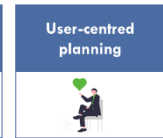
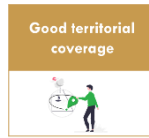


## 1.15 Transport on Demand service in Vidzeme Region (LV)

Pilot project of a **Transport on Demand (ToD) service** implemented in rural areas in Vidzeme region in Latvia.



### 1.15.1 About Vidzeme, Latvia

<u>Country</u>	<u>Region</u>	<u>Target Area</u>	<u>Population</u>	<u>Population density</u>	<u>Visitors/year</u>
Latvia	Vidzeme	19.809 Km <sup>2</sup>	276.037 inh.	14 inh./Km <sup>2</sup>	~100k (estimation from national statistics - Total 2Mln in 2021)

Vidzeme Planning Region is located in the north-east part of Latvia. It comprises 11 municipalities with a total population of around 276.037 (beginning of 2022) and a population density of 13,93 residents per square kilometre. 58% of the population lives in rural areas, often in single homesteads.

The population in Vidzeme Region is decreasing annually, and researchers predict that this trend could continue until 2030. But not only is the population declining, there are also aging issues, and intense



Figure 38 – Mazsalaca county (left) - Alūksne county

internal migration to the major settlements in the region. Elderly people tend to stay in the countryside, younger people tend to move to cities because of better work opportunities.

Vidzeme Planning Region’s rural areas are relatively sparsely populated. The target counties Mazsalaca and Alūksne are rural areas with a high percentage of an elderly population with strong issues of accessibility to services, mobility options and social inclusion. Standard public transport struggles to serve the sparse and dispersed mobility demand.

### 1.15.2 Description of the Mobility Solution

A Transport-on-Demand (ToD) service was implemented as a pilot with the financial support of the European Union, within the MAMBA project of the Interreg Baltic Sea Region programme.

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A large part of the whole territory is located on the state border, which impairs access to services. Due to demographic trends and the extensive road network, public transport services are declining. In some areas, public transport no longer exists, leaving people without alternatives to mobility, as not all of them have access to private cars. Mostly the users of the service turned out to be seniors.

The transport on demand service was provided by two subcontracted transport companies with three different types of vehicles, 4+1, 8+1 and 16 seats. In Mazsalaca, the service was operated in the whole county territory on working days, in Alūksne in certain areas without access to public transport on specific days.

The service operation procedure was organized as follows:

1. The residents registered as users of the ToD (DRT) service (by filling in the registration form in advance or during the first trip);
2. The trip requests (including the return trip) had to be done at least 24 hours in advance;
3. The coordinator of the mobility centre accepted the calls and registered the trips in the system;
4. The system created a route based on the ordered trips. (The schedule was created based on priorities, e.g. priority for doctor's appointments);
5. The mobility centre coordinator contacted the transport provider for informing about the execution of the planned route;
6. Passengers received a confirmation text message about the estimated time the vehicle would have picked them up;
7. The following day, shortly before the execution of the ToD service, the system sent a reminder message to the passengers with details of the pick-up time and place;
8. The passengers had to sign for the service received;
9. If pre - booked, the passengers were also taken back home.

Considering that the EU financed the initiative, the citizens could not be charged for the trip. However, both the community and the municipalities in whose territories the services were provided have repeatedly indicated their readiness to make a financial contribution to the development of the co-financing model. The involved stakeholders were residents, municipalities of pilot areas, local transport providers, experts working in the field of mobility, Ministry of Transport.

#### Target user groups and needs

The main users were residents, mainly older people. The target users used the service mainly to take care of health and life matters. In fact, the main destinations were the centre of the region with all the main services (e.g. shops/pharmacy, doctor, ATM, hairdresser, public institutions and social events, connections to public transport service). The origins were mostly older residents. However, the service was also used by residents of working age to get to workplaces, as well as by children to get to educational institutions.

#### Mobility services provided/addressed

The aim of this mobility solution was to increase the residents' mobility in remote rural areas, where public transport was poor or did not exist at all. In this situation, Transport on Demand was offered as an alternative local mobility solution, with the intention to ensure access to public services and equal quality of life in any area of the region.

The pilot mainly addressed social goals. It was about giving people living in rural areas the same mobility rights as those living in cities. Another aim of the pilot was to illustrate how the right to have "local mobility" could have been put into practice, as it is not specified in the Latvian legislation.

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### Involved Bodies

The leading body was Vidzeme Planning Region in articulation with the public transport operator. The pilot was led by Vidzeme Planning Region (under the Interreg Baltic Sea Region MAMBA project activities). The coordination included the routes organization, call-back to clients, claim management, phone operation, etc.

The involvement of stakeholders (local residents, municipalities of pilot areas, local transport providers, experts working in the field of mobility, Ministry of Transport, etc) was based on strategic cooperation: stakeholders were involved at the initial stage (planning) and throughout the implementation of the project. The involved bodies at State level were the Ministry of transport, Ministry of Environment and Municipalities. The private companies involved were Subcontractors to provide the transport services

### Ridership and other key metrics/results

The total number of cars involved was 3. In total, during the pilot (October 2019 – September 2020), 2.777 passengers were carried, 1.277 trips were made, and 24.821 kilometres were travelled. According to statistics, during the entire pilot, around 300 service users were registered in both implemented areas, of which around 30 were people going to work, 9 were students or children of kindergarten age, 15 used the service for tourism purposes, and the remaining were senior citizens.

In Mazsalaca county (where the service was available throughout the county), an average of 98 trips were performed per month, with an average of 1.9 passengers per trip, and an average of 12 km length of trip.

In the Alūksne county (where the service was on specific days in specific places), an average of 26 trips were performed per month, with an average of 3.2 passengers per trip, and the average length of one trip was 25 km. 85% of the passengers were women and the average age of passengers was 60 years. Other passengers included employees, school and kindergarten children, housewives, unemployed and disabled persons. Altogether in both pilot sites, the vehicles made nearly 25.000 (24.821 km) km in 11 months.

### Supporting technologies

The ITS system to support the service was used to track the carrier online. The software could be used as a valuable source of data for further analysis and finding the best mobility solution in rural areas around the country. Because of the amount of information stored in the database, it was possible to do analysis on the routes, services and time schedules which would have best met the needs of inhabitants who had a clear deficit of transportation services.

The ITS background needed was related to the preparation of the technical specification for the purchase/hire of the software and hardware for managing the booking and the dial and ride system. The software was also very useful for the communication with the passengers and carriers and keeping the track on the projects progress. First, it automatically contacted each person via text messages when needed.

### Engagement aspects

The pilots were developed in two municipalities through close cooperation on all levels, based on community meetings, as well as the involvement of local politicians, ensuring productive work and long-lasting outcomes. No specific innovative local partner was involved.

During the implementation of the pilot, neighbouring municipalities also showed interest in the possibility of getting involved in organizing the ToD service in their territory. However, further expansion was limited by the implementation of the project, within the framework of which the pilot took place.

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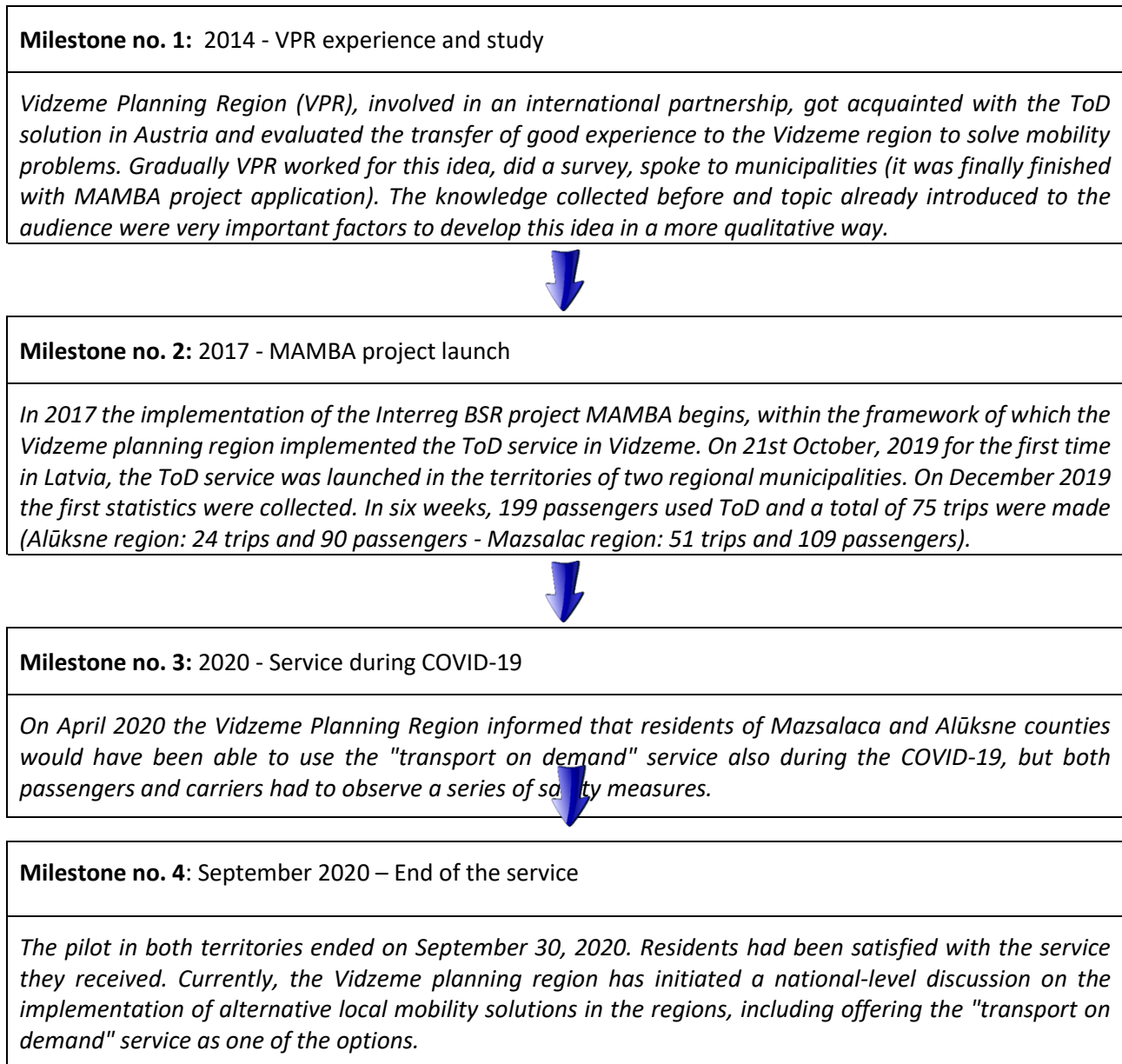


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Periodic feedback from the customer was collected to improve the service. Overall, the majority were very satisfied with the service they received.

### 1.15.3 Timelines and Milestones



### 1.15.4 Long-term assessment

#### Success, Durability and Expansion

The service stopped in October 2020 due to the lack of funds and to the INTERREG MAMBA project ending. The pilot lasted 11 months and focused on elderly residents in remote areas with almost no transport service. At this stage a discussion with national authorities to extend and maintain the service is currently ongoing. The issue was raised in parliament to establish regulations for services like this. The data for the two counties were used to prepare the amendments to the PT services law.

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During the pilot, relevant data about successful rural door-to-door transport were collected – an analysis of the social benefits and economic efficiency of ToD was conducted. At least one more municipality was interested in joining the pilot due to the success of the measure implemented.

The pilot results were presented to the regional development council to upscale the service in other areas, as well as the results of the pilot were presented to the Ministry of Transport (Political level). At the national level, a new national framework is under discussion.

### Funding and Financing

The investment and capital costs for the implementation of ToD service and Mobility Centre solutions were €155.000.

The operating costs were represented by:

- Software for ensuring the operation of the "Transport on Demand" mobility center – 13 854, 00 €
- Transport company (procurement) – Mazsalaca County 66 600,00 € ; Alūksne County 41 100,00 €, incl. A) monthly fee for providing 3 cars of different capacities on site (Mazsalaca county - 699,00 € (VAT not incl.); Aluksne county - 250,00 € (VAT not incl.) and B) fee for 1 km traveled (Mazsalaca county –2,99 € (VAT not incl.) Alūksne county – 3,50 € (VAT not incl.)
- Call center equipment (e.g. computer) – 4.200,00 €
- Mobility center coordinator (11 months) – 7.500,00 €
- Communication activities (stickers for the buses, printed materials, etc.) – 1.000,00 €

Customers were ready to pay for the service but public funds had to support the service for the CAPEX and OPEX. Because there is no other transport solution in the target area, the OPEX must be covered by a public body. In this sector, there is currently a market insufficiency, because considering the distance and low population density, it is not profitable for companies to provide services such as taxi transportation or private buses. However, when compared to regular public transport as currently offered, the ToD solution is competitive from both an economic and social perspective. Ongoing financial support is certainly necessary because at least in Latvia, this type of service cannot be considered profitable.

Final consideration is that ToD is an economically more advantageous solution compared to regular routes, for which state budget grants >90%.

### Why is it considered a Good Practice?

ToD as a service was perceived as a supplement to the public transport system and an alternative solution to uneconomic public transport management in remote and sparsely populated areas. One of the purposes of use is to get to the nearest bus stop to continue the trip by public bus.

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### 1.15.5 Transferability considerations

<b>CONTEXT PECULIARITIES</b>	<b>TRANSFERABILITY CONDITIONS</b>
<p>Throughout Latvia, there are places with poor public transport supply (insufficient or non-existent), as well as places where residents' homes are located far from the nearest public stop, and for many senior citizens where it is not a walkable distance. Also, the scheduled service times are not compatible with daily needs - to make the return trip, one often has to spend a longer time than wished at the destination as the buses do not run frequently.</p> <p>The other planning regions also recognize that such mobility problems exist in more remote rural areas.</p>	<p>The ToD pilot proved that flexible and adaptable public transport services are economical and that the funds allocated by the state for grants can be used for the creation and provision of a new service. During the pilot, two models were tested - a free choice of residents to use the service (anywhere, at any time) and a predetermined time for residents of a specific area. Analysing the socioeconomic benefits, the latter option was the more effective, and the residents themselves rated it as better.</p> <p>The users of the ToD service were mostly seniors, so it is important to choose a suitable form of communication. During the pilot, it was possible to request trips by making phone calls, which were answered by the dispatcher.</p> <p>For the pilot service a specific software was developed, and it can also be used in other sites where it would be interesting to implement the ToD service.</p>
<b>DIFFICULTIES ENCOUNTERED/WEAKNESS</b>	<b>LESSONS LEARNT</b>
<p>It is necessary to allocate a separate and sufficient budget for marketing activities, as well as for raising awareness of the target audience to overcome psychological barriers. Service is closely related to state grants for the provision of public transport services – although, it is regulated by a separate regulatory framework. This is considered a legal obstacle that needs a solution, including a strong political will.</p> <p>It should also be considered that with the current population density, most likely the service, which performs a social function, cannot be financially supported with passenger tickets alone but it is necessary to seek further financial sources.</p> <p>The service had limited touristic purpose, only 15 residents used the service for a touristic reason. Non-residents needed to register in advance and use the service.</p>	<p>It is important to involve the users in the design of the service. It is necessary to conduct a marketing campaign in time, explaining how to receive the service (even before the service has started).</p> <p>Cooperation between citizens, municipalities and state institutions is important.</p> <p>Overall conclusion: there is a demand for transport services for local trips, to get to the places of receiving services, get involved in social and in economic activities. Flexible transport services, together with modern IT solutions, allow to achieve a good balance between population demand and efficient transport service offer and:</p> <ul style="list-style-type: none"> <li>-meets the needs of the population,</li> <li>-ensures more efficient use of resources,</li> <li>-reduces environmental pollution by optimizing routes.</li> </ul>

#### References for further details

Organisation: Vidzeme Planning Region  
 Contact persons: Anita Āboliņa, Laila Gercāne  
 E-mail address: anita.abolina@vidzeme.lv ; laila.gercane@vidzeme.lv

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