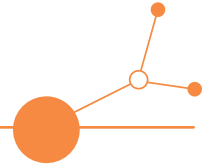
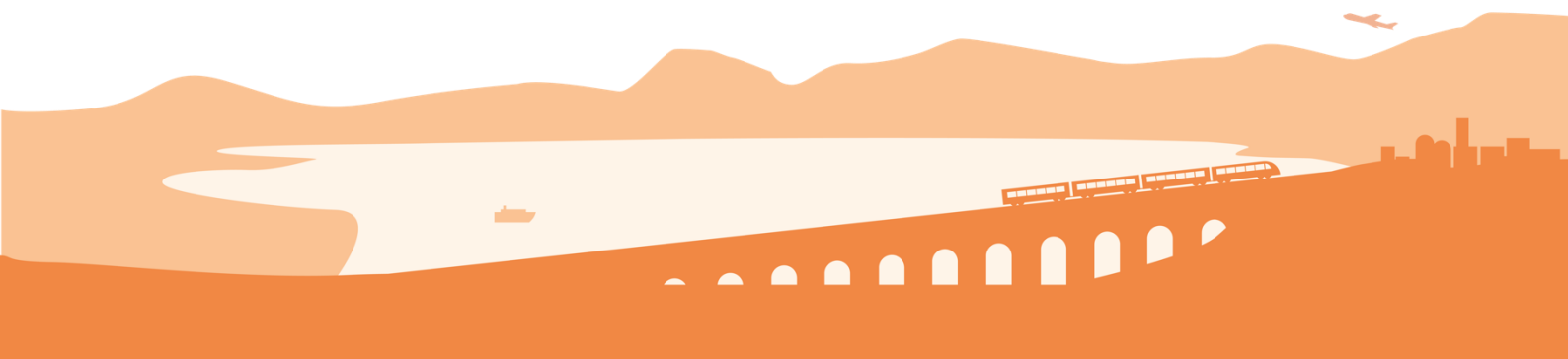


D1.1.2 State of the art report on governance structures and planning processes for DRT in the pilot areas



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1. Executive summary

The territory of Central Europe is characterised by uneven transport connections and mobility opportunities, across and within regions, between urbanised contexts, and rural and peripheral areas.

The project's common challenge is to improve accessibility and connectivity in CE peripheral and rural areas through better integration of public transport networks with Demand Responsive Transport (DRT) services, building on joint development and implementation of governance, planning, digital and operational innovations.

DREAM_PACE will develop innovative DRT concepts complementing regional mobility networks.

The project will improve DRT planning and delivery capacities of public authorities and operators.

A new generation of DRT services will become functional and integral part of regional mobility networks, enhancing accessibility for citizens, territorial cohesion, and social inclusion. Integration is the key to the DREAM_PACE innovative approach, as DRT services are mostly developed as stand-alone solutions to specific needs, the potential of scalable strategies and solutions is widely underestimated.

Project Partners will jointly develop a strategy for DRT in Sustainable Urban Mobility Plans to be adopted at EU level, co-design, test and implement innovative DRT solutions enhancing mobility networks. Strategies and solutions will foster a better integration of DRT and public transport (Bologna, Pavia, Budapest areas), support a higher coordination among existing DT initiatives (Osttirol, Baden-Württemberg) and experiment new integrated approaches for DRT "green fields" (Split-Dalmatia County).

DREAM_PACE will exploit the potential of integrated planning and digital and operational innovations for a common strategy and develop innovative DRT modular solutions. The project implementation builds on transnational cooperation to guarantee an adequate responsiveness and adaptability of project results to specific characteristics of mobility ecosystems across CE rural and peripheral areas.

This document serves as a comprehensive report on the diagnosis of Demand-Responsive Transport (DRT) governance structures and planning processes in the six pilot areas of the DREAM_PACE project.

The analysis focuses on key aspects such as territory and mobility context, existing services (public transport and DRT services), governance and planning approaches, aiming to identify gaps and specificities. The findings will be shared with relevant stakeholders primarily within the Living Labs frameworks at local level, as they represent the basis for drafting scenarios for the development and enhancement of DRT services within the co-design process. Moreover, the results of this analysis covering the six pilot areas will be re-elaborated in the communication process and disseminated through media channels to advocate for a more integrated approach to DRT.

The six pilot areas are described - in chapters from 3 to 8 - through several characteristics, such as institutional stakeholders, decision makers and roles, planning and regulation processes, territorial scope and target groups, and funding.

Notably, all territories are engaged in governance and planning improvements, focusing on strategic planning, recommendations on data governance and integration, business planning and tendering procedures. While in Bologna Metropolitan City (PP SRM), Budapest (BKK), Oltrepò Pavese (AG) and Split-Dalmatia County (SDC) pilots the efforts will be concentrated in better integrating DRT and public transport in a MaaS logic, Osttirol (RMO) and Stuttgart (nexus) areas focus on the development of coordinated DRT networks enhancing accessibility in peripheral and rural regions.



At the same time, territories such as the Oltrepò Pavese area, Budapest, Osttirol , and Split-Dalmatia County are also active in DREAM_PACE pilots dedicated to the implementation or enhancement of DRT services focusing on operational and digitalization aspects, with the support of all partners.

Overall, the document emphasizes the diversity of approaches and the collaborative efforts to address challenges and promote the integration of DRT into broader transportation systems.

The conclusions of this report on the state of the art on governance structures and planning processes for DRT in the DREAM_PACE pilot areas provide useful takeaways that will be the primary input on which the next step of the DREAM_PACE Living Labs, i.e. the development of the future scenarios, will build on.

Furthermore, chapter 10 contains the references of the document, while the Annex provides the template of the Survey used for collecting the information related to the pilot areas that are elaborated in the document.



2. Methodology for the development of the the state of the art report

This document is based on information collected through an online survey conducted among pilot areas' DREAM_PACE partners by Mobilissimus and Redmint, in collaboration with SRM and AustriaTech.

The survey - which full text is available in the Annex - was structured into three main blocks, covering:

- Territory and Mobility Context;
- Governance and Planning;
- Operational Models and Digitalization of Services.

While the operational and digitalization aspects are detailed in the DREAM_PACE deliverable D2.1.2 “State of the art report on digital and operational approaches for DRT in the pilot areas”, this document addresses the territory and mobility context and the governance and planning aspects in the six pilot areas.

The section on territory and mobility context delves into inquiries about existing services, both in regular public transport and DRT. It further details the socio-economic and cultural trends, relevant flows, and details about local public transport services, including traditional, flexible, and shared services. The survey encompasses existing DRT services, their coverage areas, and the key challenges.

The section related to the governance and planning structure of mobility and DRT focuses on characterizing DRT ecosystems taking into account the main functioning elements from the policy point of view. This involves assessing the institutional framework, definition, scope and target groups of planned services.

Finally, it is worth to highlight that the survey also investigates challenges and criticalities connected to funding and planning approaches for DRT, highlighting the expected evolution according to the aims of the project.

The document analyses the survey results for each pilot area.



3. Metropolitan city of Bologna

3.1. Territory and mobility context

3.1.1. Territory and existing services

The Metropolitan City of Bologna (55 municipalities, 1Mio inhabitants) is located in the Emilia-Romagna region. Its capital is the city of Bologna (400k inhabitants).

Mobility is based on bus public transport service (36M km/year, 96M pax/year) including DRT, Metropolitan rail service (5M km/year, 13M pax/year), and Free-floating Bike/Car-sharing services.

To have a comprehensive overview on the territory and mobility context and to better understand the current situation, the main socioeconomic and cultural trends that affect mobility in the pilot area are crucial from the pilot area development point of view.

The motorization rate increased in the last 10 years, from 62,4 cars/100 inhabitants (2012) to 68 cars/100 inhabitants (2022). At the same time, the number of inhabitants increased by 2,1% in the last 10 years in the Metropolitan area. While the number of students increased on the total population (+8% from 2016 to 2022), a progressive population aging was observed in the last 10 years.

Regarding the territory aspects, the Metropolitan area includes as mentioned 55 municipalities, the percentage of people living in the main city of Bologna compared to the inhabitants in the Metropolitan area have remained steady in the last 10 years (38,4%). In the same timeframe, a decrease in the number of active enterprises (-2,4%) in the Metropolitan city has been observed, while the number of employed persons increased by 18%¹.

Considering local traffic patterns, the main travel destinations are the followings:

- Bologna city center;
- Bologna main train station;
- Bologna bus station;
- Bologna airport;
- Bologna Fair center (when active).

Apart from these main transport hubs, secondary destinations - such as hospitals in the city and industries in the surroundings of Bologna and the Metropolitan area - are also frequent destinations.

The main mobility flows are from residential units to/from these main destinations.

In the pilot area, namely in the Metropolitan area, there are several existing local public transport, such as buses, trolleybuses, regional buses, suburban buses and even regional railway and long-distance buses. Inhabitants can also use existing flexible solutions, like taxi, DRT services, bike-sharing, shared e-scooters, shared e-bikes. Uber is also known and active in Bologna, operated by car-hire with driver services. Despite the presence of a wide range of services, there are some criticalities/challenges to cope with, such as the congestion peaks. There is high traffic on some public transport lines and it is challenging to guarantee the night service in the outskirts. Some municipalities (in the mountain/hilly areas) with low demand cannot be served with dense schedule. It is also challenging to provide access to the industries in the surroundings of the main Bologna city. For the shared services, the main challenge is to guarantee a proper number of transport means (especially the cars and the e-cars).

¹ More statistics of the Bologna Metropolitan area are available at <https://inumeridibolognametropolitana.it/dati-statistici>



3.1.2. DRT services on the territory

There are existing DRT services in the Metropolitan area of Bologna that serve rural areas, namely:

- Terre d'Acqua;
- Terre di Pianura;
- Borgo Panigale;
- Dozza;
- Ponte Rivabella.

All of them operate with a predefined time and route and is carried out only following a telephone reservation². The service applies the public transport fares and, depending on the served area, the reservation must be made at least 35 / 60 minutes in advance of the bus passage time at the desired stop.

The main criticality of those services is the high operation cost compared with the number of transported passengers. DREAM_PACE activities will also support the future enhancement of these existing services.

3.2. Governance and planning structure of mobility and DRT

3.2.1. Institutional stakeholders, decision makers and roles

Regulation

Currently, the rules related to DRT services are defined by SRM, which is the Agency for Mobility in the Metropolitan area of Bologna, i.e. the metropolitan Public Transport Authority (PTA). After receiving the related fundings, SRM can award the DRT service through a tender or involving the current incumbent for the PT in the Metropolitan area, case by case.

Strategic planning

Preliminary steps to the DRT service establishment are:

- the definition of transport needs;
- the decisions to activate the PT services;
- the provision of resources to activate the services, provided to SRM by decision makers.

Those steps are done by the local bodies (Region, Metropolitan Cities and the Municipalities).

Tactical planning

SRM draws the service with the transport operator, based on the transport needs defined by the local bodies.

Operating

DRT services are awarded by SRM through a tender or to the current incumbent of the PT Service Contract.

Monitoring

SRM monitors the activities of the transport service provider. The monitoring details are defined case by case (data source, data access, etc.).

² <https://www.tper.it/percorsi-orari/prontobus>



DREAM_PACE activities

Within DREAM_PACE, the Bologna pilot action for governance and planning concentrates on integrated DRT-public transport in a MaaS logic for peripheral and low demand areas, and in particular on the following pilot components: Strategic planning approach, to be tested within SUMP; Recommendations on data governance and integration, tariff and funding; DRT dedicated tendering procedure, to be demonstrated on field. The activities developed in Bologna aim at:

- defining how DRT can be integrated in the public transport offer since the planning phase (Planning) and how this can also be included in the next public procurement tender documents (Governance);
- defining how DRT can be included into a MaaS system developed and implemented in the Metropolitan City of Bologna (Governance).

3.2.2. Demand Responsive Transport in planning and regulation

The Sustainable Urban Mobility Plan (SUMP) for Metropolitan City of Bologna was adopted in November 2019. The SUMP is a strategic plan that addresses mobility in a sustainable way on a medium-long time horizon, but with checks and monitoring at predefined time intervals. It develops a vision of the mobility system, correlates and coordinates it with the sectoral and urban planning on a superordinate and municipal scale.

The SUMP of the Metropolitan City of Bologna has impact on the whole metropolitan territory and deals with the relations among Municipalities, both transversal and radial, analysing with particular attention the movements to and from Bologna city, in consideration of its high attractive power, and on Imola, the second biggest city of the province. The SUMP is integrated with three more plans: the Sulp - Sustainable Urban Logistics Plan, the BICIPLAN - Focus on the cycling mobility and the PGTU - Master Plan of the Urban Traffic at city level. These four integrated plans are developed at the same time.

With regard to public transport - the SUMP defines the Metropolitan Public Transport (MPT) network, i.e. a main network able to overcome the capacity limits of the current Public Transport system. MPT has to offer a competitive alternative to private car both for home-school and home-work trips and for any other mobility need, with a single integrated metropolitan fare system and with a clear recognition of the public transport service as a basic element for citizens', city users' and tourists' mobility needs.

The SUMP structures the PT network in the three components:

- Main network, consisting of a 1st level network including the Metropolitan Rail System, the new Bologna tramway network and the high-traffic suburban lines;
- Complementary network, consisting of all 2nd and 3rd level urban buses of Bologna and Imola and suburban and extra-urban lines;
- Integrative network, consisting of the so-called "local services", i.e. low frequency or flexible services/DRT service.

The Italian regulation identifies on-demand services mainly as tools for satisfying the mobility needs in the presence of "low demand", places them in the context of local public transport, and includes car sharing, taxis and possible "other" alternative/supplementary flexible transport systems, however without specifying their nature and characteristics (e.g. the possibility of integrating, under certain conditions, non-scheduled, voluntary and peer-to-peer services).

The main challenges and criticalities at governance and planning level for DRT development for the Bologna Metropolitan Area can be summarised as follows:

- Integration of DRT planning and governance in the Public Transport system and in the SUMP framework;



- Enhancement of the coordination and integration of local and regional mobility networks to improve connectivity of rural and peripheral areas, through a co-design process with local stakeholders;
- Development of DRT governance in a MaaS logic, from SUMP strategic level to tendering and Service Contracts.

3.2.3. Territorial scope and target groups of DRT services

The main territorial scope of DRT in the Bologna Metropolitan area is to cover low-demand areas with effective and more efficient services, through higher flexibility guaranteeing accessibility for all.

The target user group is represented by “low-demand” users, while systematic mobility (commuters and students) are supposed to be served by traditional PT services.

DREAM_PACE activities will then focus on improving connectivity of low demand areas by enhancing the governance and planning approaches in order to deliver services better fulfilling user needs.

3.2.4. Planning and funding of DRT services

In the Bologna Metropolitan Area, the planning process for DRT relies on the analysis of territorial and socio-economic variables according to the definition at national level, as well as on the number of passengers transported.

The latter is also an input to the funding scheme, together with the number of km driven, the time of activity and the hours of availability of the service.

DRT can be planned and organized at different levels, with specific scopes and focus, integrated later with the PT offer and provided by PTOs and others.

Public funding is shared between local entities/communities, within the Public Transport institutional framework. Private funding at local level (companies, associations/communities) is also envisaged for some DRT services.



4. Budapest

4.1. Territory and mobility context

4.1.1. Territory and existing services

The pilot area (located in district XVI of the Budapest city) has a high motorisation rate (481,9 cars/1000 inhabitants). It experienced a slight decrease in population, but a newly built housing estate project should foster a future growth.

The pilot area is typically populated by upper- to middle-class families. There are no traffic attracting facilities in the pilot area (only a kindergarten), so traffic within the area is negligible, mainly characterised by car traffic using core network.

Public transport is not available within 500 metres of the pilot area. However, the area is surrounded by bus and suburban railway stations. Shared e-scooters are available in the pilot area, but in very limited quantities.

4.1.2. DRT services on the territory

Currently, BKK is operating 11 Demand Responsive Transport (DRT) lines in Budapest, mainly in the peripheral areas: 10 day bus lines (the first line was launched in 2013) and 1 night bus line (since 2006). These services run on demand between certain stops and at certain times, but the route is always fixed. BKK will develop the existing DRT system as "more flexible" with increase of the degree of flexibility by innovative, IT supported solutions.

In detail, within the DREAM_PACE project, a new flexible demand responsive transport service without fixed route will be tested in Budapest, also equipped with an innovative IT system, connecting the selected area to the main suburban railway station.



Figure 1: DRT microbus in Budapest [Source: BKK, for SMACKER project]



4.2. Governance and planning structure of mobility and DRT

4.2.1. Institutional stakeholders, decision makers and roles

Regulation

Currently, the rules related to DRT are defined by the Municipality of Budapest.

Strategic and tactical planning

BKK as transport organiser of Budapest is in charge for strategic and tactical planning of services, including DRT.

Operating

Services are operated by the Budapest Transport Privately Held Corporation (BKV).

Monitoring

BKK (in cooperation with the transport operator, BKV) monitors the execution and performance of DRT service.

DREAM_PACE activities

Within DREAM_PACE, the Budapest pilot action for governance and planning concentrates on integrated DRT-public transport in a MaaS logic for peripheral and low demand areas, and in particular on the following pilot components: Strategic planning approach, to be tested within SUMP; Business planning tool for flexible management of DRT-PT, to be tested on running services.

4.2.2. Demand Responsive Transport in planning and regulation

According to the regulation Act XLI of 2012³, demand-driven passenger transport service is defined as: a passenger transport service organised by a service provider licensed for such services under a public Service Contract or a route licence, using information technology tools, and operating either on variable route or variable timetable, or on both variable route and timetable.

The BKK Telebusz service⁴ is a demand-driven passenger transport service, as defined in the Public Transport Act, operated by BKV Zrt. on the basis of a public Service Contract or a route licence, organised by BKK Zrt. using information technology tools, with a variable route or a variable timetable or a variable route and a variable timetable.

4.2.3. Territorial scope and target groups of DRT services

The main territorial scope of DRT in Budapest is represented by extra urban/peripheral areas, while target groups are defined according to the need of creating first last/mile connections within traditional transport networks.

³ <https://net.jogtar.hu/jogszabaly?docid=A1200041.TV&celpara=&dbnum=1>

⁴ <https://www.youtube.com/playlist?list=PLqUyWnh5MERqL9bClZQIQZVO7lOGwGjPH>



4.2.4. Planning and funding of DRT services

In Budapest, the planning process for DRT relies on the analysis of territorial variables as well as on the hours of availability of the services and times of service.

Availability and times of services are also key variables for funding, assessing and monitoring, together with the number of km driven, and passengers transported.

DRT is top down planned, integrated in the PT offer and provided by PTOs⁵ within their Service Contract.

Funding is provided according to the common public funding in public transport framework.

⁵ DRT buses in Budapest are currently provided and operated only by BKV, but other BKK services are also operated by Arrivabus in addition to BKV and the Volánbusz in the agglomeration services.



5. Pavia - Oltrepò

5.1. Territory and mobility context

5.1.1. Territory and existing services

In the Pavia region, Oltrepò is a mainly hilly rural area, composed by about 30 small municipalities; Stradella (main urban municipality of the area) is the main travel destination from other municipalities, for work reasons - thanks to the considerable development of all production sectors (especially logistics), for study reasons - thanks to the presence of secondary schools, and for leisure and shopping reasons - thanks to the presence of some commercial activities and an important market on a bi-weekly basis.

The main socioeconomic trends in the Oltrepò territory are the ageing of population and the depopulation of rural and mountain areas, only partially counterbalanced by the immigration of workers and families from foreign countries to fulfil the needs of the industry, logistics and agriculture sectors.

The urban sprawl is a significant feature of the territory, and the car dependency is very high, with a motorisation rate of approximately 600 cars per thousand inhabitants.

5.1.2. DRT services on the territory

DRT service is currently organized with free itineraries between a predefined set of 256 stops, available in the following service hours: in the school period, from Monday to Friday 9.30-11.30 / 16.30-18.30; Saturday 6.00-10.00 / 12.00-14.00 / 17.00-19.00; in the non-school/summer period, Monday to Saturday 6.00-10.00 / 12.00-14.00 / 17.00-19.00. During the booking phase, the passenger can choose the departure and arrival stops, and the desired departure or arrival time; the management system accepts the request and organizes the trip according to the availability of the buses for the requested stops and departure/arrival time.

In the same area, in addition to the DRT service, there are some fixed lines to reach other destinations outside the area (e.g. line 132 Stradella-Voghera; line 95 Castel S. Giovanni-Stradella-Pavia-Milano Famagosta), where interchange with the DRT service is possible.

5.2. Governance and planning structure of mobility and DRT

5.2.1. Institutional stakeholders, decision makers and roles

Regulation and strategic planning

Currently, the rules related to DRT are defined by the Lombardia Regional Government and by the local Public Transport Authority (PTA) Agenzia Trasporto Pubblico Locale Milano, Monza e Brianza, Lodi e Pavia, with the support of local Municipalities. The same bodies are in charge for the strategic planning processes, and for the funding of services.

Tactical planning

Public Transport Operators (PTOs) make a proposal for the organisation of services, based on the strategic planning and on the contents of tenders and Service Contracts. The PTA amends and authorises the operational plans.

Operating



DRT services in the area are provided by Autoguidovie (DREAM_PACE PP), according to the awarded PT Service Contract.

Monitoring

The monitoring of the services is operated by the Public Transport Authority, with the contribution of the PTO for the data provision.

DREAM_PACE activities

Within DREAM_PACE, the Oltrepò Pavese pilot action for governance and planning concentrates on integrated DRT-public transport in a MaaS logic for peripheral and low demand areas, and in particular on the following pilot components: Recommendations on data governance and integration, tariff and funding; Business planning tool for flexible management of DRT-PT, to be tested on running services. The activities developed in the Oltrepò Pavese aim at:

- Achieving a better integration between DRT and local public transport, also from the planning point of view;
- Enhancing the service from the digital and operational point of view (ref. DREAM_PACE WP2 pilot);
- Designing experimental DRT services in a new regulatory framework (with the support of the PTA Agenzia per il TPL as Associated Partner).

5.2.2. Demand Responsive Transport in planning and regulation

The Italian regulation identifies on-demand services mainly as tools for satisfying the mobility needs in the presence of "low demand", places them in the context of local public transport, and includes car sharing, taxis and possible "other" alternative/supplementary flexible transport systems, however without specifying their nature and characteristics (e.g. the possibility of integrating, under certain conditions, non-scheduled, voluntary and peer-to-peer services).

DRT services provided in the Oltrepò area are defined as flexible services and operate upon reservation, at unplanned times, with fixed itineraries and/or with detours or free itineraries between a set of predefined stops.

The main challenges and criticalities at governance and planning level for DRT development for the Oltrepò area can be summarised as follows:

- Conversion of traditional line km to on-demand equivalent km through an appropriate formula, codesigned and shared between PTOs and stakeholders;
- Development of a strategy to encourage the use of these services also among the elderly/dispersed population.

5.2.3. Territorial scope and target groups of DRT services

The main territorial scope of DRT in the Oltrepò area is to cover extra urban and peripheral (low-demand) areas with effective and more efficient services, through higher flexibility guaranteeing accessibility for all.

The target user group is in principle broad, even if two sub-groups have been identified, a first one made of vulnerable users requesting accessibility, and a second looking for intermodal connections with traditional services.



DREAM_PACE activities will therefore focus on improving both accessibility and intermodality, through a better integration between DRT and PT, as well as designing new experimental services under enhanced regulatory frameworks.

5.2.4. Planning and funding of DRT services

DRT is funded according to the common public funding in public transport framework.

At the moment, in order to calculate the public funding rates for DRT, the kms of services are converted into on-demand equivalent kms, taking into account parameters such as time, average speed, and an extra coefficient for services available online.

The new formula that will be studied within DREAM_PACE should consider also other variables, e.g. parameters of the transport systems (efficiency and loads of the lines in the area, position of the main hubs etc.) and characteristics of the mobility demand (e.g. main targets of the customers).



6. Osttirol

6.1. Territory and mobility context

6.1.1. Territory and existing services

In Osttirol, important trends impacting transportation include fewer people using public transit due to depopulation and an ageing population that requires specialized services.

The presence of scattered production and business sites influences commuting, and increased car use contributes to traffic and pollution. Urban sprawl has made commuting longer, affecting public transit feasibility. Cultural preferences and environmental awareness are crucial considerations for any new transportation initiatives in the region. The success of innovative initiatives depends on addressing these trends with tailored and adaptable solutions.

The main travel flows include commuting from residential areas to production and business sites, travelling from homes to train stations, and between urban and suburban areas due to urban sprawl. With an ageing population, there is a growing need for specialized transport to essential services for the elderly. Additionally, understanding flows related to leisure and recreational activities is crucial. By focusing on these travel patterns, targeted solutions can be designed to improve mobility and accessibility in the region.

Existing traditional services face challenges, notably due to limited operating hours with no regional public transport from 7 pm to 5 am. Additionally, irregular timetables, insufficient last-mile connectivity, and inadequate route coverage impact accessibility. The services may struggle to adapt to the diverse needs of the community, especially the ageing population. Overcoming these challenges is crucial for improving the reliability and effectiveness of transportation services in the region.

It is noted that shared services don't cover the entire region, requiring residents in unserved areas to find alternative transportation. The services operate on a reservation-only basis, which might not suit spontaneous travel needs. Additionally, the absence of digital infrastructure limits accessibility and real-time information. Communication barriers may affect those unfamiliar with traditional booking methods. Ensuring scalability for a growing user base and expanding coverage is crucial for the shared service to meet evolving community needs effectively.

6.1.2. DRT services on the territory

The DRT service in Osttirol encounters specific challenges. These include limited service coverage, where certain areas may lack access to the service. Users must book the service in advance through a phone call, potentially causing inconvenience for those with spontaneous travel needs. Efficient scheduling and coordination of DRT services pose challenges, and maintaining cost-effectiveness while offering flexibility remains a crucial consideration. Additionally, enhancing communication and community awareness is vital to encourage greater utilization. Integrating DRT with existing transportation options and adapting to technological limitations or demographic changes are also key challenges for ensuring an effective and accessible transportation service in the region.



Figure 2: Existing DRT service in Osttirol [Source: RMO]

6.2. Governance and planning structure of mobility and DRT

6.2.1. Institutional stakeholders, decision makers and roles

Regulation

The Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT) sets the rules for different types of transport modes, like roads and trains. It is responsible for making sure everything follows the national standards and policies.

BMVIT also plays a crucial role in financing and sustaining DRT initiatives, ensuring they align with broader transportation and innovation goals in the country. The funds provided by BMVIT contribute to the successful implementation and operation of DRT services, covering various expenses such as infrastructure development, operational costs, and innovation within the transportation sector and other regional authorities.

The Land Tirol (Regional Authority) adjusts the national rules to fit our unique needs. They oversee and make sure everything matches the plan for the East Tyrol (Ossttirol) region. In Osttirol, each municipality decides specific rules for DRT. They ensure that DRT suits the needs of each community.

The Regional Department for Mobility Planning - which acts for all the for all 33 municipalities in Osttirol region - gives technical advice and supports the planning process in order to align it to the regional transport policies.

Finally, VVT Tirol (Regional transport provider and coordinator) helps to set rules for DRT to link it with other modes of transport smoothly. As the Department for Mobility Planning ensures that everything aligns with the big plan for transportation in the Ossttirol region.

Strategic and tactical planning

VVT Tirol collaborates with different regional actors, to plan how DRT can smoothly connect with buses and trains, making sure everything aligns with the big transportation plan for the region.

The Regional Department for Mobility Planning - for all 33 municipalities in Osttirol region - helps to design detailed plans for DRT, like the routes and schedules, making sure it fits with the big transportation plan.



Operating

VVT assumes the operational role of running Demand-Responsive Transportation (DRT) services. As the coordination authority, it collaborates with public transport operators, specialised service providers, and other relevant stakeholders to execute and oversee the effective implementation of DRT services.

Monitoring

RMO (Regional Management Agency) plays a role in monitoring DRT services, keeping track of the execution and performance of DRT, ensuring it aligns with local objectives and effectively serves the community's transportation needs.

VVT monitors the execution and performance of DRT services. As coordination authority, they oversee and evaluate how well DRT is running, making sure it meets the expected standards and efficiently serves the transportation needs in the region.

DREAM_PACE activities

Within DREAM_PACE, the Osttirol pilot action for governance and planning concentrates on coordinated DRT network enhancing accessibility in peripheral and rural regions, and in particular on the following pilot components: Governance scheme for the coordination of DRT, and set up of coordinator; Strategic planning approach to DRT, coordination. DREAM_PACE aims to enhance and digitalize Demand-Responsive Transportation (DRT) services in Osttirol. The anticipated change involves expanding the provision of DRT services beyond the current limited regions. The goal is to make DRT more accessible and efficient, covering a broader area within Osttirol. The introduction of digitalisation is expected to bring about improved service coordination, scheduling, and user accessibility, making the entire DRT experience more convenient and user-friendly for the residents of Osttirol.

6.2.2. Demand Responsive Transport in planning and regulation

DRT services are a type of flexible and on-demand transport that doesn't follow fixed routes or schedules. Instead, it adapts to the needs of passengers, often using technology to optimise routes and respond to requests dynamically.

Main challenges and criticalities for DRT in Osttirol can be summarised as follows (it is noted that not all of them relate to planning and regulation, as some are more linked to operations, engagement, communication and environmental aspects:

- Limited coverage:
 - Challenge: DRT services are currently available in only a few regions of Osttirol;
 - Criticality: Expanding coverage is crucial to ensure that a larger population can benefit from flexible and on-demand transportation options;
- Community-specific needs:
 - Challenge: Varied transportation needs in different communities within Osttirol;
 - Criticality: Tailoring DRT services to meet the specific needs of diverse communities is vital for successful adoption and effectiveness;
- Coordination with existing services:
 - Challenge: Ensuring seamless integration of DRT with existing public transportation networks;
 - Criticality: Coordinated planning is essential to avoid duplication, optimize resources, and provide comprehensive transportation solutions;



- **Regulatory Alignment:**
 - Challenge: Adhering to and aligning with existing transportation regulations;
 - Criticality: Ensuring compliance with regulatory frameworks is critical for the legitimacy and sustainability of DRT services;
- **Funding and Resource Allocation:**
 - Challenge: Securing adequate funding for DRT development and operation;
 - Criticality: Sustainable funding models need to be established to support ongoing operations, infrastructure development, and potential expansion;
- **Community Engagement and Awareness:**
 - Challenge: Limited awareness and community engagement regarding the benefits and use of DRT;
 - Criticality: Effective communication and community involvement are crucial for successful;
- **Operational Efficiency:**
 - Challenge: Ensuring efficient operation, including timely responses to user requests;
 - Criticality: Operational efficiency is key to providing reliable and convenient DRT services, contributing to overall user satisfaction;
- **Environmental Impact:**
 - Challenge: Addressing potential environmental impacts, especially in regions experiencing urban sprawl;
 - Criticality: Implementing sustainable practices and minimizing environmental effects are essential for responsible DRT development.

It is noted that not all of the criticalities and challenges summarised above relate to planning and regulation, as some are more linked to operations, engagement, communication and environmental aspects.

6.2.3. Territorial scope and target groups of DRT services

The main territorial scope of DRT in the Osttirol is represented by remote and rural areas, where the main need is to enhanced accessibility for specific target groups (e.g. elderly, disabled, etc.). DREAM_PACE activities will focus on expanding the provision of DRT services beyond the current limited areas, improving service coordination, scheduling, and user accessibility also through digitalisation.

6.2.4. Planning and funding of DRT services

DRT planning is based on territorial and socio-economic variables, hours of availability of the service time of service activities. Funding and monitoring also considers the number of km driven and passengers transported.

DRT is planned and organised at local level by different public entities with specific scope and focus, and not coordinated with PT and other services.

DRT is financed through public funding in public transport framework, public funding by local entities/communities, accessibility and mobility focus, private funding at local level (companies, associations/communities), and crowdsourcing from local communities.



7. Split-Dalmatia County

7.1. Territory and mobility context

7.1.1. Territory and existing services

The Split-Dalmatia County is the second most populous county in Croatia with 423.849 inhabitants, after the City of Zagreb with 768.054. The majority of the population, almost 80%, resides in 16 cities of the County (almost 40% in the city of Split), while the remaining population lives in 39 municipalities and 382 settlements of the County.

In the age structure of the population (data from 2021), the majority consists of the age group 15-64 years (63%), while the percentage of the age group up to 15 years is 15%, and the percentage of the age group 65 years and above is 22%. The unbalanced distribution of young and old population further confirms the trend of population aging.

The total number of daily commuters in the County according to the 2021 census was 81.510, constituting approximately one-fifth of the total number of individuals aged 15 and above, 71,7% of which are workers. Of the total number of commuting workers, 74,2% work in a different city or municipality within the County, 21,9% worked in a different settlement within the same city/municipality, and 3,9% in a different county or abroad.

There are four business zones in the area. The main relevant flows are between business zones and residential areas where workers leave. In addition to business zones, POIs include healthcare facilities and shopping centers.

Some residents do not have means of transportation and it is difficult for them to travel to workplaces or health institutions.

The main challenges for the existing public transport network are related to reliability, low frequency and partial coverage of the territory.

7.1.2. DRT services on the territory

There are no existing DRT services in the Split-Dalmatia County.

7.2. Governance and planning structure of mobility and DRT

7.2.1. Institutional stakeholders, decision makers and roles

Regulation

The Croatian Law on road transport stipulates that a concession can be used to acquire the right to perform communal activities and the right to use communal infrastructure for the purpose of performing communal activities of regular passenger transport. In accordance with Regulation 1370/2007, guidelines and basic rules for the organization of passenger transport are provided. The model of the organization of the provision of public transport services can be in the form of a Concession Contract or in the form of a public Service Contract. When entering into a public Service Contract, the county undertakes to pay the service provider the net financial effect. The compensation to the public transport service provider must not exceed the net financial effect calculated according to the equation defined by Regulation 1370/2007. The procedure for concluding contracts for public services is carried out by public bidding in accordance with Regulation



1370/2007 and the Law on Public Procurement (OG 120/16, 114/22). According to the relevant law, a network in the field of public transport is considered to exist if the service is provided following the conditions established by the competent authority in Law on Public Procurement (OG 120/16, 114/22), Law on Concessions (OG 69 /17, 107/20), Law on Road Transport (OG 41/18, 98/19, 30/20, 89/21, 114/22).

Strategic planning

Strategic planning at the national level is determined by the Transport Development Strategy of the Republic of Croatia (Ministry of the Sea, Transport and Infrastructure), at the county level plans are under the jurisdiction of the county (Masterplan covers the area of several counties), and at local levels SUMP. In the existing area, not a single local self-government unit has prepared a SUMP so there are no finished SUMPs at the time this deliverable D1.1.2 is written, but basic guidelines in the field of transport can be found in local development documents.

Tactical planning

Tactical planning is being done by the counties and municipalities. Cities, municipalities, counties and the Ministry of the Sea, Transport and Infrastructure can procure external advisors for such types of planning.

Operating

The DRT system does not currently exist in the SDC area. The future DRT systems could be operated by independent DRT service providers or public transport operators. The future DRT systems could be financed through transport tickets and subsidies from local cities and municipalities.

Monitoring

The future DRT systems could be monitored by the DRT service providers (both independent DRT service providers or public transport operators) and the DRT funders like local cities and municipalities.

DREAM_PACE activities

Within DREAM_PACE, the Split Dalmatia County pilot action for governance and planning concentrates on integrated DRT-public transport in a MaaS logic for peripheral and low demand areas, and in particular on the following pilot components: Strategic planning approach, to be tested within Master Plans processes; DRT dedicated tendering procedure, to be demonstrated on field. The activities developed in the Split Dalmatia County envisage the definition of contracts at the county or local level, which can take the form of PSO (Public Service Obligation) to define the conditions under which DRT services are provided. Management should be organized at the level where the service is provided, either locally or regionally. Counties and local authorities set the basic conditions in the tender and determine the subsidy amounts they are willing to offer for the provision of the service. Service providers submit their proposals and preferences in response to the tenders, and individual ticket prices for the DRT service are defined. In the existing organization, this could involve existing offices responsible for traffic management.

7.2.2. Demand Responsive Transport in planning and regulation

DRT is a form of public transport of passengers by passenger cars of class M1⁶ or bus of class M2, which is carried out in areas where there is no organized public transport of passengers, i.e. in areas characterized by a low level of transport demand; it is carried out in accordance with the Law and does not have the characteristics of other forms of transport.

⁶ EU classification of vehicle types: <https://alternative-fuels-observatory.ec.europa.eu/general-information/vehicle-types>



At planning level, the main challenge identified is related to the possible interferences among services: DRT must be designed in order to be complementary to the existing regional bus network (DRT service will be designed as PT line feeder or as flexible PT service where standard PT is not available).

7.2.3. Territorial scope and target groups of DRT services

The main territorial scope of DRT in the Split Dalmatia County is represented by remote and rural areas, while target groups are defined according to the need of creating first last/mile connections within traditional transport networks.

DREAM_PACE activities will then focus on the implementation of new DRT concepts and use of digital innovations to improve mobility in rural areas and social inclusion.

7.2.4. Planning and funding of DRT services

As mentioned, DRT in SDC is currently in the planning phase and it will be implemented as the test service during DREAM_PACE project.

The plan is to collect data according to the following KPIs for the planning, monitoring, and improvement of services: Number of kilometers travelled; Number of passengers transported; Number of tickets sold; Reservation time (peaks); Satisfaction survey questionnaires; Integration with existing public transportation; Vehicle occupancy compared to the offered capacity.

DRT will be funded by local entities/communities, both in the case of accessibility and mobility focus, as well as welfare-oriented (e.g. elderly, disabled).



8. Stuttgart region

8.1. Territory and mobility context

8.1.1. Territory and existing services

The Stuttgart Region (3654 km²) is in general a highly populated area with 2.780.000 inhabitants, 635.000 of which residents in the main city, and includes 14 towns with more than 10.000 inhabitants. However, significant portions of its territory are characterised by scattered settlements and rural areas.

The town of Calw (24.000 inhabitants), selected as pilot site for the DREAM_PACE project, is located in the black forest, and attracts a lot of hiking tourism. Furthermore, a famous German author (Hermann Hesse) had his origins in the small town. Therefore, Calw is a destination for cultural tourists as well.

Transporting people from the town into the mountains is an important aspect of mobility. In 2025 the Herman-Hesse-Train will start to run and connect Calw with its neighbour city called Weil der Stadt.

Although there is traffic flow from Calw to the next metropol Stuttgart, no direct train connection exists. Calw isn't in fact currently connected with Stuttgart through frequent services such as the "Metropolexpress", therefore quicker connections at least with surrounding urban agglomerations are being considered in the planning process.

The existing e-Carsharing system offers a sustainable option to tourists and citizens, although the offer is limited.

Together with the lack of a direct connection to Stuttgart, the main criticalities of the existing transport network are related to the accessibility to the railway stations poorly served by buses at night, and to the connectivity among the several small towns in the area.

One of the challenges for the Stuttgart Region is represented by the fact that in several areas the time gaps in public transport services can be up to 6 hours (in one third of the populated areas this gap is between 3 and 6 hours), making it difficult to adequately serve the potential demand. Moreover, as mentioned, in 29% of the territory there is no night service available, and during weekends and holidays only 36% of the area benefits from at least the minimum standard of service provision.

8.1.2. DRT services on the territory

The criticalities reported highlight the potential role of DRT services in the Stuttgart Region as an option to provide quality accessibility to underserved territories. However, the facts that some of the DRT services (around 20%) are not listed in the local mobility app and that 68% can only be booked by phone one or in some cases two hours before, represent a relevant barrier to their full adoption.

In the selected area, there are around 13 active DRT services organised by the local transport authority VGC and connecting small towns, to be booked by phone at least one hour in advance.

Among the main criticalities, the punctuality of the services and the fact that passengers without a booking cannot access the service, even if seats are available, can be highlighted.

Furthermore, a call-car service is available as a supplement to local public transport in the evening and at night. The offer applies in the Calw district to the centers of Calw (including Bad Liebenzell), Nagold and Altensteig, and is aimed specifically at young people (but open to all age groups). The call car takes its passengers to meeting points in the city in the evening and back to their homes at night.



8.2. Governance and planning structure of mobility and DRT

8.2.1. Institutional stakeholders, decision makers and roles

Regulation

In Germany, the regulatory framework for DRT services is integrated within the Personenbeförderungsgesetzes (PBefG), i.e. the passenger transport law.

The municipality of Calw/communal administration is both the regulatory body and the decision-making authority.

Strategic and tactical planning, operating

The transport authority VGC Verkehrsgesellschaft Bäderkreis Calw mbH is responsible for planning and operating the DRT services, under the decision-making process led by the Municipality.

Monitoring

VGC is also in charge of monitoring activities.

DREAM_PACE activities

Within DREAM_PACE, the Stuttgart pilot action for governance and planning concentrates on coordinated DRT network enhancing accessibility in peripheral and rural regions, and in particular on the following pilot components: Strategic planning approach to DRT, coordination; Business model for crowdsourcing, to be tested by engaging potential participants).

8.2.2. Demand Responsive Transport in planning and regulation

According to German national legislation, in the case of scheduled on-demand transport, both virtual stop and door-to-door systems (or combinations of them) can be adopted, depending on the requests of the administration and in compliance with the public service obligations. These services must also comply with regulations and standards defined by local planning and accessibility requirements for public transport. On the other hand, these services benefit from the VAT reduction for public transport and, more importantly, the cost coverage is defined outside the normal financing instruments for local public transport and can be very different, particularly in low-demand rural areas.

As in other regions in fact, also in Baden-Württemberg DRT services often have higher operating costs per passenger than traditional bus or rail services, especially in sparsely populated areas or typically at times of low demand. Covering the operating costs of rural services requires additional funding. Mobility provision in the region is run by the district (ger: Landkreis), some of the counties in Baden-Württemberg (like Calw) are small and further, ideally require inter-district cooperation in order to offer services beyond district boundaries. The state supports DRT model projects to test their feasibility and effectiveness as well as inter-district cooperation to enable cross-district mobility.

DRT in Baden-Württemberg is financed (and subsidised) through a combination of various laws, guidelines and funding programmes. The Federal Passenger Transport Act (PBefG)⁷ forms the basis for commercial passenger transport and stipulates necessary authorisations and requirements. Section 44 of the PBefG regulates flexible services and therefore also DRT services. Section 42 refers to the scheduled services. The

⁷ Bundesministerium für Justiz (2024): Gesetze im Internet. Personenbeförderungsgesetz, abgerufen unter: (PBefG) <https://www.gesetze-im-internet.de/pbefg/BJNR002410961.html> (21.04.2024)



law on the planning, organisation and structuring of local public transport (ÖPNVG) in Baden-Württemberg aims to expand local public transport in the state as a fully-fledged alternative to motorised private transport⁸. This (ambitious) expansion can only be realised (esp. in rural areas and at times of low transport demand) in an economically viable and ecologically sound manner with DRT services (see also Baden-Württemberg Ministry of Transport, 2023). With funding from the State District Transport Financing Act (LGVFG)⁹, the state of Baden-Württemberg supports its districts and cities as well as transport companies in the management, expansion and modernization of their transport infrastructure.

The focus is on measures that drive the transport transition towards climate-, people- and environmentally-friendly mobility (Ministry of Transport Baden-Württemberg, 2023)¹⁰. The Ministry of Transport is providing temporary project funding to support the operating costs of setting up new on-demand transport services and the comprehensive upgrading of existing on-demand transport services. The Baden-Württemberg state government's transport strategy supports sustainable mobility in rural areas. The NVBW (Nahverkehrsgesellschaft Baden-Württemberg)¹¹ is providing funding to support DRT projects. In particular, the funding is aimed at rural areas in the spatial categories of "rural areas in the narrower sense" and "densely populated areas in rural areas" or "peripheral zones around densely populated areas" in accordance with the State Development Plan (LEP) 12. The NVPs (ger: Nahverkehrspläne, local transport plans) are a further planning instrument. NVPs shall create a viable and financially realistic forecast of public transport. Its aim is to coordinate local public transport and ensure common approaches that corresponds to the existing or future public transport. The districts in Baden-Württemberg are obliged to provide these plans.

In addition to regulations at federal and state level, local authorities can issue their own statutes and ordinances to regulate public transport and DRT services. Federal, state and EU funding programmes offer additional support for DRT.

Public authorities can launch tenders for DRT-services. The legal framework for such partnerships varies depending on the parties involved and the scope of the project. For rural regions, federal regionalisation funds have very limited application to DRT services¹³, since the funds are actually tied to rail transport. In Calw, a DRT service, that can be booked 60 min in advance, complements the regular buses and runs only when no regular bus is scheduled.

The main challenges and criticalities are related to the coordination and digitalisation of the existing services, but also the need to improve the design in order to attract more demand.

8.2.3. Territorial scope and target groups of DRT services

The main territorial scope of DRT in the municipality of Calw is represented by its remote and rural areas, where the main need is to integrate the existing network in off-peak times and seasons. The challenge for

⁸ Land Baden-Württemberg, Landesrecht BW (2023): Das Gesetz über die Planung, Organisation und Gestaltung des öffentlichen Personennahverkehrs (ÖPNVG), abgerufen unter <https://www.landesrecht-bw.de/bsbw/document/jlr-%C3%96PNVGBWrahmen> (21.04.2024)

⁹ Ministerium für Verkehr Baden-Württemberg (2023): Förderprogramme LGVFG, abgerufen unter <https://vm.baden-wuerttemberg.de/de/service/foerderprogramme/lgvfg/> (21.04.2024)

¹⁰ Ministerium für Verkehr Baden-Württemberg (2023): Förderprogramme ÖPNV, abgerufen unter <https://vm.baden-wuerttemberg.de/de/service/foerderprogramme/oepnv> (21.04.2024)

¹¹ NVBW (2023): Land fördert Ausbau von DRT, abgerufen unter <https://www.nvbw.de/services/presse/land-foerdert-ausbau-von-on-demand-verkehren-in-der-flaeche> (21.04.2024)

¹² Ministerium für Verkehr Baden-Württemberg (2023): Förderprogramme LGVFG, abgerufen unter <https://vm.baden-wuerttemberg.de/de/service/foerderprogramme/lgvfg/> (21.04.2024)

¹³ Die Bundesregierung (2022): Mehr Geld für den ÖPNV Abgerufen unter <https://www.bundesregierung.de/breg-de/suche/mehr-geld-fuer-den-oepnv-2143056> (21.04.2024)



the project's activities is to make services more attractive for potential users and to better understand passengers' needs and struggles when using DRT.

8.2.4. Planning and funding of DRT services

DRT planning is based on the hours of availability of the services, according to the space free from scheduled service. The funding is defined also by km and passengers, while the monitoring involves all the above-mentioned variables.

DRT is top-down planned, integrated into the PT offer and provided by PTOs within their Service Contract, and publicly funded according to the existing public transport framework.

The activities developed within the project framework will focus on developing a new approach and methodology to collect socio-economic data and insights from passengers and non-users, in order to better understand needs and plan for enhanced services.



9. Conclusions

The report builds on the knowledge gathered in the DREAM_PACE deliverable D1.1.1 “Analysis report on governance and planning for public transport, mobility innovations and DRT in CE Regions”, through the first round of Living Lab meetings held in the 6 pilot areas, and through the survey organized around the three blocks “Territory and Mobility Context”, “Governance and Planning”, and “Operational Models and Digitalization of Services”.

This document serves as a comprehensive report on the state of the art of Demand-Responsive Transport (DRT) governance structures and planning processes in the six pilot areas of the DREAM_PACE project.

Following the methodology elaborated in D3.1.1 “Methodological background for the design of DRT integrated solutions”, the results of this report represent the primary input on which the next step of the DREAM_PACE LLS, i.e. the development of the future scenarios, will build.

The governance structures for DRT services are different across pilot areas, but in most of cases aligned within the public transport regulations as complementary services, to a certain extent dedicated to specific target groups. This represents at the same time a potential strength and a limitation, since the space for DRT is in many cases pre-defined and limited. In fact, effective integration is still limited in many cases despite the general regulatory framework.

One of the aims of the project is to foster a higher degree of integration, by transforming DRT into a functioning option within PT operations and also by completing the regulation and filling the gaps.

At the same time, DRT planning is not always clearly defined and aligned with PT processes, but deserves a more comprehensive framework. The evidence confirms the need for a systematic and modular approach to DRT planning, able to build on synergies with PT and other services and contribute to a common vision.

Last but not least, DRT is largely included in the funding framework of PT contracts. This represents for sure a guarantee of stability, but higher flexibility shall be investigated by analysing the potential of dedicated funding at different governance levels, and innovations such as crowdfunding.

Across DREAM_PACE pilot areas, DRT services are planned either by local authorities or directly by operators, in most of the cases on top of existing networks in order to fill specific gaps. The challenge for the project and for the actors engaged locally is to create novel approaches and methodologies to accompany the strategic planning of DRT within the sustainable mobility planning process.



10. References

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- 4) DREAM_PACE D1.2.1 “Living labs preparation: stakeholder mapping, raising awareness and local engagement”.2023.
- 5) ITF. 2021. Innovations for Better Rural Mobility, ITF Research Reports. Paris: OECD Publishing, 2021.
- 6) Interreg Baltic-Sea Region RESPONSE initiative Demand-responsive Transport to ensure accessibility, availability and reliability of rural public transport - A mapping study of business models and targeted barrier-enabler analysis for policy makers: <https://response-project.eu/library/mapping-study-of-drt-business-models>. 2020.
- 7) Interreg SHAREPLACE project results, web page: <https://programme2014-20.interreg-central.eu/Content.Node/SHAREPLACE.html>
- 8) SHAREPLACE workshop on “Digitalizing mobility services in SHAREPLACE regions: planning, governance, technology” - Barriers and Conditions for Digitization. 2020.
- 9) SMACKER D.T1.1.3 “Review of policy level for rural and peripheral areas, including legal framework”. 2019.



11. Annex: Text of the Survey

1. General information

- Name: _____
- Email address: _____
- Organisation: _____
- Name of the pilot area: _____
- Estimated number of population of the pilot area: _____

2. Territory and mobility context

Territory and existing services

- Please provide a short description on the main socioeconomic and cultural trends affecting mobility in the pilot area that are crucial from the pilot’s development point of view (including motorization, depopulation, aging, urban sprawl etc.)
 - FREE TEXT BOX
- What are the main relevant flows in the pilot area? (please consider the area that will be affected by pilot activities) Which travel destinations are the most frequented for trips (e.g., between a residential area and the train station)?
 - FREE TEXT BOX
- What kind of transport services are available in the pilot area? [please select one or more of the following options]
 - Traditional PT services: Local PT - bus/trolley bus, Local PT - tram, Local PT - , Regional bus, Suburban or Regional Railway, Long-distance bus,
 - Flexible services: Uber, Taxi, DRT services
 - Shared services: Carpooling, Carsharing, Bikesharing, Shared e-scooter, Shared e-Bike
 - Other services [please detail]:.....
- What are the criticalities/challenges for the existing traditional services in the pilot area?
 - FREE TEXT BOX
- If there are any existing shared services, what are the criticalities/challenges? ?
 - FREE TEXT BOX

DRT services on the territory

- Are there existing DRT services in the pilot area or its surroundings? [please select one of the following options]
 - Yes, active
 - Under development (outside the DREAM_PACE project)



- Yes, planned, but not implemented (outside the DREAM_PACE project)
 - No
- What kind of area(s) does the existing DRT service serve? [please select one or more of the following options]
 - Whole functional urban area (FUA)
 - Whole urban area
 - A part of the city
 - The inner city
 - Suburban area
 - Rural area
 - A housing estate within the city
 - A newly built (residential) area
 - An industrial / workplace / campus area
 - A touristic area
 - Other [please explain]:
- What are the criticalities/challenges for the existing DRT service(s)?
FREE TEXT BOX
- The development of DRT service in the DREAM_PACE project is related to [please select one of the following options]:
 - Improvement of an existing DRT service
 - Introduction of a brand-new DRT service

3. Governance and planning structure of mobility and DRT

- What is the role of institutional stakeholders (and decision makers) in the DRT governance? Who is in charge for DRT:
 - Regulation (who defines the rules for the implementation of DRT services) please name, define, and describe; e.g. Ministry of, Regional Government, Local Government, district or province, etc [FREE TEXT BOX]
 - Strategic planning (who plans for DRT at strategic level i.e. in Sumps and other transport plans) please name, define, and describe; e.g. Ministry of, Regional Government, Local Government, district or province, etc [FREE TEXT BOX]
 - Tactical planning (who draws DRT service programmes in detail i.e. lines schedules etc) please name, define, and describe; e.g. Ministry of, Regional Government, Local Government, district or province, etc) [FREE TEXT BOX]
 - Funding, (who is funding DRT services) please name, define, and describe; e.g. Ministry of, Regional Government, Local Government, district or province, etc) [FREE TEXT BOX]



- Operating (who operates DRT services, public transport operators, specialized ones, other service providers etc.) [FREE TEXT BOX]
- Monitoring (who monitors the execution and performance of DRT services) [FREE TEXT BOX]
- What is the expected change to be introduced by DREAM_PACE? (please fill in if there is a change planned or expected, even if the solution is not clearly defined yet) [FREE TEXT BOX]
- What is the definition of DRT services according to the transport regulation? [FREE TEXT BOX]
- What are the main challenges and criticalities at governance and planning level for DRT development (according to the objective of your local pilot activities) [FREE TEXT BOX]
- What is the main territorial scope of DRT services according to the transport regulation and mobility (and other) plans?
 - Urban
 - Extra urban/peripheral
 - Remote/rural areas
 - Other (please specify)
 - What is the expected change to be introduced by DREAM_PACE? (please fill in if there is a change planned or expected, even if the solution is not clearly defined yet) [FREE TEXT BOX]
- What is the main service scope/target groups of DRT services according to the transport regulation transport regulation and mobility (and other) plans?
 - First last/mile connections within traditional transport networks
 - Integration of traditional transport networks in off peak off season
 - Stand alone services for systematic users/commuters (workers, students)
 - Non Emergency Medical Transport (NEMT)
 - Accessibility for specific target groups (e.g. elderly, disabled, etc.) Please specify
 - What is the expected change to be introduced by DREAM_PACE? (please fill in if there is a change planned or expected, even if the solution is not clearly defined yet) [FREE TEXT BOX]
- Which parameters are used to plan, fund and assess DRT services?
 - Territorial variables (plan)
 - Socio-economic variables (plan)
 - Hours of availability of the service (plan, fund, assess)
 - Time of service activities (plan, fund, assess)
 - Number of km driven (fund, assess)
 - Number of passengers transported (fund, assess)
 - Other (please specify)



- What is the expected change to be introduced by DREAM_PACE? (please fill in if there is a change planned or expected, even if the solution is not clearly defined yet) [FREE TEXT BOX]
- What is the level of coordination among actors and DRT services?
 - DRT is top down planned, integrated in the PT offer and provided by PTOs within their Service Contract
 - DRT is top down planned, developed in parallel to PT offer and provided by dedicated operators (PTOs and others)
 - DRT is planned and organised at local level by different public entities with specific scope and focus, and not coordinated with PT and other services
 - DRT is planned and organised at local level by private entities, and not coordinated with PT and other services
 - Other (please specify)
 - What is the expected change to be introduced by DREAM_PACE? (please fill in if there is a change planned or expected, even if the solution is not clearly defined yet) [FREE TEXT BOX]
- What funding schemes are in place for DRT;
 - Public funding in public transport framework
 - Public funding by local entities/communities, accessibility and mobility focus
 - Public funding by local entities/communities, tourism focus
 - Public funding by local entities/communities, welfare oriented (e.g. elderly, disabled)
 - Public funding by local entities/communities, health oriented
 - Private funding at local level (companies, associations/communities)
 - Crowdsourcing from local communities
 - Other (please specify)
 - What is the expected change to be introduced by DREAM_PACE? (please fill in if there is a change planned or expected, even if the solution is not clearly defined yet) [FREE TEXT BOX]