not speak the country’s language) it is crucial to understand their mobility needs and reveal the barriers in order to improve the accessibility and usability of the public transport services.

With the Pilot lab actions in Budapest we will reveal the main barriers of accessing and using the public transport services and we will implement an awareness raising training of the public transport employees who are in direct contact with our clients.

We believe that the INCLUSION Pilot Lab actions in Budapest will be able to contribute to shift the general comprehension about the topic of accessibility and inclusivity from being an additional expenditure solely for disabled people towards an important tool to create an inclusive transport environment.

BKK has 5 different target groups during the implementation of the pilot activities in Budapest, all groups are somehow reduced in their mobility:

- blind and visually impaired,
- disabled,
- travellers with luggage or baby buggy,
- tourists,
- foreigners staying in Budapest long-term.

We made an online questionnaire for foreigners who staying in Budapest long-term. We collected almost 100 responds helping us for searching the baseline of unmet needs.

We approached and engaged with organisations, institutions, associations representing our target groups. The key element of the collaboration has been a local stakeholder workshop. We invited all stakeholders to identify and discuss the most burning mobility problems related to accessibility. The results of the workshop helped us to decide about the pilot activities. Based on the co-identification process, two measures will be designed, implemented and evaluated in Budapest during pilot activity phase of the INCLUSION project.

25 people were at the local workshop from 6 organisation. Table 1 contains the participants of local stakeholder workshop.
Table 1: Participants of local stakeholder workshop

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Number of delegates</th>
</tr>
</thead>
<tbody>
<tr>
<td>BKK Centre for Budapest Transport</td>
<td>12</td>
</tr>
<tr>
<td>BKV Budapest Transport Plc.</td>
<td>1</td>
</tr>
<tr>
<td>National Institute for Blind and Visually Impaired People</td>
<td>3</td>
</tr>
<tr>
<td>Association of Blind and Visually Impaired in Central Hungary Region</td>
<td>4</td>
</tr>
<tr>
<td>Association of People with Disabilities in Budapest</td>
<td>2</td>
</tr>
<tr>
<td>Universal Design Information and Research Center of Hungary</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 10: Local stakeholder workshop

6.1 Pilot 1: Development of a curriculum and implementation of a sensitisation training of public transport employees

The pilot consists of the development of a curriculum, the implementation of the pilot awareness raising training and the completion of a training programme with a finalised curriculum based on the pilot training results.

The direct goal of the pilot action is to provide overall knowledge for public transport employees who are in daily direct contact with the clients about the transport related needs of people who are reduced in their mobility. This knowledge qualifies the employees to adequately help and assist the
public transport usage of people who are hampered in their mobility. The pilot goals the improvement of public transport usability for people with reduced mobility with a more competent behaviour from public transport staff towards our target groups. The indirect goal of the pilot action is to make public transport services in Budapest more attractive, more competitive and improve its usability. It is expected that the measure will improve the level of satisfaction with public transport services for each target groups.

Some of the tasks that need specified knowledge and proficiency will be procured from a professional contractor. The selected contractor will work in constant co-operation with BKK and will be required to involve stakeholders (our target groups) in the process of the development and implementation of the training programme.

A new training program will be developed and piloted in order to contribute to a more competent staff behaviour and therefore a more inclusive environment. Contracted experts will develop the training program with the involvement of local stakeholders.

During the training program 50 employees will be trained in 4 groups. One training day will have 3 theoretical and 5 practical lecture, which will be built on each other. BKK will select 10-10 people from each group of the employees. They have different scope of activities, so BKK will increase their different competences and BKK will build the experiences into the final version of the training programme.

6.2 Pilot 2: Public campaign

The pilot consists of the development, operation and evaluation of an online, public platform for reporting problems, barriers and needs related to the accessibility of public transport in Budapest.

The direct aim of the measure is to identify and understand the mobility needs and the accessibility conditions of the target groups. The indirect goal is to strengthen the involvement of citizens. The measure will be based on a public online platform wherewith citizens can transparently report problems, barriers and even solutions, lessons learnt related to the mobility of the target groups. Reports can be location specific or general and will be driven with questions, see Annex B: Questions at public announcement webpage.

BKK will analyse and develop an internal recommendation package that reflects on the data collected with the campaign. Problems reported in the first phase can be built into the training programme of pilot 1 also. Moreover, at the end of the campaign, all stakeholders will be invited to a workshop.
7 Design of the Pilot Lab

7.1 Pilot 1: Development of a curriculum and implementation of a sensitisation training of public transport employees

Currently, public transport staff does not have any specific training for helping the mobility of people with reduced mobility.

In the first phase of the pilot, BKK and the contractor will develop the training curriculum and the training methods. The developed curriculum will be tested with the training of 50 employees who will represent different departments and scope of activities but all have daily contact with public transport users. The training will both have theoretical and practical elements. Finally, the results, experience of the first training will be built into the final version of the training programme.

The training day will be 8 hours long, which will have 3 theoretical and 5 practical elements. The aim of the theoretical elements will strengthen the empathy and communication with the target groups. In the practical part of the training the participants will have exercises which will build on the scope of their activities. With this practise the theoretical knowledge will infiltrate into the everyday routine. Finally, the results and experiences of the first trainings will be built into the final version of the training programme. In this field the BKK has not have any training programme yet, but after it we would like to use this to train all our employees.

The training program can increase the competency level of employees, improve the usability of public transport services and increase the satisfaction of our target groups with public transport services. The competency level of employees will be measured by competency survey before and after a training program. This survey will be developed in part of training program. The satisfaction of our target groups will be measured by test trips.

7.1 Pilot 2: Public campaign

The needs and problems of the INCLUSION target groups are currently unknown. BKK assessed the potential technical opportunities for creating an appropriate platform which helps to understand the needs and problems.

BKK has made an arrangement with the Jarokelo NGO, who operates a popular website (www.jarokelo.hu) where citizens can report everyday urban problems (i.e. lack of pavement marks, missing street bin and sign etc.).

It is planned that the pilot campaign will be based on a dedicated subpage. The platform will be developed with the aim to make it as accessible as possible for the target groups. However regular assistance will be offered through the stakeholders to help to use the platform. One of the main results of the campaign will be a detailed, recommendation package which focuses on the unsolved mobility needs, barriers and good examples. During the campaign period BKK and the Jarokelo NGO
(platform operator) will regularly discuss the reports and the package will be developed according to the Budapest Mobility Plan (SUMP strategy of Budapest). After the 6 months long campaign, the outcomes will be presented to and discussed with local stakeholders.

It is expected that the measure will increase the satisfaction of the target groups which can be measured with a ‘before’ and ‘after’ survey. Public campaign survey for target groups will be developed until first part of April. Appropriate number of respondents can be reached using the cooperation with local stakeholders. After the 6 months long campaign, the outcomes will be presented to and discussed with local stakeholders.

Those initial problems that are related to the behaviour of staff will be taken into account in the completion of the finalised training programme.
8 Actors to be involved in the Pilot Lab, roles and responsibilities

The aim of Budapest pilot activities are to improve a more inclusive public transport system for people with reduced mobility. For this, BKK are going to build a strong collaboration with the representatives of target groups. Local Stakeholder have been already involved in the pilot activities. The Table 2 contains local Stakeholder list.

**Table 2: List of local Stakeholders**

<table>
<thead>
<tr>
<th>Local Stakeholders</th>
<th>Type of Stakeholder</th>
<th>Collaboration in the Pilot Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>BKV (Budapest Transport Ltd.)</td>
<td>Transport operator</td>
<td>Collaboration in the design, implementation and operation of the re-education and sensitisation of staff pilot lab</td>
</tr>
<tr>
<td>ETIKK (Universal Design Information and Research Center of Hungary)</td>
<td>Research centre</td>
<td>Collaboration in the design, implementation and operation of the re-education and sensitisation of staff and awareness raising campaign pilot lab</td>
</tr>
<tr>
<td>FESZT (Council of Handicapped People)</td>
<td>Overarching body</td>
<td>Collaboration in the design, implementation and operation of the re-education and sensitisation of staff and awareness raising campaign pilot lab</td>
</tr>
<tr>
<td>National Institute for Blind and Visually Impaired People</td>
<td>Government institute</td>
<td>Collaboration in the design, implementation and operation of the re-education and sensitisation of staff and awareness raising campaign pilot lab</td>
</tr>
<tr>
<td>Jarokelo non-profit association operator of jarokelo.hu public announcement webpage</td>
<td>Non-Government organisation</td>
<td>Collaboration in the design, implementation and operation of awareness raising campaign pilot lab</td>
</tr>
</tbody>
</table>
9 Timeplan for the demo operation (M19-M34)

The timeplan of pilot activities are contained by Table 3.

**Table 3: Implementation Plan of the Pilot Lab**

<table>
<thead>
<tr>
<th>Measures</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M19</td>
</tr>
<tr>
<td>Conducting training programme</td>
<td>2019</td>
</tr>
<tr>
<td>Evaluation and monitoring of training</td>
<td>2020</td>
</tr>
<tr>
<td>Development platform for the campaign</td>
<td></td>
</tr>
<tr>
<td>Campaign implementation (for identifying mobility</td>
<td></td>
</tr>
<tr>
<td>related accessibility problems)</td>
<td></td>
</tr>
<tr>
<td>Evaluation and monitoring of campaign</td>
<td></td>
</tr>
<tr>
<td>Campaign closing and analysis with local stakeholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

M1 = Training programme completed
M2 = Awareness raising measures implemented

The evaluation and monitoring plans are under developing. “Before” and “after” surveys will provide useful information for BKK about the impact of the pilot activities. The surveys are under development with the cooperation of local partners and University of Aberdeen.

According to the planned timeframe of pilot activity 1 the training programme (re-education and sensitisation of staff) will be held from M18 (March 2019) to M21 (June 2019). Training program will be developed until the end of M20 (May 2019) with the procurement of an enterprise. Training will be held for at least for 50 employees (it is currently discussed which departments will participate on
the training. BKK is planning to involve for instance ticket inspectors, customer service employees on site traffic controller) in M21 (June 2019)

The baseline will be measured during M20 (May 2019) and the evaluation and monitoring process will be held until M22 (July 2019.)

According to the planned timeframe of pilot activity 2, the campaign will be implemented from M19 (April 2019) to M25 (October 2019). Cooperation agreement will be concluded with Jarokelo NGO until the end of M18 (March 2019).

The project will have dedicated subpage for target groups at jarokelo.hu, which is popular urban public announcement website in Budapest, Hungary. This subpage will be developed during M19 (April 2019), and after that public campaign will be started in the end of M19 (April 2019), and the public announcement website will be launched until M25 (October 2019).

The baseline “before” statement will be surveyed during 19 (April 2019). Evaluation and monitoring of campaign will be continuously monitored, and measuring of “after” statement will be finished at M26 (November 2019)

Main experiences and results will be discussed with local stakeholders then public campaign will be finished with public event in M27 (December 2019).
10 Risk assessment

A Crisis management plan is always necessary for any actions. The Table 4 contains a contingency plan of Budapest pilot.

<table>
<thead>
<tr>
<th>Possible risk</th>
<th>Likelihood of risk</th>
<th>Mitigation measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the pre-feasibility analysis we identify barriers that are out of the project scope</td>
<td>Medium</td>
<td>Stakeholder involvement, strong emphasis of project scope and goals</td>
</tr>
<tr>
<td>Target groups do not reveal issues with public transport</td>
<td>Low</td>
<td>Different target groups are approached with different methods</td>
</tr>
<tr>
<td>Lack of experience in fine-tuning a training programme for internal staff</td>
<td>High</td>
<td>Involvement of training expert</td>
</tr>
<tr>
<td>Due to heavy workload, sufficient number of staff is not able to participate on training</td>
<td>Medium</td>
<td>Different times with less workload were identified for each department (which we would like to include on the training)</td>
</tr>
<tr>
<td>Limited communication opportunities due to political campaign period</td>
<td>High</td>
<td>Carefully selected campaign measures</td>
</tr>
<tr>
<td>Issue</td>
<td>Rating</td>
<td>Action</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Cooperation problems with local stakeholders.</td>
<td>Low</td>
<td>To establish cooperation agreements with local stakeholders if it necessary.</td>
</tr>
<tr>
<td>Trouble with public announcement webpage (not evaluable announcements; not enough announcements; problems with webpage operation)</td>
<td>High</td>
<td>Strong connection with local stakeholders and public campaign.</td>
</tr>
</tbody>
</table>
11 INCLUSION consortium

For further information
www.h2020-inclusion.eu
@H2020_INCLUSION
#H2020INCLUSION

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 770115
## Annex A: Budapest Local Pilot Action Plan

### 1. Object of the Pilot Lab

<table>
<thead>
<tr>
<th>1.1</th>
<th>Actions (to be) demonstrated in the Pilot Lab - Overview</th>
<th>Please specify the actions (to be) demonstrated in the Pilot Lab</th>
</tr>
</thead>
</table>

Budapest has 5 different target groups during the implementation of the pilot activities, all groups are somehow reduced in their mobility:
- blind and visually impaired
- disabled
- travellers with luggage or baby buggy
- tourists
- foreigners staying in Budapest long-term.

The Budapest pilot activities consist two type of measures:

1. **Re-education and sensitisation of staff.**
   a. objective:
      i. improve public transport usability for people with reduced mobility
      ii. the measure will contribute to a more competent behaviour from public transport staff towards our target groups
   b. target: improve the level of satisfaction with public transport services for each target groups
   c. The measure includes the following steps:
      i. Identification of mobility related problems, issues and demands of our target groups.
      ii. Development of a training programme that is reflecting on the needs identified
      iii. Conducting training for selected employees (who are in daily contact with the target groups) of BKK.
      iv. Evaluating the impact of the measure

2. **Awareness raising campaign**
   a. objective:
      i. improve public transport usability for people with reduced mobility
      ii. contribution to a more inclusive and accessible public transport system
   b. target:
i. improve the level of satisfaction with public transport services for each target groups  
ii. increase the number of trips for blind and visually impaired and disabled 

c. The measure will include the following steps:  
   i. Identification of mobility related problems, issues and demands of our target groups.  
   ii. Implementing soft, awareness raising measures in public transport services reflecting on the needs identified, with constant communication between the mobility manager and the target groups.  
   iii. Evaluating the impact of the measure 

<table>
<thead>
<tr>
<th>1.2</th>
<th>What will be demonstrated in the Pilot Lab?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
<td>Improvement of mobility services</td>
</tr>
<tr>
<td>☒</td>
<td>Provision of new “customers oriented” services</td>
</tr>
<tr>
<td>☒</td>
<td>Optimization of internal processes from Transport Operator’s side</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.3 (a)</th>
<th>In case the answer to 1.2) is “improvement of mobility services”, please detail which is the change involved in the mobility offer</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
<td>Enhancement of a mobility service already operated</td>
</tr>
<tr>
<td></td>
<td>□ Extension in terms of covered area</td>
</tr>
<tr>
<td></td>
<td>□ Extension in terms of covered time</td>
</tr>
<tr>
<td></td>
<td>□ Enforcement of vehicles/fleet (number, typology, performance/quality)</td>
</tr>
<tr>
<td></td>
<td>☒ Other (please specify): more competent and professional behaviour from staff</td>
</tr>
<tr>
<td></td>
<td>Integration of mobility services already operated</td>
</tr>
<tr>
<td></td>
<td>□ Coordination of services among multiple service providers or funding agencies</td>
</tr>
<tr>
<td></td>
<td>□ Integration of services targeted to specific target users with general public transport</td>
</tr>
<tr>
<td></td>
<td>□ Integration of sustainable modes with general public transport</td>
</tr>
<tr>
<td></td>
<td>□ Integration of ride/(asset) sharing services with general public transport</td>
</tr>
<tr>
<td></td>
<td>☒ Optimization of scheduling/timetable (not dedicated target, but might be part of our awareness raising measure)</td>
</tr>
<tr>
<td></td>
<td>□ Enhancement of interchange points</td>
</tr>
</tbody>
</table>
| | □ Other (please specify)...............................
<table>
<thead>
<tr>
<th>1.3 (b)</th>
<th>In case the answer to 1.2) is “Provision of new “customers oriented” services”, please detail which is the new/enhanced service offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
<td>Other (please specify): <strong>improve the inclusiveness of public transport services</strong></td>
</tr>
<tr>
<td>☐</td>
<td>New or enhanced access modalities to services (i.e. service registration/membership, booking, etc.)</td>
</tr>
<tr>
<td>☐</td>
<td>New or enhanced payment methods</td>
</tr>
<tr>
<td>☒</td>
<td><strong>New or enhanced passenger information services</strong></td>
</tr>
<tr>
<td>☒</td>
<td><strong>New or enhanced customer handling and support</strong></td>
</tr>
<tr>
<td>☐</td>
<td>Other (please specify).................................</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.3 (c)</th>
<th>In case the answer to 1.2) is “optimization of internal processes”, please detail which are the processes involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
<td><strong>Service planning</strong></td>
</tr>
<tr>
<td>☐</td>
<td>Service operation/control</td>
</tr>
<tr>
<td>☐</td>
<td>Assessment of quality performance/service reporting</td>
</tr>
<tr>
<td>☐</td>
<td>Relationship with the funding agencies/authorities</td>
</tr>
<tr>
<td>☒</td>
<td><strong>Marketing</strong></td>
</tr>
<tr>
<td>☒</td>
<td><strong>Customers satisfaction analysis</strong></td>
</tr>
<tr>
<td>☒</td>
<td><strong>Customers needs analysis</strong></td>
</tr>
<tr>
<td>☒</td>
<td>Training/improved skills of the internal staff</td>
</tr>
<tr>
<td>☐</td>
<td>Other (please specify).................................</td>
</tr>
</tbody>
</table>

### 2. Pre-feasibility analysis

<table>
<thead>
<tr>
<th>2.1</th>
<th>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 target groups’ requirements is mainly complete.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The analysis of the target groups’ requirements is mainly complete.</td>
</tr>
<tr>
<td></td>
<td>BKK identified five different target groups and conducts different actions to identify needs:</td>
</tr>
<tr>
<td></td>
<td>• Blind and visually impaired, disabled:</td>
</tr>
<tr>
<td></td>
<td>o relevant stakeholders, associations were approached,</td>
</tr>
<tr>
<td></td>
<td>o An internal meeting within BKK was organised in order to involve a number of officers and to raise awareness about the INCLUSION measures</td>
</tr>
</tbody>
</table>
| the requirements completed? | A stakeholders’ workshops was organised with representants of the target groups  
| | - Foreigners staying in Budapest long-term.  
| | | - relevant stakeholders, associations were approached,  
| | | - 2 deep interviews were conducted,  
| | | - questionnaire is prepared for conducting survey  
| | - All target groups: analysis of received passenger queries is under progress. |

### 2.2 Please resume the main results of the requirements analysis

The analysis helps to identify the needs of the different target groups. This was necessary for setting up relevant and measurable indicators.

### 2.3 Please describe the actions to be carried out in the future to complete the requirements analysis and the milestones

Following actions will be carried out to complete the requirements analysis and the milestones:

1. **Re-education and sensitisation of staff**
   a. Timeframe: from March (M18) to June (M21)
   b. Approx. 50 ticket inspector and customer service employee will be trained by 8-hour training
   c. Data collection through ‘before’ and ‘after’ surveys with employees at training for checking the sensitisation improvement of staff.

2. **Awareness raising campaign**
   a. Timeframe: from March (M18) to December (M27)
   b. Clear the needs of target groups
   c. Public announcement for 5 target groups through dedicated webpage by short specific questions.
      i. Collecting data
      ii. Solving announcements
iii. Implementing results to training program

iv. Public campaign based on the public announcements

d. Data collection through ‘before’ and ‘after’ surveys with target groups. Local stakeholders would help it.

### 3. Design of Pilot Lab

#### 3.1

Please describe the current status of design activities of Pilot Lab actions. Is the design completed?

As of November 2018, the pilot activities in Budapest are under development:

1. Current status of Re-education and sensitisation of staff pilot action
   a. Stakeholders were approached,
   b. needs, demands, requirements are being identified
   c. training programme is being developed based on the findings of the identification process

2. Current status of Awareness raising campaign pilot action
   a. Stakeholders were approached,
   b. needs, demands, requirements are being identified

#### 3.2

Please resume the main results of the design of the Pilot Lab

3.2.1 Design of new mobility services/ Definition of improvements to a mobility service already under operation / Service integration

The detailed design of the pilot actions will be based on the needs and requirements conducted.

Access modalities:…….
Service model: covered area, opening time, service scheme, routing, scheduling, pick up-drop off points, interchange points, etc.
Fleet/vehicle description: .........
Booking procedure:........
Payment modalities:.......;
Integration within mobility offer: ......
Institutional/regulatory issues:..........;
Actors involved, role and responsibilities:..............................
### 3.2.2 Design of new customer services

- Service specifications: 
- Management procedure for the operation of the service: 
- Data/resources required: 
- Institutional/regulatory issues: 
- Actors involved, role and responsibilities: 
- Other (please specify): 

### 3.2.3 Specifications of new internal processes

- Description of the processes: 
- Resources required/involved: 
- Supporting data/tools/material: 
- Allocation of responsibilities: 
- Other (please specify): 

### 3.3 Please describe the actions to be carried out in the future to complete the design of the Pilot Lab and the milestones

<table>
<thead>
<tr>
<th>Re-education and sensitisation of staff:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• develop baseline and indicators,</td>
</tr>
<tr>
<td>• develop a training programme,</td>
</tr>
<tr>
<td>• conduct training programme,</td>
</tr>
<tr>
<td>• evaluate and monitoring results</td>
</tr>
<tr>
<td>Awareness raising campaign:</td>
</tr>
<tr>
<td>• develop baseline and indicators,</td>
</tr>
<tr>
<td>• Implementing soft, awareness raising measures in public transport services reflecting on the needs identified, with constant communication between the mobility manager and the target groups.</td>
</tr>
<tr>
<td>• Evaluating the impact of the measure</td>
</tr>
</tbody>
</table>

### 4. Implementation Plan of the Pilot Lab

#### 4.1 Please fill in the following GANTT with the main actions occurring in the future months for the finalization of requirements analysis and design of the Pilot Lab. Please highlight the milestone to be achieved up to the end of the design phase. In case you have indicated that this phase is already completed in section 2, go to 4.2

<table>
<thead>
<tr>
<th>Identification of needs, demands, requirements</th>
<th>M13</th>
<th>M14</th>
<th>M15</th>
<th>M16</th>
<th>M17</th>
<th>M18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify baseline and indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M3</td>
<td></td>
</tr>
<tr>
<td>Preparation of the detailed training programme for staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M2</td>
</tr>
</tbody>
</table>
Preparation of the detailed programme for carrying out the awareness raising measures

M1 = Elaboration of a brief report explaining the main results of the needs analysis
M2 = The detailed training programme for staff is completed.
M3 = Pre-feasibility
M4 = Awareness raising measures programme

4.2 Please fill in the following GANTT with the main actions occurring in the demo months for the setup of demo actions included in the Pilot Lab, the implementation of the preparatory activities and the operation. Please highlight the milestone to be achieved up to the launch of Pilot Lab and during the operation of the demo.

<table>
<thead>
<tr>
<th>Name</th>
<th>Typology</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>BKV</td>
<td>Transport operator</td>
<td>Collaboration in the design, implementation and operation of the pilot lab</td>
</tr>
<tr>
<td>ETIKK (Universal Design Information and Research Center of Hungary)</td>
<td>Research centre</td>
<td>Collaboration in the design, implementation and operation of the pilot lab</td>
</tr>
</tbody>
</table>

5. Local stakeholders and partnership (to be) involved during the Pilot Lab design, implementation and operation
| **FESZT (Council of Handicapped People)** | **Overarching body** | **Collaboration in the design, implementation and operation of the pilot lab** |
| **National Institute for Blind and Visually Impaired People** | **Government institute** | **Collaboration in the design, implementation and operation of the pilot lab** |

### 6. Contingency plan

**Please list the risk that you envisaged in the implementation/operation of the Pilot Lab**

<p>| <strong>Please indicate the likelihood the risk indicated will occur</strong> | <strong>Please indicate mitigation measures that you have plan for the risk indicated</strong> |
| <strong>In the pre-feasibility analysis we identify barriers that are out of the project scope</strong> | <strong>Medium</strong> | <strong>Stakeholder involvement, strong emphasis of project scope and goals</strong> |
| <strong>Target groups do not reveal issues with public transport</strong> | <strong>Low</strong> | <strong>Different target groups are approached with different methods</strong> |
| <strong>Lack of experience in fine-tuning a training programme for internal staff</strong> | <strong>High</strong> | <strong>Involvement of training expert</strong> |
| <strong>Due to heavy workload, sufficient number of staff is not able to participate on training</strong> | <strong>Medium</strong> | <strong>Different times with less workload were identified for each department (which we would like to include on the training)</strong> |
| <strong>Limited communication opportunities due to political campaign period</strong> | <strong>High</strong> | <strong>Carefully selected campaign measures</strong> |
| <strong>Cooperation problems with local stakeholders.</strong> | <strong>Low</strong> | <strong>To establish cooperation agreements with local</strong> |</p>
<table>
<thead>
<tr>
<th>Stakeholders if it necessary.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trouble with public announcement webpage (not evaluable announcements; not enough announcements; problems with webpage operation)</strong></td>
</tr>
</tbody>
</table>
Annex B: Questions at public announcement webpage

1. During your trip/journey in Budapest have you noticed such obstacle/barrier/difficulty that made your trip impossible?
   a. No: Jump to the next question.
   b. Yes:
      i. Please, specify the obstacle/barrier/difficulty.
      ii. Why was it an obstacle/barrier/difficulty?
      iii. How did it change your trip? How did you go after the incapacitation?
      iv. Please, mark the place of the obstacle/barrier/difficulty on the map (if it is possible).

2. During your trip/journey in Budapest have you noticed such obstacle/barrier/difficulty that made your trip more difficult?
   a. No: End of questionnaire
   b. Yes:
      i. Please, specify the obstacle/barrier/difficulty.
      ii. Why was it an obstacle/barrier/difficulty?
      iii. Would you use public transport more often if the obstacle/barrier/difficulty was ceased?
      iv. Please, mark the place of the obstacle/barrier/difficulty on the map (if it is possible).
Annex C: Training program for re-education and sensitisation of staff

**General description:** Practical applicability of equal access to public transport services for persons with reduced mobility by re-education and sensitisation of public transport staff.

**Aim of training program:** The aim of the curriculum unit is to transmit practical basic knowledge, which is applied in the field of public transport, about certain methods and tools supporting equal access.

**Methodology:** The participants will learn about and will acquire routine by using the general aspects of ensuring equal access, the practical application of targeted communication to the target group, through joint analysis of case studies on specific areas of public transport and jointly developed opportunities of solutions.

**Measures:** incident presentation, joint conversation, group work