

TIME TO **RE THI NK** RURAL MOBILITY



THIS PROJECT IS FUNDED
BY THE EUROPEAN UNION



SMARTA

*Sustainable shared mobility interconnected
with public transport in European rural areas
(developing the concept of 'smart rural transport areas' [SMARTA])*

Rethinking Rural Mobility

Design and Editor:

European Integrated Projects

Authors:

SMARTA consortium:

*MemEx SRL (lead partner), Vectos GmbH, The University Court of the University of Aberdeen,
Transport & Mobility Leuven NV and European Integrated Projects*

SMARTA project at:

www.ruralsharedmobility.eu



The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

Rethinking Rural Mobility

Sustainable shared mobility interconnected
with public transport in European rural areas
developing the concept of 'smart rural transport areas' [SMARTA]



This project is funded by
the European Union



RETHINKING RURAL MOBILITY

The transport and mobility sector has experienced a vicious cycle over the last 20 years – rural areas are losing their attractiveness and facing issues such as an aging population and reduction in demand which results in depleted public transport services. This has impacted the quality and accessibility to public transport services thus making them less attractive to new dwellers. Can this vicious cycle be stopped or turned into a worthy process?

These are the challenges that **SMARTA** will strive to address. **SMARTA - Sustainable shared mobility interconnected with public transport in European rural areas** – is one of the most interesting initiatives for rural mobility, promoted by the European Parliament. It aims to understand the current relevance and potential of on-demand and shared mobility services and their integration with public transport in European rural areas.

SMARTA initiated an in-depth analysis of the rural mobility frameworks in the 28 EU Member States and selected third countries. The results were presented through a set of [Insight Papers](#), describing the national frameworks (policy, regulations, resources, strategies, etc.) that include rural mobility policies. A comprehensive analysis of rural mobility frameworks had not previously been conducted across all Member States of Europe (individual Member States have been studied in various projects). This in itself indicates a low level of prioritisation for rural mobility, which is what the SMARTA project is looking to overcome.

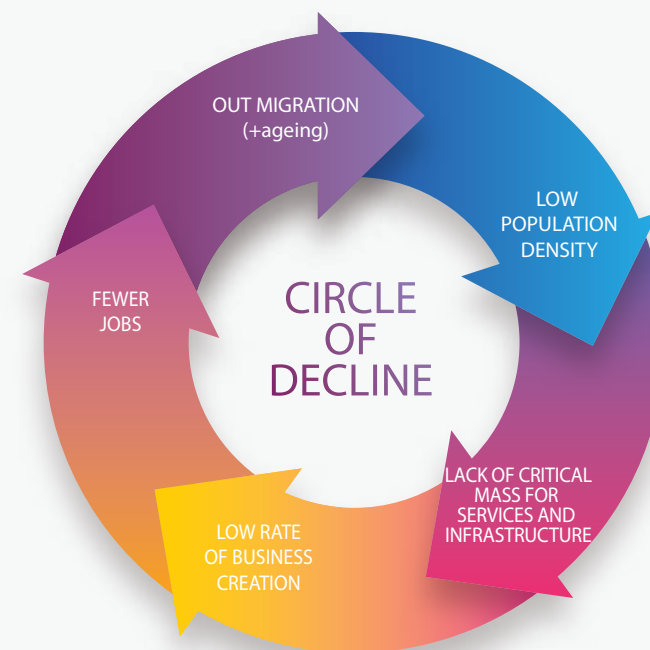
SMARTA has also identified a series of [Good Practices](#) for rural mobility that not only relate to conventional public transport but also include innovative transport solutions based on “shared-mobility” schemes for rural residents.

The research results obtained by SMARTA provides an evidence base on rural transport across the 28 EU members and an insight into successful solutions; including their context, objectives, approach, challenges to be solved, achievements to date and transferability issues. The key findings from the current state of play are outlined in the Insight Papers; how responsibility for rural mobility is delegated at Government level, the extent to which there is defined policy for rural mobility, how rural mobility services are provided at the operational level.

The outcome is a set of recommendations that address the different layers of policy and governance in each member state. It is Time to Act and offer rural areas - “the lungs of the cities” - the well-deserved and long overdue attention that they need.



In European countries, the population tends to be centred around towns and cities in compact areas, with other larger areas being much more sparsely populated¹. However, more than a quarter of the population of the EU-28, meaning around 140 million people, live in rural and non-urban areas². In total 75% of the territory of the EU is classified as rural and the 25% classified as urban also contains many dispersed hinterlands and rural settlements³. Despite European rural areas being diverse in nature, characterised by their specific natural environments, resources and settlement patterns, they present a number of similar aspects and challenges. Reduced job and business opportunities, declining services and migration from rural to urban environments can be part of a 'circle of decline' that trap rural areas into downward conditions.



Circle of decline for rural areas

Source: ENRD Thematic Group on Smart Villages, EU Rural Review No 26

Looking back, especially for some of the western and southern countries (e.g. Greece, Croatia, Ireland, Italy) rural depopulation and emigration has been a common trend for a very long time. In some cases, this trend has stretched back to the latter part of the 19th century, with cycles of stabilisation and then recurring depopulation into the 20th century. Looking ahead, the rural population decline is expected to continue in the following years. The UN population projection estimate that in 2050, only 16.3% of the European population will live in rural areas (with respect the current value of 27%), while the remainder of 83.7% will live in urban areas.

It is important to understand whether this is a natural, optimal and inevitable outcome; or if it is an avoidable outcome that occurs due to neglect of rural areas. Most importantly, there is a need to assess whether in the future there will continue to be a lack of investment in Europe's rural areas in acceptance of their terminal decline, or if rural Europe will have a positive future, perhaps different from its past, which requires a coherent policy and continued investment. Whatever the future holds for rural Europe, there is a clear necessity for people to easily commute and for the communities to be well connected. This is the domain of 'rural mobility'.

KEY MESSAGE

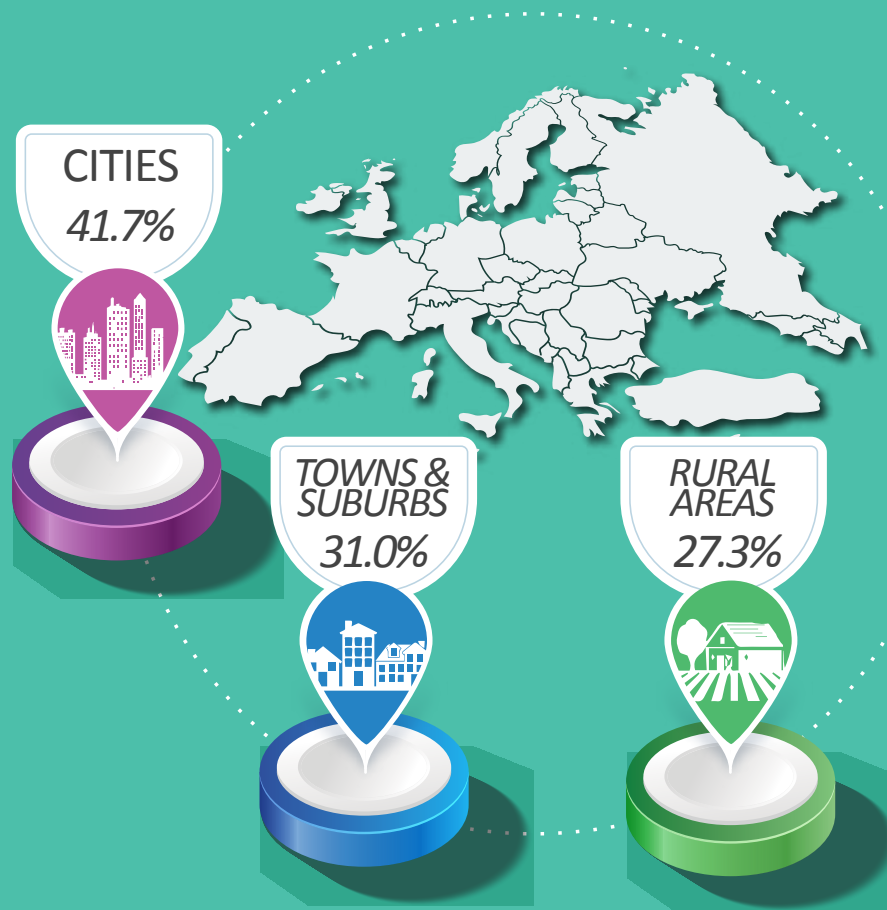
SMARTA represents a very exciting opportunity to conceptualise, identify and pilot 'smart transport services' in rural areas.

¹ UN, World Urbanization Prospects, 2018. Retrieved from: <https://population.un.org/wup/>, accessed June 2019

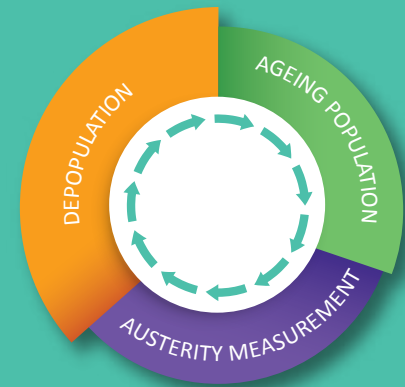
² https://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_rural_areas_in_the_EU#Main_statistical_findings

³ https://ec.europa.eu/eurostat/statistics-explained/index.php/Territorial_typologies

Currently, depopulation and migration represent common challenges that the majority of European rural areas are facing. Students, young workers and families with children have been moving from remote villages to urban centres looking for job opportunities as well as affordable and accessible services. The increase of these rural – urban migration trends not only reduces the rural population but also accentuates the percentage of aging population living in rural environments.



Rural areas key challenges Source: Eurostat 2017



Additional social and economic challenges appear or are reinforced as rural communities shrink and age: limited local job and business opportunities, reductions of basic social services and related accessibility, increased risk of poverty and social exclusion. Therefore, the accessibility and mobility services are the main problems to be faced in order to attempt to reverse these negative trends and to answer to community needs. By contrast the transport policy sector has, over the last 20 years, focused predominantly on urban and metropolitan areas. Meanwhile, there has been relatively limited effort to understand how rural mobility needs can be properly

addressed and how the transport services of those living in rural territories can be provided or improved. As a result, nowadays mobility choices in rural areas are very limited compared to those in urban areas. Urban areas have extensive public transport networks, have well-developed facilities for active modes, and policy, institutional and financial frameworks to ensure mobility and to optimise its sustainability. To a great degree, this is absent in rural areas, primarily because people and activities are more diffuse, and the mobility solutions that work in urban areas are often unaffordable or unsuitable in rural areas for different causes (from economic issues to organizational and operational dimensions).

'Mobility' can be defined as the ability to move from one place to another, for whatever reason and with whatever means of transportation. Moving with freedom⁴ is a basic need, as everyone should have the possibility to easily reach work, school, health services or leisure places. Mobility should not only ensure equal economic and social opportunities for all people, but also their social inclusion and access to other elements that ensure a high quality of life. Mobility, therefore, can be considered as the "horizontal" layer not only for going in specific places, but also for ensuring the same economic and job opportunities for all people, besides social inclusion and better quality of life. In rural areas, it is difficult to provide public transport services well-tailored to the mobility needs of different user groups and of dispersed trip origins/destinations. Such rural services are usually the result of a balance between the financial sustainability and the need to cover the main (more used) connections and low demand hours. The highly dispersed and varied mobility demand and the low number of passengers

lead therefore to high operational costs for the transport services and an increased need for subsidies. In many EU countries the provision for subsidies for rural services has been reduced in recent years, as part of the central government's objective to reduce the public spending.

The limited availability of transport services is one factor that increases car-dependency of the population in rural areas. The residents who can afford to own a car use it for most or all of their travels, while the remaining population is either captive, with reduced possibilities to participate in society, or is dependent on car users for lifts. This is clearly incompatible with policies that seek to develop and revitalise rural areas, to improve opportunities and to reduce the social exclusion rate. On one hand, these modes of travel are inherently inefficient in fuel consumption and emissions. On the other, when the large number of cars from rural areas converge on towns and cities, they contribute to congesting the urban road network, leading to further inefficiencies, emissions, delay and economic losses.

Therefore, it is time to rethink not only transport policies for rural areas but also, to define new approaches and services schemes for the possible transport solutions, based on the potentials of new ICT devices and IT tools.

In this context 'shared-mobility' could be an essential part of the transport solution set to deal with rural mobility challenges and needs, both by combining travellers more efficiently, and by improving the accessibility for different user groups. 'Shared-mobility' generally refers to modes and services that are additional to the conventional route-based public transport operated by buses. This concept increases demand for responsive transport, shared taxis, car-pooling, car-sharing, community/volunteer schemes, etc.

Shared mobility services include both the mobility services themselves and the supporting services such as traveller information, reservations, payment and operations management.



Currently, in almost all the EU-28, shared mobility solutions are not key competitive alternatives to the private car. Community-based solutions with volunteer drivers could be a sustainable and money-saving solution for sparse and remote villages, although widespread initiatives seem to be implemented only in France and Germany. Demand Responsive Transport (DRT) services could partly be an answer to the challenges of mobility demand in rural areas. However, the full integration between the public transport network and DRT / other shared mobility services (where they are implemented) is present only in few countries such as Austria, Denmark and Netherlands. Integration of services, both digitally using journey planning and payment apps, and physically through provision of quality hubs, is generally lagging behind in rural areas, although there are notable exceptions.

KEY MESSAGE

Shared mobility is an essential part in providing rural transport services well-tailored to user needs.

How SMARTA fits in the current rural context

At the initiative of the European Parliament, SMARTA sets out to (i) understand existing frameworks for rural mobility across Europe and how these can be improved; (ii) gain knowledge of the mobility problems, needs and preferences of people living in and visiting rural areas; and (iii) understand how rural mobility Good Practices can be used to inspire enhanced rural mobility services. In essence, SMARTA is contributing to **Rethinking Rural Mobility** for an inclusive, prosperous and sustainable Europe.

During 2018 and early-2019, SMARTA carried out an in-depth analysis of the rural mobility frameworks in the EU-28 Member States and selected third countries. This was done through desk research and direct contacts with national ministries, regional and local authorities, transport operators, academics and research institutes. These activities resulted in the production of a set of **Insight Papers**, describing each national framework (policy, legislation, obligations, resources, targets, etc.) within which rural mobility is implemented in European countries. In parallel, the project

identified a set of **Good Practices** in rural mobility, not only related to conventional public transport but also extended to innovative transport forms based on “shared-mobility” schemes for the residents of a rural area, vulnerable social groups and for visitors and tourists (a group that can result in highly variable demand). In the second period of the project, SMARTA will engage with selected pilot sites with the aim of gaining a deep understanding about key findings, lessons learned and transferability issues of different kinds of pilot experiences in the rural mobility domain. In 2020, a final conference will be organized in Brussels where the SMARTA results will be shared with the European, national and regional stakeholders and policy makers.

In a nutshell, SMARTA aims to provide a deep understanding of how policy should be developed for rural shared mobility; what solutions work best in what contexts, estimating how various target groups will respond; what impacts a new rural mobility policy could have on economic, social and environmental challenges facing Europe; and whether/how to interface shared mobility options with the conventional public transport.

KEY MESSAGE

SMARTA sets out to gain a deep understanding of the key findings, lessons learned and transferability potential of different kinds of mobility experiences in rural areas across Europe.

As a first step, the SMARTA Consortium did a comprehensive rural mobility analysis across all European Member States and selected third countries. The focus was on related national frameworks within which rural mobility is organised, taking into consideration the specific policy (if any), the role of the local and regional authorities and the financing mechanisms. The research also focused on where and how these frameworks vary across Europe.

Currently, the policy and planning frameworks for rural mobility are broadly similar to the frameworks for urban and metropolitan mobility. In practice,

while the latter achieve more positive outcomes for European cities, when it comes to rural mobility, the countries analysed do not make the same level of commitments. This is despite many of the existing policy and planning frameworks acknowledging that innovative mobility services, such as ride-sharing services, Mobility as a Service (MaaS), app-based ride-hailing or e-hitchhiking could have a significant potential to provide solutions in sparsely populated areas, where public transport cannot be efficiently provided.

KEY MESSAGE

Currently, the policy level pays little attention and makes few commitments for rural mobility.

Understanding rural mobility in Europe started with identifying important elements of the local context: geography, demography, institutional, regulatory, organizational, policy and financial frameworks. This knowledge converged into shaping the national framework within which rural mobility exists. SMARTA has identified five major themes for rural mobility in Europe that need to be refined in order to better understand the differences between EU countries:

THEME 1: WHO IS IN CHARGE FOR RURAL MOBILITY?

THEME 2: IS THERE ANY RURAL MOBILITY POLICY?

THEME 3: WHO PROVIDES RURAL MOBILITY SERVICES?

THEME 4: ARE THERE ANY COMPLEMENTARY SERVICES TO RURAL MOBILITY?

THEME 5: HOW RURAL SHARED MOBILITY IS REGULATED?

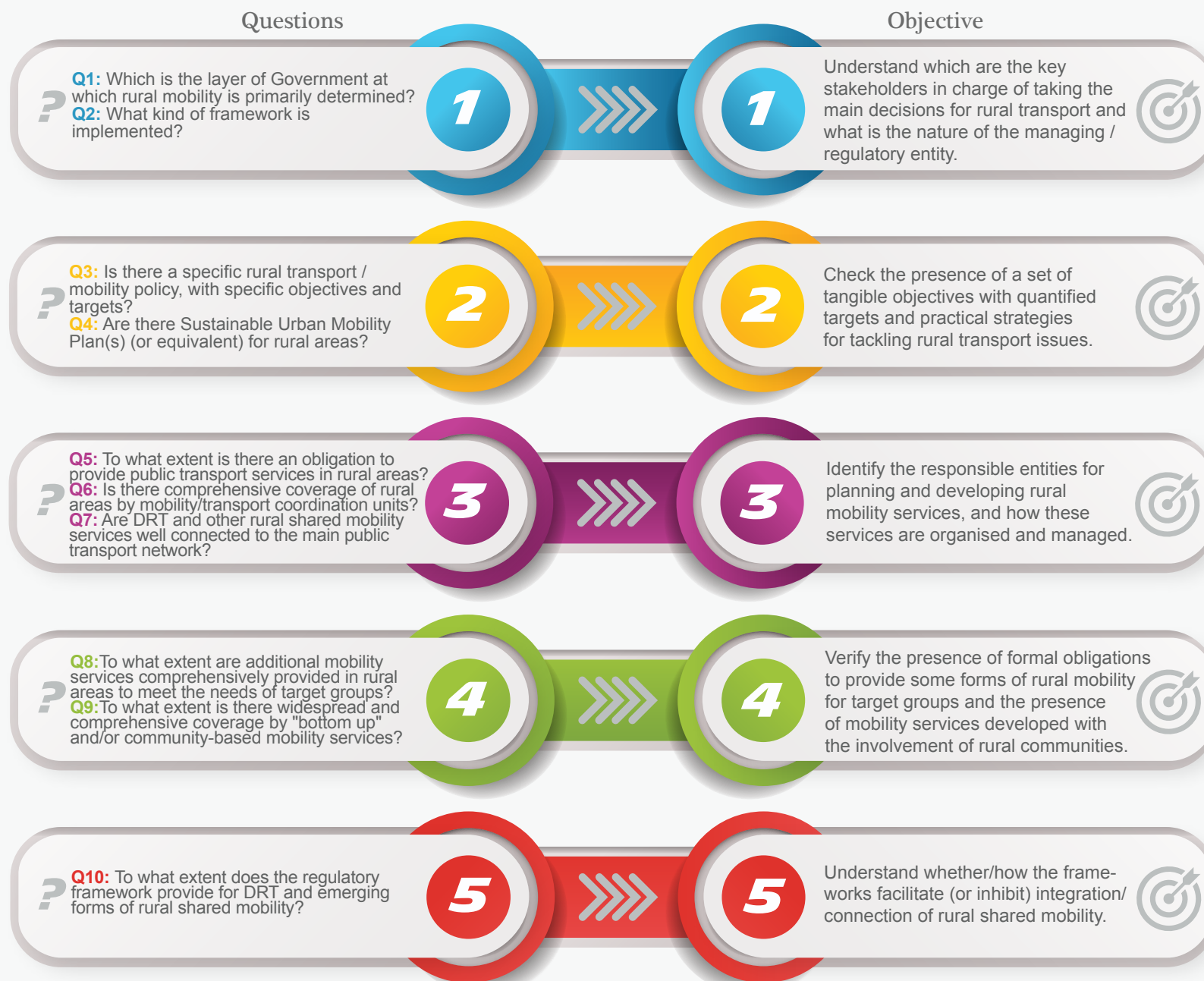
The following figure presents the five themes together with their corresponding research objective and a more specific research focus. Conclusions for each focus area are presented in the following pages.

The following themes provide an overview of the various practices and frameworks which exist in European countries, while creating the context to better understand which frameworks are ineffective or defective.

KEY MESSAGE

In most European countries, there is no dedicated framework for mobility in rural areas, but it needs to be designed.

Questions and Objectives for comparison of EU Member State Framework





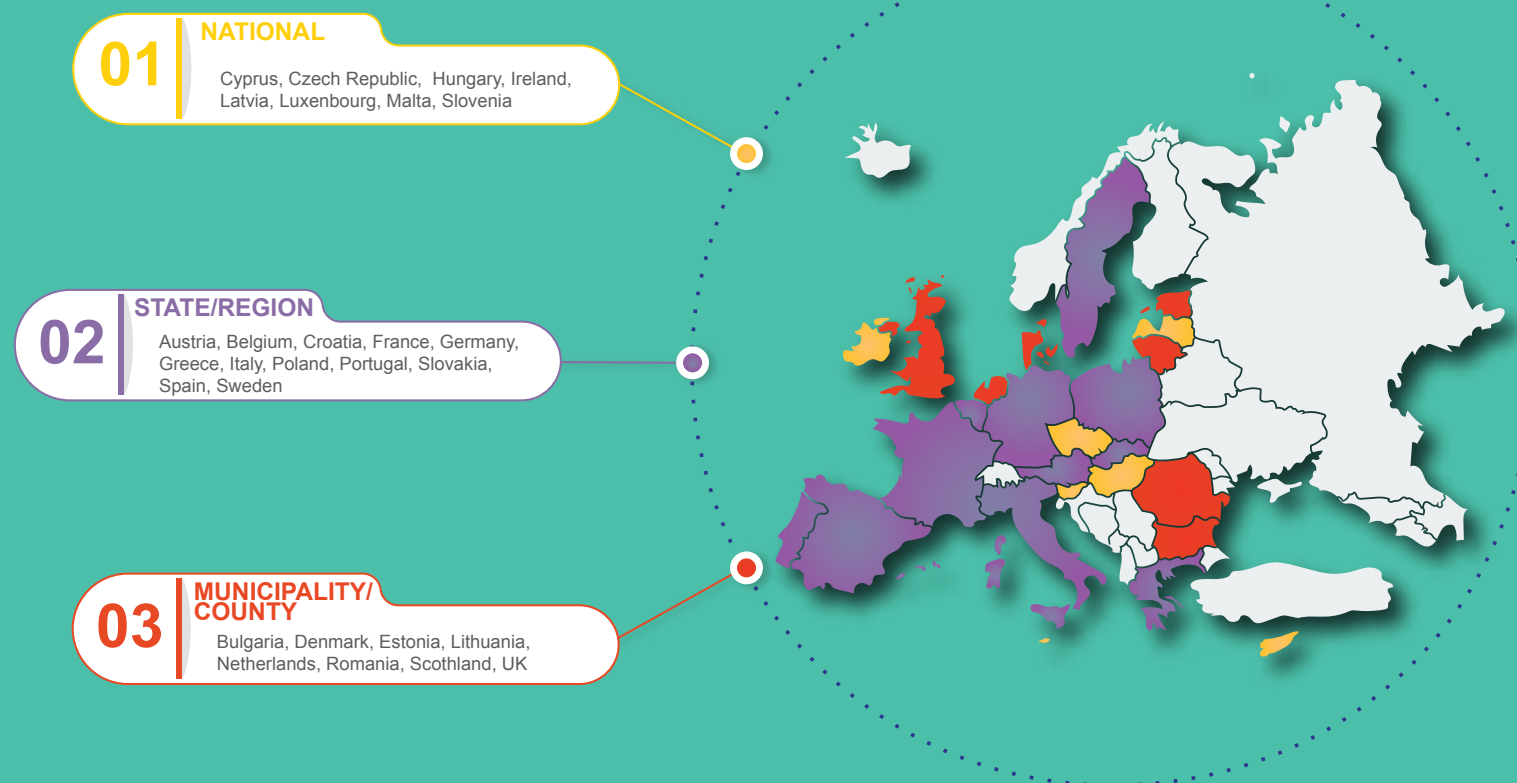
Theme1: Who is in charge for rural mobility?

The research examined the responsibilities and allocation of the Government agencies' roles in relation to mobility in rural areas. The focus has been on the administrative level, which determines rural mobility on the consistency of national frameworks throughout the country.

Layer of Government at which rural mobility is primarily determined

Current practices show considerable variation within European Member States when discussing the layer of Government at which rural mobility is

primarily determined. In the majority of countries, this happens at the sub-national level, either being the State/Region or the Municipality/County. For smaller countries, which do not have a regional structure, the National level provides the primary determination for rural mobility.



Layer of Government at which rural mobility is primarily determined

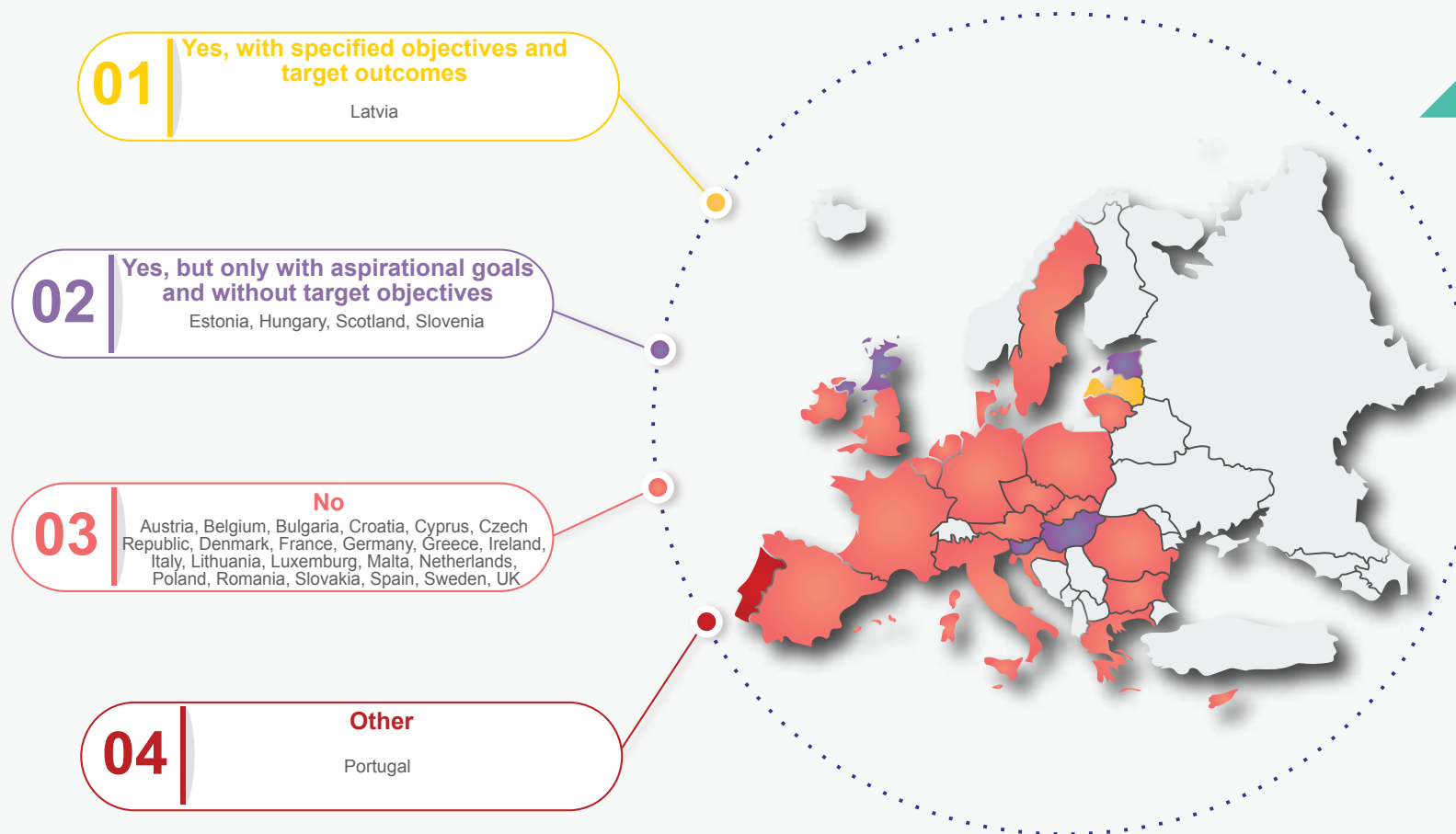
Nature of the framework throughout the country

The dominant model throughout Europe is a common national framework, which permits regional or local variations. The framework is coordinated at the national level, through laws or directives, while the planning and organizing of

rural transport is carried out at regional or local level. Smaller European territories are characterised by a single consistent framework throughout the country. In contrast to this, there are major variations within some Member States where the regions have considerable autonomy.



The analysis focused on whether there is a vision or policy framework for mobility in rural areas, either as a dedicated rural area(s) policy, or as a substantive part of a general mobility policy. This was further detailed into the following research strands, one focusing on existing policies, while the other focused on well-established planning practices for rural mobility.



Presence of specific rural mobility/transport policy with objectives and targets

Presence of specific national rural mobility/transport policy with objectives and targets

Europe is characterised by the lack of national policies dedicated to rural mobility and lack of any specific national commitment to provide transportation services. However, there are a few countries who acknowledge the need for improved rural mobility, albeit this remains in aspirational terms, without firm objectives, targets or committed funding.

At sub-national level the issue is more nuanced, particularly in countries with considerable regional autonomy, where some regions are more advanced in developing rural mobility policies together with corresponding targets.

“Latvia is the only country with a national target-based rural mobility policy, while Flanders (BE) is a region with strong target-based rural mobility policy and obligations.”

Presence of Sustainable Urban Mobility Plans (SUMP) or equivalent for rural areas

Sustainable Urban Mobility Plans have become fairly common throughout Europe as a tool for organizing and planning the transport system in urban and metropolitan areas.

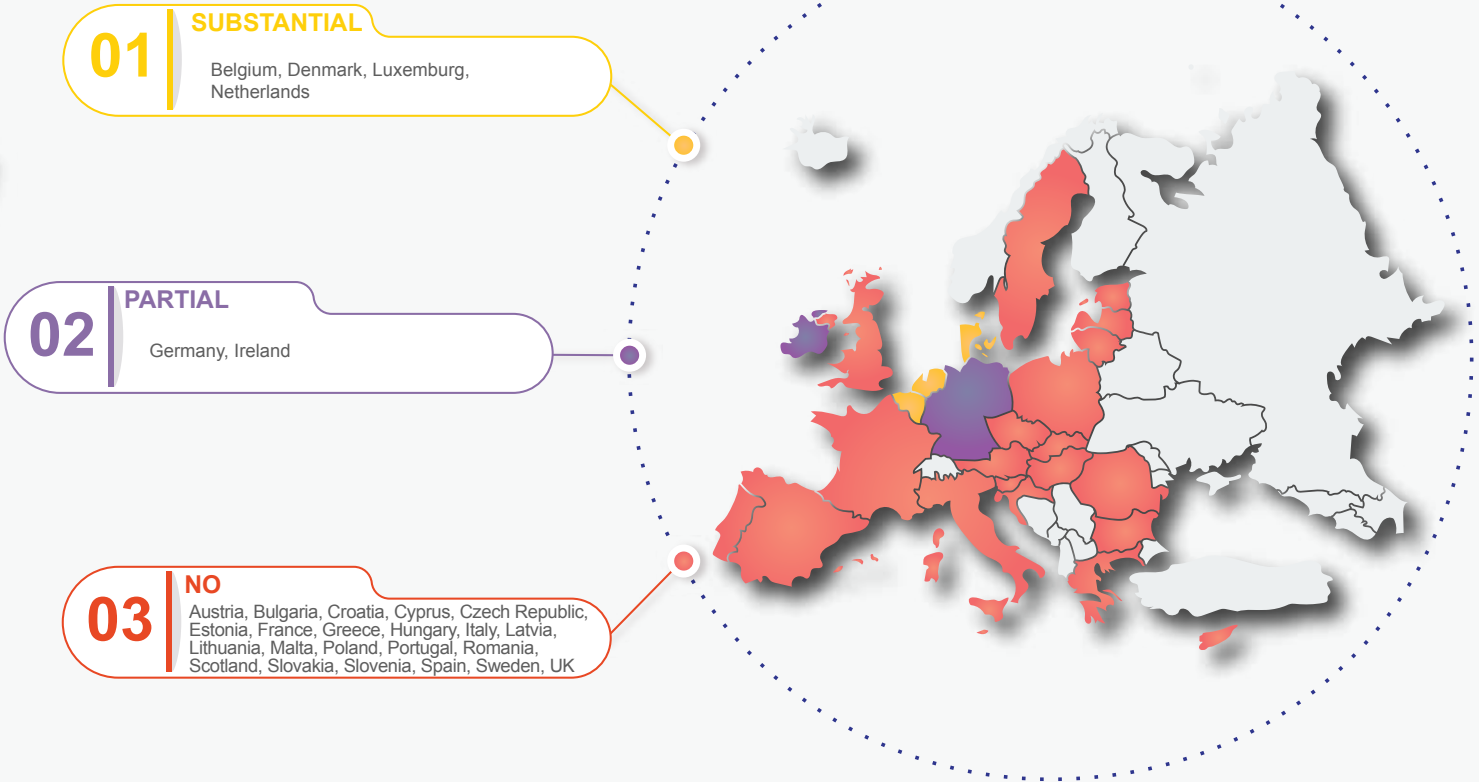
Furthermore, the impact of SUMPs has extended to the surrounding metropolitan areas. However, a corresponding common methodology has not yet been developed to address predominantly rural areas or the extension of a sustainable metropolitan mobility plan to its hinterlands.

There appears to be no similar concept developed to address strategic planning for sustainable rural mobility, particularly one which considers a rural area as having its own identity and requirements. Such rural territories are generally perceived as an “extension of an urban area” in terms of transport planning.

“Slovenia is leading the way in widespread use of SUMP-equivalents for its extra-/non-urban areas, while Flanders (BE) is one region that has now adopted the process”.

Theme3: Who provides rural mobility services?

The organisation of the rural mobility services that currently exist was analysed focusing on existing obligations for providing rural mobility services, existing mobility transport units which coordinate a wide range of mobility services in rural areas and the state of integration between the main public transport network and DRT servicing rural areas.



Presence of comprehensive territorial coverage by transport/mobility units which coordinate a range of rural mobility services

What are the modes of providing transport services in rural areas?

Current practices show considerable variation at the European level, ranging from mandatory provision of rural mobility services to scarce provision dependent on inter-urban routes passing through.

The majority of Member States are characterized by a lack of defined obligation to ensure public transport to rural areas. However, half of these countries leave the transport services at the discretion of the local authorities, while the other half provide services as a result of inter-urban and regional public transport services passing through.

Specific obligations to ensure public transport in rural areas were identified in only four Member States (Austria, Belgium, Cyprus, and Latvia).

Are there organisations that coordinate a range of rural mobility services?

The majority of the Member States do not have any organised form to manage the transport services in rural areas. There are only four Member States (Belgium, Denmark, Latvia, Netherlands) that have such a system of coordination units, responsible for a range of rural mobility services, including those for social and healthcare-oriented target groups.

The lack of coordination activities in EU countries reflect (i) the lack of organised rural mobility services for the general public and (ii) the fragmentation of governing bodies in rural areas.

“Ireland has full territorial coverage, but lacks a consistent level of service”

What is the connection between DRT (and other forms of shared mobility services) and regular public transport?

DRT services are a critical domain for rural shared mobility solutions and their connection and coordination with regular public transport systems is of primary importance.

The majority of European countries do not have connections between DRT and public transport; this is a consequence of a lack of DRT/ rural shared mobility services in the country or due to lack of integration between these services and public transport.

Only three Member States (Austria, Belgium, Denmark) have a fully planned connection of the DRT with the public transport network, while an additionally five countries have a reasonable degree of coordination between these services where they occur.

Theme 4: Are there any complementary services to rural mobility?

The SMARTA research reveals other forms of organised mobility services that have been developed to meet the specific needs of rural communities: these include obligatory mobility services to specific user groups, such as for schoolchildren (“top-down” approach), and also the services that are generated by the rural communities themselves (“bottom-up” approach).

Presence of organised mobility services for certain user groups

The vast majority of the Member States have specific policies for providing dedicated transport services for schoolchildren or young students. This means that these types of mobility services are formally organised and managed by the national governments.

In four Member States (Austria, Croatia, Cyprus and Hungary) targeted mobility services are organised by the local or regional level, without a national obligation being in force.

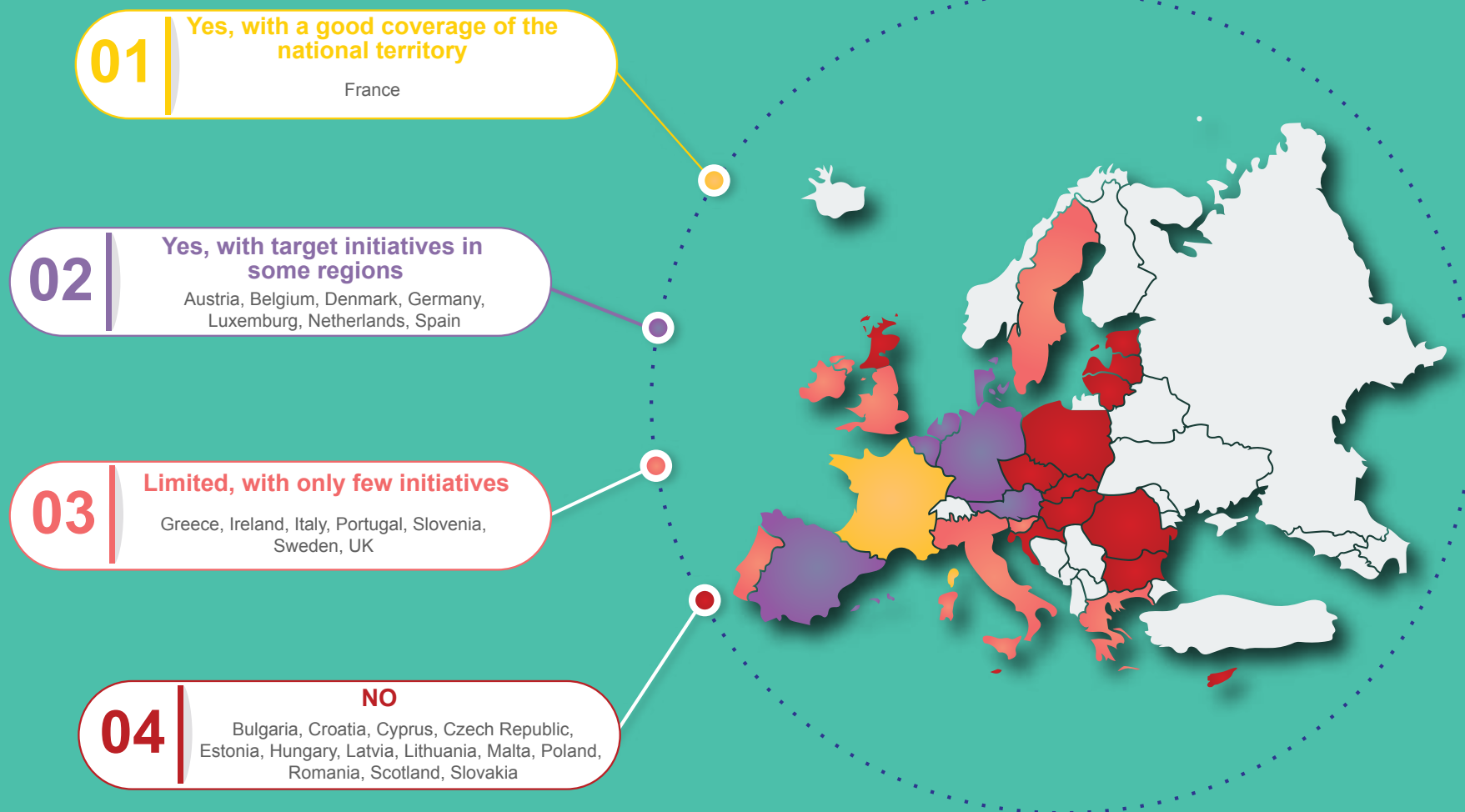
School transport was the main targeted mobility service identified in rural areas. Transport services for general healthcare are not nationally provided or mandated for rural areas almost anywhere throughout Europe, although there are different types of services for the healthcare in rural areas. Such services are often dedicated to their clients and are not available for use by the general public. There is little evidence on other type of mobility services formally organised for other types of user groups.

Presence of widespread provision of ‘bottom-up’ and community mobility services

More than half of the Member States have, to some degree, community initiatives to provide mobility services in rural areas. The most noteworthy case is France, where such services have a good coverage of the national territory.

'Bottom-up' rural mobility initiatives are widespread at the European level, but it is more difficult to define or categorise them. In most cases, such services are organised and funded by non-transport agencies, catering to the needs of specific target groups, and they are rarely cooperating with regular mobility service providers. Additionally, in some areas, local communities came together and organised shared mobility solutions among community members.

"France, with the e-hitchhiking scheme RezoPouce, is the only case of almost-nationwide 'bottom-up' initiative in rural mobility. Austria and Germany have many cases of Bürgerbus, while Belgium, Denmark, Germany and Netherlands have growing number of locally initiated car-pooling and car-sharing schemes".



Presence of widespread provision of 'bottom up' and community mobility services



Theme5: How rural shared mobility is regulated?

Analysis on the role of the regulatory framework, particularly its flexibility for shared mobility services.

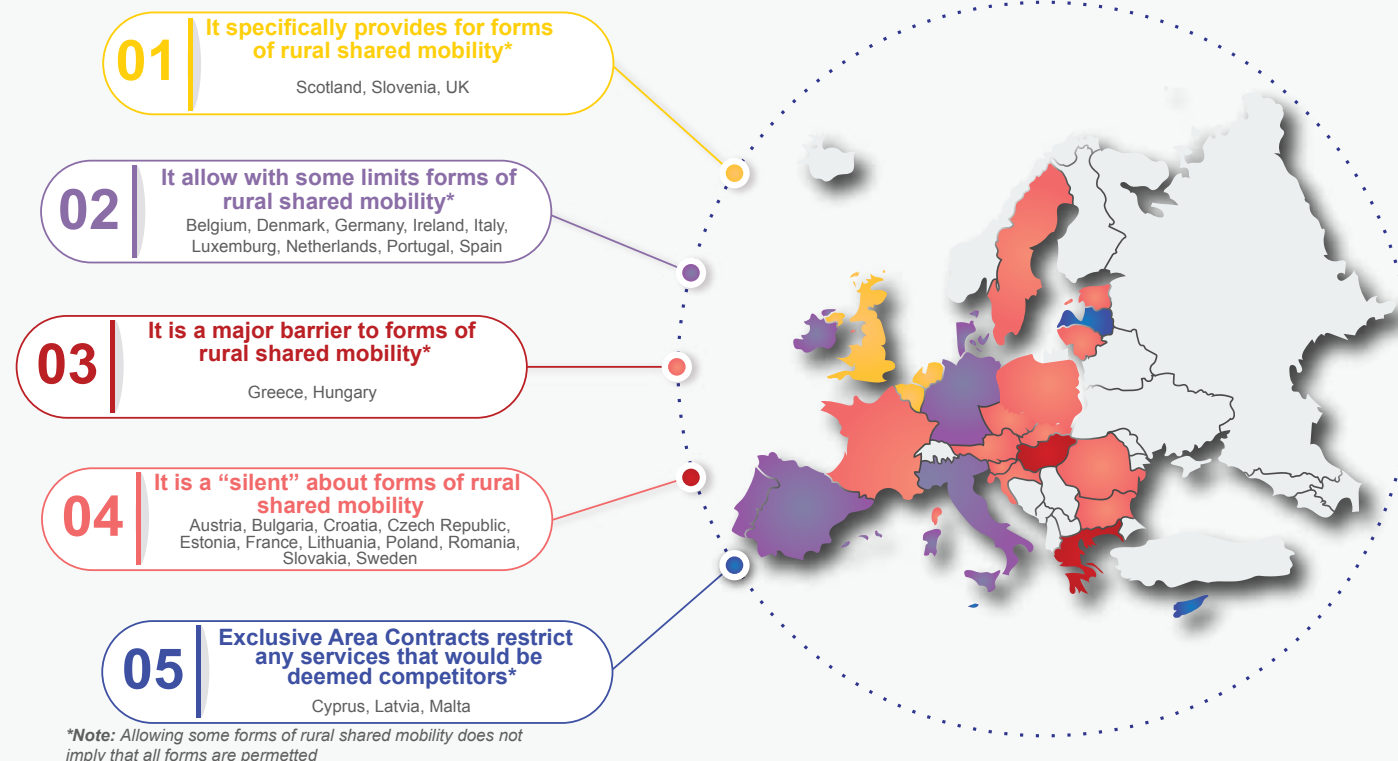
Extent to which the regulatory framework provides for DRT and emerging rural shared mobility

There are considerable variations throughout Europe in terms of legislative recognition of emerging rural shared mobility services. Regulatory frameworks range from including DRT and other forms of rural shared mobility, to simply not mentioning any form of shared mobility. These are clear barriers for developing such services. In general, public agencies initiate or facilitate DRT under their own powers, but it is not clear that a

similar private or community-initiative would have any legal standing or basis to be authorised by the regulatory agencies.

Further, in some countries the general financial support for mobility may only be channelled to “public transport”, which excludes any form of shared mobility not categorised as such. In other countries, it is at the discretion of the organising authorities what service types they will support and how much funds they allocate.

In the context of a lack of a specific regulatory and financing framework for rural shared mobility in European Member States, there remains a lot of uncertainty as to whether it is possible to operate and sustain such services.



Extent to which the regulatory framework provides for DRT and emerging rural shared mobility

KEY MESSAGE

Rural shared mobility is a challenge throughout Europe. There are examples in different Member States that demonstrate how a successful rural mobility scheme can be operated. However, the challenge remains to combine all of the necessary elements to ensure that a comprehensive framework for rural mobility can be developed throughout Europe.

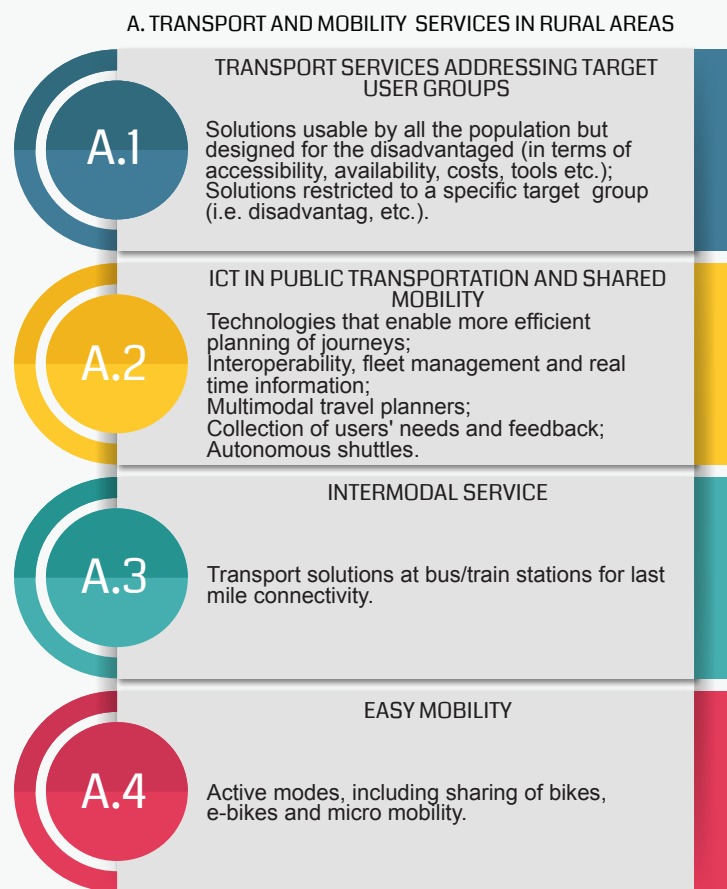
Rural communities have limited resources that should not be wasted on developing services from scratch when they could easily learn from the best practice of others.

During 2018 and 2019, the SMARTA Consortium has made a comprehensive overview⁵ of Good Practices in rural shared mobility from around Europe and beyond. The overview covered a wide range of aspects such as how the mobility solutions and regular public transport services can be targeted to specific user groups or community goals. It also addressed the topic of operational practice and intermodal coordination. The use of

established and innovative technologies, new business and governance models have been analysed. Last but not least, the overview presented potential strategies for increasing community engagement, ridership and customer relationships. In particular, the Consortium set out to identify two broad categories of Good Practices (GPs):

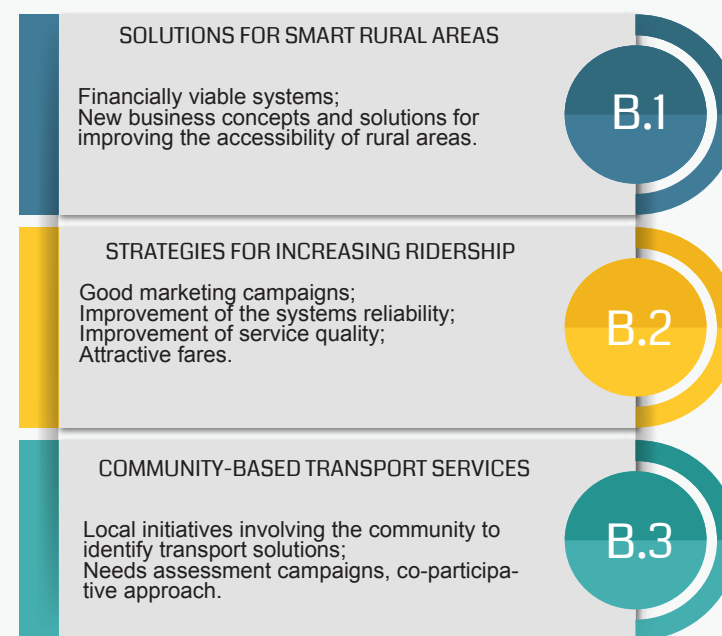
A. Transport and mobility services in rural areas – providing examples of successful and innovative public and shared modes of transport.

B. Organisational Aspects Enabling Sustainable Rural Mobility



Key organisational issues in rural mobility

B. ORGANISATIONAL ASPECTS ENABLING SUSTAINABLE RURAL MOBILITY



SMARTA identified and analysed over 30 rural mobility schemes; these are considered Good Practices for the knowledge on certain aspects of the organisation and implementation of a rural mobility scheme. They have also been analysed for their potential to integrate with conventional public transport services. The integration of these services with new ITS solutions defines four types of rural share mobility services:

- Conventional or regular public transport
- Flexible collective transport
- Vehicle sharing
- Individual transport.

⁵ Projects that have covered rural mobility good practices:
 LAST-MILE Project - <https://www.interregeurope.eu/lastmile>,
 EuroMontana Association - <https://www.euromontana.org>,
 MAMBA Project - <https://www.mambaproject.eu>,
 Hi-Reach Project - <https://hireach-project.eu>,
 RuMobil Project - <https://www.interreg-central.eu/Content.Node/rumobil.html>



Map of SMARTA Good Practices

Two notable good practices are the RezoPouce hitch-hiking service in France and the Bürgerbus services in Germany.

RezoPouce⁶, France

RezoPouce is an organised hitch-hiking service. It emerged in 2009 as a result of the common idea of 10 municipalities in the North of Toulouse to offer an alternative solution to a local bus service which was characterised by a low number of users and high operating costs. The RezoPouce Association was officially created in 2012, and in June 2013 it succeeded in grouping 80 local authorities. It is now deployed in around 2,000 municipalities across France, covering approximately 20% of rural areas where - much like of the rest of Europe - people without a car do not have viable transport options and public transport is not financially sustainable.

In the year that the service was introduced, the degree of penetration among the population was 1-2%, with an average 1% increase the following years. Considering that two million inhabitants live in the served area, this means a baseline of 20,000-40,000 users (an average of 20-40 for each local authority).

From the governance point of view, the service is organised by the local authorities, with the support of the RezoPouce Association, which provides the know-how and training. The association groups local authorities, mobility stakeholders, highway/public transport operators, employees and users. An interested local authority provides RezoPouce with a fee (proportional with the number of inhabitants) for the services it offers. The service is completely free for the users.

RezoPouce strives to overcome the drawbacks of classic hitch-hiking, such as: a subjective feeling of unsafety and uncertainty by allowing the management of personal info with an ID card, a photo. Their app. also plays a big part in making transportation safe and accessible, matching demand and offer of hitch-hiking as well as offering travel information services. It also provides well-recognisable visual identity tools, such as: smart cards for the end-users, stickers to put on car windows, a list of hitch-hike points.



⁶ <https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-Rezopouce.pdf>



Bürgerbuses, Germany

Bürgerbus⁷ is a volunteer-based community transport service operating in different regions of Germany, mostly within Baden-Württemberg, Lower Saxony and North-Reine Westphalia. Bürgerbus complements the conventional public transport services in rural and semi-rural areas, where the mobility choices are limited. Currently, a total of around 350 Bürgerbus services are operated, of which more than 80 in Baden-Württemberg and more than 130 in North-Reine Westphalia. Bürgerbus are financially sustained by a combination of state and private funding.

The success of this shared transport solution is proven by the continuous increase of services and covered areas, which has increased substantially in the last ten years. Furthermore, only 25 shared transportation services are reported to have closed down since the first services began operating in the '80s. The first community services went into operation in 1985, focusing on the Baden-Württemberg experience. By 2010, 10 Bürgerbus services were operating, with the service being officially recognized by the Regional Administration who started to financially support the system. In September 2014, the Association pro Bürgerbus Baden-Württemberg was established in order to coordinate and support the development of the service at a regional level. The same year, the service arrived to 40 operational Bürgerbus services.

The Bürgerbus services are mostly operated as conventional public transport services with fixed routes and timetables, although in some areas Bürgerbuses are operated on-demand, with advance pre-booking. Although Bürgerbuses are available to the general public, most users are elderly people with reduced mobility, youths and families with children.

The set-up of a Bürgerbus service starts when a local community expresses the intention to organise a transport service by itself. This intention needs to be positively accepted by the local authority which assumes the relatively low residual costs. The local transport company integrates the Bürgerbus in its transport offer and the Region co-funds the purchase of the vehicle. In Baden-Württemberg the Bürgerbus Association monitors the service performance, collects the users' feedback and assesses the mobility needs regularly in order to better serve the area.

This good practice highlights an adequate level of cooperation between citizens, local and regional authorities and private companies (transport operators). This collaboration is meant to develop a transport solution that responds to the mobility needs of people in rural and semi-rural areas. It is acknowledged that the fairly high level of public funding plays a key role in the service setup (vehicles' purchase), which makes replication in many EU countries and contexts challenging.

⁷ <https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-BurgerBus.pdf>

Good Practice innovation and success factors for transferability

A comparative appraisal between similar Good Practices has been made by SMARTA resulting in a composite view of the state-of-art of mobility services in rural areas. The principal objectives of this work have been to highlight those aspects of the Good Practices that could be seen as innovative and which have contributed to their success.

To enable a comparative evaluation of the Good Practices, a simple canvas methodology has been developed in order to present examples of **innovation and success factors** from different cases. The diagram is broken down into four main segments based on four types of innovation (classified by OECD and Eurostat⁸). These types of innovation can be summarised as:



1 ORGANISATIONAL

Innovation and success factors relating to governance, organisational structures, legal frameworks and operational practices

2 PLANNING AND IMPLEMENTATION

Innovation and success factors including significantly improved techniques for data collection and analysis, service planning and evaluation, service/ITS procurement and implementation

3 BUSINESS MODEL AND MARKETING

Innovation and success factors relating to the way in which a service is marketed, customer relations are nurtured and/or the way the product or service is financed

4 PRODUCT AND SERVICE

Innovation and success factors in the services provided to customers and in the level of quality in order to match unmet needs of the potential users and/or to make the service more customer oriented.

⁸ Oslo Manual: Guidelines for collecting and interpreting innovation data^{*} - 2005, 3rd Edition, OECD publishing

Identifying the four types of innovation to develop the comparative appraisal has been helpful as the Good Practices can be seen to have different strengths. For instance, some have been particularly effective in engaging the community through their organisational set up, whilst others have developed more advanced ICT solutions for journey planning and interoperability. Additionally, the level of information available for each Good Practice is not consistent, so it is not always possible to directly compare the cases on similar terms. A more complex approach to ranking or scoring the Good Practices could therefore become misleading and not fully take into account the background context.



An overview of the SMARTA innovation appraisal

A summary of the comparative appraisal of Good Practices that was undertaken for three main categories of measures: Rural conventional bus services; DRT; and Shared Mobility.

Rural bus networks

Public bus services are often the main or only form of transport for people in rural areas, and as they can be viewed as costly (based on Euros per passenger km), they are vulnerable to budget cuts and neglect.

Unfortunately, these services are often designed based on historical data and on the constraints for their operation. The SMARTA Good Practices demonstrate that where services have been redesigned based on an in-depth assessment of the evolving needs of citizens, a spiral of decline can be halted and reversed, as the rationalisation has been balanced by investment in journey reliability and passenger comfort.

ALBA COUNTY (RO)

Rationalisation of previously disjointed rural and urban networks, alongside investment in new vehicles, resulted in a 43% increase in trips made.

MULDENTAL (DE)

A total re-design of the bus network comprising 34 lines, including improved service frequencies and 66 new bus stops, resulted in a 10% increase of PT users in just six months.

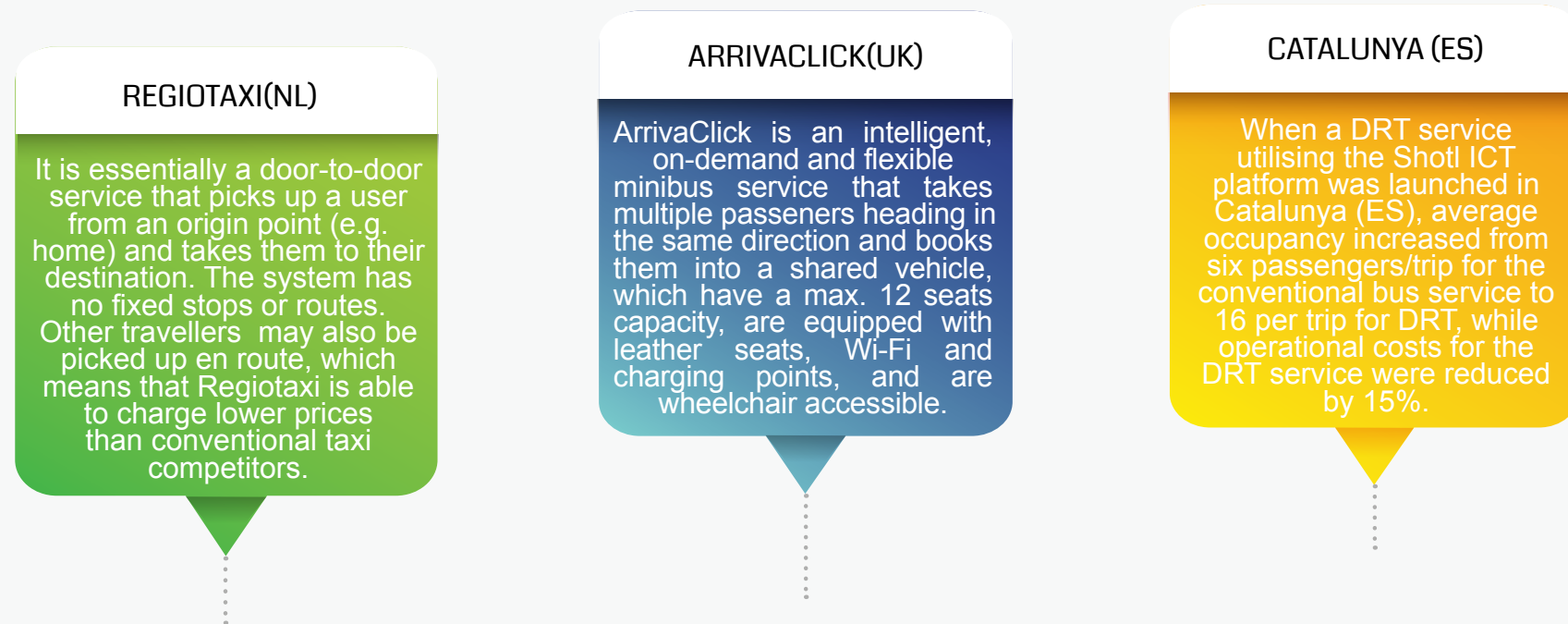
ALPINBUS (CH)

This case demonstrates the value of providing services responding to seasonal spikes in tourism demand, which enable people to switch from the use of the private car to more sustainable transport modes.

Demand Responsive Transport

DRT is a flexible mode of public transport, typically involving minibuses, where the route and time of pick-up adapts to the demands of its users. Since the 1970s and the creation of 'Dial-a-Ride' services, DRT has been promoted as a transport solution in circumstances where more traditional services are not economically viable and is often therefore viewed as a key component in a rural mobility offer.

The SMARTA Good Practices represent a spectrum of primary objectives and an evolution of DRT services, ranging from, **mobility services of 'last resort'** for rural communities, such as **RegioTaxi (NL)**, through to what could be viewed as a **premium form of public transport**, including the case of **ArrivaClick (UK)**. Recent years have seen the emergence of ICT platforms involving a smartphone app for the passenger, a centralised route planning and optimisation programme (as in **Catalunya (ES)**), and an integrated routing app for the vehicle driver. These help to enable faster response times and have the potential to reduce operational costs; moreover, this solution is in line with the service level experienced by users with other kind of services (i.e. Uber, Lyft, etc.).



None of the SMARTA DRT Good Practices are currently operating without public subsidy (which of course is also the case for urban public transport throughout Europe). Nevertheless, the evidence presents a picture that DRT is able to both increase user numbers and reduce operational costs in rural areas when compared to conventional fixed-route public transport. In some cases, rural DRT mobility services are focussed on specific target groups and it is suggested that a flexi-schedule approach, combining flexible services with fixed services for specific trip types in off-peak periods (e.g. healthcare services, youth sports clubs and leisure activities etc.) further improves the business case.

Shared mobility

SMARTA review of Good Practices demonstrates real diversity in how well-known forms of shared mobility have been adapted to suit local circumstances and budgets, in many cases reinvigorating older practices.

An important distinguishing feature between the Good Practices is whether the vehicle is collectively owned (by the municipality, local company or community group) or whether it depends on some form of peer-to-peer vehicle or lift sharing (e.g. **Talybont Car Sharing (UK)**). For public authorities that have very constrained budgets, fostering the latter forms of shared mobility could provide an opportune way to improve the range of

mobility possibilities for people in rural areas, supplementing existing public transport networks. Good Practices involving use of privately-owned vehicles include **Sopotniki car journeys for older age groups (SI)**.

Appraisal of peer-to-peer sharing Good Practices shows how informal networks and community goodwill can lead to steady expansion of schemes that have started at a very small scale.

TALYBONT CAR SHARING (UK)

The scheme is a good example of a grassroots level initiative that is driven by the local community for the local residential population. This encourages a greater element of ownership among locals to keep the initiative going.

SOPOTNIKI (SI)

The service had 31 volunteers in 2017, which had risen to 47 active volunteer drivers in 2018, providing trips for 350 users.

REZOPOUCE (FR)

Service expanded rapidly from 80 participating municipalities in 2013, to a predicted 2,000 municipalities by the end of 2020, covering 20% of rural France.

As a result of the early outcomes from the SMARTA project, the European Commission extended the SMARTA programme with a demonstration project - SMARTA2. It aims to implement shared mobility solutions in East Tyrol (Austria), Trikala (Greece), Águeda (Portugal) and Brasov (Romania). These four European rural areas, spanning different geographies, populations and mobility challenges will be setting up different sharing services, interconnecting them with the existing public transport offer to improve the range of mobility options for the local inhabitants. The SMARTA 2 project will provide important additional good practices and further geographical coverage to the main SMARTA project.

There is a need for a new vision for European rural areas based on community empowerment, developing local knowledge and establishing clear objectives in terms of sustainability and environment targets. Rural mobility is one of the main “tools” for enhancing accessibility to services and the “freedom” of movement, which decreases the risk of social exclusion of specific citizen groups and depopulation of the rural area.

Rural mobility and related transport services have a direct impact on the overall development of rural areas and regions. Demonstrating the value, impacts and feasibility of rural mobility can be the key to achieving long-term benefits for the communities. To this extent it is important to define transport services that are well tailored to different areas and population groups, integrating shared mobility services with the public transport.

KEY MESSAGE 7

“The time to act is now! Rural mobility needs more attention as it is critical to the overall sustainability of rural areas”

How European policies should be improved?

Rural mobility needs strong policy support. Although a few Member States have set up a specific framework for rural mobility, in general both at European level and Member State level there is a lack of relevant policy and related intervention plans for rural mobility.

The EU could play a major role by encouraging Member States to formulate policy for mobility in rural areas, with the goal to achieve better outcomes for rural mobility. It would be a matter for the individual Member States to identify the most suitable path for setting and achieving the established goals and targets.



The EU could also facilitate the take-up and engagement actions of Member States in the rural mobility framework as it does for other sectors and for other mobility/transport domains (sustainable urban

mobility, Intelligent Transport Systems, etc.). It could prepare specific guidance and directives, if/where required, regarding shared mobility and public transport in rural areas or regions.

Recommendations:

1

EU to encourage Member States to develop and adopt policy for rural mobility with specific goals and targets, and to develop the implementation and financing plan. The EU sets only the obligation and the broad framework, the individual Member States develop the policy and plans as best suits their territory.

2

Considering the current limitations regarding expertise and experience in the domain, European effort is required for guidance, methodology, tools and know-how. Additionally, in order to facilitate the take-up and to reduce the mistakes it is important to disseminate the results emerging from practice.

3

Facilitating suitable financial mechanisms at the European level for the deployment of rural mobility services as part of the overall transport system. Different approaches or pathways could be defined at EU level for inviting the Member States to finance rural mobility provision (such as shared or conventional services).

4

Funding demonstration programmes dedicated to rural mobility services could be used as an important instrument to deliver the Smart Village concept. This would provide European support to rural mobility, similar to the support received by urban mobility over recent decades.

5

Good practices inspire. The sharing of results from successful initiatives can be the key to gaining political backing and unlocking funding.

What can be done at national level?

In many European Member States, planning for mobility in rural areas does not have a dedicated framework at the national level. Usually it is generalised under different national planning frameworks, which might not sufficiently address the specific problems. The difficulties in coordinating rural transport services which cater to different target groups can aggravate problems of social exclusion.

A specific and focused regulatory framework for rural mobility and transport services is essential. Such a framework should have clear and well-defined targets. The framework also has to make provision for both current and emerging forms of rural shared mobility.

Recommendations:

1

There is a need for a policy and planning framework for rural mobility at national level; it should specifically support the design of the mobility in rural areas. Such a framework would provide the opportunity to set national targets, assign specific responsibilities and develop the needed financial mechanism to achieve the required mobility levels.

2

Developing a specific policy framework for rural mobility ensures consistency throughout the country, being particularly important in reducing regional disparities for those Member States with a high level of regional autonomy (e.g. Belgium, Germany, Spain).

3

Increasing the coordination and integration of mobility services in rural areas can lead to significant benefits. National bodies that coordinate rural mobility services in dedicated areas represent an opportunity to provide integrated services which better cater to the communities and reduce overlapping activities or responsibilities in optimising the funds and resources.

4

National authorities could be more active in updating the regulatory framework, to better provide rural mobility in different forms, including emerging rural ride sharing services. National authorities could provide financial support for developing and operating the services and create the context for increased coordination and integration of the specific shared mobility services with the conventional public transport network.

What can be done at local/regional level?

Local communities know better what type of transport they need; it is expected that communities proactively design and implement specific rural mobility schemes that better address their particular needs. This could be a smooth process, providing there are European and National

recommendations available, policy and planning frameworks established and good, reliable funding sources. Rural mobility schemes should be developed with a “rural mind-set”. The established urban practices may not be necessary successful in a rural environment. Therefore, the transfer of any good practices from any other successful schemes is encouraged.

Recommendations

1

The revitalization of conventional rural bus networks can be achieved if services are redesigned based on a good knowledge of the users' needs. The spiral of decline for such services can be halted and reversed by additionally increasing journey reliability and passenger comfort.

2

The different flexible transport services including shared mobility are solutions that could improve the range of mobility possibilities for people in rural areas. This can be achieved either by supplementing existing public transport networks, as is the case with shared mobility, or by providing more financially efficient alternatives to conventional bus services, as is the case with DRT.

3

Geographic scaling and clustering of resources represents a good opportunity for local authorities to use their financial and human resources jointly and cooperate for the delivery of a coordinated mobility and transport offer to the community. This is very helpful when such services could not have been developed by individual authorities.

4

Joining forces and funding schemes can help meet fundamental mobility needs, by ensuring sufficient funding resources together with the potential to exploit additional marketing channels. Such a joint endeavour can be achieved between the transport authority and other public departments (social services, health, education) which have mobility related responsibilities.

5

ICT solutions enable data collection, service operation monitoring, intermodal journey planning, integrated payment, real-time information and service KPI evaluation. Although advanced ICT solutions cannot guarantee by themselves the success of conventional or shared mobility solutions, the introduction of ICT tools, platforms and apps could support the operational dimension and improve the performance levels. They can also facilitate coordination among different services and integration with the public transport network and with other rural shared mobility schemes.



Given the diversity of rural experiences across the EU Member States, it is clear that there is no silver bullet for solving rural mobility issues and this is why we need all levels of stakeholders to join together to understand how to improve rural mobility and to develop a new vision for rural mobility.

In rural mobility there is a need for a different way of thinking compared to developing urban mobility. In this context, networking is one of the key components of the SMARTA project. The goal of the SMARTA networking activities is to actively engage with the most relevant stakeholders active in the field of rural mobility. Politicians, public transport operators, different providers for mobility services or products should join together to understand how to develop a new vision for rural mobility. SMARTA initiated a network of stakeholders that started to discuss the main issues that could contribute to shape the building blocks for a new European rural mobility vision.

The “**Time to Rethink Rural Mobility**” Event⁹ organized by the SMARTA consortium in Brussels on 30-31 January 2019 has set the scene for the discussion. During the event the elements that drive successful rural mobility initiatives, ranging from social aspects, policy, financing to ICT solutions have been discussed.

A wide range of stakeholders and institutions were present at the event: European Commission (DG MOVE, DG AGRI, DG REGIO), European Parliament, The European Network for Rural Development (ENRD), European Committee of the Regions (CoR), Conference of Peripheral Maritime Regions (CPMR), POLIS Network, ERTICO - ITS Europe / MaaS Alliance, service providers (Taxistop, Autodelen, Newbility, Mobility Carsharing), mobility agencies and regional agencies.

The participants focused on the possible changes that will positively impact the state of rural mobility. The consensus was that there is a real need for defining a vision for rural environments, to discuss the future of the rural population and of the functions of rural areas. If the vision can be agreed upon, it can drive the policy and unlock programs and resource allocation. This is the only approach that could lead to long-term benefits of shared and sustainable transportation for rural communities. The main conclusion agreed by all the participants is that **the time to act for rural mobility is now.**

⁹ Find out more about the SMARTA Networking activities - <https://ruralsharedmobility.eu/workshops>

For more relevant information and evidence to support the rural shared mobility please check SMARTA website, www.ruralsharedmobility.eu and get an in-depth look at the SMARTA results so far:

A full set of Insight Papers (IPs), developed for each of the EU-28 Member States, plus also a mix of neighbouring countries (Albania, Macedonia, Moldova, Norway) and reference non-European countries (Canada, Australia). <https://ruralsharedmobility.eu/insight-papers-page/>

32 Good Practices (GPs) covering different types of public and shared mobility services and presenting a range of information (transport scheme, target groups, funding/incentive, community/authority engagement, etc.), have been analysed and reported using a common layout. <https://ruralsharedmobility.eu/good-practices/>

Report of the first SMARTA Workshop – “Time to Rethink Rural Mobility” held in Brussels on 30-31 January 2019. <https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-Workshop-report.pdf>

SMARTA report on good practices: <https://ruralsharedmobility.eu/wp-content/uploads/2019/12/Smarta-Report-on-rural-good-practices-web-version.pdf>

SMARTA Evaluation Framework aims to guide the SMARTA2 pilot sites in developing the evaluation process of the measures to be implemented during the period 2019-2020. <https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-Evaluation-Framework-1.pdf>

The most relevant resources, insights and information from similar projects. <https://ruralsharedmobility.eu/resources/>



GET INVOLVED

Join our Stakeholders Network.

The **SMARTA** consortium would like to invite you to nominate a representative of your Organization or Project interested in rural mobility to join the Stakeholders Network.

If you are interested in the project activities and results, being part of the network will give you access to the knowledge gathered, the results and recommendations arising from the main project activities, keep you informed about workshops and events organised for the scope of the project and give you the opportunity to interact with stakeholders in the field of rural mobility. It is also an opportunity for us to hear from you and to incorporate your views and findings into our work

LET`S KEEP IN TOUCH!

www.ruralsharedmobility.eu
info@ruralsharedmobility.eu

For more information, don't hesitate to contact the Project coordinators at MemEx:

Giorgio Ambrosino - giorgio.ambrosino@memexitaly.it

Brendan Finn - brendan.finn@memexitaly.it

Andrea Lorenzini - andrea.lorenzini@memexitaly.it

Or the Project communication managers at EIP:

Lucia Cristea - lucia.cristea@eiproject.eu







SMARTA
smart rural transport areas