Demand-Responsive Transport to ensure accessibility, availability and reliability of rural public transport

MAPPING STUDY OF INNOVATIVE DRT BUSINESS MODELS - LITHUANIA

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Acknowledgements

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1 General overview of DRT status and future in the country

There is no special legislation for DRT service in Lithuania nor national plan regarding introducing it within the country.

2 Examples of demand-responsive transport services

2.1 Case study No. 1 ŽA

One of the examples could be transportation after the events at "Žalgirio arena" – special bus service marked ŽA. There are 6 offered bus routes ŽA2, ŽA3, ŽA4, ŽA5, ŽA6 and ŽA7, that are all going to the separate areas of the city. The bus trip on the ŽA bus costs the same as using a regular city bus service.

Table 1. Questionnaire about DRT service

NO.	AREA	QUESTION	REPLY
1	**Name**	*What is the name of the DRT service?*	***ŽA***
2	**Organization**	*Organization responsible for the service.*	LLC "Kauno autobusai"
3	**Location**	*Please describe briefly the area that the DRT service is covering. Rural/urban/mixed.*	Kaunas city
4	**Population**	*What is the population in the service area and how are they located?*	295 000
5	**Customers**	*Please describe what customer group are you targeting, if any (Disabled/elderly/children etc.).*	City citizens and guests
6	**Network topology**	*Please describe your DRT network topology and what are the reasons behind it. (Fixed routes, door-to-door or fully flexible, partly flexible, combined with public transport)*	Fixed routes combined with public transport
7	**Frequency/ availability of service**	*What is the DRT schedule, how frequently does the service run, i.e. only when requested, set number of journeys per day?*	Only when requested
8	**Notice requirements**	*When is booking required (on the day/when required, in advance, repeating booking)?*	There is no user booking required
9	**Pick-up location**	*Where are users picked up and dropped off (many-to-many, one-to-one, one-to-many/many-to-one)?*	Users are picked up at the bus stop near the arena and dropped off according to the route (one to many)
10	**Transport type**	*What types of transportation do you use (buses, cars, trams, trains)? Are vehicles also suitable for people with special needs?*	Low floor buses
11	**Sharing a ride**	*Please describe if passengers share a ride or get their own ride.*	Buses after the event are waiting for the passengers, so they all using the same bus.
12	**Fares**	*Please give an overview of the ticket fares. Are there any discounts? Is it per kilometre or fixed price etc.? Do the customers pay it themselves or is it funded by local government? Can they pay in cash or with a card?*	Fares are the same as for local public transport costs
13	**Total cost**	*What is the cost of providing the service? How much do you as a transport organizer pay for it? What is the share approximate/precise share of revenues from tickets?*	City council pay ticket fare subsidy for a different type of commuters (pupils, students, disabled persons, elderly aged 70 and over, children up to age 7 and some other persons are entitled to travel by public transport in Kaunas with a preference)
14	**Ordering**	*How do users book their journeys? Please describe the transport ordering process shortly and why you chose it to be like this. (App, web, phone call*)	Arena operator is providing for us with event schedule and the city is arranging special bus service, marked ŽA routes.

15	**Concept**	*Is your DRT service together with regular public transport or separate? Why is it so?*	Together. The same company that is providing city public transport is providing these ZA busses.
16	**Start time (ending time)**	*When did you start to provide this service, is it still on-going or not?*	Since 2012
17	**Improvements/ changes**	*If you would change or improve some aspects in your transport service what would it be and why? Also, how would you improve or change it?*	Maybe to have shuttle buses who would pick up passengers from special areas from which they would be taken to the arena before the event starts.

2.1.1 Data related barriers related to Ža DRT service

Table 2. Identification of data barriers related to the DRT case study: Ža DRT service

No.	Question	Optional answers	REPLY
1	What are the most important KPIs for the evaluation of your organization related to the transportation of passengers?	Cost, accuracy, customer satisfaction,	Customer satisfaction.
2	Are you collecting data from the transportation of passengers?	What type of data are you collecting? 1. Pickup and drop-off points? 2. Number of passengers 3. Vehicle types 4. GPS data 5. Fuel consumption 6. Accuracy of pickup and delivery? 7. ...	We are not collecting any data from the transportation company.
3	Are you using the data collected to monitor in real-time the transportation?	YES/NO (additional comments)	No.
4	Are you storing the data and using the historical data from analysis and optimization?	1)Please describe the currently existing data platform used for the planning and operation of special transport services (STS) and DRT. (Information flow, which type of GIS data is used, how is data updated, where is data stored, how is data retrieved). Is this data platform specific to 1 organization or is this country-wide? 2)Please describe the major challenges related to the currently available data platforms (cost, data availability, accuracy of data, etc.) 3)Please explain the pricing on the use of various proprietary software & data providers for the use of special transport services (STS) & DRT systems (app-s, maps, ticketing, etc.).	No.
5	Is there any information about the real-time monitoring of the vehicles you are missing?	If possible prioritize the information that could benefit your organization the most 1)Would you like to know how the passengers evaluate the quality of the service you provide? 2)Would you like to know how accurate you are at pickup and drop-off of passengers?	No.

		3)Would you like to be able to compare the accuracy of your current service with the service last year? 4)Would you like to be able to do green accounting? (how large are the CO2 emissions from your entire organization, or per passenger kilometre)	

3 Barriers in the country related to DRT services

The information about the barriers that halter the DRT development in Lithuania can be found from Annex VIII of the report - Barriers synchronization table.