

Annex VIII DRT barriers table

| Identifying the common barriers related to the development of DRT in different RESPONSE partner countries | | | | | | | | | | | |
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| | | Responded by | Sebastian Tay-Hannebo, Region Värmland | Responded by | Anette Enemark, Movia | Responded by | Kari Dybsjord Røstad, Ruter | Responded by | Eva Killar, Ministry of Economic Affairs and Communication; Kirke Williamson, Estonian Road Association | Responded by | Mindaugas Augustaitis, Kaunas City Municipal Administration |
| Category | Name of the barrier | Sweden | Remark | Denmark | Remark | Norway | Remark | Estonia | Remark | Lithuania | Remark |
| Legal and/or other administrative barriers | Fragmented legal framework (different authorities have separate by laws for traffic management) | | Sweden has different laws for public transport, special passenger transport (transport that requires a permit to use) and taxi traffic. DRT is used in both public transport and special passenger transports, in Värmland same vehicles are often used. Taxis are private companies and are procured by the PTA/PTO if they are needed to perform the DRT services as part of the other types of traffic. | | Public Transport in Denmark is regulated with "Law on PTA's" and includes a special DRT-service for disabled citizens, who cannot use ordinary public transport. Besides the general law DRT is regulated in different sectors: Health care, education, rehabilitation etc. Its a decision made by local and regional authorities (municipalities and regions) whether they allocate these DRT-services to the PTA's or organize these services by themselves (in-house or procurement process) | | | | The organization of the transport service is divided between the State (JCCs which organize the transport of county lines) and the local authorities (school transport, social transport, and in the larger cities also urban transport), which creates confusion and is not viewed as a single entity throughout the region. | | |
| | Too specific rules and requirements for small vehicles, only seen as taxi service (conventional or app based) - i.e. requiring taximeter | | In 2018 the Swedish parliament decided to introduce a new category of taxi traffic that does not need a taximeter. Instead, taxi vehicles must be connected to a booking centre for taxi traffic and have special equipment. | | General legal framework for all small and middle size vehicles in Denmark - less than 9 passengers incl. the driver - used for DRT and normal taxi service. Meters are only mandatory in vehicles for ordinary taxi service. | | Norway is considering a law that allows taxi traffic without a taximeter and without the need to be connected to a common booking center, but we do not yet know if this will be a barrier for Norwegian DRT in the future. | | In Estonia a new law (amendments to Public Transport Act on 01.11.2017) on public transport regulating the ride-sharing service was entered into force. With this amendment, ridesharing was established as a type of taxi service (pricing of this service must be made through IT-platform) | | Lithuaniana law (Road Transport Code) allows car sharing or passenger carrying service for individuals (not a legal entity) a passenger transport organizer. However they have some restrictions to compare with regular Taxi (not allowed to park at taxi parking space, to take cash etc.) |
| | Lack of operators competence/experience in setting up and running a DRT system operators | | Overall DRT is a relatively wide spread form of providing public transport in Sweden and in that sense there are a lot of experience regarding DRT from both PTOs and PTAs. Värmland was one of the first regions to develop a DRT service. In the rest of Sweden DRT is perhaps not as developed but still exists in some places. A lot of PTA/PTOs are looking at new kinds of DRT in the form of on-demand solutions. They can generally be thought of as positive, knowing they need to change their businessmodel and are thus not viewed as a barrier for the emergence of DRT services. | DRT is widely used in all regions of Denmark. DRT is organized through a national entity, owned by the Danish PTAs, called "Flex Denmark". Flex Denmark is responsible for the maintenance and development of the national DRT platform, used by all Danish PTAs. No lack of operators and +20 years of experience with DTR in Denmark | | | | There isn't much experience on setting up and running a DRT system in Estonia but we feel that if the scheme on how to do it would be clear on state level then there would be no problem to find operators for this service. | | Lithuania doesn't have much experience with DRT service. There are some cases of social taxi services in some cities, or special public transport routes which are operated only after events (like sport or recreational events). | |
| | Lack of awareness of DRT as an alternative or complementary measure for policy-makers | | DRT in Sweden is often thought of as the hidden mode of public transport as many have never encountered a DRT solution and are unaware of how to use it. This is the same for decision-makers. So far DRT solutions have been used when passenger demand is low and the regular public transport is facing low load factors. As a way to preserve the taxpayers money efficiently a DRT solution is introduced, as it is only run when someone actually wants to travel. This often leads to some resistance amongst politicians as it does infringe on the ease of travelling for the affected passengers. The lack of awareness may also stem from the fact that regular public transport takes up a much larger proportion of costs and therefore receives most of the politicians attention. | DRT is widely used in all regions of Denmark. DRT is organized through a national entity, owned by the Danish PTAs, called "Flex Denmark". Flex Denmark is responsible for the maintenance and development of the national DRT platform, used by all Danish PTAs. No lack of operators and +20 years of experience with DTR in Denmark | | In Norway DRT has a great deal of awareness among local authorities such as municipalities and county authorities, but very little amongst central authorities. This is not necessarily perceived as a barrier. | | Awareness about DRT as an alternative exists but we are struggling in a light of free public transportation in Estonian rural areas to find the right solution on pricing and therefore for the whole scheme of DRT. | | It could be one of the issues since the DRT service is not popular as a transport mode - policy makers may not be aware of DRT during planning PT. DRT is always mentioned as a possible solution in all the studies (for example Sustainable urban mobility plans), but is rarely implemented as a real life solution. | |
| | Legal barriers to fund DRT as part of public transport | | Regular public transport needs to adapt according to commercial interests as it is not supposed to provide a service that is commercially viable. This is however not seen as a barrier to current forms of DRT that focuses on routes with low load factors and the only reason DRT exists is to uphold mobility in the area of the route. | The "open" DRT services in Denmark are funded as an integrated part of the Public Transport Service and are directly funded by the municipalities (as local and regional public transport is). There are no legal barriers to fund DRT as part of public transport. The DRT-services offered by visitation are subsidized 100% and is funded by law by municipalities or regions. | | | | There are no legal barriers to finance DRT because the service is acquired under public procurement law. | | There is no legal barriers to finance DRT. | |
| | Add more if they exist | | | | | | | | | We have hard time to find the right financing scheme (related to free PTA in rural areas) to fund DRT as part of public transport | |
| | Ticket prices for customers compared to regular public transit services | | In most places DRT has the same price as regular public transport. | | The municipalities and regional transport authorities demand responsive trip price at a level high enough to encourage use of regular buses and trains. The "Open" services includes: Flex Traffic - an DRT service door-to-door (The cost scheme consist of a flat fee (including the first 10 km) of Euro 4,8/3,2 + a fee pr km (Euro 0,8) exceeding 10 km); Plusstar (Plus trip) - DRT service from door to Public Transport Hub (or reverse), at a flat fee of Euro 2,8. These trips are offered at rural areas with limited PT. Must be booked through the national travelplanner ("Rejseplanen"). | | So far it is the same price for DRT as it is for other public transport. No higher prices are currently planned for DRT | | In most counties public transport is free for the consumers (compensated by the state at the expense of the taxpayer) so developing DRT services rises new questions such as should this also be free and if it cannot be free (which is the case actually) then how to price it? | | Public transport fares are defined by the local authorities in the country and in most cases are the same as PT. Social taxi services might have some variations - some municipalities subsidises these services, others ask passengers to contribute their own funds. |

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| | Private organizations have limited access to public transport market | | Regulated by national regulations, but there are also positive examples of public-private co-operations in Sweden. For instance in Region Värmland and Värmlandstrafiken we cooperate with businesses and public organisations by providing "företagskortet" an opportunity to connect the organisations business trips to a single invoice. | | The access of private organizations to the public transport market is restricted by law. Only the Regional PTAs have the right to deliver Public Transport. This can be a barrier in testing more innovative DRT solutions, but has not been an issues so far. | | Regulated by national regulations, but there are also positive examples (Ruter working with schools). | | Public transport market is not very agile due to the fact that all the transport service providers are contracted through public procurement and all the contracts last at least 5 years. | | Private companies can participate in tenders for public transport services, but the local authorities (municipalities) can make a decision to entitle public transport service function for municipal owned company. | |
| Market penetration of DRT solutions | Difficult to pilot/test/initiate new schemes due to high upfront investment costs (acquiring fleet / training staff / etc) | | Not an issue as we can use vehicles that already exist in our organisation and through our procurements. However if there is an very large increase this could prove to be an issue as it would spill over to the special passenger transport department, leading to a need for investments. In order to finance these investments the model "as much traffic as possible for the available funds" is what dictates the conditions. | | As all funding for Public Transport is carried by the Municipalities and Regions, funding of new and innovative solutions are hard to find. However, due to the collaboration and funding of "Flex Denmark" by all PTAs, new DRT offers are continuously being developed and tested. | | | | Estonia is a pretty good testing ground for pilots. | | There are some investments needed for this kind of service (fleet investment, applications coordination costs). | |
| | High operation costs once the service is running (difficult to maintain) | | In Sweden DRT services tend to be used in order to cut costs but not needing to maintain a service that has lower demands. | | This is a political issue (at municipal level) as the higher cost of DRT is taken out of the budget for "regular" Public Transport. However, DRT is put in service to replace buses running with few passengers at a high cost per passenger. | | It is a challenge to make all the effects visible. Are there other effects of DRT that differentiate it from ordinary public transport that can make DRT more profitable than pure costs show? Are there socio-economic benefits that outweigh the business economics? This is difficult to make visible when discussing costs. | | As in most of Estonian rural areas public transportation is free for users, the cost of PT rises every year and at the same time it is very difficult to implement new services (for example DRT) because it would rise the costs even more. | | In some cases DRT could be cheaper to run comparing to regular public transport lines. It could be cheaper than planning new routes. | |
| | Lack of understanding of the market, the users and their needs | | It is not common in Sweden to look at user needs regarding DRT solutions. We are much more focused on travelling statistics. When the load factors decrease we rather look at a DRT solution instead of looking at why the load factor is decreasing if there is a change in user needs. More can be done to tailor to the needs and perhaps not needing to introduce a DRT solution at all, or seeing that a DRT solution is what the user needs. | | Marked: The local operators (often Local taxi services) have a more regular income through DRT services procured by PTAs. There is a good, and growing, understanding here. Users: The open DRT services are mainly used by older children and mostly elderly citizens. However the flat-rate door-to-door DRT service (Plustur) is being used by a broader range of costumers | | Lack of data, and the users do not always know what they need. | | Lack of reliable and useful data. | | There is no data (studies) done regarding DRT usage. | |
| | Integration of different vehicle types with regularly scheduled public transport - demands for permits do not allow smaller vehicles or special transport services to be procured under same contract | | Special transport services (patient transport, school buses) require special permits. As long as the procurement is written correctly these vehicles can be used to provide DRT solutions in the regular public transport. The other way around although possible is very less likely as the vehicles still require a special permit. | | Public transport in general are divided into entities, where ordinary public transport (buses and local train services) is procured separately. And DRT-services are procured separately. Fixed routes and flexible DRT-services are furthermore separate in different procurement processes. | | Smaller vehicles need taxi license and cannot be procured under the same contract. | | Different vehicles can be procured under same contract. Different vehicles on different routes. The contracting authority may request different vehicles in the procurement, it is not forbidden. | | The procurement procedures might be more complicated to compare with regular public transport, but there are no restrictions for procuring any kind of public transport service. | |
| Procurement schemes | Permit/procurement to offer transport on outside predefined routes | | Contracts can include clauses for additional traffic and is therefore, if procurement is done well, not an issue | | Not a problem. The contracts have a high degree of flexibility. | | Although this has been marked as a barrier, there are some positive examples. Operators who have a contract with Ruter do not need a permit because Ruter is an administrative company for public transport in Oslo and Akershus. | | Under the Public Transport Act all the routes have to be predefined. | | | |
| | Access to data platform is expensive | | | | No, a data platform is part of the FlexTrafik (DRT) planning system. However, data is used broadly for statistics and analysis. So the barriers in data platforms is the lack of certain features - not access to data. | | The same platform that is used on DRT is used more on other services, which makes it cheaper. | | Saaremaa social transport pilot project has indicated this as the main problem. | | There is no clear data available. We have lack of information about real time flows and it could be indicated as main issue. | |
| Data flows | Availability/Quality of the data for regular analysis | | Data availability is okay, but the problem is the quality and how to uphold it especially in flows where the main input will be manual and not sensory/automatic. Maps or GIS data in general can be used in open-source-way (OpenStreetMap for instance) but more qualified services can be bought once-off or per-period through the Swedish Lantmäteriet or by 3rd party providers such as ESRI, HERE, Google or others. | | Good data sources are available and is open for use. Movia complies with GDPR-regulation and is monitored externally. Movia monitors FlexDanmark (our provider of the planning system) on their compliance with GDPR. | | | | Accuracy of data in sparsely populated areas (by South-East Public Transport Centre). | | | |
| | It is costly to be the software maintainer for the DRT service provider | | Costly to be the maintainer of the software solution. | | Cost is shared between the five regional PTA's in Denmark | | We do not act as a software maintainer for the DRT service provider. | | There is no software in use at the present time for the 4 pilots in Estonia. The barrier has been marked as with medium importance because due to it development of pilots are somewhat slowed down and barrier is somewhat unknown. | | We are not using any kind of software for DRT so it suppose to be extra costs for us. | |
| | Limitations of proposed software package (booking options via different means (app, webpage, phone etc) depending on the user group in one software/platform) | | | | | Our IT-platform is difficult and rather old that is why new services are difficult and costly to develop. A new planning IT-system is currently in a tender-process | | | | | There are many software package options in the world but very good ones are very expensive and the ones that are not so expensive are not so user friendly. | N/A |
| | General Data Protection regulation restricts the usage of data | | | | | Yes, see above. Not a restriction to the value of data, but takes resources to rinse out social security numbers, names, addresses etc. in datasets. | | The legal barriers limit how the data can be stored and used | | General Data Protection regulation hinders innovative approach to data usage. | | |

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| Strict internal regulations of the PTA-s in regard to using external software. | | | | | | | | There is no software in use at the present time for the 4 pilots in Estonia. The barrier has been marked as with medium importance because due to it development of pilots are somewhat slowed down and barrier is somewhat unknown. | | |
| Lack of existing DRT Data specification standards and API:s to fall back on | | Harder to make structured integrations - costly. | | | | | | | | |