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# Summary

Demand-responsive transport (DRT) refers to all types of transport services which adapt their routes and/or schedules to answer the needs of their passengers, with the aim of providing a cost-efficient service which is also convenient for users. DRT can be used in many different settings and adapted to the local requirements. For example, they may use different vehicle types based on demand (usually minibuses or cars, rather than buses), they may have set pick-up and drop-off points, or otherwise offer door-to-door service, and they may be booked in different manners, such as website, application, or telephone. Ultimately, DRT is a solution which is adaptable to many different settings and many different target audiences.

DRT can be especially useful for rural and sparsely populated areas, helping to provide mobility options which are cheaper than traditional public transport by optimising vehicle use and ensuring that empty vehicles do not run. In this way they can also help to support economic development and social inclusion, in some cases targeting people with specific physical and mobility challenges. As well as serving local communities, some DRT systems are also targeted towards tourists in areas which experience high seasonal changes in traffic.

Since DRT systems are typically run for public good, rather than for profit, public authorities need to play a key role in setting them up, by understand their regional needs and market, considering social aspects and concerns, piloting new technologies and approaches, working with mobility providers, bringing together the necessary stakeholders, and providing financial support to ensure sustainability.

The knowledge, solutions and good practices showcased in this policy brief come mainly from Interreg Europe projects.

# **Table of Contents**

Introduction  What is Demand-Responsive Transport?  Benefits & Challenges  The Future of DRT  How does it work?  European support for DRT  Policy Framework  Interreg Europe Projects  Policy Learning Platform  What can Public Authorities do?  Policy recommendations	2 4 4 5 6 8 8 9 9 11		
		Sources and further information	16
		Interreg Europe good practices	
		GOOD PRACTICE 1: DefMobil	4
		GOOD PRACTICE 2: Local Link Rural Transport Programme	6
		GOOD PRACTICE 3: Clic.Cat	10
		GOOD PRACTICE 4: Bummelbus: Dial-a-Bus Service	
		GOOD PRACTICE 5: Transport on Demand for Extremadura - TADEx	
		GOOD PRACTICE 6: DRT service: Circuit of electric mini-buses in Viseu	
		GOOD PRACTICE 7: Flexa DRT	13

# Introduction

**Demand-Responsive Transport** (DRT) is a key piece of the puzzle in enabling sustainable mobility for Europe's citizens. It has been widely used for many years, but interest has increased with advances in ICT and new models of collaboration. In this policy brief we will draw from experiences in Interreg Europe projects, as well as other resources, to explore how DRT can help to overcome Europe's mobility challenges, particularly in rural areas and for groups with limited mobility. It will explore different configurations and present good practices from which public authorities across Europe can learn, ending with a set of recommendations to be implemented.

## What is Demand-Responsive Transport?

Demand-Responsive Transport (DRT) refers to an **adaptable mode of transportation**, which can adjust routes and/or schedules based on user requests. These models are often used in rural areas with sparse populations, or to serve vulnerable communities, but can be applied in other circumstances such as tackling peak times in touristic regions. In these cases, it can provide a more personalised and lower-cost option than other transport services.

DRT has also garnered interest for its potential as a first/last mile solution, being **integrated into public transport systems** to enable multi-modal travel, by connecting users with transport hubs where journeys can then be continued by a traditional public transport service or use of shared vehicles.

A wide number of service offers and business models can be observed in Europe, making it a solution which is **highly adaptable to regional context**. This can include flexibility of route design, methods of finance, booking channels, types of vehicles and methods of payment, depending on the scale of the scheme, its target audience and the technical complexity of the supporting ICT framework.

#### GOOD PRACTICE 1: DefMobil

LAST MILE
Interreg Europe

In East Tyrol, Austria, the hailed shared taxi DefMobil operates to fill the gap in mobility supply in three municipalities. Due to the region's mountainous terrain and low population density, the municipalities saw no way to implement an efficient and cost-effective public transport line to serve the local population and visiting tourists.

Instead, the municipalities formed an association to launch a demand-responsive transport solution that fit the area's geographic and social characteristics, while also running frequently and being affordable.



Image source: <u>LAST MILE</u>

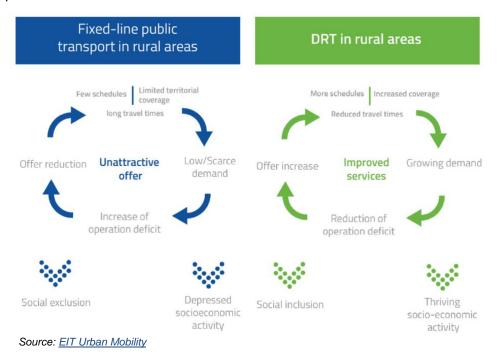
DefMobil operates on a fixed timetable, but the route travelled varies depending on demand. Users can book their journey by telephone, at least one hour in advance of departure. While the municipalities took the lead, the success of the scheme was ensured through co-operation with the local taxi operator, who operate the vehicles, though those vehicles are owned by the Government of Tyrol. Collaboration with the Tourism Association of East Tyrol and the University of Natural Resources was also crucial for the project development.

In 2017, DefMobil was taken over by the regional public transport association, which provides funding and ensures that the system is integrated into the broader mobility system and is marketed as part of the wider network. Tickets have also been unified and integrated into a single ticketing system.

Click here to find out more about this practice.

### **Benefits & Challenges**

Only a handful of public transport systems globally are profitable, even in cities, with most either breaking even or relying on subsidies to function. Cost-efficient implementation of public transport is especially challenging in rural areas. This is the result of **low population density** and **dispersed settlements**, which mean that public **transport journeys are often longer** than in urban settings, but with limited ridership, so they are not economically viable for traditional fixed-route services. Where they do function, they often provide an unattractive offer, with long-travel times and infrequent service. As such, residents usually **rely on private vehicles** which may not be accessible for the elderly, disabled or low-income groups, or for young people. In turn, this can lead to social isolation, limited access to social and economic opportunities, and essential services, which can further increase disparities between urban and rural areas.



However, these challenges are **not entirely unique to rural areas**. Suburban and peri-urban areas may also have low population density, requiring cost-efficient ways to connect these areas with mobility hubs in the city core. In urban areas, **vulnerable groups such as the elderly or disabled** who may struggle with traditional public transport services also require specific support. DRT can also help to limit private car usage in urban areas with people having confidence that they can access mobility services as and when needed.

Demand-responsive transport has been recognised as a potential solution to these challenges. Systems can adapt to the needs of their users by **providing flexible routing and scheduling** based on demand, rather than fixed timetables. This can help to keep down costs while also improving accessibility by giving confidence to users that they will always have a transport option.

However, implementing DRT can be challenging as **schemes** still have **higher operating costs** than urban transport solutions, **technological requirements** which can be challenging for public authorities to implement, and the need to constantly **monitor performance** and adapt to **changing populations** and use patterns. There is also a need to consider the digital divide between urban and rural areas, as well as between different generations, with access to internet and modern communication technologies limiting the adoption of smart mobility solutions. At the same time, an over reliance on applications and websites can also alienate users who may not be comfortable with modern technologies. In the long run, DRT therefore also needs to be considered in the framework of broader rural and regional policy, with **improved infrastructure** and **digital connectivity**, as well as **social and community programmes** to ensure that services are tailored to the specific needs of their target publics.

#### The future of DRT

While DRT services have existed for a long time, developments in communications, route planning and vehicle tracking technologies have increased interest in these practices over the past decade, including increasingly in cities. More advanced systems using ICT and data will have the benefits of adapting routes to reduce vehicle mileage, integrate sustainable vehicles such as e-buses, taking into account charging requirements, and cases are also emerging which explore the use of autonomous vehicles.

While DRT solutions have seen mixed success historically, they are increasingly becoming more mainstream as technological uptake advances and DRT services are integrated into wider mobility systems ... before, DRT was a 'nice to have,' now it is a 'must have'.

EIT Urban Mobility

In particular, the rise of apps has had a deep impact, enabling users to signal demand, and operators to aggregate that demand, more easily. As cities explore the applications of Mobility as a Service (MaaS), this will entail integration of DRT services, enabling a more seamless multimodal system and increased use. MaaS requires the integration of different services into a single ecosystem, with the aim of significantly improving convenience, providing simplified route planning and reducing costs for users – this should create a system that can compete with private vehicles.

## **GOOD PRACTICE 2: Local Link Rural Transport**



## **Programme**

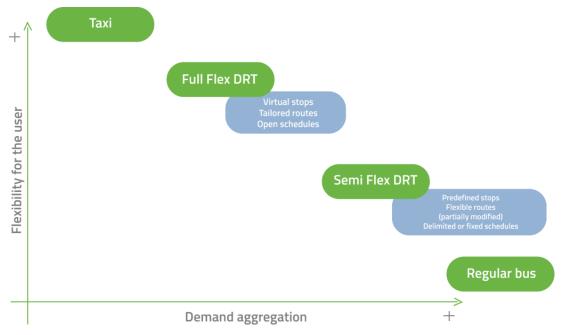
Ireland's Local Link Rural Transport Programme consists of fifteen public transport companies, operated by the local community, that responds to the community's needs. The programme links villages and towns with existing transport nodes and local attractions, to enable connection to the wider transport network and essential public services. It aims to foster social inclusion by linking to rural areas, to reduce carbon emissions by using clean transport modes and encouraging a shift from private vehicles, to improve multimodality, and to be accessible to all.

The Local Link brand was created by the Irish National Transport Authority, which partly funds the local networks, with the remainder of the costs covered by local councils, and by passenger fares, which are similar in price to urban bus fares. The service provides a combination of scheduled and flexible services, providing home-to-hub services, with bookings made by phone or email. Around 1.9 million journeys are made with Local Link, annually. The programme's success is noted to be the result of involving local community representatives in network design, to ensure that the service truly meets local needs.

Click here to find out more about this practice.

# How does it work?

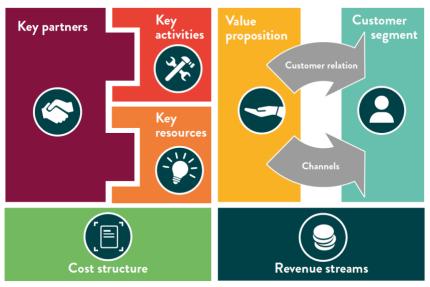
Demand-responsive transport systems have several variable parameters, related to higher or lower flexibility and the level of demand aggregation. The image below, from EIT Urban Mobility, illustrates these various modalities from the most flexible, but lowest capacity – a personal taxi – to the least flexible, but highest aggregation – a traditional fixed route bus. DRT systems are located between these two poles, as outlined in the image below.



Source: EIT Urban Mobility

Full-Flex DRT systems can arrange door-to-door transportation, picking up and dropping off from any location, with fully tailored routes. Semi-Flex DRT, which is more common, may use predefined stops, routes or timetables, only operating when there is demand. There can also be hybrid models, combining both door-to-door and stop-to-stop elements to balance convenience and efficiency.

With so many different DRT set-ups being possible, and with the challenge of ensuring the sustainability of the solution, the **business model** must be carefully considered. This involve thinking about key partners and resources for success of the scheme, its target audiences, activities, booking and payment options, and revenue streams. The image below represents the well-known business model canvas, elaborating how a business can create value.



Source: UITP (2021)

For public authorities wishing to set up a DRT scheme, they need to consider the essential **key partners** – these will be local public transport companies, taxi companies or other private companies actively involved in delivering the service, but also local associations and companies that can be helpful in engaging with citizens, informing

them and engaging them in service planning. **Key activities** refer to the service offer and its level of flexibility as well as booking and payment channels, while **key resources** involve consideration of digital and physical infrastructure, human and financial resources.

There are several key issues to consider here, also related to **customer relationships**. Booking can be performed through various means, including phone calls, websites or mobile apps, specifying pick-up time and location. It is important to consider the target audience for DRT when considering the booking system, bearing in mind the digital divide. The systems will then aggregate multiple requests and optimise routes to pick-up and drop-off passengers. In some smaller DRT systems this may be done manually, but digital tools are increasingly used. Next comes vehicle dispatch, to fulfil the agreed-upon service. This may be mini-buses, vans or cars depending on number of passengers or vehicle availability.

Cost structure and revenue streams are major challenges, considering that most DRT schemes operate at a loss. They can be funded by local and/or national governments, or set-up as public-private partnerships – the benefit of this model is that they can ensure schemes as public services, reaching citizens most in need. Entirely private models may make a profit through charging fares, but such examples are rare. Some schemes also exist in which community groups and non-profit groups run DRT schemes, targeted towards specific customer segments, such as the elderly or disabled, and may be supported by charities or donations. Somewhere along this chain, payment must also be taken. This can be done at the time of booking or at the time of service, implementing on board the vehicle, or via a digital platform. Fares may be calculated at a flat rate, based on distance, or even through subscription models.

# **European support for DRT**

### **Policy Framework**

European Policy objectives for transport are supported by initiatives such as the Sustainable and Smart Mobility Strategy and the TEN-T Guidelines, as well as being integrated into regional and cohesion policy. Collectively, the framework focuses on improving connectivity, enabling a smart transformation through the use of ICT, and enabling a sustainable transformation with a shift towards sustainable modes and zero-emission vehicles.

The <u>Sustainable and Smart Mobility Strategy</u>, adopted at the end of 2020, aims to create a more sustainable, efficient and inclusive transport system in the EU, including a 90% reduction in greenhouse gas emissions by 2050 to achieve the objectives of the European Green Deal. The strategy also includes a focus on the need for socially inclusive transport systems which are accessible to all citizens, especially those in rural and remote areas by using multi-modal transport and ICT to make travel more efficient and user-friendly.

The <u>Trans-European Transport Network</u> (TEN-T) aims to contribute to European cohesion efforts by improving mobility options for all regions of Europe. This includes supporting projects to extend transport infrastructure to rural areas and improve connectivity. To this end, the development of TEN-T infrastructure can be supported by the Cohesion Fund and the European Regional Development Fund, under priority 3, 'a more connected Europe by enhancing mobility'. Funds are also available under the Connecting Europe Facility, the primary financial instrument for TEN-T.

Additional funding options can be found in the <u>Horizon Europe</u> programme, which can fund innovative DRT schemes and application of communication technologies and AI under Cluster 5, in particular, but also under the <u>Mission for Climate-Neutral and Smart Cities by 2030</u>. Advice and support are available via both the <u>CIVITAS</u> initiative and the <u>EU's Urban Mobility Observatory</u> (formerly known as Eltis).

## **Interreg Europe projects**

Given its significant promise, Demand-Responsive Transport has been explored in Interreg Europe projects, with regions examining successful case studies from across Europe, exploring their success factors, and looking to replicate from one region to another. This has been a primary focus of several Interreg Europe projects, both in the current (2021-2027) and last (2014-2020) programming period.



intErconnecting MoBility acRoss europeAn CitiEs and subuRbs EMBRACER (2023-2027) aims to strengthen interconnections between rural and urban areas by integrating public transport with modes such as on-demand transport, cycling, ride-hailing and autonomous shuttles. Fine out more at the EMBRACER website.



# Improving rural mobility across Europe through novel transport solutions and innovative policy approaches

Rural Mobility (2024-2028) will explore how public authorities can provide cost-effective and convenient public transport in rural areas, exploring Mobility as a Service and Intelligent Transport Systems. Find out more at the Rural Mobility website.



#### Sustainable mobility for the last mile in tourism regions

LAST MILE explored the use of DRT to cover last mile journeys for tourists and inhabitants. The project investigated the state-of-the-art in DRT and assessed regional framework conditions to make recommendations on DRT uptake and devise action plans for its partner regions. Find out more at the <u>LAST MILE website</u> or via the story <u>Providing public transport for rural communities</u>.



# **Delivering Efficient Sustainable Tourism with low-carbon transport Innovations**

DESTI-SMART explored sustainable mobility and accessibility for touristic locations. The project organised workshops for exchange of experience and developed feasibility studies and action plans for its partner regions. Find out more at the <u>DESTI-SMART website</u>.



Interregional Learning towards Sustainable Mobility in Europe REGIO-MOB sought to increase the use of sustainable transport in its partner regions, including exploration of DRT practices. Find out more at the <a href="REGIO-MOB website">REGIO-MOB website</a>

# **Policy Learning Platform**

Building on the work of the projects, the Policy Learning Platform has implemented several activities related to DRT, a few of which are outlined here. More resources can be found in the further reading section at the end of this document.

#### E-workshop on Green and Inclusive Regional Mobility

In March 2024, the Policy Learning Platform organised an <u>e-workshop on Green and Inclusive Regional Mobility</u>, looking at ways to decarbonise rural areas, while also providing sustainable public services and increasing connectivity. In particular, the e-workshop explored shared mobility and demand-responsive transport and their high potential in rural areas.

In DRT, presentations included the Clic.Cat scheme in Catalonia (see Good Practice 3), the Coimbra Sit Flexi scheme in Portugal, and the results of the Peer review on DRT-Services in Saarland (see below). Presentations and discussions revealed some key takeaways for the design of DRT systems:

- DRT is incredibly flexible and can work in many rural regions with the right scale, service offer, partners and business model;
- It needs to be thought of not only in terms of economic performance, but also the many social benefits it can offer to keep rural areas connected;
- DRT needs to be as easy as possible to use, ideally with a few booking and payment options that take
  account of different skills with ICT;
- Constant monitoring is important, making changes and improvements to attract and retain customers;
- Communication is essential to build up a use base find a strong name and identity;
- Design with the end users in mind participatory processes and citizen engagement are essential.

#### **GOOD PRACTICE 3: Clic.Cat**

Catalonia makes wide use of DRT systems to provide public transportation in small towns located far from main transport routes, in order to connect them with transport hubs and urban centres. From 1991, Catalonia used a mixture of fully and partially on-demand services, but from 2021, has been integrating these services under a common brand, Clic.Cat. The service now has 235 lines, covering more than 730 villages in Catalonia.

Clic.Cat, as a brand, has been rolled out to all vehicles, stops and information services, with a common app and ICT infrastructure. Reservations for journeys can be made by app, 15 minutes ahead of the journey – compared to 24 hours before digitisation. To remain accessible, the service also allows booking by phone call.

A common communication campaign was created to raise awareness of the integrated services. The new approach led to an increase in ridership of on-demand services by 175% between 2021 and 2022

For more information, see the Clic.Cat website.

#### Peer review: Implementation of DRT-Services in Saarland

In November 2023, the Platform organised an <u>on-site peer review</u> for Saarland's Ministry for the Environment, Climate Protection, Mobility, Agriculture and Consumer Protection, on the implementation of on-demand public transport in the region. The Ministry sought to increase the attractiveness of local public transport through combined mobility offers, and to double the number of passengers using public transport by 2030.

The peer review resulted in a set of recommendations for Saarland, including:

- DRT should complement, but not replace, existing public transport it is a key tool in tackling gaps in the network;
- Multi-level and multi-actor governance models are needed. The regional or national level should set the framework, provide funds and establish replicable platforms, while the local level determines objectives, gathers data, designs networks and oversees implementation;
- Pilot projects using existing fleets are a good starting point, reducing costs while different models can be tested.
- Make it convenient easy to book, easy to pay for and easy to access.

# What can Public Authorities do?

Public authorities play a leading role in establishing, implementing and monitoring DRT schemes, helping to bring together the necessary actors to run them. Their role covers everything from licencing and safety to funding and community engagement.

Firstly, public authorities set the overall **regulatory and licencing framework** in which DRT systems operate, including service standards, safety and environmental requirements, driver training obligations, fare structures and accessibility requirements. Licencing can ensure that operators comply with their regulatory requirements and deliver a minimum service quality. Considering that DRT systems are frequently targeted towards disabled and elderly citizens, or those with limited mobility, there should be a particular focus on accessibility, with operators required to provide accessible vehicles, specialised services, and accommodations such as wheelchair ramps, priority seating, and audiovisual announcements.

#### GOOD PRACTICE 4: Bummelbus: Dial-a-Bus Service



Bummelbus is an on-demand service operating in Ösling region, Luxembourg, co-financed by the Ministry of Labour, Employment and the Social Economy with an initial dual mission of providing mobility services for the elderly population, as well as bringing long-term unemployed people back into the workforce. Drivers are re-educated and given a two-year contract to gain work experience and make them fit for the job market.

The service provides flexible routing to individual destinations (door-to-door), with varying ticket fares depending on the distance travelled. While initially focused on the elderly population, the service is now available for all segments of society, with a potential usership of 82,000 inhabitants in 255 villages. Bookings can be made by telephone but must be booked the day before travel.

Since the service also has a social mission, it is 70% funded by the state, with the remaining costs covered by ticketing and municipal budgets. The service now has around fifty vehicles, has reintegrated 370 long-term unemployed people, and serves around 140,000 passengers per year.

Click here to find out more about this practice.

Public Authorities can also **play a facilitating role**, bringing together public transport operators and social groups (charities, citizens associations) to establish new schemes and integrate them with other modes of public transport and the existing transport network. For this, they may conduct planning studies, assess community needs, and develop strategies to optimise service coverage. They can also engage residents, businesses, advocacy groups to gather inputs and concerns, and build support for DRT initiatives. This can be done with public meetings and surveys to inform planning and decision-making.

**Market research** should be performed to identify the areas where transportation needs are not adequately met by existing public transport options, for example by analysing population density, demographic profiles, travel patterns and existing transport infrastructure. This will also involve stakeholder engagement to gather interests and concerns.

Based on this information, the **DRT service can be designed** considering the service area, operating hours, frequency, vehicle types, fare structures, booking methods, communications technologies and complexity of digital platforms. The operator will also need to decide on the fleet acquisition and staffing based on the expected user base and frequency of service. Regional authorities can fund **pilot or demonstration projects** to test systems, scaling up once the concept has been proven.

Considering the challenges of public transport in rural areas in particular, Public Authorities often play a key role in **financing DRT schemes**. For new schemes, they may encourage innovation with pilot programs, research initiatives, and partnerships with technology providers, academic institutions, and private sector stakeholders, enabling new technologies, service models, or pricing strategies to be tested. In the long run, they may also provide financial support to DRT services through subsidies, grants, or contracts to help cover operating costs, infrastructure investments, and service expansion. This funding may come from local, regional, or national government sources.

Once the regulatory framework has been set, an operator has been identified and finance has been secured, public authorities can support the operator in designing and implementing the DRT scheme. Many of the activities could be funded by the authority or supported via other resources, and ultimately the division of activities between the operator and public authority will change from case to case.

# **GOOD PRACTICE 5: Transport on Demand for Extremadura - TADEx**



The TADEx DRT system operates in the eastern part of Extremadura (Spain), linking smaller towns (less than 2,000 inhabitants) with the nearest transport network hubs. TADEx aims to increase the cost and energy-efficiency of the transport system, ensure better use of capacity by using appropriate types and sizes of vehicles based on demand, and encourage greater use of public transport.

The service is comprised of two intercity bus lines, and users can request and book trips via website, app or phone call. Operating since 2022 as a pilot project funded by the regional government, Extremadura aims to roll the system out to other parts of the region.

Switching from traditional bus lines to TADEx saw a monthly reduction of 2,331km travelled per month by public transport vehicles, demonstrating increased efficiency from optimised vehicle use.

Click here to find out more about this practice.



Image source: CISMOB

The launch of the service must be accompanied by a comprehensive **marketing and promotional campaign** to raise awareness and attract users. This should use various communications channels, in particular established local media. To ensure that operators are meeting their requirements, Public Authorities need to also **monitor performance** of DRT services, while also checking their cost-effectiveness and efficiency. This includes collecting data on ridership levels, service reliability, customer satisfaction, and environmental impacts, which can be used to consistently improve service.

# **GOOD PRACTICE 6:** DRT service: Circuit of electric mini-buses in Viseu





Image Source: InnovaSUMP

From 2002 to 2005, twenty-five Portuguese municipalities, working with the General Direction of Land and River Transport, and the Portuguese Association of Electric Vehicles, launched a **demonstration programme** for introducing electric buses to Portuguese cities. In this context, the city of Viseu developed and implemented a semi-flex DRT system with three electric minibuses, which follows a set route and operates on demand, primarily for the elderly population of the city to be able to access facilities in the city centre. Passengers could travel for free, but low-cost fares were introduced in 2020 to maintain the sustainability of the scheme.

Starting as a demonstration project ran for more than fourteen years, with around 13,000 users per year. DRT schemes like this could be interesting for other cities with a historic city centre that limits access (for example, a low-emission zone), with many elderly citizens or tourists.

Click here to find out more about this practice.

#### GOOD PRACTICE 7: Flexa DRT



Flexa offers demand-responsive transport services for the suburbs of Leipzig (Germany), which are poorly served by public transport, to connect them with transport hubs. Customers use an app to input their current location and destination (based on a list of 120 virtual stops), pick-up time and number of passengers to receive an offer for a customised ride. If there is an existing public transport link that can offer the same route, then no offer is made to the user, who is instead given information on the available public transport route. In this way, Flexa ensures that DRT is truly integrated into the mobility system to fill gaps, and not compete against existing services. The initial pilot project was funded by the German government, as well as the Interreg Central Europe project, Dynaxibility4CE. From this pilot, Flexa is now available throughout the city.

Flexa uses e-vehicles and is part of the municipal transport company's offer, accessible through the general public transport app, with ticket prices using the same tariff as other public transport options. As well as setting a novel route, the Flexa system will pool journeys from several users to keep down costs and increase efficiency.

Click here to find out more about this practice.

# **Policy recommendations**

Demand-responsive transport can fill a key niche in European transport systems. This is especially true in rural areas or for targeting certain demographics, keeping costs down compared to traditional public transport, while delivering a more convenient service and tackling social challenges. With the wider roll-out of communication technologies and platforms, DRT systems are also becoming more relevant for urban and peri-urban areas, bringing together the sustainability benefits of public transportation with the convenience of ride-sharing services.

This brief has explored the different parameters of DRT systems, the role of public authorities, and successful case studies from across Europe. This exploration can deliver some specific recommendations for national, regional and local authorities.

## Set the legislative framework

- As identified in the Saarland peer review, multi-level governance is needed, with the regional or national level setting the overarching framework, while the actual systems are planned and implemented at the regional level, setting the objectives, gathering data and managing stakeholders;
- These national/regional levels can also set up funding programmes for municipalities, as well as reference platforms and guidelines to assist local authorities in design and implementation.
- Licencing can be used to ensure service quality, safety and accessibility, as well as influence fare structures.

#### **Understand the market**

- It's essential to understand the regional situation and citizen needs. This means understanding the region's demographics and traffic patterns, as well as the current modal distribution. This data is necessary for identifying the best business model to implement.
- Public authorities can lead in this data collection, but it should be made available to transport operators so they can understand the opportunities of implementing a new service.
- While the economic performance is important, the expected social impact of the service should be emphasised. This is why public sector involvement is so essential, to build confidence with the operator that support will be offered in designing and running the scheme.

#### Act as a facilitator

- Public authorities can take the lead by bringing together the necessary stakeholders to begin discussions, and act as a neutral partner in encouraging co-operation.
- DefMobil (Good Practice 1) demonstrates the potential, with municipalities collaborating in an association and then working with a local taxi company, the regional government, the tourism office and a university to provide technical advice.

# Implement pilot actions and constantly monitor performance

- Pilot actions and demonstration projects are essential before implementing a major investment. Initial trials
  can be done with existing fleets before scaling up. The TADEx system (Good Practice 5) and Viseu DRT
  (Good Practice 6), both started as pilot programmes before expanding their service offer. In Viseu, the pilot
  was part of a wider pilot funding programme implemented by the national government, which itself represents
  a good practice for national/regional level, giving scope for municipal level to tailor pilots to their needs.
- Once systems have been scaled up, it is essential to constantly monitor performance, not only economic
  performance, but also customer satisfaction. If services are insufficiently convenient and do not meet the
  needs and requirements of citizens, individuals will return to the use of their own vehicles, and once trust is
  lost, it is very difficult to regain.

#### Provide subsidies for social benefit

- In many cases, DRT schemes will only be able to operate with subsidies from public authorities. Again, this acknowledges that the service is a public good with social aims.
- The Local Link Rural Transport Programme (Good Practice 2) demonstrates a good model, with some funding from the national level, some from the local level, and additional income from transport fares.
- Considering social aspects, Bummelbus (Good Practice 4) is also an excellent case study of reintegrating people into the job market and supporting the elderly, receiving 70% funding from the state.

## Make DRT as convenient as possible

- DRT systems often stand alone, but they should instead be integrated into the existing public transport scheme. Common information systems and ticketing should become the norm, enabling smooth multi-modal mobility and enhancing connectivity. For example, DefMobil (Good Practice 1) has unified its ticketing into the local transport system, while Clic.Cat (Good Practice 3) has developed a common application for route planning between all DRT lines;
- Booking and payment need to be as simple as possible, but also flexible. Make booking possible through several different methods so that nobody is excluded from lack of experience with digital technologies, as in TADEx (Good Practice 5).
- DRT needs to complement the existing transport system, not replace it. Flexa DRT (Good Practice 7) is
  innovative in this respect, providing a complex ticketing and pricing structure that takes account of the impact
  on the existing transport network, by only operating when traditional public transport lines cannot fulfil the
  customer need.

#### **Communicate and raise awareness**

• DRT schemes need to be well promoted to inform citizens about what is available and ensure demand. Strong brands that cover a wide, like Local Link (Good Practice 2) and Clic.Cat (Good Practice 3) should be encouraged to be instantly recognisable, as should widespread communication campaigns.

## **Seek support from others**

- As demonstrated by the good practices, many regions in Europe have already designed successful DRT schemes from which other regions can learn. Platforms such as the Urban Mobility Observatory can direct public authorities towards useful information and guidelines, and EU funded projects are exploring the cutting edge of DRT application.
- Regional and local authorities in Europe can benefit from the Policy Learning Platform through on-demand expert services, such as matchmakings and peer reviews. For more information, see the summary on page 17.

# Sources and further information

Our experts provide a tailored set of resources, contacts, or in-depth analyses to help you find the answers you are looking for. Explore our services that can help you solve your regional policy challenges.

## **Interreg Europe Policy Learning Platform information**

- Editorial: Connecting Europe: A regional perspective on the Trans-European Transport Network
- E-workshop: Green and Inclusive Regional Mobility
- Online discussion: <u>Demand-responsive transport as a last mile mobility solution</u>
- Peer review Report: Implementation of DRT-Services in Saarland
- Policy brief: Approaches for a rural low-carbon economy
- Story: Providing public transport solutions for rural communities

#### Other sources

#### **LAST MILE Resources**

- Best Practices Analysis
- National and regional framework conditions and barriers of flexible transport
- State-of-the-Art of regional public transport systems and particularly flexible systems

#### **REGIO-MOB Resources**

- Guidelines of Best Practices in Sustainable Mobility
- Recommendation Guide on Sustainable Mobility Action Plans

#### **European Union Documents**

- Bisaschi, Romano et al, 2021, Research for European Parliament TRAN Committee <u>Transport infrastructure in low-density and depopulating areas</u>
- European Commission, 2020 <u>Sustainable and Smart Mobility Strategy</u>
- European Union, 2024 <u>Consolidated text: Regulation (EU) No 1315/2013 on Union guidelines for the development of the trans-European transport network</u>

#### **Other**

- Bart, Majcan et al, DREAM\_Pace, 2023 Analysis report on DRT digital and operational innovations in CE regions and engaged areas
- Grea, DREAM Pace, 2023 Methodological background for the design of DRT integrated solutions
- Grea, Seyfert et al, DREAM\_Pace, 2023 Report on governance and planning for public transport, mobility innovations and DRT in CE regions
- EIT Urban Mobility, 2022 <u>Demand Responsive Transport: recommendations for successful deployment</u>
- MOVMI, 2023 <u>Transport infrastructure in low-density and depopulating areas, European Parliament,</u> <u>Policy Department for Structural and Cohesion Policies, Brussels</u>
- UITP, 2021 Knowledge Brief: Using Business Models for Better Integrated Mobility
- Via, 2020 How to design a demand-responsive transport service that passengers love

#### **Interreg Europe Programme**

Interreg Europe is an interregional cooperation programme co-financed by the European Union. With a budget of 379 million euros for 2021-2027, Interreg Europe helps local, regional and national governments across Europe to develop and deliver better policies through interregional cooperation projects and its Policy Learning Platform services. The programme promotes good practice sharing and policy learning among European regions in 29 countries – the EU27, Norway and Switzerland. Interreg Europe contributes to the EU cohesion policy together with the other European Territorial Cooperation programmes known as Interreg.

#### **Interreg Europe Policy Learning Platform**

The Policy Learning Platform is the second action of the Interreg Europe programme. It aims to boost EU-wide policy learning and builds on good practices related to regional development policies.

The Platform is a space where the European policy-making community can tap into the know-how of regional policy experts and peers. It offers information on a variety of topics via thematic publications, online and onsite events, and direct communication with a team of experts.

Community members can use the free services we propose to policymakers looking for tailored advice on their policy challenges.

#### **Interreg Europe Policy Learning Platform expert services**

Our team of experts provide a set of services that can help you with regional policy challenges. Get in contact with our experts to discuss the possibilities:



Via the <u>policy helpdesk</u>, policymakers may submit their questions to receive a set of resources ranging from inspiring good practices from across Europe, policy briefs, webinar recordings, information about upcoming events, available European support and contacts of relevant people, as well as matchmaking recommendations and peer review opportunities.



A <u>matchmaking session</u> is a thematic discussion hosted and moderated by the Policy Learning Platform, designed around the policy needs and questions put forward by the requesting public authority or agency. It brings together peers from other European regions to present their experience and successes, to provide inspiration for overcoming regional challenges.



<u>Peer reviews</u> are the deepest and most intensive of the on-demand services, bringing together peers from a number of regions for a two-day work session, to examine the specific territorial and thematic context of the requesting region, discuss with stakeholders, and devise recommendations.

Discover more: www.interregeurope.eu/policylearning







# **Interreg Europe Policy Learning Platform**

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