LAST MILE
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LAST MILE – Sustainable mobility for the last mile in tourism regions

Synthesis

West Pomerania

Task leader: PP7 – Westpomeranian Voivodeship – Regional Office for Spatial Planning of Westpomeranian Voivodeship (RBGPWZ)

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Summary

The experience of the LAST MILE project clearly indicates every region seeks effective and lasting solutions for sustainable mobility. Challenges of the last mile, both for tourists and residents, may take different forms; however, solutions based on flexible transport systems (FTS) have proved effective.

All regions analysed have undertaken a number of initiatives while seeking transport solutions that could help meeting challenges related to accessibility. Many solutions result from bottom-up initiatives that adjust the model of operation to actual needs and expectations of residents and other target groups. Moreover, flexibility was one of crucial factors for the operation of the system. Solutions implemented have proved the growing awareness of needs related to the development of sustainable mobility and the pursuit of approach based on the 'mobility as a service'.

However, it should be emphasized that a significant part of FTS solutions identified had to overcome unfavourable conditions and very often their creation resulted from strong determination and consistent effort made by municipalities and local entities. They often had to manoeuver between imprecise or insufficient legal provisions, seek numerous organizational compromises, develop dedicated financing models or take on a number of new responsibilities related to the implementation and management of a given service.

In response to this, recommendations developed by the LAST MILE project indicate areas in which specific measures may support the implementation of flexible transport systems. In terms of legislation and legal conditions, the national laws pertaining to transport should be updated as quickly as possible. New laws should provide definitions of the FTS and its role and position in the transport policy of a given country. This will allow the use of the FTS as an integral part of public transport systems. In order to ensure permanent and comprehensive implementation of the FTS, such solutions should first be reflected in developed and updated strategic transport policy documents. This applies in particular to the *Sustainable Urban Mobility Plan* as an instrument that can be adjusted to needs of rural, peripheral or tourist areas. At the same time, it should be emphasized that the effectiveness of those plans and strategies depends, among others, on the connection with financing instruments, such as Regional Operational Programmes. Those programmes can support the implementation of tasks specified in policy documents. In the next EU financial perspective, Regional Operational Programmes should include support for the FTS as a part of mobility policies. It should also be mentioned that the promotion of the FTS, as well as financial and institutional support for their creation should be initially provided by institutions and administrations at the regional level, since they enjoy a wide range of competences and capabilities in the area concerned.

Main conclusions:

- One of the main conclusions emerging from the study is that it is possible to introduce various forms of the FTS in the majority of partner regions. However, such initiatives often necessitate broad compromises due to insufficient legal regulations and the lack of comprehensive organizational and financial support.

- Transport organizers do not usually have experience in implementing the FTS in public transport systems. They are also afraid of additional cost involved. In tourist areas, the FTS focusing on tourists are most often implemented by commercial entities.

- The organization and implementation of the FTS require adequate knowledge on the functioning of flexible transport systems, cooperation with multiple partners and the ability to coordinate joint operations. The multidimensional nature of the cooperation is related to technical issues (IT systems, infrastructure), economic issues (external funding, self-financing) and social ones (promotion, education, usability). In all these areas, an adequate level of awareness and knowledge is necessary to properly assess barriers and prepare appropriate solutions.

- In most cases, applicable strategy documents do not reflect on the FTS. They also often focus on transport accessibility in relation to infrastructure (availability and quality of road and rail networks, stops, stations, intermodal nodes) without considering quality and accessibility of the public transport. **They rarely combine tourism with transport policies**.

- Strategic transport policy documents related to sustainable transport (including FTS) may have real impact if they are directly linked to funding (e.g. Operational Programmes closely related to strategies). In other cases, they serve as tools for increasing general awareness.

- The Sustainable Urban Mobility Plans provide for instruments and approaches which worked well in urban areas. They should be transferred and adapted to needs of rural and tourist regions. Such plans can allow for the implementation of mobility policies in a strategic, consistent and long-term manner.

- The implementation of FTS systems is a complex process, but its success contributes to improved quality of life for residents and provides enhanced alternative mobility options for tourists. The possibility of using the FTS operating in the form of public transport services reduces transport exclusion, prevents, among others, depopulation of the area, and contributes to the extension of the season in tourist regions.

- For the initiative to succeed, it is necessary to have solid foundation made up of laws and strategic documents. It is also necessary to provide financing and ensure proper level of awareness as regards FTS specific nature and capabilities. Particularly important are successfully implemented good practices that involve long-term financing models, multi-faceted cooperation and properly identified needs. Some of them can be implemented, inter alia, through social participation.

- **The region should be the main level responsible for the implementation of FTS policies**. Regional authorities, their units and regional transport associations have a variety of tools to ensure coordinated and comprehensive support for local FTS, from Regional Operational Programmes to financial and expert support.

Main recommendations:

EU Level

- Emphasis on integrating flexible transport systems in guidelines for transport and sustainable mobility (White Paper, Sustainable Urban Mobility Plans, Sustainable Regional Mobility Plans).
- Promoting awareness raising regarding benefits of the FTS (e.g. defining theme for European Sustainable Mobility Week closely related to FTS in rural and tourist areas).

National level:

- Preparation of unambiguous definitions of flexible forms of transport and provisions in the national law enabling the functioning of the FTS as a part of the public transport system.
- Introduction of regulations that impose the coordination of all means of transport on public transport organizers in their area of operation.
- Creation of conditions for implementation and financing of the FTS by using national and regional funding instruments.

Regional level:

- Development of regional mobility plans that include the FTS and cover metropolitan and remote disadvantaged areas.
- The inclusion of the FTS implementation and financing in regional operational programs
- Issues related to tourism should be reflected in transport strategies and policy documents. Consequently, documents and concepts regarding tourism development should refer to transport and sustainable mobility.
- Information regarding the transport offer, including FTS solutions, should be coordinated and integrated. It is worth considering to implement a unified regional information platform.

Local level:

- Development and implementation of plans for sustainable public transport and sustainable mobility, including flexible transport systems.
- Continuous examination and evaluation of passenger transport needs (i.e. residents and tourists) and relevant transport policy update.
- Training, meetings, and study visits for decision makers and stakeholders at the local level should be organized to support the FTS promotion process.

1. Introduction

1.1. LAST MILE Objectives

The LAST MILE project, funded from an EU-programme of INTERREG EUROPE, aims at finding innovative, flexible solutions for sustainable regional mobility systems. The project wants to guarantee that visitors can travel the 'last mile' of their travel chain in a sustainable manner and residents can enjoy alternatives to the individual car use for their daily trips as well.

The project focuses on the accessibility of transportation on the last link of the travel from origin to destination (so called "last mile"). It collects and analyses solutions to fil this gap with sustainable modes of transport. The project also examines environmental benefits as well as long term resource- and cost-efficiency.

LAST MILE has aimed, among others, at emphasising how a sound institutional framework can facilitate the implementation of demand-oriented transport solutions (public, sharing, pooling). The project uses lessons learnt to further encourage regional stakeholders to try new approaches that have been successful in other regions in Europe when they develop regional action plans. The transfer of the best practice and innovative approaches to their regional policies has been yet another goal of the LAST MILE project.

Taking into account the overall objective of the INTERREG EUROPE Programme, the LAST MILE aimed to improve the implementation of regional development policies and programmes, in particular programmes supporting Investment for Growth and Jobs and, where relevant, ETC programmes, addressing the transition to a low-carbon economy.

Improving regional policies and creating clear framework conditions for sustainable, flexible transport forms in the last mile of the travel chain will ultimately change the modal split towards more sustainable transport modes for tourism and recreation related traffic by shifting from car to sustainable transport modes by 5% by 2020 (comparing to 2015). This is in line with the long-term goal of moving towards a competitive low carbon economy in Europe.

The social and territorial cohesion will be improved through equal transport opportunities and better accessibility for tourists and residents to remote areas and hinterlands. Thus, the catchment area covered by public transport, in terms of the travel time from the capital of the region, is to be enlarged through the implementation of new flexible transport systems by 10% until 2020.

The project contributes to the Growth & Jobs goal through creating 'green jobs' and implementing new mobility solutions and services in less densely populated areas. Thus, it helps to reduce the unemployment rate in less favoured regions with 100 new 'green jobs' created by 2020.

Financed from INTERREG EUROPE, LAST MILE is a Europe-wide interregional project led by the **Environment Agency Austria**, with 7 partners from 6 countries comprising a group of about 50 stakeholders. The partner regions included as follows:

- Region of East Tyrol in Austria - elaborated by Regional Management East Tyrol
- Region of Košice in Slovakia - elaborated by Agency for the Support of Regional Development Košice
- Region of Varna District in Bulgaria - elaborated by CSDCS (Club "Sustainable Development of Civil Society")
- Region of Catalonia - elaborated by the Ministry of Territory & Sustainability (DTS) of the Catalan Government
- Region of Nature Park Upper Sûre in Luxembourg - elaborated by Upper Sûre Nature Park
- Region of Szczecin Metropolitan Area (Westpomeranian Voivodeship) in Poland, elaborated by Regional Office for Spatial Planning of Westpomeranian Voivodeship

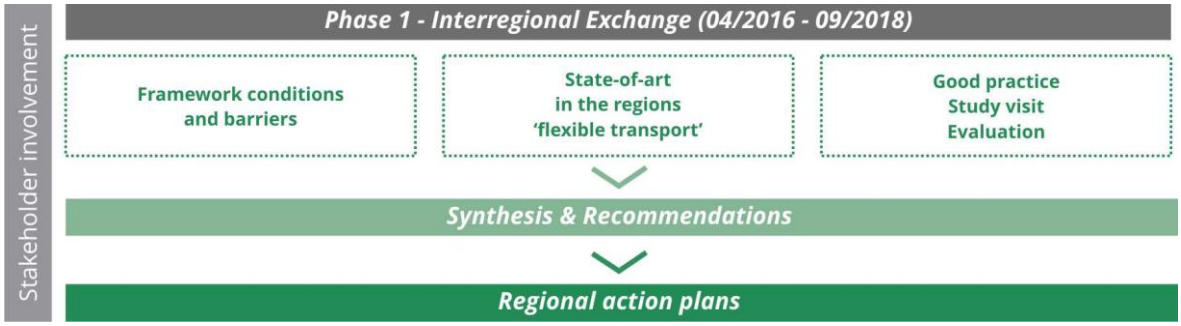
The 6 project partners have elaborated their regional reports analysing respective territories in relation to the status of sustainable mobility, flexible transport and tourism, in particular:

- *Analysis of national and regional framework conditions and barriers of flexible transport*
- *Analysis of technical State-of-the-Art of regional public transport systems and particularly flexible systems*
- *Good Practice Evaluation*

The prepared synthesis of the regional reports and its results provided regional partners with a basis for the development of their **Regional Action Plans**. Conclusions and recommendations were addressed to entities at various decision-making levels to allow for more precise implementation of measures supporting the development of the FTS and emphasizing their possible role in public transport systems. In addition, the document can also be used as reference in the case of publications summarizing the first phase of the LAST MILE project. On its basis, an information brochure was prepared, as well as major input for the project website and for a knowledge and experience exchange platform of the Interreg Europe project.

1.2. Objectives of the Report

The following document is a synthesis of information gathered in three international reports prepared by LAST MILE project partners and covering many aspects of flexible transport systems (FTS) as solutions that can support the development of sustainable mobility in the last mile areas in tourist regions.



The purpose of the aggregate report is to consolidate international experience regarding flexible transport systems to identify effective universal solutions and areas in which the most positive results can be reached while developing the FTS. Recommendations included in the aggregate report cover a wide range of levels and issues. The overriding purpose is to ensure possibly the most comprehensive and effective influence on the FTS implementation process.

The document has been developed to disseminate information among a wide range of recipients, such as public transport organizers, representatives of local governments, transport operators and carriers and entities responsible for planning and implementation of transport policies. Its primary goal is to develop recommendations and indicate necessary conditions for the effective implementation and maintenance of transport solutions that could meet "last mile" challenges in tourist regions and in peripheral areas of low population density.

1.3. Methodology

The aggregate report is based on the following methodology adopted for collecting and merging information about flexible transport systems.

Each of the good practices identified and evaluated during the LAST MILE project has been analysed in terms of **success factors** that have contributed most to FTS development and effective implementation. The good practices included the following:

- DefMobil hailed shared taxi in Defereggen (East Tyrol, Austria)
- FLUGS public car-sharing system in Lienz (East Tyrol, Austria)
- Train with stops on demand from Lleida to La Pobla de Segur (Catalonia, Spain)
- Shuttle taxi services at Aigüestortes National Park - Vall de Boi (Catalonia, Spain)
- Seasonal bus line no. 209 in Varna (Varna Region, Bulgaria)
- Seasonal shuttle bus and phaetons in Byala (Varna Region, Bulgaria)
- Bummelbus dial-a-bus (Luxembourg)
- Night Rider dial-a-bus (Luxembourg)
- Seaside Narrow Gauge Railway in Rewal (West Pomerania, Poland)
- BalticBike.pl a tourist bike rental system in Świnoujście (West Pomerania, Poland)
- Nostalgic Train in Košice (Košice Region, Slovakia)
- Cyklo Tour Spiš, a tourist bike rental system in Slovak Paradise National Park (Košice Region, Slovakia)

Success factors may vary in nature, ranging from appropriate legal regulations and provisions, support in the form of financial instruments, appropriate management structure, to activities based on the defining of the target group or well-diagnosed needs.

Defined success factors are then assigned to specific **fields of action** (areas of synthesis). This allowed both to determine how activities at different levels and scopes can effectively influence the development of the FTS, as well as to identify areas where universal measures can be distinguished.

Within each individual field of action, the analysis of success factors was carried out simultaneously with the *Analysis of national and regional framework conditions and barriers of flexible transport*, from the *Analysis of Technical State-of-the-Art of regional public transport systems and particularly flexible systems* and from the *Good Practice Evaluation.* It was followed by determining of possible connections and references between particular fields of action (cross-reference).

The summary of a given field of action includes a table of recommendations, with brake down into individual decision-making levels (EU, national, regional, local) and target groups assigned to them (recipients of individual recommendations).

2. Challenges and solutions

2.1. Accessibility to remote tourist regions – a challenge

The LAST MILE project, which examines sustainable mobility in the last mile area in tourist regions, directly refers to the issue of accessibility. Although very common, the concept of accessibility very difficult to define. We can consider it in several ways, e.g. in physical, spatial, geographical and social contexts.

Most often, analyses focus on the **transport accessibility** which determines the possibility of reaching a given location by using a particular means of transport.

One of its aspects is the availability of transport which depends on the density of stops and the frequency of services between them. Proper accessibility is a factor determining spatial integration of various areas and their territorial cohesion.

We can expect very good transport accessibility in urban areas and associated surrounding functional areas. On the other hand, rural and remote areas of low population density and considerable fragmentation and dispersion of settlements are exposed to the growing transport accessibility challenges.

Due to the specific nature of rural areas and low or limited demand for transport services, traditional public transport services based on high-capacity vehicles, fixed timetables and high frequency of services are too expensive. Therefore, in such areas, public transport services offered by carriers are infrequent and not adjusted to the needs of residents, their working time, opening hours of offices, medical facilities or commercial and service facilities. Moreover, in some cases, the least profitable transportation lines are liquidated depriving various social groups (young people, elderly people and people who do not have their own cars or driving license) of the access to public

transport services. Thus, the shortage of public transport contributes to social exclusion and a significant deterioration of the quality of life.

Additionally, in the majority of rural tourist destinations, **transport availability is limited after the tourist season**. In some instances, it is provided as school transport for children only. The limited transport accessibility is even worse in peripheral areas of growing dependence on individual car transportation. This translates into increased pollution of the environment, congestion in cities and on access roads, as well as increased demand for parking spaces. This is particularly noticeable in tourist destinations that can hardly cope with the excessive number of cars during the season.

2.2. Flexible transport systems as a solution

Flexible transport systems (FTS) may be the answer to transport accessibility challenges in rural areas. The LAST MILE project has identified various types and forms of the FTS, e.g. on-demand call/dial systems, *car-sharing* and *bike-sharing* systems and seasonal transport solutions.

Since project partners have been dealing with an international context and very different regional settings regarding forms and approaches to flexible transport, it is important to develop a common understanding of the 'Flexible Transport Service' and what it actually comprises. It is also crucial to develop a comprehensive overview of framework conditions and barriers.

Thus, Flexible Transport Services are defined as services that only operate on demand. Operation on demand in this context includes call/dial systems (i.e. hailed shared taxi), seasonal/temporary systems (i.e. occasional bus/train) and other forms of on-demand transport, such as sharing and pooling systems. Therefore, it can comprise services that can be summarized as enhanced public transport services (also flexible public transport services) like a hailed shared taxi service and also other flexible transport services such as car- and bike-sharing or carpooling which are not part of public transport in the narrower sense. In the LAST MILE project, the main feature of the FTS is that the service operates on demand only.

The definition also takes into account different publications on the subject. Flexible transport is regarded as a special form of public transport, e.g. the definition by Penelope Bacchus (n. d.):

Flexible Transport Services or demand responsive services (also termed as flexible transport solutions or flexible transport systems further on) are defined as 'an advanced, user-oriented form of public transport characterized by flexible routing scheduling of small/medium vehicles operating in shared/ride mode between pick-up and drop-off locations according to passenger's needs' (Penelope Bacchus, n.d.).

In this context, we can distinguish the following categories of flexible modes of transport which can be differentiated by their specific attributes.

- **Call/Dial Systems** (operate only after calling)
  - following a regular route/schedule of the bus line (only after calling)
  - fixed start and end stops, deviation from the regular route to serve additional on demand stops within a defined corridor
  - fixed stops, flexible routing to individual destinations
- **Seasonal/temporary shuttle service** (operates only seasonally or on specific occasions) with fixed route and stops, mostly small distances
  - seasonal
  - events
- **Sharing**
- **Pooling**

FTS systems can play a complementary role to existing regular public transport services or can operate as completely new transport solutions. The advantage of the FTS is a far more efficient adaptation of the service to the actual needs of passengers. This enables to provide an affordable service to smaller flows of passengers, and at the same time excludes empty trips or low occupancy of vehicles, which are regular problems in conventional transport systems. It is also possible to extend the scope of the system and to cover larger areas and provide public transport to a larger population.

Given the importance of transport accessibility, it should be emphasized that well-organized public transportation is essential for sustainable regional development. A made to measure transport service improves the quality of life for residents, influences their business activity and ensures better access to the labour market, education, culture and entertainment. It also supports the development of rural and peripheral areas by increasing their attractiveness. Moreover, it supports local advancement in particular areas and prevents their marginalization.

Thus, it is extremely important to support transport solutions that are alternatives to individual cars. Considering the inefficiency of regular public transport and the steady increase of service costs in rural areas, flexible transport systems are a suitable alternative.

3. Regional reports conclusions

The following subsections present a summary of the most important conclusions and observations based on the *Analysis of national and regional framework conditions and barriers of flexible transport*, from the *Analysis of Technical State-of-the-Art of regional public transport systems and particularly flexible systems* and the *Good Practice Evaluation. Information gathered has been used to develop the summary report.*

3.1. Framework conditions and barriers

The analysis of national and regional framework conditions and barriers has identified challenges for the implementation and operation of the FTS. The analysis is based on a survey questionnaire with quantitative and qualitative questions, where **legal**, **institutional**, **economic** and **other** aspects (concerning technical, organisational, management, awareness raising, information dissemination and feasibility of FTS) have been examined. The analysis of framework conditions and barriers led to the following conclusions:

Legal framework conditions and barriers:

- *Insufficient or partially missing legal framework for the FTS humpers the implementation and operation of the FTS and fails to regulate its functioning, organization and financing.*
- *Provisions on sustainable mobility in approved regional strategies mainly boil down to general recommendations that have no binding power.*
- *Municipalities have little decision making power as regards the implementation of the FTS, in particular for cross-border services or projects on a larger scale.*

Institutional framework conditions and barriers:

- *A major obstacle is the absence of an integrated transport organizer which could provide overall coordination, organization, data collection and financial contribution to the FTS.*
- *Due to the fact that the FTS is rarely integrated into the public transport information service or the Intelligent Transport System (ITS), potential users do not get relevant information on the FTS.*
- *Resistance to the FTS is noticeable due to political barriers, competition or the lack of profitability.*
- *It is necessary to satisfy mobility needs for locals as well as tourists.*
- *The municipalities may have difficulties to establish the FTS due to the lack of expertise in the sector, excessive cost or workload.*

Economic framework conditions and barriers:

- *Service operators have to struggle with low or missing subsidies or incoherent financing models used for the implementation of the FTS.*
- *The long-term financing is still a major challenge. This is why municipalities with very limited budgets are not motivated to implement the FTS.*
- *Collaboration under private-private and private-public partnerships is realistic and already in progress.*
- *Municipalities can mitigate short-term difficulties better or easier then private entrepreneurs, although the lack of experience in the FTS remains a problem.*

Other framework conditions and barriers:

- *Dissemination of information about the FTS is not efficient enough to reach target groups.*
- *The lack of sustainable transport educational programmes for decision-makers, operators, as well as users may be the reason of insufficient awareness regarding the importance of sustainable transport.*
- *The lack of attractive alternatives to public transport is one of reasons why certain habits are difficult to address.*

3.2. State-of-the-Art

The main purpose of the State-of-the-Art report was to analyses the current state of flexible transport in case study areas to identify existing best practices about FTS in tourism. Based on the regional analysis and information collected about FTS in case study regions, the State-of-the-Art analysis draw to the following conclusions:

- *Public transport networks around cities and central settlements provide good accessibility. However, tourist hotspots in rural areas, in the majority of cases, have inadequate availability of the public transport system.*
- *Conditions in rural areas makes the implementation of efficient sustainable transport systems difficult due to the low population density.*
- *Regions face seasonal fluctuation of the tourist traffic, which makes it difficult to run a profitable public transport all year round, especially in a low demand period. Additionally, some existing FTS initiatives do not offer services to tourists.*
- *Although local governments are generally willing to develop sustainable mobility measures to cover 'last mile' transport in rural areas, they face a poor legal framework for developing the FTS. The lack of experience in the implementation of such services by transport operators slows down the FTS development.*
- *Cooperation and communication between relevant regional stakeholders, especially among tourist private operators, remains poor.*

State-of-the-Art report identifies approaches to the FTS in all regions concerned, but not all regions enjoy the same level of FTS development and implementation. Among different types of existing flexible transport services, call/dial systems, shuttle services and seasonal services for tourists prevail. **In each case, the FTS is an opportunity for the improvement of sustainable transport by strengthening the coordination and integration within the overall transport service chain.**

Regional SWOT analyses are the basis for the joint SWOT analysis. The latter highlights universal strengths, weaknesses, opportunities and threats to the flexible transport system.

Strengths	Weaknesses
• In general, relatively good accessibility to the local public transport system in cities and major settlements. • Positive perception and willingness of the majority of local governments to develop sustainable mobility measures to cover the last mile transport. • Good experience with the FTS in a regional context, e.g. East Tyrol, Westpomeranian voivodeship, Luxembourg.	• Poor cooperation and communication between relevant regional stakeholders as regards promotion of sustainable tourist mobility. • Poor legal framework for the Flexible Transport System. • Lack of experience in implementation and operation of such services by the transport organizer and poor knowledge among passengers. • Different expectations and needs of individual municipalities can affect their will to cooperate. • Preference of car-based mobility among tourists.

Opportunities	Threats
• Technological advances and increasingly higher proportion of people using mobile devices facilitates the implementation of modern and easy-to-use trip planner systems and dispatch systems. • Some promising concepts being implemented successfully (e.g. E-mobility and e-car-sharing in East Tyrol). • Implementation of flexible transport services for tourists could improve the image of the service and increase tourist attractiveness of regions. • There are EU programmes aimed at promoting sustainable transport solutions. • Increased interest in sustainable mobility guidelines. • Flexible (public transport) services can better serve regions with difficult topography and geography (low population) than a regular public transport system. • The peak hour commuter traffic can be complementary to transport needs among tourists.	• Lack of competitiveness of public transport in relation to car rental. • Due to the seasonal nature of tourism, the transport system becomes unprofitable during certain months. • Spatially differentiated demographic changes in regions lead to the shrinking of rural regions.

3.3. Good practice evaluation

The analytical report on 'Best Practices Analysis' presents all FTS practices in partner regions identified during the LAST MILE project. Below, individual regional FTS solutions have been briefly described in the context of key factors responsible for FTS success and its effective implementation.

The 'Best Practices Analysis' report summarises best practices in six regions examined by the LAST MILE project. It also summarizes information collected during study visits in target regions to analyse sustainable transport networks and existing flexible transport systems in rural areas in different European countries. The report led to the following conclusions:

- ***Overall approach to tourist products, including soft mobility solutions*** *There are good examples of integration between the FTS and a public transport system and local tourist services. In Austria, there was a full integration of the service to the regional Public Transport system (communication, ticketing, funding, etc.) and/or creation of new tourist-oriented services (higher scheduled service frequency, new destinations to tourist regions and historical sites, etc.).*

- ***Cooperation and multilateral funding as a good policy practice at all levels (state, regional, local, private) and collaboration between all stakeholders –*** *All visited countries have shown numerous examples of fruitful cooperation between FTS providers, municipalities, regional governments, central government, tourist agencies, transport providers, hotels etc. AT, SP, PL and LU provided good examples of Public-Private Partnerships.*

- ***Benefits in the social sphere*** *- There are many examples of job creation (LU, SP, PL) and social inclusion (AT, BG, LU). The FTS is a very good example of a comprehensive solution to*

limited accessibility and social exclusion due to the lack of mobility. Services offered are addressed to all groups of users: young and old, singles and families, as well as locals and visitors.

- ***Environmental benefits** - All regions that have implemented flexible transport services give a positive example of green tourism and environmental care because of reduction of emissions and noise in tourist areas.*

- ***Modern marketing approach** - The stress is put on the attractiveness of services offered. They need to be flexible, available, sometimes free of charge, sometimes with playful elements. Usually, there are different loyalty programmes offered for regular users.*

- ***Self-funding systems** - Some of the good practices have already been operating as a self-funding solutions. It reflects a high business planning profile and competitiveness of services provided.*

Below you can find several general conclusions drawn from the exchange of experience under the LAST MILE project:

- ***The cooperation between decision makers** (regional/local administration) **and stakeholders in tourism and transport sectors is crucial for the establishing and maintaining of the FTS**. The transferability of good practices much depends on such cooperation but also on the national legal framework. Study visits have shown that **whenever such cooperation is established** and local service providers are supported by higher levels of administration, **results are always very promising**.*

- *Funding should not be disregarded, since it is an important factor not only during the implementation of a new sustainable last-mile initiatives but also during their operation. **In order to establish a sustainable FTS, funding sources have to be identified for its whole life cycle** and prudent economic calculations should be continuously performed while bearing in mind the social impact of innovations introduced.*

- *All best practices that have been demonstrated provide a strong contribution to making tourism green. They also have a **very positive influence on the environment** by reducing air pollution, noise and congestion, and narrowing the carbon footprint of transport and leisure sectors.*

- *The idea of sharing transport instead of using private cars should be the leading principle in the last mile approach.*

- *For their success, novelties need to be supported by a branding policy implemented in tourist regions designed to reach visitors with information about mobility as a means to attract more tourists. **should be considered as car-free and care-free services for tourists.***

- *Full integration of advanced technologies and modern trends (e-mobility, ITS, integrated public transport into one system, mobile applications etc.) can facilitate provision of information and attract more visitors. This will result in positive economic and social benefits for local communities.*

4. Selected fields of action [FoA]

To introduce a clear structure into the synthesis process, the theme division adopted in the 'Analysis of national and regional framework conditions and barriers of flexible transport' was used to define four main groups of conditions and barriers to the implementation of the FTS. The groups are as follows: **regulatory** (analysis of applicable laws adopted by central and local governments), **institutional** (analysis of organizational conditions and responsibilities), **economic** (analysis of financing possibilities) and **others** concerning various single issues (e.g. social barriers). For the purposes of the aggregate report, each of the groups was sub-divided into two major fields of action that included the most important issues. Thus, a total of **eight synthesis fields of action** were identified with success factors for each good practice.

4.1. Regulatory framework conditions and barriers

Fields of action in this particular group refer to all regulatory components, from laws [FoA.1] and strategic documents [FoA.2] that may visibly affect the creation and functioning of the FTS. Both fields have been determined to indicate the actual impact of legal and strategic frameworks on launching and operating of the FTS and, first and foremost, its ultimate success. The legal framework also includes regulations pertaining to insurance, tariffs and timetables.

Conclusions drawn will be used as a basis to formulate recommendations to be included in guidelines for provisions of law in specific acts and policy documents related to flexible transport, or, on the contrary, necessary to leave some legal space for more flexible and spontaneous initiatives and autonomous development. In this context, it is particularly relevant to include provisions in acts of law that define the FTS as such and possible forms of its operation.

§	**[FoA.1] – National and regional regulations regarding flexible transport systems**
This field of action incorporates success factors of initiatives taken under relevant policy documents regulating the FTS. This field also includes issues pertaining to the legal framework supporting the sector of transport, regulations on the operation of sustainable transport and strengthening of new types of flexible transport.	

FTS	**[FoA.2] – Flexible transport systems in strategic documents**
This field of action incorporates success factors of initiatives taken under relevant strategic documents regulating the FTS. This field remains in line with planning documents, concepts or strategies that regulate sustainable transport operations or strengthen new types of flexible transport.	

4.2. Institutional framework conditions and barriers

Fields of action in this group are related to institutional aspects that may constitute one of the main obstacles for the implementation and operation of the FTS. Institutions considered in this aggregate report include legal administrative bodies and other units (associations, non-governmental organizations) or private entities whose involvement may affect the implementation of transport tasks. Thus, this field includes measures determining the organization of flexible transport (including establishing of associations or unions), as well as any form of inter-sectoral or inter-branch cooperation affecting the effective implementation of the FTS.

Conclusions drawn will enable to prepare recommendations regarding, inter alia, the possibility of building platforms and organizational instruments for the implementation of the FTS, especially as a part of the public transport network, possible integration of regular and flexible systems, and requirements for developing a cooperation network between different institutions and entities.

	**[FoA.3] – Management and organization of flexible transport systems**
In this field of action success factors qualified result from institutional support (transport associations or unions). This field also refers to organizational activities undertaken to integrate flexible transport solutions with regular public transport systems through building common structures or through their joint management within one system.	

	**[FoA.4] – Cooperation and coordination at individual levels**
In this field of action, success factors qualified result from inter-sectoral cooperation, inter-industry cooperation or from the coordination of various transport systems. This field also includes activities aimed at strengthening cooperation between administrative bodies (municipalities, counties, regions), organizers and operators of transport (e.g. including of flexible transport systems in general public passenger transport information systems, integrated timetables and trip planning platforms).	

4.3. Economic framework conditions and barriers

The fields of action in this group refer to economic factors which determine some of the most important conditions for the organization of any form of transport. Public transport services in every form hardly generate any profit or have very low rate of return. Therefore, a crucial success factor is not only the provision of funding to launch the service [FoA.5] but, first and foremost, funding should be secured for its operation to enable its long-term presence [FoA.6].

Conclusions drawn will allow to prepare recommendations, among others, regarding appropriate instruments for comprehensive financing for the FTS at various administrative levels, a possible approach to long-term financing and the possibility of resorting to additional programmes and support initiatives.

	**[FoA.5] – Financing instruments and FTS support programmes (initial funding)**
In this field of action, success factors qualified refer to the financial support for the FTS from external sources or the use of financial strategies dedicated to the FTS (to launch and implement FTS). Particular attention has been given to the source of funding, with a particular emphasis on the European Regional Development Fund as a regional source of external funding. This field also includes actions that attract funds during their further operation supporting FTS development or improvement of its quality. In addition, the field includes all external programmes and projects that, despite the lack of a direct connection with financial instruments, allowed for additional support (know-how) and development.	

	**[FoA.6] – Long-term financing instruments and FTS operational financing**
In this field, success factors qualified are related to long-term FTS financing models. This field also includes all business activities, such as a reliable business plan, reduction of operating costs or continuous supervision and financial evaluation. Public-private partnerships are also taken into account to ensure continuity of financing.	

4.4. Other framework conditions and barriers

Due to a multifaceted nature of conditions that are particularly important during the implementation and operation of the FTS, other fields of action contain components related to social policy, education and service accessibility for different target groups. The initiative's success often depends on information policy and awareness-raising, as well as the availability of services for particular social groups. The shortage of knowledge about FTS rules and modes of operation may disturb the existing status-quo and contribute to contradictory expectations, resistance and opposition based on the conflict of interests and views of parties involved.

Conclusions drawn will allow to formulate recommendations, among others, regarding activities and processes aimed at preventing conflicts, supporting awareness building, promotion and dissemination of information about new transport systems, and a proper definition of needs and expectations of target groups.

	**[FoA.7] – Awareness raising and information policy in relation to FTS**
In this field of action, success factors qualified result from appropriate FTS promotion, advertising or education. This field includes initiatives building FTS awareness among decision makers, users and entrepreneurs, education activity focusing on children and young people, and workshops for residents. They all promote the FTS and the level of its acceptance among users.	

	**[FoA.8] – Identification of needs, social participation and applicability of FTS**
In this field of action, success factors qualified are related to the identification of user needs. Attention is also paid to the determining of the potential, optimized use of local potential (e.g. infrastructure), facilitation during use, social involvement and participation, and evaluation that promotes better matching of the service and expectations.	

4.5. Cross-references between fields of action

Due to the complexity of specific issues related to the functioning of the FTS, it is not always possible to consider individual aspects and a specific field of action separately. For this reason, if justified, possible cross references between fields and potential interdependencies have been identified (see: *3. Synthesis and Recommendations*).

5. Good practice success factors

This section includes a summary of success factors for each good practice examined and evaluated by the LAST MILE project. Each of the success factors has been described and an appropriate field of action identified.

5.1. Good practice – Austria

The project identified two examples of good practice related to the implementation of the FTS. These include the DefMobil system, which operates in the area of Defereggen Valley, and the FLUGS, a car-sharing system in Lienz in the region of East Tyrol.

5.1.1 DefMobil

In the Defereggen Valley, a hailed shared taxi system DefMobil has been operating for several years. It covers towns of St. Jakob, Hopfgarten and St. Veit. Due to the land configuration (large differences in height) and the distributed settlement network, there are no grounds to establish a regular bus line. As a result, municipalities located in the valley associated and launched the FTS that suits the physical, geographic and spatial conditions of the area. The DefMobil system is mainly used by inhabitants of the valley, such as elderly people, people without a driver's license or without a car. Transport of children to the kindergarten is also organized within the system. DefMobil provides service based on regular bus lines to Lienz and Kitzbühel. The system is one of measures implemented to counteract the progressing depopulation of the area. It was developed in the cooperation with the University of Innsbruck.

Table 1 Good practice success factors - DefMobil

Success factor	Grounds/Field of action
Financing system	The DefMobil system is funded primarily from external sources. Nearly 70% of funds comes from external sources, of which 50% are provided by the Federal Government of Tyrol. More than 15% of the funding originates from the national '*klima**aktiv** mobil*' programme which supports climate protection and low carbon economy. The national programme provides financial support for a period of three years. Such a large external support allows the municipalities to implement pilot and innovative solutions, without incurring excessive cost at the start. Thus, municipalities, which are the transport organizers, have time to test, adjust and optimize solutions, whereas residents have time to learn how to use it and accept the way the system operates.

	 	**[FoA.5] – the guarantee of external financing received at the launching of the system allowed for the launch of the service in its intended form** **[FoA.6] – funds received from national and regional level allow for longer financing of the system operation. Local governments also receive support through a system of discounts and ticket cost refund schemes (e.g. tickets for students)**
Support from the transport association	While implementing the FTS (call on-demand systems), Austrian municipalities can count on the support of transport associations. The Regional Transport Association, operating in the area of East Tirol (Verkehrsverbund Tirol - VVT), financially supports the implementation of specific solutions, as well as coordinates transport systems and ensures coherent information policies. If the solution succeeds and is accepted by users, the transport association may take over the responsibility for the management and further financing of the service. Thus, the association takes over the responsibility for the system from the municipality. This type of support encourages municipalities to make efforts to implement sustainable public transport solutions.	
	 	**[FoA.3] – the transport association may take over the responsibility for the management and financing of the solution in case the system proves effective** **[FoA.4] – the transport association is a coordinator of transport systems in a given area in the wider (regional and supra-regional) context of transport policy**
A well-defined target group	The DefMobil system is tailored to actual needs of residents. On the one hand, it supports the elderly, which is an increasing population group in the area (provides access to town centre, shops, medical centres and other public facilities). On the other hand, the transport of children to kindergartens is also organized within the system. DefMobil is also used by young people who do not have a driver's license or private cars. The coordination of the service with regular bus lines allows users to cross the border of the area with considerable ease (trips to Lienz and Innsbruck).	
	 	**[FoA.7] – initiatives addressed directly to a specific target group promote the system and help to win acceptance (education of children and youth, competitions to promote and strengthen image of the initiative)** **[FoA.8] – the operation of the system is based on well-examined and filtered transport demand among residents**

5.1.2 FLUGS E-car-sharing

The FLUGS system has been operating in Lienz since 2015 as the car-sharing service. It was created as part of a social project selected by residents and aimed at improving the quality of life in the area. The main objective was to complement the existing public transport service. FLUGS is an available public transport system that aims at reducing the need for a second car in a household. The fleet consists of electric cars and power is supplied from existing renewable energy sources. The system provides easy booking and payment via the website. The system is used for journeys within the urban area, but due to its relatively large coverage (about 200 km), it also enables trips outside the city.

Table 2 Good practice success factors - FLUGS E- car-sharing

Success factor	Grounds/Field of action	
Reduction of operating costs	In the case of the FLUGS system, a particular attention should be paid to the idea of reducing the operational cost, which is particularly important in the case of innovative and pilot systems. Vehicles and batteries are provided under a leasing contract, whereas cleaning and minor repairs are carried out by local activists as a voluntary service. The cost and implementation of the charging station was covered by a regional energy company (energy supplier). Members of the staff have been trained so they can perform various functions. Reduced capital expenditure and operating cost eliminated much of the pressure on the local government budget. Although not sizable, monthly income from the use fees covers the operating cost of the system and even ensures profitability. This allows for a steady improvement of the service and optimization of the tariff without excessive financial obligations. Thus, it is a good example for other cities and areas that are interested in implementing similar solutions.	
		**[FoA.4] – wide cooperation of entities at the local level increases the acceptance of the solution and may help to reduce cost (additional financial support, sponsorship, assistance in promotion)**
		**[FoA.6] – provided operating cost is reduced, it is easier to implement and optimize of the service without putting excessive burden on the organizer/operator**

High level of social participation	The system was created as a bottom-up initiative by residents. At the implementation stage, the initiative determined such issues as rental station deployment, tariff and operating principles. Additionally, volunteers helped to provide maintenance of the system (washing and vacuuming cars, minor maintenance).	
		**[FoA.8] – community involvement in the FTS process significantly increases acceptance of the solution and the effectiveness its of implementation. It reduces potential vandalism as well (shared responsibility)**
Easy-to-use	The use of the system is very simple. To register, one needs to present a copy of the driving license, a confirmation of membership fee payment, and the person needs to sign terms and conditions of the service. To start the car, the user receives an e-card or a smartphone application. Reservations can be made on-line.	
		**[FoA.8] – easy access encourages more frequent use of the system and expands the potential target group**

5.2. Good practice – Catalonia

The LAST MILE project identified two FTS good practices in the Catalonia region, namely a train from Lleida to La Pobla de Segur with 'on-demand' stops and a shared taxi system in the Val de Boi valley.

5.2.1 Train from Lleida to La Pobla de Segur with on demand stops

The railway line with on demand stops started operating at the beginning of 2016. The system operator is Ferrocarrils de la Generalitat de Catalunya (FGC) - a railway carrier providing transport services in the Catalunya area. From the very beginning, the main goal was to create a railway connection aiming at the highest possible optimization of communication and response to the needs of the passengers on the route indicated between the towns of Lleida and La Pobla de Segur. One of the solutions adopted was the introduction of a system with on-demand stops. Stops on demand were set mainly at smaller intermediate stations, which significantly increased the transport accessibility along the route. The solution is fully coordinated with other modes of transport. The coordination included the high-speed AVANT and AVE train schedules (connections between Lleida - Barcelona and Lleida - Madrid). Moreover, the coordination with bus transport was ensured by modifying the network of connections and timetables.

Trains have a regular schedule with an increased frequency during rush hours. The schedule has been prepared in order to maximize the demand for transport. Thanks to coordination with other systems, during periods of low demand, the service on specific routes is handled by buses. Additionally, as part of the transport service integration, a single ticket and tariff were introduced for both modes of transport to avoid price competition between particular services. The system of discounts for card holders and travel subsidies were adjusted and unified.

Table 3 Good practice success factors - train from Lleida to La Pobla de Segur

<table>
<tr><th>Success factor</th><th colspan="2">Grounds/Field of action</th></tr>
<tr><td rowspan="2">Integrated management structure</td><td colspan="2">In the case of the FGC train system with on demand stops, the success factor was the system implementation of a flexible transport solution and its full coordination with other parts of the transport system. Since the governing body for the FGC was the Generalitat de Catalunya (territorial self-government unit of Catalonia), project implementation, including planning, coordinating the network, financing, providing public information, promoting and developing of the service were carried out by or with the direct support of the public administration. This contributed to the success of the optimally coordinated flexible transport solution based on the available transport infrastructure. It is a perfect example of how proper planning, coordination and distribution of resources at the regional level can translate into the success of a specific solution.</td></tr>
<tr><td> 
  </td><td>[FoA.3] – implementation of the FTS in a single jointly managed transport system allows for its fast integration, mitigation of conflicts and overall coordination, and at the same time, strengthening of the main advantages of the new system

[FoA.4] – the transport system, includes and coordinates various forms of transport. However, there are numerous measures that promote synergy between the system itself and the area served. One entity facilitates cooperation in the tourist industry and supports coordinated investment (revitalization of railway infrastructure)</td></tr>
<tr><td>Optimal legislative solutions</td><td colspan="2">The legislative framework in the Catalan Region in the field of transport and railway traffic supports a faster implementation of a modern system. For example, it is possible for a passenger to stop a train if needed (in many countries such possibility exists in emergency only). This helped to implement a system of on-demand stops.
Additionally, the railway staff can perform a number of functions interchangeably, i.e. drivers, conductors, service personnel. It is quite an innovative and very practical solution. This enabled to optimize their work schedule and significantly reduced operating costs.</td></tr>
</table>

	§	**[FoA.1] – partial legislative independence of the region allows for faster change of transport regulations and policies (increased degree of flexibility). Regional regulations are often better suited to local conditions than general national policies**
Dialogue with the user	To match the transport service with user needs, a quality system was introduced to monitor the level of satisfaction. In an annual survey, users rate 26 issues, including punctuality, cleanliness, service quality and security. There is also a daily monitoring covering compliance with schedule, delays, problems with ticket purchase and control, system failures and notifications by users. Apart from the active monitoring of service quality, the system includes a number of improvements for passengers, e.g. various payment systems. Moreover, a series of information campaigns was implemented to support the participation of the region's population. An example of this is the #LoTrenDeTots# campaign aimed at changing the visual regional identity of the rolling stock.	
		**[FoA.7] – actions to promote the transport solution together with the promotion of the region may increase the level of local acceptance**
		**[FoA.8] – evaluation of the solution expedites its optimization, correction of possible defects, and elimination of barriers are actions that could prevent the outflow of users**

5.2.2 Shuttle Taxi service at the Aigüestortes National Park (Vall de Boi)

The on demand system of shared shuttle taxis was launched in response to the decision of the National Park Aigüestortes, Estany de Sant Maurici and the Catalan Government, to completely prohibit private car traffic in the national park. The decision was made due to growing number of tourists in the area, and a significant increase in the number of private cars, which led to congestion on the access roads to the park. At the same time, there was no organized public transport in the area that could provide an alternative to individual car traffic. The restriction necessitated to implement a system targeted at tourists visiting the region. As a result of the agreement between the Park, the provincial administration and entrepreneurs, the provision of transport services was

entrusted to the municipal taxi association which included residents of the commune. The agreement provided for the establishing of an optimized tariff that can be affordable for tourists and provide an adequate break-even point for carriers.

Members of the association (mainly local residents) coordinate the sequence of rounds. To use the service, the user needs to make a phone call (call/dial system), and in the peak season, buses wait for tourists at designated stops. When the bus is not fully occupied, the maximum waiting time for a ride is one hour. This reduces the number of trips made with a smaller number of passengers.

Despite initial concerns, the major legal limitation of individual car traffic has actually increased the attractiveness of the area and the number of visitors is steadily growing.

Table 4 Good practice success factors - Shuttle Taxi Service in Vall de Boi

<table>
<tr><th>Success factor</th><th colspan="2">Grounds/Field of action</th></tr>
<tr><td rowspan="2">Exclusivity of service</td><td colspan="2">The car traffic restrictions triggered the need to provide an alternative transport solution. On the one hand, it was necessary to implement a solution that was efficient enough to meet the needs of tourist traffic, and on the other, it had to include some degree of access control in the protected area.

An on-demand shared taxi system was introduced and the provision of the service was vested in the association of private carriers. They enjoyed an exclusive access to the park in exchange for meeting certain requirements (e.g. fixed price tariff) and maintaining an appropriate standard of services. Thus, carriers had clearly defined and stable operating framework conditions for their services.</td></tr>
<tr><td>  </td><td>[FoA.1] – ensuring the exclusivity for transport service in the area concerned increases the stability of the solution; carriers may plan the development of the service over a longer period</td></tr>
<tr><td rowspan="2">Optimal tariff model</td><td colspan="2">As part of the service organization, a well-balanced and optimal financing model was developed. On the one hand, the tariff is sufficiently attractive for users (acceptance of price), and on the other, it ensures profitability for carriers providing transport services. Thus, the service can be self-financed, and the system does not put pressure on the municipal budget.</td></tr>
<tr><td>  </td><td>[FoA.6] – an optimal financing model and a well-prepared business plan increase chances for effective implementation of the service, provide benefits to all parties involved (profitability for carriers, no additional cost for municipality, reasonable price for users)</td></tr>
</table>

Public participation	The participation of the local community was crucial for the establishing of the system. The community had to accept the restricted access to the park (concern about reduced number of tourists and smaller revenues from tourism) and participate in the process of organizing a new transport system. Members of the association are mainly residents of the region.	
		**[FoA.8] – wide participation of the community, private entities, representatives of local governments or other administrative units in the process of creating the FTS support its effective implementation**

5.3. Good practice – Bulgaria

In the Varna region, the LAST MILE project identified two good FTS practices, namely seasonal bus line no. 209 connecting the centre of Varna with holiday resorts on the coast and the transport system in Byala.

5.3.1 Fast seasonal bus line no. 209

In 2016, a tourist transportation service was launched in Varna in the form of a tourist bus line no. 209 connecting the city centre with tourist resorts on the Black Sea. The line operates from May to the end of September and performs a scheduled service from 5:30 to 22:40. Line 209 is a fast line with only 10 stops on its route to shorten the travelling time. For instance, the all year operating line no. 409 covers the same route and includes more than 50 stops. Already during the first season, line no. 209 recorded a very high turnout. It is used by both tourists (line begins near the airport and stops also at main train station), as well as people working in seaside resorts in the tourist sector.

Table 5 Good practice success factors - fast seasonal bus line no. 209

Success factor	Grounds/Field of action	
Solution integrated with the urban transport system	The seasonal tourist line has been implemented within the existing urban transport system of the City of Varna. It is used in the same way as a regular bus line. The system comprised the same tariff, discount system, common infrastructure of stops and information distribution platform. The timetable is coordinated and consistent with that of the urban transport system, and information about it is available at stops and websites via the on-line system.	
		**[FoA.3] – implementation of the solution in the existing transport system facilitates its fast integration and acceptance of the solution among users**
Well-defined target group	The line has been launched for tourists and people who want to quickly get from the centre of Varna to summer resorts (i.e. employees of tourist sector) and back. Therefore, the line starts at the main station (transport node) and includes only ten stops along the route. Selected stops are located in the vicinity of popular tourist sites.	
		**[FoA.8] – a solution made to cater a specific target group and its needs (need to quickly move between sites) stands a better chance of its effective implementation**

5.3.2 Flexible mobility services in Byala

The Municipality of Byala, located 50 km south of Varna, is the destination for many tourists who, during the summer season, spend their holidays their private apartments or accommodation available in resorts. One of the main attractions in the area is the museum on Cape St. Athanasius. As a part of an open-air exhibition, presented are remains of an ancient Greek settlement, a Roman fortress and an early Christian cult centre discovered during archaeological works. In order to limit individual car traffic between the centre of Byala and resorts located at the seaside, in 2014, the administration of Byala allowed private owners to provide transportation for tourist using horse-drawn carriages. Additionally, they introduced a restricted access to the open-air museum. The reason for that was a constant traffic congestion during the season. As an alternative, an electric minibus was commissioned in 2015 to provide regular service for tourists from the village centre to the museum. Since 2014, the number of visitors to Byala has increased by over 10%, which may indicate an indirect influence of transport solutions implemented.

Table 6 Good practice success factors - Flexible Mobility Service in Byala

Success factor	Grounds/Field of action	
Regulations limiting individual car traffic	Restrictions on individual car traffic, in particular regarding the access to the archaeological museum, resulted in a need to provide an alternative transport. An electric bus operated by the Byala Municipality allows tourists to travel from the centre of the village directly to the entrance to the museum. This ensures an adequate level of transport accessibility and, at the same time, reduces traffic generated by individual cars.	
	§	**[FoA.1] – local regulations and restrictions to individual car traffic may have a beneficial effect on the development of the area, provided an appropriate transport alternative is secured**
External funds support	The launch of the electric bus was funded by the municipality from the Operational Programme 'Regional Development' (OPRD). The Operational Programme provided for the practical implementation of Priority 4 of the national programme of 'Sustainable Territorial Development' funded from the European Regional Development Fund (ERDF).	
		**[FoA.5] – programmes supporting the purchase of a low-emission vehicles encouraged the municipality to launch a communal transport system for the tourist traffic**

5.4. Good practices - Luxembourg

The LAST MILE project evaluated two FTS good practices. One of them is the Bummelbus which is the on-demand transport solution that additionally supports social and labour integration. The other one, the Night Rider System offers evening and night transport during weekends.

5.4.1 Bummelbus

The Bummelbus is an on-demand transport system (travelling requests should be notified minimum two hours in advance) operating in the area of 40 municipalities in Luxembourg (most of them located in northern part of country). The system was created in cooperation with the Ministry of Labour, Employment and the Social Economy as a part of the social programme to support the economic and labour integration of long-term unemployed people. Programme participants work

as drivers for a period of no more than two years. During that time, they develop their professional qualifications and can seek other jobs. Drivers' remuneration is paid by the Ministry and the other cost of the system is coved by transport organizers, including Forum pour l'Emploi a.s.b. (Employment Forum), a non-profit association supporting the policy of counteracting unemployment.

The Bummelbus Service is addressed only to the residents of the municipalities involved. Residents from areas of poor transportation accessibility use the system for shopping, visiting doctors and commuting to work. A major part of the service helps meeting transport needs of children and youth providing them the possibility of regular travel, e.g. to out-of-school activities (sports, interests). The project supplements the public transport service. The idea of the project fits perfectly into the low-emission economy, since it partially eliminates the need to use individual cars.

Table 7 Good practice success factors - Bummelbus

<table>
<tr><th>Success factor</th><th colspan="2">Grounds/Field of action</th></tr>
<tr><td rowspan="2">Financing system</td><td colspan="2">The Bummelbus is one of projects of the Employment Forum (Forum pour l'emploi) in the area of labour market integration. The project is co-financed by the Ministry of Labour, Employment and the Social Economy which covers salary cost for unemployed people taking part in the programme. Thus, the Ministry covers about 70% of the system operating costs, which ensures high stability of operation and a continuous increase in the scale of the project (Bummelbus System steadily increases its operational area).</td></tr>
<tr><td> 
  </td><td>[FoA.5] – the guarantee of external funding at the start of the system allowed to launch the service in its intended form

[FoA.6] – permanent financial support allows to build a stable solution and the possibility of planning service development. It also encourages wider changes and innovative elements</td></tr>
<tr><td>Social aspect</td><td colspan="2">A special feature that distinguishes the Bummelbus from other on-demand systems is that bus drivers are recruited from long-term unemployed people. The job of a driver helps those people to re-enter the labour market by gaining new experience and relevant skills. After a maximum period of 2 years, these people very often find jobs in transport companies. Additionally, the project requires the unemployed to keep searching for a permanent job. Thus, the project not only implements policies aimed at increasing transport accessibility, but also has a significant social impact (ensuring equal opportunities, combating unemployment, developing skills).</td></tr>
</table>

		[FoA.8] – the feasibility of the FTS can be considered not only in the context of users' expectations, but also the support and implementation of social policies
Well-defined target group	Although all inhabitants in the area concerned can use the Bummelbus System, a significant part of the service is designed to ensure organized transport for children and teenagers (minimum passenger age is 4) to after-school classes and activities. Although the system operates as an on-demand call system, it is possible to request a regular transport service performed periodically at specific hours and days of the week, e.g. children commuting to sports clubs at fixed times. It reduces the number of individual car trips (no need for each parent to drive child to classes).	
		[FoA.8] – Since the project is designed to cater a transport niche (organization of safe transport for children and youth to their after-school activities), it was quickly accepted by users

5.4.2 Night Rider

The Night Rider, weekend on-demand transport, has been operating since 2005. Currently, the Night Rider service is available all over Luxembourg, including 60 municipalities participating in the NighCard programme. The main goal of the project is to respond to the lack of adequate public transport allowing for overnight trips to entertainment venues and safe return at night. The problem has been particularly vivid in peripheral areas, distant from the larger cities in Luxembourg. Additionally, the system reduces weekend traffic and, at the same time, encourages to use public transport. This fits into the development of the low-emission economy. The service is designed mainly for residents of participating municipalities, but it can also be used by people who temporarily stay in the area (tourists, seasonal workers etc.). Additionally, in each municipality, the carrier may develop a special annual subscription programme depending on spatial and demographic conditions in the area (i.e. analysis of potential service cost). The municipality may designate its co-financing and offer a 'night card' at a lower price to its residents. The card entitles users to an unlimited number of trips per year.

Table 8 Good practice success factors - Night Rider

<table>
<tr><th>Success factor</th><th colspan="2">Grounds/Field of action</th></tr>
<tr><td rowspan="2">Financing system</td><td colspan="2">A distinguishing feature of the Night Rider is its active approach to the financing model. For example, the system has an individual ‘night card’ tariff. In the analysis preceding the process, the carrier estimates the break-even point of the system in a given area. Another feature is the affiliate programme run in collaboration with a bank. When user uses a credit card issued by that bank, he/she can make payments in the system at a significant discount.

Another example is a well-thought tariff system which encourages clients to organize group trips. The travel cost is calculated based on the distance covered and it is divided by the number of passengers. This encourages people to make joint trips.

The system was created in cooperation with the Ministry of Transport and for four years it enjoyed financial support from public funds. Currently, it operates without any national subsidies.</td></tr>
<tr><td> 
  </td><td>[FoA.5] – support in the form of a four-year financing from the national budget enables to develop the system, win its acceptance among users and develop a financing model that does not require external subsidies

[FoA.6] – the development of the optimal financing model and the diversification of income sources enhances profitability of the service (e.g. properly developed business plan)</td></tr>
<tr><td rowspan="2">Cooperation with municipalities</td><td colspan="2">The collaboration between the carrier and individual municipalities enables to purchase a local travel card (i.e. Night card). The card entitles users to an unlimited number of journeys during a year under a paid subscription, provided departure or destination is in the commune of the card holder. Residents of participating communes can buy the card at a lower price negotiated between the commune and the carrier.</td></tr>
<tr><td>  </td><td>[FoA.4] – close cooperation between the municipality and the carrier allows to reach a compromised price. On the one hand, profitability of the service is maintained, and on the other, local subsidies make the option attractive for the user</td></tr>
</table>

Well-defined target group	Unlike other on-demand transport systems examined, the Night Rider service is provided on weekends only from 18:00 to 5:00 in the morning. Therefore, the service is designated to a specific target group, i.e. mainly young and middle-aged people, who may enjoy an on-demand transport for their evening trips to restaurants, clubs, social gatherings and cultural events. Since the service is requested individually or for small groups and transport provided from door to door, it is considered comfortable and safe for underage users (acceptance of solution by parents and guardians).	
		**[FoA.8] – system is suitable since it is adjusted to niche demand (evening and night transport on weekends). It is provided door-to-door which increases the safety of transport and, consequently, the level of service acceptance**

5.5. Good practice – Poland

The LAST MILE project examined two FTS good practices in the West Pomerania Province, namely the Seaside Narrow Gauge Railway in the Rewal Municipality providing seasonal tourist transportation, and BalticBike.pl, a bike rental system for tourists.

5.5.1 Seaside Narrow Gauge Railway

The Seaside Narrow Gauge Railway Company was established in 2013. After the acquisition of a narrow gauge railway line from the Polish National Railways, the former Railway Transport Department at the Rewal Municipality, was incorporated into the company's structure and was transformed into a commercial business entity. The main task of the Seaside Narrow Gauge Railway is to organize tourist transport on the Gryfice – Pogorzelica route and to manage the railway infrastructure.

The regular transport season begins in May and continues until last days of September. During the season, the railway service operates daily with the first train from the Gryfice Depot. After reaching Trzęsacz, the first stop in the municipality of Rewal, the train continues on a Trzęsacz – Pogorzelica – Trzęsacz shuttle route. The last train provides a return trip to the Gryfice Depot. In the off-season period, it is possible to hire an off-schedule service.

The solution links towns within the transport system and integrates tourist services in the area. The cooperation with operators of tourist attractions helps to create tourist packages, for example a train ticket entitles to a discount in other tourist attractions. It can also work the other way, namely a visit to selected attractions, you can buy a discounted train ticket. This encourages tourists to move around the municipality without the need to use their cars.

Table 9 Good practice success factors - Seaside Narrow Gauge Railway

Success factor	Grounds/Field of action	
Financing system	The Seaside Narrow Gauge Railway is a commercial law company and does not receive funding or subsidies from the municipality. It strives to maintain its operation profitable. Hence, various activities are carried out based on the infrastructure and rolling stock. In addition to the seasonal transport services, the offer includes the possibility to order off-season individual transport services (events, conferences, guided tours, integration events) or organize leisure and occasional events (picnics, bonfires, bike rallies). The company is active in seeking sponsors and promotion contracts (e.g. hosting events and concerts). The fare varies and is affordable for tourists, including individuals, groups, families, full-day tickets etc.	
		**[FoA.6] – once a business model is well thought and funding attracted, even seasonal transport solutions can be profitable and do not require public co-financing**
Building a cooperation network	The Seaside Narrow Gauge Railway has been developing a cooperation network on many levels. The cooperation with local operators of tourist attractions helped to create tourist packages integrated with the transport system. Participating entities inform each other about their services and organize joint promotion and information campaigns. The railway operator cooperates with the municipal bike rental system (Rewal Bike System) and offers free narrow gauge railway transport for rented bicycles in special wagons. Main stakeholders and beneficiaries are local tourist attraction operators. The cooperation supports tourist packages which combine mobility and access to attractions (system of mutual discounts). Thereby, every entrepreneur involved in the cooperation can benefit from additional publicity and partnership. It provides synergy and reciprocal business support.	
		**[FoA.4] – the transport system enables to develop new active cooperation networks involving entities interested in the development of the area (transport systems enhance local tourist potential)**

Utilization of local potential	The Seaside Narrow Gauge Railway operates on the basis of the restored and modernized local railway infrastructure. The infrastructure and railway assets were acquired from the Polish National Railways and are currently managed by the municipality. The restructuring process vested the municipality with ownership rights to plots of land and immovable property needed for the operation of the narrow gauge line. It created the opportunity to prepare a comprehensive restoration programme for the narrow gauge railway system.	
	 	**[FoA.3] – changes of ownership and organizational structure allowed to implement a comprehensive rehabilitation of the railway system within the framework of existing regional and local strategic policy documents** **[FoA.8] – the system operates based on a well-identified potential and seeks to maximize benefits from specific conditions in the area**

5.5.2 BalticBike.pl

BalticBike.pl, a rental bike system, was founded in June 2008. It focuses primarily on offering tourists well-equipped bicycles that are prepared for tours and trips.

In 2013, thanks to the financial support from the European Union and the European Fisheries Fund (EFF), a new fleet of bicycles was bought together with equipment that supports trips for families with children. Necessary investment in infrastructure were made to increasing the number of bicycle delivery points and the number of service vehicles that support the operation of the system. Currently, the system operates nearly 1000 bicycles. Initially, the bike rental system operated in Świnoujście only, where it developed into a network of bike stations in the city. Those stations also provided rental of equipment. Currently, the system also operates in neighbouring municipalities of Międzyzdroje and Kamień Pomorski. There are also plans to launch the system in the remaining municipalities along the coast.

In 2016, the BalticBike.pl system registered over 36,000 rentals. The company operates almost all year round (after summer season service provided mostly for organized groups and visitors staying in hotels and guesthouses). A well-developed technical base has helped the company to deliver bicycles and necessary equipment to locations requested. Moreover, the company provides its

technical on route support for its clients. In case of a breakdown on specific routes, the company repairs or exchanges bikes and the user can continue their trip. It is possible to book a bike online, and in Świnoujście, the company's headquarters, it is also possible to make a non-cash payment. BalticBike.pl is also a partner of the Germany-based UsedomRad and NextBike, an operator of the maintenance-free bicycle rental system. The cooperation promotes planning of cross-border trips (e.g. from Świnoujście to Ahlbeck or Heringsdorf).

Table 10 Good practice success factors - Balticbike.pl

<table>
<tr><th>Success factor</th><th colspan="2">Grounds/Field of action</th></tr>
<tr><td rowspan="2">Financing system</td><td colspan="2">The BalticBike system operates as a private company and does not receive public subsidies. To promote its more rapid development, the company resorted to the EU EFF programme (European Fisheries Fund).

The system includes a diversified tariff and numerous discounts promoting long-term rentals. Its full-time staff undergo on-job training at rental points and provide bike repair, maintenance, and transport bicycles between stations. Additional workers are employed in the peak season, but those they are students who return to their universities after the holiday period. This approach reduces operating cost and guarantees a stable employment structure.

It is also worth emphasizing that despite its large scale (about 1000 bikes), the system is based on manned rentals stations. The analysis showed that the implementation of an innovative maintenance-free system, at current rates and license fees, would make the service unprofitable, despite savings on employee salaries. Hence, the traditional rental model is still more profitable.</td></tr>
<tr><td>  </td><td>[FoA.5] – support in the form of external financing allows to expand the service and its operation area

[FoA.6] – provided operational cost is reduced, the service is easier to implement and optimize without putting unnecessary burden on the organizer/operator</td></tr>
<tr><td>Building a cooperation network</td><td colspan="2">The BalticBike.pl system cooperates with UsedomRad, Germany, an operator of the unmanned (maintenance-free) bicycle rental network. Despite their similar profile, companies do not compete with each other. Instead they try to combine their offers. For example, bikes from the UsedomRad system can be returned at BalticBike stations. At the same time, the BalticBike system rents UsedomRad electric bikes to test their possible implementation on the Polish side of the border.The system also cooperates with tourist accommodation facilities and operators (promoting its offer) and in cooperation with the City and its subordinate units, the company negotiates the possibility of free-of-charge installation of bicycle stations (station cost is covered by BalticBike).</td></tr>
</table>

		[FoA.4] – companies of seemingly identical business profiles can develop a successful cooperation model and derive benefits for all parties involved
Well-defined target group	The service is dedicated to active tourists willing to use the bicycle infrastructure in the area. Main users of the system are tourists from Germany. Therefore, information about the service and price list are provided in German. A significant percentage of people renting bikes are families with children. For this reason, special bicycles and appropriate equipment have been prepared for them (helmets, child seats, caravans).	
		[FoA.8] – preparing the offer for a specific target group facilitates planning of the system development. It also improves information policy and promotional campaigns

5.6. Good practice – Slovakia

The LAST MILE project examined two FTS good practices in the Kosice Region, namely the *Nostalgic Train* of Košice for tourists and *Cyklo Tour Spiš,* a tourist bike rental system in the Slovak Paradise National Park.

5.6.1 Nostalgic Train

The Nostalgic Train has been implemented as a bottom-up initiative by the Historical Children's Košice Railway Association (Košická detská historická železnica - KDHŽ). The association, in close cooperation with the City of Košice and private businesses, aims at revitalizing of the historic railway infrastructure. The KDHŽ narrow gauge railway was launched in 1955 as the *railway of pioneers* and operated as a leisure and education project designed primarily for children and youth. After difficult years of the political transformation and the stagnation of the 90s, in 2012, the modernization and revitalization of the railway started. Currently, the railway operates a 4.2 km route connecting three stations of Čermeľ, Vpred and Alpinka. One full trip takes about 20 minutes. The Nostalgic Train starts operating on 1st May and ends its operation late autumn.

The KDHŽ Association organizes trips mainly under programmes and projects addressed to children and youth (City of Košice Day, historical routes, pottery workshops) and cultural events connected with the Nostalgic Train initiative (Theatre Saturdays in July, Summer Cinema, UNESCO monument trail). In 2017, sixteen Nostalgic Train trips were organized. The activity of the KDHŽ Association accounts for nearly 70% of trips. The remaining 30% are trips organized for individual clients.

Table 11 Good practice success factors - Nostalgic Train

<table>
<tr><th>Success factor</th><th colspan="2">Grounds/Field of action</th></tr>
<tr><td rowspan="2">Building a cooperation network</td><td colspan="2">Although the Historical Children's Košice Railway Association is the main stakeholder of the good practice, the main beneficiaries are the inhabitants of Košice (estimated 80% of all users).

It should be noted, however, that the direct beneficiaries are also local operators of tourist attractions located in the catchment area with the access to the narrow gauge railway. The cooperation helped to develop tourist packages that combine transport services with access to tourist attractions.</td></tr>
<tr><td>  </td><td>[FoA.4] – the transport system allows for building new networks of cooperation between entities interested in the development of the area. Moreover, it creates the opportunity to implement new products and initiatives</td></tr>
<tr><td rowspan="2">Utilization of local potential</td><td colspan="2">The solution is based on the existing railway infrastructure and preserved historical rolling stock. The KDHŽ narrow gauge railway has been in operation for over 60 years and despite periods of stagnation and breaks in its operation due to organizational changes, it has been possible to preserve its infrastructure and historical rolling stock. Currently, KDHŽ provides trips using, among others, steam locomotive 36.003 Katka and wagon D/u841, built in 1884 and 1886 respectively. Both the locomotive and the wagon are currently the oldest operating rolling stock units in Slovakia.</td></tr>
<tr><td>  </td><td>[FoA.8] – the system operates based on well-identified potential of the area, benefiting from existing conditions in the best way possible</td></tr>
</table>

5.6.2 Cyklo Tour Spiš

Cyclo Tour Spiš, a bike rental system, was established in 2006 in response to the rapidly growing tourist traffic in the Slovak Paradise National Park. Due to the shortage of public transport and services provided by private operators that allow to return from or move between particular routes, a tourist bike rental system was launched. Currently, the system operates 250 bicycles and three rental stations. The main station is located in Podlesok, the other two are located in the Suchá Belá Valley and the Kláštorisko Clearing.

Cyklo Tour Spiš is a private initiative implemented by a family-owned company. The majority of employees, also during season, are family members. Since a business activity in the area of the National Park was not easy, it took about three years to obtain necessary permits (operator estimates that during this period they had to obtain about 174 different permits and consents).

Although it does not use any form of public co-financing, the system is profitable. During its implementation and development, it did not use external financial instruments or EU funds as well.

Table 12 Good practice success factors - Cyklo Tour Spiš

Success factor	Grounds/Field of action	
Financing system	The Cyklo Tour Spiš system operates as a private company and does not receive any public co-financing. Yet, the financial model has proven to operate and generate profit. The operation as a family-owned business allows for more flexibility while estimating service cost and determining the employment structure (e.g. during season).	
		**[FoA.6] – Provided operational cost is reduced, the service is easier to implement and optimize without putting unnecessary burden on the organizer/operator**

<table>
<tr><td rowspan="2">Building a cooperation network</td><td colspan="2">Cyklo Tour Spiš cooperates with operators and managers of tourist services in the area of the Slovak Paradise National Park. Guests using the accommodation base of hotels and resorts are informed about the offer of tourist bike rental. It also works the other way - hotels can advertise their offer indicating cooperation with Cyklo Tour Spiš.</td></tr>
<tr><td>  </td><td>[FoA.4] – it is possible to develop a cooperation model that does not generate excessive cost of service operation. At the same time, it enables to reach a wider audience</td></tr>
<tr><td rowspan="2">Well-defined target group</td><td colspan="2">The system has been developed to meet expectations of a growing group of tourists who want to explore the area of the Slovak Paradise. The service provides a possibility of reach various client groups (e.g. families with children). For this reason, special bicycles (of various sizes) with relevant equipment have been prepared for them (fittings include panniers, baskets, helmets, child seats, travel trailers).</td></tr>
<tr><td>  </td><td>[FoA.8] – versatile offer helps to reach a potentially wider target group</td></tr>
</table>

5.7. Summary of Success factors

The summary table shows the correlation between good practice success factors and particular fields of action. The table marks success factors that were considered priority when creating, implementing or developing a given initiative. The number of cells marked for each field of action show how important a given field was in the context of effective implementation of the FTS.

Table 13 Success factors and fields of action.

Region / Country		East Tyrol Austria		Catalonia Spain		Varna Bulgaria		Luxembourg		West Pomerania Poland		Košice Slovakia	
Regional good practices		Defmobil	Flugs	Train from la Pobla	Taxies in Vall de Boi	Seasonal line 209	FTS in Byala	Night Rider	Bummelbus	Narrow Gauge Railway	BalitcBike	Nostalgic Train	Cyklo Tour Spiš
§	**[FoA.1] – National and regional regulations regarding flexible transport systems**			+	+		+						
FTS	**[FoA.2] – Flexible transport systems in strategic documents**												
	[FoA.3] – Management and organization of flexible transport systems	+		+		+				+			
	[FoA.4] – Cooperation and coordination at individual levels	+	+	+				+		+	+	+	+
	[FoA.5] – Financing instruments and FTS support programs (initial funding)	+					+	+	+		+		
	[FoA.6] – Long-term financing instruments and FTS operational financing	+	+		+			+	+	+	+		+
	[FoA.7] – Raising awareness and information policy in relation to FTS	+		+									
	[FoA.8] – Identification of needs, social participation and applicability of FTS	+	+	+	+	+		+	+	+	+	+	+

Conclusions:

The summary shows that in the case of good practices examined by the LAST MILE project, most of success factors contributing to the effective implementation of the solution are related to such fields as financing, cooperation building and proper diagnosis of needs. There are no success factors that result directly from applicable strategic documents. A detailed analysis of conclusions pertaining to specific areas has been prepared in the following section.

6. Conclusions and recommendations

This section presents and summarizes information and issues reflected upon in the following documents: "*Analysis of national and regional framework conditions and barriers of flexible transport", "Analysis of technical State-of-the-Art of regional public transport systems and particularly flexible systems"* and "*Evaluation of Good Practices*" developed to support the project. The experience gained was put together to draw conclusions from individual analyses and to determine success factors for FTS systems.

In each field of action, findings and conclusions were summarized and corresponding recommendations were presented and broken down into individual management levels and target groups while taking into account their specific nature, scope and scale.

6.1 National and regional regulations regarding flexible transport systems [FoA.1]

6.1.1 Synthesis

According to conclusions from regional analyses developed by project partners (*Analysis of national and regional framework conditions and barriers of flexible transport)* and applicable laws, **there are virtually no specific provisions referring to defined types of flexible transport systems** (none of countries involved have statutory definitions of car-pooling and car-sharing). Most of existing regulations apply only to public transport and its general operational rules.

In the SWOT analysis, presented in the *"Analysis of technical State-of-the-Art of regional public transport systems and particularly flexible systems"*, all project partners pointed out that 'insufficient legal framework for flexible transport systems' is one of the main weaknesses while implementing sustainable mobility services and strategies.

Despite the fact that flexible transport systems have not yet been defined in national and regional laws, the **existing general provisions and loopholes create a number of possibilities for the implementation of the FTS** (possibility of drafting specific regulations). This can be supported by the example of the FTS systems identified in each of the partner regions. Despite the lack of dedicated regulations, Regions concerned were able to adjust such systems to their conditions and achieve goals planned.

Moreover, loopholes in the law pose certain challenges, such as opposition and competition between different entities, e.g. due to ambiguity of regulations and criteria for the implementation

of the FTS. The lack of clear FTS definition and classification of the FTS as a part of public transport **limit the possibility of attracting funding** for such initiatives to be established as public services.

The analysis of **good practice success factors** has been based on three examples of national and regional regulations in relation to the FTS. These examples can be divided into two groups.

The first example, which is a train from Lleida to La Pobla de Segur in the Region of Catalonia, refers to the partial independence enjoyed by the region to introduce their own regulations pertaining to the transport policy. The wide range of competences to develop the regional law allows for considerable flexibility which expedites the implementation of innovative or pilot solutions.

The second group refers to local regulations. Within the scope of their competences, local governments introduced provisions on transport accessibility in a selected area. Examples are the restricted entry to Aigüestortes and Estany de Sant Maurici National Park in Catalonia, as well as to the museum area at Cape Athanasius in Byala in the Varna region. Although local regulations did not directly refer to the FTS, they motivated parties involved to develop an alternative tailor-made flexible transport system.

In the same context, it is also worth noting that such provisions of law frequently **do not cover the issue of fluctuating seasonal traffic** present in tourist areas. Regions analysed are mostly areas of smaller population which must absorb and handle much bigger groups of visitors during the tourist season. This significantly increases the financial burden on those municipalities, for instance in the field of transport. Such a special situation should be reflected in applicable laws.

6.1.2 Cross reference with other fields of action

Based on the examples analysed, the impact of national and regional legal regulations pertaining to the FTS is particularly visible in the area of management and organization of flexible transport systems **[FoA.3]** and long-term financing instruments **[FoA.6]**. Relevant general transport regulations **[FoA.3]** should enable public transport authorities to deal with the FTS and promote their effective and sustainable implementation. A good example in the above is the DefMobil system implemented with the support of the regional transport association in the area of East Tyrol (Verkehrsverbund Tirol - VVT). In the case of [FoA.6], appropriate financing instruments can be created, provided the transport policy includes the definition of statutory FTS terms, functions and priorities.

6.1.3 Conclusions:

- The lack of national regulations is not always an obstacle to launch the FTS. The provision of the transport organization framework and flexibility in the implementation of innovative solutions helps creating desired FTS solutions.
- The presence of relevant laws can, however, expedite the FTS process, especially when the FTS should become integrated with the public transport system.
- In the majority of cases analysed, laws neither explicitly define the FTS nor indicate the possibility of their application in public transport.
- An unambiguous FTS definition and relevant public transport laws covering, among others, rules and forms of operation, rights and obligations of the carrier and passengers, liability insurance and compensation, financial settlements and controls etc., facilitate FTS implementation and reduce the scope of potential conflicts.

- Public transport organizers (e.g. municipalities, tourist associations, tourist regions) are capable of identifying transport needs. Therefore, provisions of law should not limit their autonomy in choosing the means of implementing public transport services (regular or flexible system).
- Local governments have certain tools and regulatory instruments to implement transport policies within their areas.

6.1.4 Recommendations

Table 14 Recommendations - national and regional regulations regarding flexible transport systems

Level	Recommendation	Target group
national level	Unambiguous definitions of the FTS and provisions in national laws should be prepared to enable the functioning of the FTS as a part of the public transport system.	Government/Legislator Relevant ministries
	National recommendations should be developed regarding the FTS in public transport in the context of applicable laws.	
regional level	Regional Administrations should support and lobby for regulating the FTS in national laws.	Regional Administrations
local level	Resolutions should be adopted that require the launch of FTS transport lines depending on local conditions.	Local Administrations

6.2 Flexible transport systems in strategic documents [FoA2]

6.2.1 Synthesis

Analysis of barriers and conditions for the development of the FTS shows low influence of current regional strategic documents as regards the creation and development of the FTS. Conclusions, especially from *Technical State-of-the-Art of regional public transport systems and particularly flexible systems* point out two potential causes.

Firstly, most of the existing strategic documents regarding sustainable transport policies or mobility do not include provisions on the FTS. One possible reason is still limited general awareness of flexible transport system principles and their possible role in the implementation of transport policies, including the decision-making level. Additionally, strategic documents show an inherent inertia. Since they are created or updated every several years, flexible transport systems based on rapidly developing technological advances (car-sharing, car-pooling, 'on demand' systems) may not to be reflected in those documents.

Secondly, many of those documents do not have legal power. Their role frequently boils down to diagnosing certain issues, indicating general directions for transport system development and presenting general recommendations. Of course, there are some exceptions. For example, the support for transport policies by the Region of Catalonia through their Regional Passenger Transport Plan. The Plan sets, for instance, minimum public transport standards (including daily services to reach region's capital).

However, regardless of the direct impact on transport policies, the weight of strategic documents should not be disregarded due to their links with financial instruments, including Regional Operational Programmes. It is worth emphasising the role of the Global Strategy for Sustainable Mobility (MODU), which is the main component of the transport policy in Luxembourg. The implementation of MODU is closely linked with financing provided from the national level.

Additionally, the SWOT analysis of transport systems in project partner regions showed that while implementing the FTS existing plans and development strategies for transport policies adopted by local, regional or national authorities should be taken into account. This means that despite the lack of direct impact on the legal status, strategic documents play an important role in the implementation and use of the FTS in public transport, especially by stimulating attitudes and raising awareness.

It should also be noted that the strategic transport policy documents analysed (e.g. *Plan for sustainable public transport in West Pomerania*) very often disregard tourism while focusing on meeting primarily residents' transport needs. Thus, they fail to examine challenges in specific areas. This in turn leads to the lack of appropriate and comprehensive transport solutions.

As regards successful planning tools, it should also be noted that **Sustainable Urban Mobility Plans (SUMP's)**, quite often used in Western European countries and various urban areas **were recognized in 2013 as the most comprehensive instruments** in the Urban Mobility Package adopted by the European Commission. In contrast to traditional transport plans, they present a much wider approach to urban transport planning as they are not limited to public transport. The main focus is rather on ensuring sustainable mobility.

These plans focus on activities integrating economic, spatial, social and environmental policies and taking into account experience from various social environments, policy sectors and various levels of government. Their special feature is the participative approach, i.e. involving residents and stakeholders at every stage of the planning process. This strengthens civic involvement and reduces resistance to measures implemented. Periodical evaluation and updating of the plan is considered very important. An additional argument for the development of SUMPs is the possibility of applying for European funds designated for the development of transport measures and infrastructure.

The mobility plans include both 'hard' measures, i.e. the development of infrastructure, and 'soft' ones, such as the organization and coordination of transport systems encompassing the FTS (car-pooling, car-sharing, on demand transport), as well as education and marketing that do not incur major cost. It helps to achieve goals in a fast and effective manner.

The implementation of Sustainable Urban Mobility Plans has a number of benefits, such as improved attractiveness of public space, increased satisfaction of urban transport, reduced traffic congestion, enhanced road safety, limited air pollution and noise generated by transport, as well as improved citizens' health.

It should be noted that the SUMP is an extremely effective tool to deal with transport issues in modern cities. However, the planning should not be limited to urban centres only. Considering SUMP's positive contribution to mobility management in urban areas, it would be justified to **develop similar planning instruments for rural tourist areas**, where seasonal fluctuation of traffic, caused by influx of tourists, poses a number of challenges for the implementation of mobility policies.

Sustainable mobility plans in rural tourist regions should help to organize seasonal tourist traffic and parking policy, and increase accessibility to destinations by providing, inter alia, a high quality and tailored public transport system (including flexible transport). Most importantly, however, **such plans can enable to implement mobility policies in a strategic, consistent and long-term manner**.

6.2.2 Cross reference with other fields of action

Despite the lack of examples of success factors in the second field of action, the connection between strategic documents and financing for sustainable transport systems, including potential FTS solutions, is noticeable ([FoA.5], [FoA.6] - Financing instruments). This has been highlighted by Luxembourg's experience where the government support for projects aimed at reducing individual car transport is secured based on a strategy document which promotes changes in the new modal split (MODU, 2012). Additionally, in the Westpomeranian Voivideship the *Strategy for the Development of the West Pomerania until 2020* is the basis for the co-financing of many transport initiatives.

6.2.3 Conclusions:

- In the majority of cases, applicable strategy documents do not cover the FTS in their provisions, **and they rarely combine tourism with transport policy**.
- Strategic documents rarely have executive power. Greater impact/legal weight given to provisions of strategic documents may increase the chance that they translate into actions implemented by local governments or public transport organizers.
- Examples analysed show that to increase the role of strategic documents it is necessary to combine them, possibly directly, with financing instruments that enable them to achieve their goals.
- A good example of the above is provided by Sustainable Urban Mobility Plans (SUMP) that are very often linked with Regional Operational Programmes. SUMP's approach can also be a good and effective solution for peripheral and tourist areas and allow for the implementation of mobility policies in a strategic, consistent and long-term manner.
- In the context of transport policies, strategic documents often focus on transport accessibility in relation to infrastructure (availability and quality of road and rail networks, stops, stations, intermodal nodes). An equally important is the access to and actual demand for transport services in a given area (including public transport systems, private systems and various mobility solutions). This should promote a better diagnosis of the area and the determination of transport blank spots, including last mile sections.

6.2.4 Recommendations

Table 15 Recommendations - Flexible transport systems in strategic documents

Level	Recommendation	Target group
EU level	Emphasis should be put on the integration of the FTS with transport and sustainable mobility guidelines (White Paper, Sustainable Urban Mobility Plans, Sustainable Regional Mobility Plans).	European Commission, Council of the European Union
	Strategic documents should address directly the FTS as possible solutions in certain circumstances. The FTS should also be defined as one of new forms of collective transport.	
national level	FTS should be establishment and developed as a part of the public transport system in strategic documents at the national level and link them directly to national funding programmes.	Relevant ministries and government bodies
regional level	The FTS should be an integral part of public transport and sustainable mobility development.	Regional Administrations
	Regional mobility plans should be developed encompassing the use of the FTS and providing equal playing field for metropolitan areas and remote disadvantaged settlements.	
	Expert support and overall coordination of development and implementation of sustainable mobility plans should take place at the local level.	
	Regional public transport development plans should be linked directly with financial instruments.	Regional Administrations /Institutions responsible for operational programmes
	Tourism should be included in policy documents and transport strategies. Accordingly, tourism development documents and concepts should refer to transport and sustainable mobility.	Regional Administrations, the Faculty of Transport and the Tourism Department
	Strategies should not only reflect upon transport infrastructure accessibility but also the quality of public transport services.	Regional Administrations and their units
local level	Sustainable mobility plans, as well as the FTS, should be developed and implemented.	Local administrations
	Connections between transport and tourism should be taken into account in plans and strategies at the local level.	

6.3 Management and organization of flexible transport systems [FoA.3]

6.3.1 Synthesis

Based on conditions and institutional barriers identified, it can be stressed that the absence of an integrated (superior) public transport organizer may be a significant hindrance in the implementation of the FTS. Municipalities, especially small ones, do not have relevant structures allowing them to organize and manage public transport. The transport service is often outsourced (e.g. transport of children to schools) or is carried out at the supra-municipal level (e.g. railway transport organized and managed from regional and national levels). Other transport services are provided by private commercial entities.

All project partners anticipate difficulties when the obligation to manage various mobility services is assigned to municipalities. Difficulties may be related to the administrative burden, additional workload, payments and settlements etc. Additionally, SWOT analyses performed for individual regions indicate that shortages in knowledge and experience in transport management (including FTS) may lead to resistance among municipalities and carriers to implement such services.

The Polish regional partner highlighted the risk associated with delegating responsibility for all types of the FTS. Main concerns are related to prospective (not specified at implementation stage) new responsibilities and competences required. In the early stages of FTS implementation, a number of challenges related to the lack of experience may be expected, especially in areas where the level and division of responsibilities is not clearly defined. Those challenges may be related primarily to legal and financial liability, but also to service quality supervision and control.

The partner from Luxembourg pointed to the risk associated with new responsibilities imposed on municipalities. Since most municipalities in the Luxembourg area are small and do not have a large number of employees, new responsibilities may become a barrier for the implementation of the FTS.

In the above mentioned context, the project partners indicated that in the FTS implementation and management, it is necessary to obtain support from an appropriate coordinator (often from higher administrative level). This applies in particular to organizational and legal support needed for the proper implementation of the solution, support for the management of the information policy, and assistance with the preparation and provision of adequate funding.

In this field of action, there were four good practice success factors that have been used in various ways within organizational structures to support effective implementation.

The Austrian DefMobil system (on demand bus) was created based on a comprehensive support from the VVT, a regional transport association (Verkehrsverbund Tirol - organizer and transport coordinator) operating in the area of Tyrol, of which East Tyrol is a part. After its successful implementation, the management and financing of the DefMobil system was taken over by the VVT and the service became a part of the regional public transport system. This type of comprehensive support has effectively encouraged municipalities to launch the FTS.

Examples of the Catalan train from Lleida to La Pobla de Segur (with on demand stops) and bus line no. 209 in Varna show that the existing dedicated public transport structures should be the first point of focus when implementing the FTS. Specific administrative structure, scope of competences, use of available resources and available physical and financial support facilitate the whole process. The FTS can be implemented more efficiently without creating completely new organizational structures for them. They can also be better integrated with the overall transport context, for instance as regards transport information.

The last example is the Seaside Narrow Gauge Railway in Poland. In this case, the key success factor was the integration of ownership and organizational structure of all entities involved in the operation and management of the coastal railway. A single integrated entity answerable to the municipality was created, but it enjoyed a wide decision-making autonomy as regards service management and development. The creation of a new organizational entity can be a good solution, provided it has a wide range of competences.

6.3.2 Cross reference with other fields of action

Apart from the current legal status, referred to in **[FoA.1]**, the management and organization of the FTS much depends on cooperation and coordination **[FoA.4]** (e.g. joint management of public transport, public-private partnership - all need to be based on clear statutory provisions) and raising awareness and information policy **[FoA.7]** (increasing level of awareness among decision makers facilitates development of joint management models and introduction of new forms of transport).

6.3.3 Conclusions:

- Frequently, municipalities (municipal transport organizers) refrain from implementing the FTS since they are concerned about an influx of new responsibilities and the shortage of adequate knowledge and experience. Moreover, they do not have relevant structures (neither own units nor separate entities) responsible for the implementation of transport policies, especially organization and management (including FTS systems).
- The implementation of the FTS within existing transport organization structures (local and regional) significantly streamlines and facilitates the process.
- In the case of new structures created to launch the FTS, it is necessary to ensure a wide range of competences and autonomy.
- Adequate support from a higher-level organizer (e.g. region) to coordinate the implementation of transport policies encourages municipalities to increase the scope of the FTS launched.

6.3.4 Recommendations

Table 16 Recommendations - Management and organization of flexible transport systems

Level	Recommendation	Target group
national level	Cooperation should be promoted between transport, tourism and environmental sectors (e.g. in form of strategic platform).	Transport, tourist and environmental associations, members of political bodies at regional level
regional level	Coordination of local and supra-local transport associations and unions should be supported, as well as cooperation with them at the regional level.	Regional Administrations and their units
	A support system at the regional level should be established for the development of the FTS at the municipal and supra-municipal level.	Regional Administrations and their units
	Information about transport services available in the region should be collected (integrating locations with transport accessibility challenges).	Regional administrations, transport and tourism departments of regional government, tourist organizations

6.4 Cooperation and coordination at individual levels [FoA.4]

6.4.1 Synthesis

The gathered experience analysed, the lack of cooperation and proper coordination of activities can be one of main barriers to the implementation of FTS systems.

Four of the project partners have fully and partially identified barriers, respectively Poland and Bulgaria, and Spain and Austria. Those barriers were related to the risk of insufficient cooperation between local stakeholder groups during planning, implementation and management of the FTS. The main reasons for conflicts may include incomplete communication, lack of precise definition of competences and divergent expectations regarding the functioning of the service. Other regional partners identified risks related to coordination and communication, especially between municipalities, transport operators and representatives of private carriers, primarily taxi drivers. The lack of proper communication between major stakeholders often leads to a stalemate. Then, none of parties benefits from the implementation of the new solution.

When organizing the FTS, emphasis should be placed on cooperation with other transport operators to coordinate schedules and exchange information in order to build a comprehensive offer. Insufficient cooperation between potential users and service providers (e.g. while determining specific locations of necessary infrastructure, defining service rules, fees and tariffs and communication channels) may cause users' reluctance to the use the system.

The SWOT analysis often pointed to insufficient cooperation between regional stakeholders and different expectations and needs of individual municipalities. This was qualified as weaknesses and threats to the implementation of the FTS. At the same time, the role of the regional authorities as integrator of stakeholders (Tyrol) and regulator of cooperation with the private sector (Westpomeranian Voivodeship) were highlighted as strengths of the FTS implementation process. FTS opportunities included the strengthening of cooperation between tourism and transport sectors.

While seeking integration, cooperation is particularly important. It includes cooperation between various entities, especially coordination of timetables and creation of a unified transport information system encompassing flexible services (on-line travel planners). In their analyses, all regional project partners classified the above cooperation as insufficient. The majority of existing public information platforms supporting travel planning include information about public (scheduled) transport services only. They neglect FTS and private carrier services. In particular, pooling and sharing transport systems are completely excluded from integrated information systems.

In many cases, once the challenge of developing an appropriate cooperation model is overcome, chance for effective FTS implementation improve significantly. Seven success factors in this field of action and related to them good practices are the best evidence for the above. This highlights the importance of cooperation and coordination for the success of the process. Levels of cooperation are many, depending on organizational, infrastructural, legal or social conditions.

Examples such as DefMobil (AT) or trains from Lleida to La Pobla de Segur (ES) with on-demand stops are the result of close cooperation at the level of transport organization. Although DefMobil is a bottom-up initiative developed by local stakeholders, it is strongly linked with the VVT transport association (e.g. through co-financing). The train from Lleida to La Pobla de Segur is based on a wide multilevel and multi-sectoral cooperation which was defined at the very beginning as one of the main success factors of the project. In both cases, cooperation also takes place regarding coordinated information policies.

Cooperation can also be effectively built on a local scale. For instance, close cooperation between the carrier and the municipality supporting the Night Rider system in Luxembourg allows to determine the actual public transport demand and develop an effective tariff model suitable to the financial capacity of the municipality and its population. In turn, cooperation involving a wide group of local stakeholders, e.g. Flugs system, can significantly reduce and share the system implementation cost. The sharing of tasks relieves the municipality, the organizer of transport, and at the same time, it expands the group of responsible for the FTS. This leads to greater acceptance and commitment.

Additionally, cooperation helps combining local and regional potentials. It can be based directly on promotion and exchange of information about transport services, e.g. the Polish BalticBike.pl system which, despite a similar business profile, cooperates with the German UsedomRad rental network. It may also include intersectoral cooperation, e.g. the Seaside Narrow Gauge Railway in Poland or the Nostalgic Train and Cyklo Tour Spiš, a bike rental, in Slovakia. Managers and operators of these systems cooperate, among others, with the tourism industry mutually complementing their offers and building joint tourism and transport packages.

6.4.2 Cross reference with other fields of action

In addition to the indicated reference between the area of cooperation and coordination and the management and organization of the FTS **[FoA.3]**, examples discussed in this chapter often consider participation and applicability of the FTS **[FoA.8]**. This relationship is produced by cooperation through inter-institutional and inter-sectoral networking, involving non-governmental organizations and residents. This process creates an opportunity to determine mutual expectations regarding the operation of the FTS. Such as wide cooperation can also be the basis of financial success **[FoA.6]**. The service supported by an appropriate financial analysis, including cooperation and inter-sectoral coordination, stands a better chance of economic sustainability.

6.4.3 Conclusions:

- Cooperation and coordination are some of the most important components in the FTS development and maintenance. Cooperation between local governments, transport associations, business partners, other transport organizers, and carriers and users should be promoted.
- It is possible to develop a system of cooperation, also between entities potentially competing with each other (joint enlargement of target group).
- It is advisable that the FTS designed to handle tourist traffic should be managed and implemented in close cooperation with tourist organizations and operators of tourist attractions. This enables to tune the service, increase the use of tourist potential and transport accessibility of attractions. Additionally, it enables to share the costs of its implementation and maintenance.
- Provided legal and organizational conditions are suitable, cooperation with private entities should be used, also in the form of public-private partnerships. The experience that businesses have can be valuable while adopting appropriate economic assumptions.
- Regardless the degree of the FTS autonomy, it should be coordinated with other transport services and information systems (e.g. travel planners, timetables) to increase the comprehensive scale of transport services in the area and to ensure more efficient use of public resources.
- One of the objectives should be possible elimination of barriers and limitations for the end user of the system (e.g. single ticket/unification of tariffs).

6.4.4 Recommendations

Table 17 Recommendations - Cooperation and coordination at individual levels

Level	Recommendation	Target group
national level	Provisions in the legal framework should be introduced to support local governments and facilitate cooperation in the form of public-private partnerships	National authorities, subordinate units and ministries
	Regulations requiring public transport organizers to coordinate all means of transport in their area should be promoted.	
regional level	Cooperation between transport and tourism sectors as well as stakeholders, private carriers and public organizations should be strengthened through relevant provisions in strategic documents and information exchange at the regional level	Regional Administrations and their units
	Transport information policies, including FTS solutions, should be coordinated and integrated. A unified regional information platform should be developed.	
local level	Close cooperation with representatives of the local community should be used to implement services that meet real transport needs of residents and tourists.	Transport organizer at the local level
	Cooperation should be stimulated between tourist organizations and operators of attractions while creating transport policies with due respect to tourism conditions.	Transport organizer at the local level / tourism associations and entities

6.5 Financing instruments and FTS support programmes (initial funding) [FoA.5]

6.5.1 Synthesis

The analysis of framework conditions and barriers indicates that high investment cost and insufficient external financial support (e.g. regional or central governments) for municipalities are the main barriers for the implementation of the FTS. Additionally, project partners highlighted the issue of local public finance deficit as a weakness in the development of transport systems.

In the regions of Košice, Varna, Catalonia and the Szczecin Metropolitan Area, local stakeholders (regional entities, municipalities) which intend to participate in the implementation of the FTS may have problems finding adequate financing for the investment needed. This is often related, for example, to the actual arrangement of regional operational programmes in terms of supporting the development of public transport in large cities and agglomerations and the development of infrastructure. In the majority of instances, there are no financial instruments designed to promote transport in rural and peripheral areas or areas struggling with the high fluctuation of seasonal traffic. Financing designated for mobility does not support soft actions, such as communication with users, education and raising awareness, coordination of information policy.

Since regular public transport is unprofitable, the introduction of a new, unknown transport initiatives poses high risk and financial burden, especially during the initial period. Funds earmarked for launching the FTS initiative secure time necessary to attract passengers, introduce changes and relevant promotion of the service. Selected fields of action are matched with good practices which have success factors attributed to them. Those factors include the use of external funds to implement or develop the FTS.

The first example is the Austrian DefMobil which used the national outreach and funding programme for sustainable mobility provided by the Ministry for Sustainable Development and Tourism. '*Klima**aktiv** mobil*' is a national action programme for mobility management supported by funds for the development of mobility measures leading to the reduction of CO_2 through, inter alia, seasonal or demand related transport systems.

The Bummelbus system operating in the northern region of Luxembourg was launched, inter alia, due to national funds provided by the Ministry of Labour, Employment and Social and Solidarity Economy. Comprehensive financing enabled to launch the system and continue its sustainable operation. It was a tool for labour integration of long-term unemployed people. In turn, the Night Rider system was based on a four-year financing programme for night transport services with the guarantee by the Ministry of Transport of Luxembourg.

The funds available from EU programmes also support the implementation of the FTS. For instance, the municipality of Byala in the Varna Region used funds available under the Regional Development Operational Programme to purchase means of transport which expedited the launch of a new transport service. Another example is the Polish BalticBike.pl system where the organizer used support from the European Fisheries Fund (EFF) to enhance the development of entrepreneurship in coastal areas.

With regard to external support that can significantly facilitate the implementation and development of the FTS, we should also mention instruments and programmes that are not based on direct financing. They can, however, provide broad analytical support, access to a database of good practices and know-how, or expert assistance, as well as promotion and awareness raising. All these activities can effectively develop the project or prepare a good basis for its implementation. In this context, it is worth mentioning that the EU provides a wide range of programmes that can support such actions on many levels.

One of good practices identified by the LAST MILE project is the 'Alpine Pearl – Werfenweng' project. The project benefited much from the support of such programmes. It was implemented a by participating in EU funded projects, including the Alpine Space Interreg III B (Alpine Awareness project, MOBILALP, Alps Mobility II Alpine Pearls). It is currently one of the most interesting examples of a broad approach to mobility in tourism. A guiding idea of the project is the implementation of low-emission solutions, reduction of individual car traffic and provision of high quality transport systems in the area. The balanced approach does not only apply to transport. The region has been gradually implementing solutions that reduce energy consumption and shorten the

supply chain. In 2017, Werfenweng was listed as one of 100 most recognized sustainable tourism destinations, i.e. 'Top 100 sustainable destinations 2017'.

6.5.2 Cross reference with other fields of action

From the point of view of initiating a new FTS service, the most important is the availability of financing which frequently follows strategic documents **[FoA.2].** The use of external financial instruments sometimes forces organizational changes **[FoA.3]** and motivates to organize the management process, e.g. by appointing parties responsible for the management of funds. Additionally, in the context of programmes providing support and finance, the appropriate level of awareness among people responsible for their development is also important **[FoA.7].** The appropriate level of knowledge regarding the last mile and the applicability of the FTS enable to develop support programmes corresponding with actual problems.

6.5.3 Conclusions:

- Frequently, municipalities do not have their own funds for the implementation of new transport initiatives, including the FTS.
- External support available from regional, national and European programmes can often motivate municipalities to launch the FTS.
- A significant part of current external financing programmes is not directly targeted at the FTS. However, there are still many external programmes that address the FTS as the *Mobility as a Service* Approach (e.g. programmes that integrate excluded social groups, electric mobility etc.) which provide financial support.
- In the field of transport, external financing programmes often focus on urban areas and agglomerations, especially those of large passenger flows. There is a limited number of financial instruments designed to deal with transport in rural or peripheral areas, or areas struggling against significant seasonal traffic fluctuation.
- Currently, it is possible to receiving a significant non-financial support, e.g. from EU programmes and initiatives, which can greatly support the development of the FTS in a given area. However, it should be noted that municipalities and responsible entities are often unaware of such programmes or do not know how to use them.

6.5.4 Recommendations

Table 18 Recommendations - Financing instruments and FTS support programmes (initial funding)

Level	Recommendation	Target group
national level	The next financial public transport plan should include the FTS as a solution to deal with transport accessibility in rural areas, areas of a distributed settlement network or experiencing high seasonal traffic fluctuation.	National authorities, subordinate units and ministries
	Conditions should be created for the implementation and financing of the FTS together with national and regional funding instruments.	

regional level	Provisions should be included in regional strategic documents regarding the financing of mobility development measures (especially in rural areas).	Regional Administrations and their units
	The implementation and financing of the FTS should be included in regional operational programmes.	
	An active information policy should focus on material and financial support for the development and implementation of sustainable mobility plans.	
local level	The application for funds should be fostered to develop a system financing new and existing FTS services.	Local administrations, non-governmental organizations, transport associations

6.6 Long-term financing instruments and FTS operational financing [FoA.6]

6.6.1 Synthesis

All regions highlighted the difficulty of obtaining or developing a stable long-term financial support model for the FTS. In very few cases, municipalities can count on funds allocated for this purpose from the national level. The same applies to funding from transport unions and associations or from regional governments. Additionally, in some cases, financial support from the national or regional levels also depends on whether relevant finance corresponding to the demand has been included in national or regional strategies.

The system of long-term operational financing is one of the main barriers related to the implementation of the FTS. The reason for this is the current obligation imposed on local governments (municipalities) to entirely finance public transport at the local level. Considering their very limited budgets, municipalities are not motivated to take initiatives, especially if it involves permanent and long-lasting financial consequences.

As mentioned above, the external financial instruments designed to provide a public transport support are mainly aimed at financing the purchase of rolling stock or invest in infrastructure. Such instruments rarely take into account the need of long-term financing. In this context, it should be emphasised that current national and regional support programmes and financial instruments are insufficient to support easy and effective implementation of the FTS.
The analysis of framework conditions showed that often the only system solution supporting long-term functioning of public transport services, including the FTS, are statutory subsidies for concessionary tickets which certain social groups are eligible to (e.g. children, youth, elderly and disabled). The majority of carriers create their business models on that basis. However, this often produces adverse results, such as the focus on servicing the most profitable transport lines only, unfair competition or abuse of the system (declaring larger than actual number of reduced fares).

Additionally, while introducing comprehensive solutions for long-term co-financing of public transport, including the FTS, we need to take into account fair competition principles. For example,

if the service is to be financially viable for the operator without public funding, it must often be implemented as a part of the most profitable transport lines. In this case, strong competition from other carriers competing for the same group of customers may constitute a barrier to the implementation of a flexible service. However, additional public subsidies for services operating on the same routes as private carriers may cause resistance from the private sector and allegations of unfair competition.

Currently, in the absence of adequate comprehensive support, the majority of FTS systems analysed must follow free market rules. A regional partner from Slovakia indicates that their FTS (e.g. bicycle rental systems and tourist train to seasonal events) are implemented on a commercial basis and receive support from sponsors. Similar observations are made by other project partners, who also pointing out the need for public-private inter-institutional cooperation or the need to obtain sponsorship funding for the long-term financing of the FTS.

The analysis of key good practice success factors confirms that an appropriate long-term financing model is the basis for the effective implementation of the FTS. As many as eight good practices have been linked to this field of action. This confirms the role of long-term financing and a business-like approach that promotes self-financing and maintaining the profitability of the service. The FTS include local government initiatives and arrangements run by local governments or their subordinate institutions, as well as private initiatives that operate on the transport service market as independent providers. Working models and approaches to long-term financing may have a very diverse form.

The Bummelbus system, operating in the northern regions of Luxembourg, is one of few examples of the FTS built on comprehensive and permanent financing from the national level (support from ministry). However, it should be emphasized that the Bummelbus initiative combines transport and social policy objectives, which is a perfect example of the wide and multi-faceted use of the FTS.

In the context of a comprehensive support, we should once again refer to the example of the Austrian DefMobil system, operation of which is financed in part by a regional transport association. Additionally, for three consecutive years, the system was supported by the national "*Klima**aktiv*** mobil" programme. This type of support allowed municipalities to take risks related to the launch of the FTS by eliminating excessive financial obligations.

The Flugs system, which is a public car-sharing system in the city of Lienz, is an example of a reasonable approach to the FTS economics. Already at the stage of its implementation, the operator focused on possible reduction of its operating cost (e.g. economical electric drive, reduced leasing instalments, support of local activists and volunteers). The tariff allows for self-financing of the service even with a small group of users. It enables a more efficient implementation of the service and its further streamlining without imposing an excessive burden on the organizer.

Effective long-term implementation of the on demand taxi service in the Catalan Vall de Boi Valley is in turn supported by appropriate regulations that ensure economic benefits for all parties involved (profit for carrier, no budget expenditure for municipality, and reasonable price for users). Close cooperation between municipalities and the operator of the Night Rider system in Luxembourg has had a similar effect. Good identification of the municipalities needs and local

conditions allows for individual adjustment of the tariff. The above solutions can be good examples to follow while developing appropriate operational models with a responsible and committed approach of all parties to the process.

Other FTS systems operating on a commercial basis, such as the Seaside Narrow Gauge Railway and BalticBike.pl system in Poland, or Cyklo Tour Spiš in Slovakia, owe their success to a well-developed business model. The openness to new options and sources of financing as well as reduction of operating cost additionally makes these systems more flexible and innovative. This can support the development of the service and its profitability.

In short, both comprehensive financing solutions and actions to reduce cost and develop appropriate business models aim primarily at ensuring stability and durability of the solutions. Once financial burden is reduced, municipalities can gradually adjust and evaluate the FTS. Private businesses may reach higher profitability levels and promote the development of the service.

6.6.2 Cross reference with other fields of action

The issue of long-term financing or self-financing is inextricably linked to choices made by the target group **[FoA.8]** and accurate budget assumptions. A long-term FTS financing model may be based on a cooperation network consisting of all relevant entities **[FoA.4].** This should allow to share financial responsibility. As regards external financing instruments, the impact of raising awareness and maintaining an appropriate information policy is also significant **[FoA.7].**

6.6.3 Conclusions:

- In sparsely populated areas or areas that are less attractive for tourists, the provision of public transport services is unprofitable and constitutes a significant burden for municipalities. In such areas, FTS systems are less expensive than regular public transport because of their higher efficiency and a better cost-benefit ratio.
- In most of the regions, there is no comprehensive financing model (national and regional) for the FTS regardless of its type.
- The lack of a long-term financing model can make municipalities reluctant to implement FTS initiatives despite access to existing financial programmes supporting the launch of the service (purchase of vehicles, systems, investment implementations).
- Since municipalities run regular public transport below the profitability level, the introduction of a new and unknown transport system is a big risk. External funds for launching and maintaining of the FTS (especially during initial years of operation) enable to attract passengers gradually, and optimize and promote the service.
- Comprehensive financing schemes must observe fair competition and market access principles in order to avoid potential conflicts.
- FTS initiatives in tourist areas can be profitable without public support, provided an appropriate business model is developed.
- Reliable cost analysis and reduction of cost, especially during the initial period, allows for streamlining of the system and matching it with demands of the target group.
- It is possible to develop FTS economic models that are beneficial to all entities involved while ensuring their responsible and honest approach.

- The FTS can help implementing transport tasks much more efficiently and cost-effectively compared to traditional systems. However, municipalities are not motivated to perform analyses in this area due to additional cost involved.

6.6.4 Recommendations

Table 19 Recommendations - Long-term financing instruments and FTS operational financing

Level	Recommendation	Target group
national level	National programmes should be developed and launched allowing for comprehensive financial support of the FTS as a priority applied in sparsely populated areas, areas of distributed settlement network and high fluctuation of seasonal traffic.	National authorities, subordinate units and ministries
	National recommendations should be developed for an economic and comparative analysis of regular and flexible systems at the launching of a transport service to support sparsely populated areas, areas of distributed settlement network and high fluctuation of seasonal traffic.	
regional level	Regional programmes should be developed and launched allowing for comprehensive financial support to the FTS as a priority applied in sparsely populated areas, areas of distributed settlement network and high fluctuation of seasonal traffic.	Regional Administrations and their units
local level	Soft actions and measures, such as promotion and education, should focus on economics of the FTS.	Local administrations, transport organizations, carriers and operators
	Parking management measures (e.g. parking fees) should be implemented as a financial basis for the FTS at the local level.	Local administrations and infrastructure manager
	Profits from the public FTS in the tourist season should be used for co-financing of transport operations in the remaining part of the year.	Local administrations, transport organizations, carriers and operators

6.7 Raising awareness and information policy in relation to FTS [FoA.7]

6.7.1 Synthesis

The analysis is that information on the existing flexible transport service is usually available to the general public. This is supported by examples from the majority of project partner areas (Tyrol, Catalonia or the Westpomeranian Voivodeship). Information about the FTS is disseminated through internet platforms, local media, communication platforms, tourist organizations and businesses, municipal offices and whispered marketing. Usually, however, this applies to the FTS operating as a part of the public transport system.

Barriers examined include the lack of a central information platform and an adequate cooperation between transport service providers and tourist entities, and those are present in the majority of regions in question. Cooperation between all parties involved is essential for the proper circulation of information regarding the FTS available.

A real obstacle to the implementation of the FTS is the general shortage of knowledge about sustainable transport and the FTS. The same applies to FTS advantages and disadvantages and general operational principles. While overcoming this barrier, education should be the first step taken. In particular, education measures should focus on decision makers, service providers, operators and potential users. Unfortunately, in this respect, all regions have pointed to the lack or insufficient quality of education and programmes on sustainable transport and mobility. Existing programmes are chiefly designed for children and youth, whereas no education focuses on entities directly involved in the planning, organization and management of public transport systems.

This has been confirmed by the conclusions from the SWOT analysis. A strength of the sustainable transport is its positive perception and willingness of the majority of local governments to develop sustainable mobility measures (e.g. to cover transport needs on the last mile). However, at the same time, threats include poor understanding among decision-makers regarding FTS rules and the actual importance of sustainable mobility systems in the implementation of effective transport policies. Therefore, actions aimed at raising the awareness of local decision-makers and stakeholders should be listed among priorities of effective FTS implementation and development.

In the context of key good practice success factors, special attention should be given to various forms of education and awareness-raising which led to effective and long-term implementation of a good practice.

The implementation of the Catalan train from Lleida to La Pobla de Segur with on demand stops involved a series of promotion initiatives and campaigns targeted at potential users. To a large extent, they were embedded in the regional context, e.g. the #LoTrenDeTots# campaign (changes towards regional visual identification of rolling stock). Information campaigns focused on emphasizing that the new service was created for residents and its launch increases the potential of the region. This influenced the acceptance and regional identity of the solution.

Information campaigns and promotion activities can also be effective despite their limited scale. It is crucial that they address an appropriate target group. Increased awareness of DefMobil system advantages is based, among others, on active promotion and education directed to children and young people. DefMobil provide transportation for school and pre-school children and they are one of the main target groups for the service. Awareness raising means that children and adolescents, and consequently their parents and guardians, perceive the DefMobil system as the primary (default) mode of transport.

6.7.2 Cross reference with other fields of action

Although the degree may vary, education and awareness raising activities are present in **all fields of action.** Raising awareness is very often important for social participation and system utility **[FoA.8]**. It also affects effective and competent building of cooperation structures or inter-branch coordination **[FoA.4]**. Awareness of the specifics and determinants of the FTS helps to create effective legislative framework **[FoA.1]** and organizational structures **[FoA.3]**. This dependency also occurs in relation to the creation of external support instruments **[FoA.5]** or models of long-term financing **[FoA.6].**

6.7.3 Conclusions:

- Low social awareness regarding sustainable mobility systems, especially the FTS, is still noticeable. However, once such systems are known and recognizable by the public, their perception is usually positive.
- Promotion and education activities increase popularity and strengthen durability of the FTS, especially when clearly associated with the region (strong sense of 'ownership').
- Actions to raise awareness may have different scale and form. However, it is crucial to direct them to the appropriate target group.
- Awareness raising programmes and activities related to sustainable transport are mainly aimed at children and young people (potential future users). However, there are no professional and comprehensive campaigns directed to decision-makers and people responsible indirectly for the implementation of transport policies.
- If the implemented sustainable mobility solution meets the needs of both residents and tourists, the level of acceptance and public awareness rapidly grows.
- Distributed and ineffective FTS information systems should be replaced, as a preferred standard, with unified platforms ensuring access to information about the transport service to all users. Due to the complexity and scale of the FTS, such platforms should be created at the regional level.
- Information about the FTS in tourist areas should be closely linked with information about tourist attractions with the aim to reduce the need of using individual car transport.

6.7.4 Recommendations

Table 20 Recommendations - Raising awareness and information policy in relation to FTS

Level	Recommendation	Target group
EU level	Promotion activities to raise awareness of FTS benefits should be implemented (e.g. defining themes for European Sustainable Mobility Week closely related to FTS in rural and tourist areas).	European Commission
national level	Issues related to public transport and sustainable mobility should be included in school curricula and educational programmes.	The relevant ministry
regional level	Information platforms, regional travel planners, should gather information about all means of transport, including the FTS. They should combine the transport information platform with a knowledge platform about available tourist attractions in the region.	Regional Administrations and their units
	Training courses, meetings, study visits for decision-makers, transport organizers and carriers should be set up at the regional level. They should bring up FTS issues and specific features of their implementation and operation.	

local level	Education and promotion campaigns should be implemented to create new attitudes towards residents' mobility.	Local administrations, local non-governmental organizations, educational institutions
	Education programmes should be implemented at schools and pre-schools to create new attitudes towards residents' mobility.	
	Information policies regarding the connection and interrelationships of mobility and the environment and health should be implemented	
	Training courses, meetings, study visits for decision-makers, transport organizers and carriers should be set up at the regional level. They should bring up FTS issues and specific features of their implementation and operation.	Local administrations, local non-governmental organizations

6.8 Identification of needs, social participation and applicability of FTS [FoA.8]

6.8.1 Synthesis

LAST MILE project analyses and experiences indicate that regardless of the legislative system, the organizational conditions, and financial and planning instruments, it is always the user who decides about the success of each FTS. For this reason, proper identification of needs, participation in the process of implementing the FTS and adjusting the service are crucial success factors.

In the area concerned, the survey of actual transport needs of residents and other potential target groups should be the basis for effective implementation of the FTS. It should be followed by selecting of a relevant form of the flexible transport solution. The analysis should also take into account residents and tourists mobility patterns within and beyond a given area and reasons of such transport behaviour. For example, the use of individual car transport can result from the shortage of a proper service in the public transport network or the lack of knowledge about existing services. A thorough examination of the local potential and conditions allows to avoid errors related to, for example, copying of good mobility practices from other areas, e.g. models of car-sharing or bike-sharing systems operating in cities may not work efficiently in rural areas and tourist regions.

The process of social participation and involvement of a given group of users in the development and implementation of the FTS is yet another crucial success factor. The participation of a wide range of stakeholders in the process has two specific goals. The first one is to present, at the stage of project formation, a possible multilateral and multi-faceted approach to identify potential barriers, problems and challenges, and then develop a variety of solutions that will facilitate the implementation of the FTS. The second goal is to seek the involvement of the widest possible group of entities from the moment the system is launched. This will affect responsibility sharing, so important for the success of the initiative, and will more effectively link the project to the local level. Although this approach can significantly extend the system implementation process, it clearly improves its long-term operation.
In the context of social participation, however, two issues emerge. In many cases, it is extremely difficult to motivate local stakeholders to implement joint activities. The reason, inter alia, is the low awareness about transport in general and sustainable mobility in particular. The second issue

is that municipalities lack preparation and experience (shortage of competent leaders) in the effective implementation of the participatory process. Lack of leadership and motivation or the unintentional omission of specific parties may discourage individual stakeholders.

In the context of the FTS applicability, improvements can be introduced in a variety of areas, e.g. technological or system improvements. However, they can also contribute to new barriers. For example, one of the barriers to the development of the FTS, based on modern technological solutions, may be the lack of affordable and easy to implement ticket, reservation, payment and dispatch systems. Barriers in this respect also result from the lack of adequate experience among municipalities and operators (i.e. specialist knowledge), as well as missing regulations and standards, which was highlighted in particular by partners from Spanish and Bulgarian regions. However, the practices analysed by the project indicate that such systems can be effectively implemented. For instance, options for online booking are partially available for seasonal rail transport (coastal trains) operating in the Szczecin Metropolitan Area. FTS implemented by transport associations and an online booking functionality are available in Austria, Spain and Luxembourg. Nevertheless, the implementation and maintenance of such systems by private operators and municipalities may be too complicated in terms of management, settlement of payments, archiving etc.

The FTS can clearly benefit from the use of an integrated tariff system. The lack of an integrated tariff system and diversity of procedures in a given area may cause a number of difficulties during the implementation of ticketing, booking and payment systems. A Spanish partner pointed out that the main obstacle in regions trying to introduce an integrated tariff system is the integrated transport ticket. This necessitates the fitting of all public transport vehicles, including taxis and minibuses, with ticket and voucher machines.

In the context of the applicability of the FTS, we should also highlight barriers associated with the need to change users' habits. For example, call/dial systems may produce initial reluctance to file individual orders with a dispatch centre and to call the centre in advance. Barriers for the introduction of pooling and sharing systems may result from difficulties with going through the rental procedure, e.g. excessive formalities or the need to use new technologies, such as mobile and on-line systems. This might be considered an obstacle for the elderly or digitally excluded people.

As regards key good practice success factors, almost all of FTS examples analysed fall into this field of action. This confirms that identification of needs, social participation and usability are extremely important for relevant frequency of the flexible service and its financial viability.

The major success factor is the good identification of actual user needs. The FTS analysed, such as DefMobil, Bummelbus and NightRider, were established to meet transport needs of residents, but they build their offer also upon other social groups and their different expectations. DefMobil focuses on transporting children and young people to schools and provides daily public transport for residents. The Bummelbus mainly provides transportation of children and young people to after-school activities, whereas the Night Rider uses the existing niche of night transport demand

during weekend. Each system can be effective once a relevant profile has been developed for the service provided.

In the case of the FTS designed for tourists, apart from an appropriate diagnosis of the target group, the analysis should cover the optimum use of the regional tourist infrastructure and potential. Tourist bus line no. 209 in Varna was established to provide the service to people who want to move quickly between the most popular tourist attractions. The Seaside Narrow Gauge Railway was established for tourists who want to explore the region (family tourism) without much haste and the operation of the Railway is based on the modernized and reconstructed local rail infrastructure. Touring bike rental systems of BalticBike.pl and Cyklo Tour Spiš are designed for active tourists and their potential is based on landscape and infrastructure resources present in the area (routes and cycling paths).

Some of practices that resulted from effective social participation include on demand taxis in the Valley of Vall de Boi and Flugs, a car-sharing system. The beginning of the FTS in the Vall de Boi Valley was the result of the restriction imposed on individual vehicles to enter the area of the National Park. Participatory activities involving a number of social groups allowed to ease the local community resistance associated with regulations introduced and to develop such an operational and economic FTS model that was beneficial for all parties involved.

The establishing of the Flugs system was almost entirely based on a bottom-up initiative. It was one of projects applied for by residents of Lienz and aimed at improving the quality of life in the area. The participatory approach helped creating a real public transport system. The broad public participation allowed to spread investment and operational costs (some entities support Flugs as part of their regular activity or as voluntary work).

The Flugs system can also be referred to in the context of availability and usability. Simplified booking procedures, clear terms of use and an affordable tariff encourage users to use the system without requiring them to make excessive commitments.

Identification of customer needs and expectations should not take place at the initial stage of FTS system development only. Equally important is its continued evaluation and improvement.

A good example of the above is the train from Lleida to La Pobla de Segur with on demand stops. A continued and periodical assessment of the quality of services, customer satisfaction and potential new needs enables a speedy reaction and implementation of necessary improvements. This prevents the outflow of users and increases trust to and acceptance of the system.

6.8.2 Cross reference with other fields of action

Issues covered by area **[FoA.8]**, similarly to area **[FoA.7]** associated with education and increasing the level of awareness, are in fact related directly or indirectly to all other areas of the summary. Particular attention should be put to the close relationship between cooperation and coordination **[FoA.4]** where fields of action concerned show the largest number of common points and constitute a serious success factor for the FTS.

6.8.3 Conclusions:

- The most important FTS success factor is an appropriate diagnosis of conditions and adjustment of the system to expectations and needs of end users.
- The FTS do not have to focus on fulfilling all social expectations. Smaller solutions well suited to specific needs work effectively too.
- The FTS are often directly associated with social aspect of mobility and accessibility. They create new jobs ('green' jobs) and secure one of the main human rights according to MaaR (Mobility as a right) definition.
- A dialogue with the user is the foundation of an effective system. The system should enable active social participation at the stage of planning and creating of the system, as well as during its further operation (evaluation).
- Parties responsible for running the participatory process are often not adequately prepared to the task (lack of experience and access to appropriate expert support).
- Due to the specific nature of the FTS, in many instances, their effective operation depends on new digital communication technologies. However, it is necessary to ensure adequate availability and ease of use to avoid digital exclusion.
- The degree of complexity and cost of IT systems underlying the FTS discourage transport organizers, operators and carriers. Thus, they are reluctant to implement certain forms of the FTS (call and sharing systems).
- Ensuring broad accessibility and easy use of the system for all social groups should be the lead principle underlying the operation of the FTS.
- The success of FTS designed for tourists is not determined solely by an efficient transport solution. Equally important is a well-integrated tourist potential of the area and access to attractions within the system.

6.8.4 Recommendations

Table 21 Recommendations - identification of needs, social participation and applicability of FTS

Level	Recommendation	Target group
EU level	European recommendations should be followed to fill blanks spots on the Internet access map and actions should be implemented to prevent digital exclusion.	European Commission, Council of the European Union
national level	Relevant programmes should be implemented at the national level to prevent digital exclusion.	National authorities, subordinate units and ministries
	Financial programmes should be launched to support the implementation of the FTS based on modern IT systems (activities to support innovation).	

regional level	Regional actions should be undertaken to prevent digital exclusion.	Regional Administrations and their units
	Expert and financial support should be provided in relation to the FTS implementation based on modern IT systems (as part of innovation support).	
	Expert support should be provided at the local level to ensure social participation during the implementation of transport policies (including FTS implementation).	
local level	Local actions should be implemented to prevent digital exclusion.	Local administrations and their units,
	Transport needs of passengers (residents and tourists) should undergo continuous examination and evaluation, whereas related transport policy should be updated.	
	The local community should be engaged in the conciliatory process and elaboration of local transport development plans.	Local administrations and their units, residents, local action groups, non-governmental organizations
	A local cooperation platform (forum) should be created to support the exchange of experience and expansion of the network of stakeholders involved in the development of the transport policy in the area.	

7. Recommendations summary

Recommendations presented in individual areas of synthesis arise directly from the case studies analysed by the LAST MILE project. They are based on the findings of regional analyses of framework conditions, barriers and good practices implemented by regional project partners, as well as expert input and comments and opinions of stakeholders participating in regional meetings. Based on information and experience in launching and implementing of the FTS, conclusions and further recommendations are developed with break down into different levels of management.

7.1 EU level

EU level is the highest and, at the same time, the most remote level from the direct implementation of project results. At this level, recommendations focus on the further support of FTS integration within EU guidelines, awareness raising activities and measures preventing digital exclusion.

Table 22 EU Level recommendations

Field of action		Recommendation	Target group
	**[FoA.2] – Flexible transport systems in strategic documents**	Emphasis should be put on the integration of the FTS with transport and sustainable mobility guidelines (White Paper, Sustainable Urban Mobility Plans, Sustainable Regional Mobility Plans).	European Commission, Council of the European Union
		Strategic documents should address directly the FTS as possible solutions in certain circumstances. The FTS should also be defined as one of new forms of collective transport.	
	**[FoA.7] – Raising awareness and information policy in relation to FTS**	Promotion activities to raise awareness of FTS benefits should be implemented (e.g. defining themes for European Sustainable Mobility Week closely related to FTS in rural and tourist areas).	European Commission
	**[FoA.8] – Identification of needs, social participation and usefulness of FTS**	European recommendations should be followed to fill blanks spots on the Internet access map and actions should be implemented to prevent digital exclusion.	European Commission, Council of the European Union

Conclusions:

LAST MILE project recommendations pertaining to the EU level should be taken into account while implementing specific EU activities and policies. This should have a positive impact on common transport policy priorities, especially in the context of the FTS development. At the same time, those priorities should indirectly enable all member states to benefit from project results. Benefits of experience, awareness and knowledge will positively affect the development of sustainable transport in Europe and will translate into improved transport accessibility, especially in sparsely populated areas of a distributed settlement network and poor accessibility. The implementation of the FTS in the EU member states can be a part of a worldwide effort aimed at reducing CO2 emissions and helping to prevent social exclusion.

7.2 National level

Recommendations for the national level mainly refer to legal provisions regarding public collective transport and possibility of implementing joint transport management, including through public-private partnerships. On the one hand, these provisions should specify FTS definitions and, on the other, enable FTS to be used for public transport. The drafting of relevant amendments should allow public transport organizers to use all available transport systems.

Table 23 National level recommendations

Field of action		Recommendation	Target group
	**[FoA.1] – National and regional regulations regarding flexible transport systems**	Unambiguous definitions of the FTS and provisions in national laws should be prepared to enable the functioning of the FTS as a part of the public transport system.	Government / Legislator Relevant ministries
		National recommendations should be developed regarding the FTS in public transport in the context of applicable laws.	
	**[FoA.2] – Flexible transport systems in strategic documents**	FTS should be establishment and developed as a part of the public transport system in strategic documents at the national level and link them directly to national funding programmes.	Relevant ministries and government bodies
	**[FoA.3] – Management and organization of flexible transport systems**	Cooperation should be promoted between transport, tourism and environmental sectors (e.g. in form of strategic platform).	Transport, tourist and environmental associations, members of political bodies at regional level
	**[FoA.4] – Cooperation and coordination at individual levels**	Provisions in the legal framework should be introduced to support local governments and facilitate cooperation in the form of public-private partnerships.	National authorities, subordinate units and ministries
		Regulations requiring public transport organizers to coordinate all means of transport in their area should be promoted.	
	**[FoA.5] – Financing instruments and FTS support programs (initial funding)**	The next financial public transport plan should include the FTS as a solution to deal with transport accessibility in rural areas, areas of a distributed settlement network or experiencing high seasonal traffic fluctuation.	National authorities, subordinate units and ministries
		Conditions should be created for the implementation and financing of the FTS together with national and regional funding instruments.	
	**[FoA.6] – Long-term financing instruments and FTS operational financing**	National programmes should be developed and launched allowing for comprehensive financial support of the FTS as a priority applied in sparsely populated areas, areas of distributed settlement network and high fluctuation of seasonal traffic.	National authorities, subordinate units and ministries
		National recommendations should be developed for an economic and comparative analysis of regular and flexible systems at the launching of a transport service to support sparsely populated areas, areas of distributed settlement network and high fluctuation of seasonal traffic.	

	**[FoA.7] – Raising awareness and information policy in relation to FTS**	Issues related to public transport and sustainable mobility should be included in school curricula and educational programmes.	The relevant ministry
	**[FoA.8] – Identification of needs, social participation and usefulness of FTS**	Relevant programmes should be implemented at the national level to prevent digital exclusion. Financial programmes should be launched to support the implementation of the FTS based on modern IT systems (activities to support innovation).	National authorities, subordinate units and ministries

Conclusions:

National governments are responsible for adopting the legal framework, introducing FTS definitions, and developing provisions that support the development of public transport through the FTS. Such provisions of law stimulate interest among organizers in new forms of transport and enable full practical compliance with the law. The introduction of provisions recommending the use of flexible systems, where regular public transport is unprofitable or not feasible, e.g. due to difficult spatial conditions, will be an impulse for public transport organizers to implement such systems. The provisions adopted at country-level strategic documents provide guidelines for the implementation of various forms of transport at the regional and local levels alike. Additionally, FTS provisions in the strategic documents are the basis for FTS launching funded from Regional Operational Programmes and creating instruments dedicated to the comprehensive long-term financial support.

Action taken: Recommendations at the national level are to be adapted individually by each of the partner regions as a part of developing the Regional Action Plan.

7.3 Regional level

Conclusions from the aggregate report and the number of recommendations developed in the meantime indicate that the involvement of the regional level may prove to be crucial for the effective FTS implementation. The regional level enjoys a wide range of competences related to financing instruments, coordination of the overall transport policy in the region, available expert and material support and possibly building of system solutions supporting the implementation of local FTS. Regional authorities should primarily focus on including flexible transport systems among solutions referred to in regional strategic documents use of systems, especially in rural areas, and services supported under the Regional Operational Programme. FTS provisions in strategic documents should promote the application for external funds and set the path for the development of public transport policies in documents at lower administrative levels. Local entities expect developmental impulses from the regional level, a level which should support innovation and desired trends and concepts in sustainable mobility policies.

Table 24 Regional level recommendations

Field of action		Recommendation	Target group
	**[FoA.1] – National and regional regulations regarding flexible transport systems**	Regional Administrations should support and lobby for regulating the FTS in national laws.	Regional Administrations
	**[FoA.2] – Flexible transport systems in strategic documents**	The FTS should be an integral part of public transport and sustainable mobility development.	Regional Administrations
		Regional mobility plans should be developed encompassing the use of the FTS and providing equal playing field for metropolitan areas and remote disadvantaged settlements.	
		Expert support and overall coordination of development and implementation of sustainable mobility plans should take place at the local level.	
		Regional public transport development plans should be linked directly with financial instruments.	Regional Administrations / Institutions responsible for operational programs
		Tourism should be included in policy documents and transport strategies. Accordingly, tourism development documents and concepts should refer to transport and sustainable mobility.	Regional Administrations, the Transport and Tourism Departments of the regional government, tourist organizations
		Strategies should not only reflect upon transport infrastructure accessibility but also the quality of public transport services.	Regional Administrations and their units
	**[FoA.3] – Management and organization of flexible transport systems**	Coordination of local and supra-local transport associations and unions should be supported, as well as cooperation with them at the regional level.	Regional Administrations and their units
		A support system at the regional level should be established for the development of the FTS at the municipal and supra-municipal level.	
		Information about transport services available in the region should be collected (integrating locations with transport accessibility challenges).	Regional Administrations, the Faculty of Transport and the Tourism Department, tourist organizations
	**[FoA.4] – Cooperation and coordination at individual levels**	Cooperation between transport and tourism sectors as well as stakeholders, private carriers and public organizations should be strengthened through relevant provisions in strategic documents and information exchange at the regional level	Regional Administrations and their units
		Transport information policies, including FTS solutions, should be coordinated and integrated. A unified regional information platform should be developed.	

	**[FoA.5] – Financing instruments and FTS support programs (initial funding)**	Provisions should be included in regional strategic documents regarding the financing of mobility development measures (especially in rural areas).	Regional Administrations and their units
		The implementation and financing of the FTS should be included in regional operational programmes.	
		An active information policy should focus on material and financial support for the development and implementation of sustainable mobility plans.	
	**[FoA.6] – Long-term financing instruments and FTS operational financing**	Regional programmes should be developed and launched allowing for comprehensive financial support to the FTS as a priority applied in sparsely populated areas, areas of distributed settlement network and high fluctuation of seasonal traffic.	Regional Administrations and their units
	**[FoA.7] – Raising awareness and information policy in relation to FTS**	Information platforms, regional travel planners, should gather information about all means of transport, including the FTS. They should combine the transport information platform with a knowledge platform about available tourist attractions in the region.	Regional Administrations and their units
		Training courses, meetings, study visits for decision-makers, transport organizers and carriers should be set up at the regional level. They should bring up FTS issues and specific features of their implementation and operation.	
	**[FoA.8] – Identification of needs, social participation and usefulness of FTS**	Regional actions should be undertaken to prevent digital exclusion.	Regional Administrations and their units
		Expert and financial support should be provided in relation to the FTS implementation based on modern IT systems (as part of innovation support).	
		Expert support should be provided at the local level to ensure social participation during the implementation of transport policies (including FTS implementation).	

Conclusions:

Implementation of recommendations at the regional level should coincide with the implementation of national strategic objectives and funding from Regional Operational Programmes. At the same time, inter-sectoral coordination at the regional level should become the basis for initiating and strengthening cooperation between local governments, transport associations and carriers, as well as tourist and non-governmental organizations. Regional authorities are required to monitor the status of public technical infrastructure and its rational use, e.g. to establish new interchanges (use of abandoned or neglected railway stations) or tourist transport lines. At the regional level, a unified travel planner should also be implemented. Such an application should enable passengers (residents and tourists) to plan their trips and purchase tickets. Additionally, it should provide information about tourist attractions (permanent and temporary) and traffic congestion, including accidents or booking Park & Ride facilities. **The region should become the main level responsible for the implementation of a sustainable mobility policy involving the FTS.**

Action taken: Recommendations at the regional level are to be adapted individually by each partner region and included in the Regional Action Plan.

7.4 Local level

A large number of recommendations are addressed to the local level where local governments are the main organizers of public transport. Local governments are also responsible for ensuring transport accessibility. The most important local level tasks include the following: ongoing response to residents and tourists transport needs (i.e. continuous examination of transport demand), coordination of timetables for various transport modes and their integration (transfer nodes, single tickets), application for external co-financing designated for public transport and wide promotion, education and awareness-raising among residents and decision-makers.

Table 25 Local level recommendations

Field of action		Recommendation	Target group
	**[FoA.1] – National and regional regulations regarding flexible transport systems**	Resolutions should be adopted that require the launch of FTS transport lines depending on local conditions.	Local administrations
	**[FoA.2] – Flexible transport systems in strategic documents**	Sustainable mobility plans, as well as the FTS, should be developed and implemented.	Local administrations
		Connections between transport and tourism should be taken into account in plans and strategies at the local level.	
	**[FoA.4] – Cooperation and coordination at individual levels**	Close cooperation with representatives of the local community should be used to implement services that meet real transport needs of residents and tourists.	Transport organizer at the local level
		Cooperation should be stimulated between tourist organizations and operators of attractions while creating transport policies with due respect to tourism conditions.	Transport organizer at the local level / tourism associations and entities
	**[FoA.5] – Financing instruments and FTS support programs (initial funding)**	The application for funds should be fostered to develop a system financing new and existing FTS services.	Local administrations, non-governmental organizations, transport associations
	**[FoA.6] – Long-term financing instruments and FTS operational financing**	Soft actions and measures, such as promotion and education, should focus on economics of the FTS.	Local administrations, transport organizations, carriers and operators
		Parking management measures (e.g. parking fees) should be implemented as a financial basis for the FTS at the local level.	Local administrations and infrastructure manager
		Profits from the public FTS in the tourist season should be used for co-financing of transport operations in the remaining part of the year.	Local administrations, transport organizations, carriers and operators

	**[FoA.7] – Raising awareness and information policy in relation to FTS**	Education and promotion campaigns should be implemented to create new attitudes towards residents' mobility.	Local administrations, local non-governmental organizations, educational institutions
		Education programmes should be implemented at schools and pre-schools to create new attitudes towards residents' mobility.	
		Information policies regarding the connection and interrelationships of mobility and the environment and health should be implemented.	
		Training courses, meetings, study visits for decision-makers, transport organizers and carriers should be set up at the regional level. They should bring up FTS issues and specific features of their implementation and operation.	Local administrations, local non-governmental organizations
	**[FoA.8] – Identification of needs, social participation and usefulness of FTS**	Local actions should be implemented to prevent digital exclusion.	Local administrations and their units,
		Transport needs of passengers (residents and tourists) should undergo continuous examination and evaluation, whereas related transport policy should be updated.	
		The local community should be engaged in the conciliatory process and elaboration of local transport development plans.	Local administrations and their units, residents, local action groups, non-governmental organizations
		A local cooperation platform (forum) should be created to support the exchange of experience and expansion of the network of stakeholders involved in the development of the transport policy in the area.	

Conclusions:

Recommendations dedicated to the local level are the most detailed and concern many technical and organizational issues. It is related to the specific nature of the local government as regards the organization of public transport. Additionally, the local government has the largest number of responsibilities related to the implementation and operation of public transport. For this reason, the local government has major influence on the implementation of the FTS. The most important recommendations for the local level apply to local government cooperation aimed at creating a common (inter-municipal) public transport organization, inter-sectoral cooperation (tourist and non-governmental organizations), and implementation of the information policy. Local governments should also analyse transport demands and conduct a participatory social dialogue to develop optimised solutions aimed at meeting needs of particular social groups. To reduce the cost of introducing new transport systems, the existing technical infrastructure should be used to the extent possible and the FTS should be included in public transport policies and systems. Apart from 'hard' measures, i.e. development of technical facilities and infrastructure, the local government ned to implement 'soft' measures, i.e. raising awareness of the FTS among decision makers and passengers, and promotion and education among residents and tourists in the field of sustainable transport.

Action taken: Recommendations at the regional level are to be adapted individually by each partner region and included in the Regional Action Plan.

8. List of tables and charts

9. Source materials

LAST MILE project joint analysis

- National and regional framework conditions and barriers of flexible transport, Synopsis – *elaborated by Regional Management East Tyrol*
- State-of-the-Art of regional public transport systems and particularly flexible systems, Synopsis – *elaborated by Mobility and Transport Direction. Ministry of Territory and Sustainability. Government of Catalonia*
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