



TIME TO



**RURAL
MOBILITY**



*Current and emerging good
practices in rural shared
mobility-experiences from
the SMARTA project*

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MemEx Srl

www.ruralsharedmobility.eu

Mobility is being transformed throughout Europe



SUMPs

ITS systems

Smart cities

Low emission zones

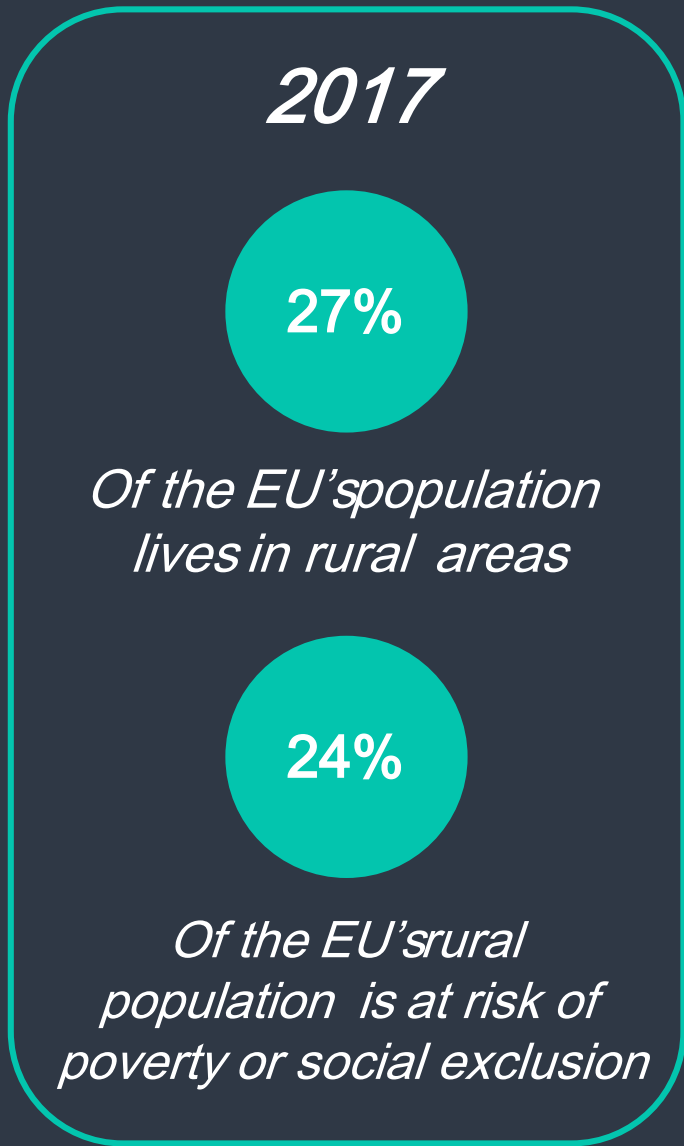
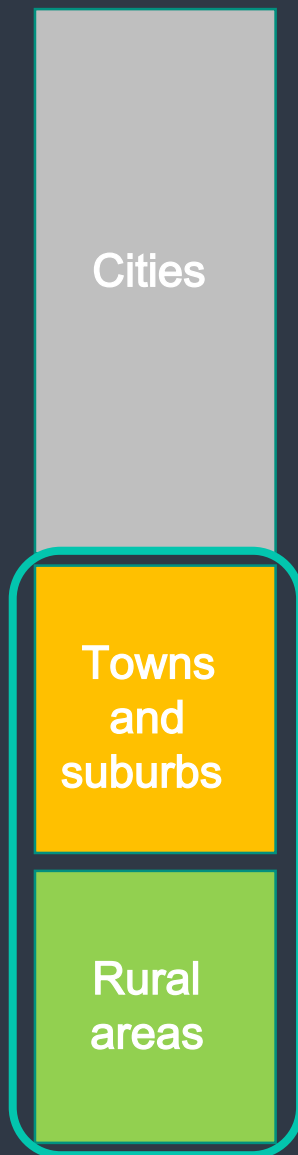
White Papers on urban transport

Transport Networking Companies rules

...



Mobility in rural areas needs attention



27% of Europe's population means 137 million people, which equates to the population of the 40 largest Metropolitan areas in Europe

More attention in transport policy, innovation, capital investment and ongoing subsidy for rural mobility needs

Distribution of population (%) by degree of urbanisation, EU28 Eurostat 2017 (estimated)



SMARTA
smart rural transport areas



SMARTA Project



3 Main strands of activities



*Research
Demonstration
Engagement*

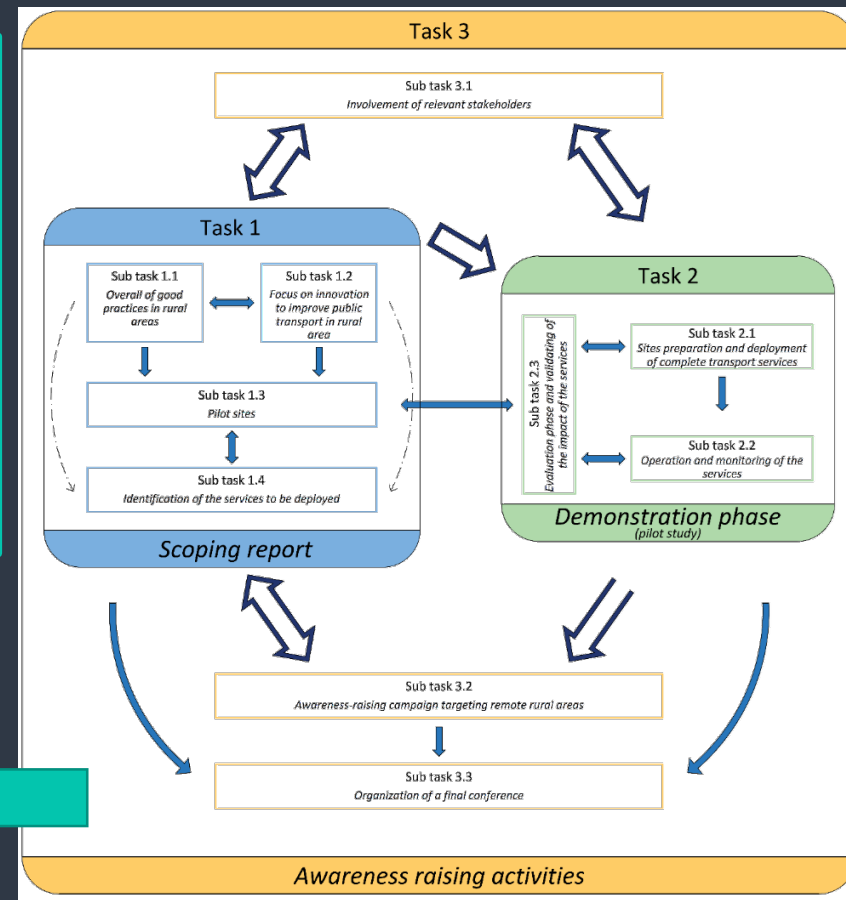
Sponsored by European Parliament and founded through EU Transport Ministry - DG MOVE



SMARTA Consortium

Explore ways to ensure sustainable mobility by improving shared mobility integrated with public transport services across different European rural areas

Recommendations and Guidelines



“Insight Papers”

Analysis of the challenges of mobility in rural areas and the framework in each of the 28 EU countries (including selected EEA states, North America and Australia)

“Good Practices”

Comprehensive overview of Good Practices in rural shared mobility from around Europe and beyond

New software to better direct on-demand bus services to customer needs in the rural areas of the Province of Modena Italy, Emilia Romagna Region

Overview
Modena is an on-demand bus service which aims to integrate urban and suburban public transport services with the neighboring villages and rural areas in the Province of Modena, within the Municipality of the Municipality of Emporeo. A new software has been developed with the aim of improving the quality of information of the service. The project has started in September 2016 and ended in October 2017 with the implementation of the software in the Municipality of Emporeo.

Main objectives of the good practice
The software allows the user to request a bus service directly from a mobile application. The user can see the location of the bus and the estimated arrival time. The software also allows the user to request a bus service for a specific date and time.

Target user groups and needs

The target user groups are the rural population in the Province of Modena, Italy. The needs are to have a reliable and affordable public transport service that can connect the rural areas to the urban centers.

Detailed description of the practice
The software is a web-based application that allows the user to request a bus service directly from a mobile application. The user can see the location of the bus and the estimated arrival time. The software also allows the user to request a bus service for a specific date and time.

Results achieved
The software has been used by a large number of users, and it has been found that it has improved the quality of the service and has reduced the waiting time for the bus.

Assessment

The assessment was conducted using a set of indicators that measure the impact of the software on the rural population. The indicators include the number of users, the number of bus requests, and the number of bus services provided.

Key findings
The software has been found to be a successful tool for improving the quality of the service and has reduced the waiting time for the bus. The software has also been found to be a cost-effective way of providing a public transport service to the rural population.

Features that are considered to be Good Practice (Lessons learned)

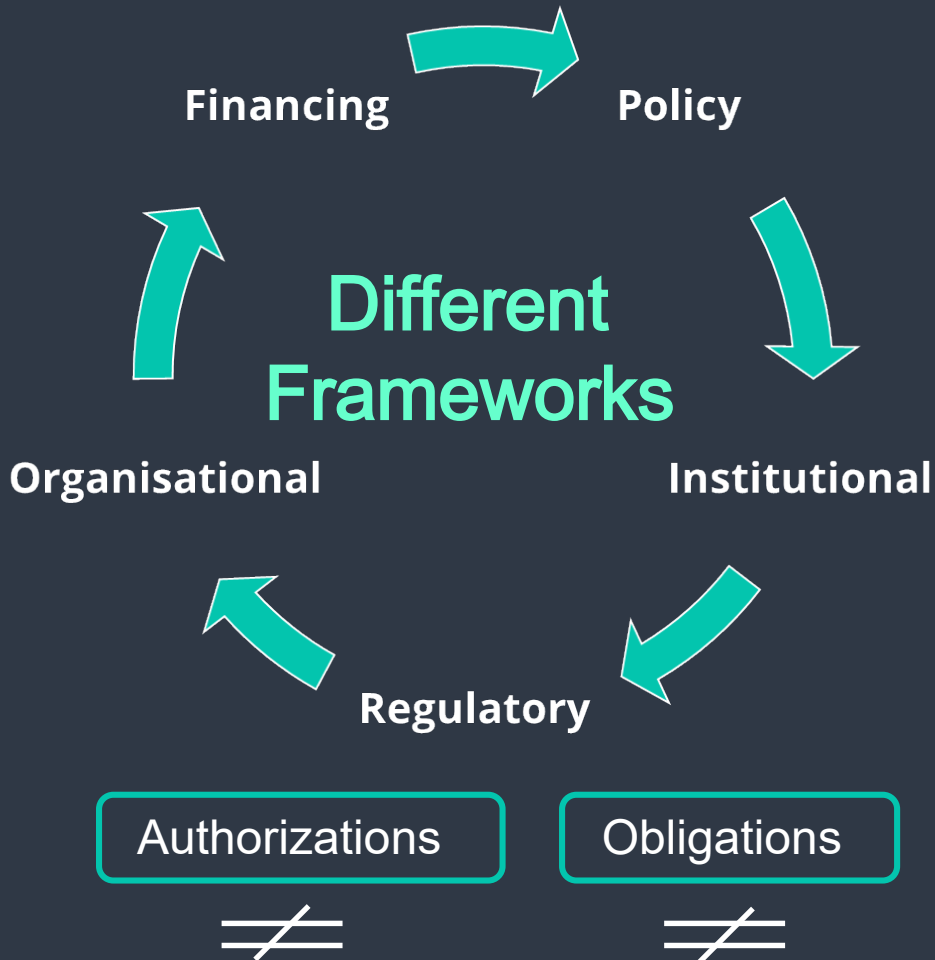
The software is a good example of how to use technology to improve the quality of public transport services in rural areas. The software is easy to use and provides a high level of service to the user.

References for further details
The software is available for download from the website of the Municipality of Emporeo. The website is www.comune.emporeo.mo.it.



Insight Papers

Mapping the diversity within European frameworks



Which is the layer of Government at which rural mobility is primarily determined?

National

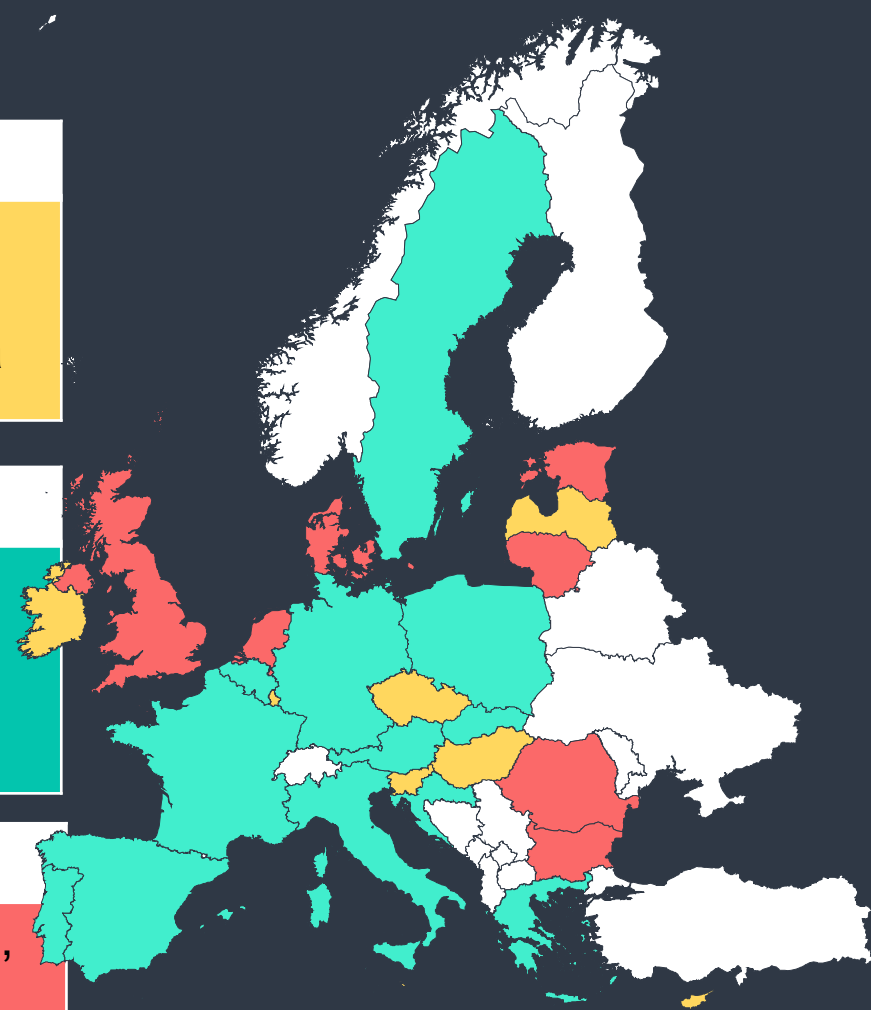
Cyprus, Czech Republic, Hungary, Ireland, Latvia, Luxemburg, Malta, Slovenia

State/ Region

Austria, Belgium, Croatia, France, Germany, Greece, Italy, Poland, Portugal, Slovakia, Spain, Sweden

Municipality /Country

Bulgaria, Denmark, Estonia, Lithuania, Netherlands, Romania, Scotland, UK



B.Finn in Session B



Pilot Demonstration Sites

✓ Validation and evaluation in real -field conditions of effectiveness , efficiency , response , impacts and prospects for shared mobility services connected with public transport

Combining travellers more efficiently by different service schemes

Improving the availability and integration of transport offer and mobility options

Support ITS such as user info, booking, ticketing, fleet control, MaaS schemes, ...



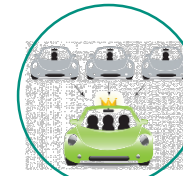
Long-distance coach



Local bus



Carsharing / Bikesharing



Ride sharing



Bus On-Demand

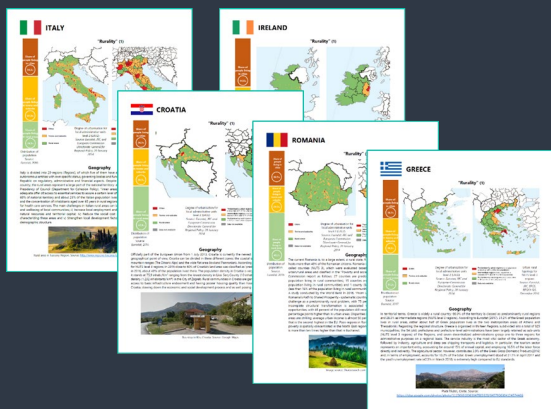


Taxi

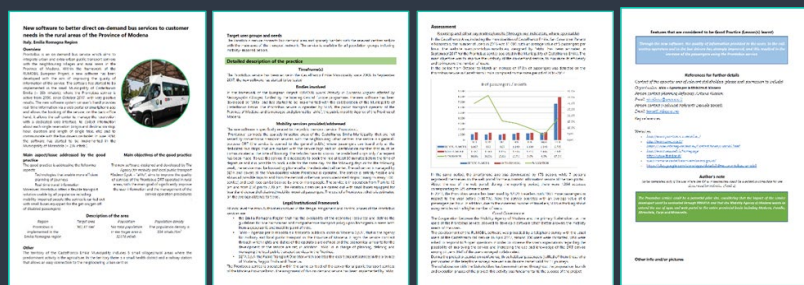
Specific Call for Tender has been launched by EU -DGMOVE for selecting 4 different pilot sites

The SMARTA Consortium will assist, support and evaluate the 4 pilots

“Insight Papers”



“Good Practices”



Pilot Demonstration sites



Stakeholder's Engagement

Gain a deep understanding about the key findings, lessons learnt and transferability issues of different mobility experiences in rural areas across Europe



Good Practices

A. Transport and mobility services in rural areas

A.1 TRANSPORT SERVICES and TARGET USER GROUPS

- Solutions for all the population especially the disadvantaged (in terms of accessibility, availability, costs, tools etc.)

A.2 ICT IN PUBLIC TRANSPORTATION AND SHARED MOBILITY

- Technologies that enable more efficient planning of journeys
- Simulation of advantages and disadvantages
- Fleet management and real time information
- Multimodal travel planners
- Autonomous shuttles

A.3 INTERMODAL SERVICE COORDINATION

- Transport solutions at bus/train stations for last mile connectivity

A.4 EASY MOBILITY

- Active modes, including sharing of bikes and e -bikes

B. Good Governance Enabling Sustainable

Rural Mobility

B.1 SOLUTIONS FOR SMART RURAL AREAS

- Financially viable systems
- New business concepts and solutions for improving the accessibility of rural areas

B.2 STRATEGIES FOR INCREASE RIDERSHIPs

- Good marketing campaigns
- Improvement of the systems reliability
- Attractive fares

B.3 COMMUNITY -BASED TRANSPORT SERVICES

- Local initiatives involving the community to identify transport solutions
- Needs assessment campaigns

Good Practices: case identified

National Program	DRT	Shared Mobility	Integrated PT
Rural Transport Program, Ireland	Ring a link, Kilkenny, Ireland	CTProgram, Canada	Langdas case study (SmartMove project), Greece
ITNAmerica –Community Based Rural&Town Transportation,USA	Prontobus , Modena Province, Italy	Shared Use Mobility Agency, Elba Island, Italy	Krakov Metropolitan Transport, Poland
National Maas Framework, Finland	DRT in the region of Middle Tejo, Portugal	SOPOTNIKI–free transport for elders in rural areas, Slovenia	Smart Move in the Metropolitan Area of Alba Iulia, Romania
Fare-free buses, Estonia	Shotl Platform, Spain	Alpine Bus –Bus service in tourist area, Switzerland	Muldental in Fahrt, Germany
<div style="border: 2px solid black; padding: 10px; text-align: center;"> <p>32 Good Practices identified to the date Target 60 GPs</p> </div>	The Village Bus in Kolsillre , Sweden	Talybont Energy –community car sharing, Wales	
	RegioTaxi, Netherlands	Rezo Pouce, France	
	Flexible solution in 8 rural municipalities (Flexi Tec),Belgium	EcoVolis community bike -sharing, Albania	
	Bummelbus (DRT), Luxembourg	Northern Commute, Limerick, IE	
	Western Region DRT Pilot Stage 1 –New South Wales, Australia	Autonomous shuttle in Bad Birnbach, Germany	
	Suffolk Links DRT, UK		
	Fast seasonal bus line from Varna to the resort area;Bulgaria		
	ArrivaClick On-Demand Public Transport Service, UK		
	Badenoch and Strathspey Community Transport Company, Scotland		
	Texelhopper -Flexible solution on Dutch Isle, Netherlands		
		Donegal LocalLink, Ireland	

Good Practices

Same description format

1. Overview

- Short description of Good Practice (GP)
- Main aspect/issue addressed by GP
- Main objectives of GP
- Description of the area
- Other
- Target user groups and needs

2. Detailed description

- Timeframe
- Bodies involved
- Mobility services provided/addressed
- Legal Framework
- Cost and Financing sources
- Organizational set-up
- Supporting technologies

3. Innovation aspects

- Organisational responsibilities and working arrangements
- Level of public sector financial support
- Interconnections between shared and public transport services
- ICT connections and impacts
- Other (e.g. social innovation, etc.)

4. Assessment

- Ridership and other key metrics/results
- Good Governance
- Success factors/strengths
- Difficulties encountered/weaknesses
- Features that are considered to be Good Practice (Lesson learnt)
- References for further details
- Author's note

New software to better direct on-demand bus services in the rural areas of the Province of Modena, Emilia Romagna Region

Overview

ProntoBus is an on demand bus service which aims to integrate urban and extra-urban public transport services with the neighbouring villages and rural areas in the Province of Modena. Within the framework of the RUMOBIL European Project, a new software has been developed with the aim of improving the quality of information of the service. The software has started to be implemented in the small Municipality of Castelfranco Emilia (~ 30k inhabit), where the ProntoBus service is active from 2006, since October 2017, with very positive results. The new software system on user's hand provides real-time information via a web portal or smartphone app and allows the booking of the service; on the back-office hand, it allows the call center to manage the reservation with a dedicated web interface, to collect information about each single reservation (origin and destination stop, hour, duration and length of single trips, etc) and to communicate with the bus drivers via tablet. In June 2018, the software has started to be implemented in the Municipality of Mirandola (~ 23k inhab).



Main aspect/issue addressed by the good practice

The good practice is addressing the following aspects:

- Technologies that enable more efficient planning of journeys
- Real time travel information

Moreover, ProntoBus offers a flexible transport solution usable by all population including mobility-impaired people (the service is carried out with small buses equipped for the get-on/get-off of disabled passengers)

Main objectives of the good practice

The new software, designed and developed by the Agency for mobility and local public transport Modena S.p.A. - "aMo", aims to improve the quality of services of the ProntoBus DRT operated in rural areas, with the main goal of significantly improve the user information and the management of the service operation procedures

Description of the area			
Region	Target area	Population	Population density
ProntoBus is implemented in the Emilia Romagna region	102,47 Km ²	The total population in the target area is 32174 inhab.	304 inhab./Km ²

Other

The territory of the Castelfranco Emilia Municipality includes 8 small villages/rural areas where the predominant activity is the agriculture. In the territory there is a small health district and a railway station that allows an easy connection to the neighbouring urban centres

Target user groups and needs

The ProntoBus service connects with the main user groups: the mobility impaired people.

Detailed description

The ProntoBus service has been active in the Castelfranco Emilia Municipality since 2006. In September 2017, the new software has started to be tested.

Timeframe(s)

The service has been active in the Castelfranco Emilia Municipality since 2006. In September 2017, the new software has started to be tested.

Bodies involved

In the framework of the European Project RUMOBIL - Rural Mobility in European Regions affected by Demographic Change, funded by the Interreg Central Europe programme, the new software has been developed by "aMo" and has started to be implemented with the collaboration of the Municipality of Castelfranco Emilia. The ProntoBus service is operated by SETA, the public transport operator of the Province of Modena, and is managed and planned by "aMo", the public mobility Agency of the Province of Modena.

Mobility services provided/addressed

The new software is specifically related to the public transport service "ProntoBus". "ProntoBus" connects the sparsely inhabited areas of the Castelfranco Emilia Municipality, that are not served by conventional transport services, with the neighbouring urban centres. The service is a general-purpose DRT (the service is opened to the general public) where passengers can board only at the dedicated bus stops, that are marked with the service logo and an identification number that must be communicated at the time of booking. The vehicles have to stop in the predefined stops only if a request has been made. To use the service, it is necessary to book the ride at least 30 minutes before the time of departure and it is possible to book a ride for the same day, for the following days or for the following week; the service must be booked by phone call at the dedicated call center. The call center is managed by SETA and covers all the Municipalities where ProntoBus is operated. The service is entirely flexible and allows all possible trips to and from the network collection points (dedicated stops) ("many to many" DRT service) and each race can be booked by one or more people. The service is in operation from 7 am to 12 pm and from 2.30 pm to 7.30 pm. The ProntoBus services are carried out with small buses equipped for board and deboard of disabled/mobility impaired passengers. The cost of a ProntoBus ticket is estimated on the average distance to travel.

Legal/Institutional Framework

At local level the main Authorities involved in the design, assignment and control phases of the ProntoBus services are:

- the Emilia Romagna Region that has the availability of the economic resources and defines the guidelines for one harmonised and comprehensive transport policy upon homogenous areas both from a geographic and mobility point of view.
- "aMo - Agenzia per la mobilità e il trasporto pubblico locale di Modena S.p.A", that is the agency for mobility and local public transport in the Province of Modena. It signs the service contract through which rights and duties of the operators are defined and the economical amounts for the development of the service are set; in addition, "aMo" is in charge of planning, defining and managing the local public transport services in the Province.
- SETA S.p.A, the Public Transport Operator which operates the local transport services in the province of Modena, Reggio Emilia and Piacenza.

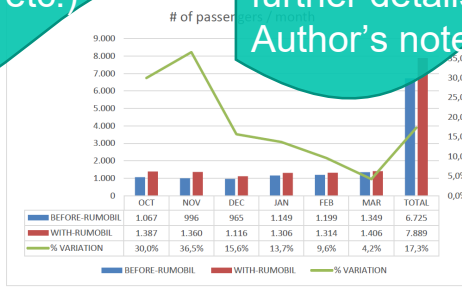
The ProntoBus service is operated within the same contract of the conventional public transport services of the Modena Province basin. The assignment of this on-demand service has been implemented by "aMo"

Assessment

In the same period, the smartphone app was downloaded by 178 people, while 7 persons registered themselves on the web portal for the automatic information service of the web portal. About the use of the web portal, during the reporting period, there were 1.384 accesses corresponding to 385 different users. In 2017, the ProntoBus service has been used by 12926 travellers, with 1853 more passengers in respect to the year before (+16,7%). Now the service operates with an average value of 6 passengers per hour. In addition, due to the increased number of travellers, SETA is thinking about using vehicles with a higher number of seats.

Good Governance

The Cooperation between the Mobility Agency of Modena and the primary Stakeholder, i.e. the users of the ProntoBus service, allowed to develop a software which better answers the mobility needs of the users. The development of the RUMOBIL software was preceded by a telephone survey with the usual users of the Castelfranco call service. In April 2017, around 300 users were contacted, who were asked to respond to 5 open questions in order to increase the user's expectations regarding the possibility of improving the service and increasing the use and knowledge of the DRT service among citizens. Half of the users surveyed collaborated. During the project presentation conference, three habitual passengers (raffled off from those who participated in the telephone survey) received a multi-race carnet valid for 12 journeys. The collaboration with the Stakeholders has been maintained throughout the preparation, launch and execution phases of the project; this activity was fundamental to the success of the project



Month	BEFORE-RUMOBIL	WITH RUMOBIL	% VARIATION
OCT	1,067	996	30,0%
NOV	1,387	1,360	36,5%
DEC	1,116	1,140	15,6%
JAN	1,306	1,199	13,7%
FEB	1,314	1,406	9,6%
MAR	1,406	1,406	4,2%
TOTAL	6,725	7,889	17,3%



Bürgerbuses, North Rhine-Westphalia, Germany

- ✓ Volunteer-based community transport service
- ✓ Based on a set of timetable and defined stops (conventional service)
- ✓ Ticket payed directly to the driver and booking in advance is not necessary

Bürgerbuses complement public transport with first/ last-mile services

Passenger capacity is limited to 8 seats because volunteer drivers do not have bus driver licenses

The service scheme depends mainly on community level of engagement

Financially combination of public and private funding as well as membership fees

Vehicles are owned by volunteers association and can be supported by NRW's Ministry of Transport



RezoPouce, France

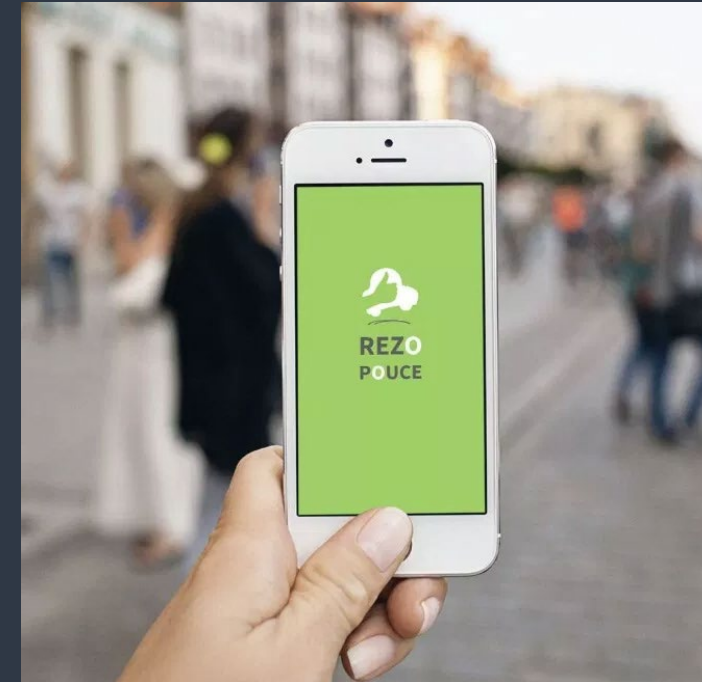
RezoPouce is a successful hitch-hiking service

IT platform for subscription avoiding subjective feeling of unsafety and uncertainty and allowing rapid, convenient and extremely cheap trip

Service is organised by the municipality with the support of the RezoPouce association

Innovative governance model: a cooperative society with collective interest (SCIC)

“Spot” every 400 m in village

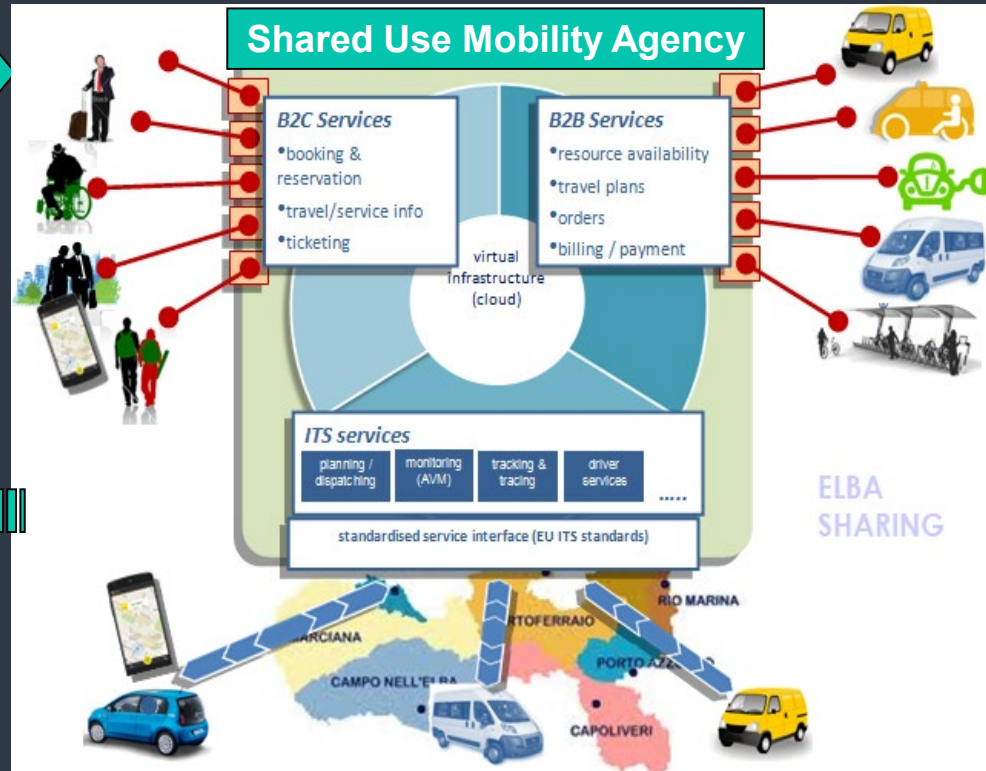
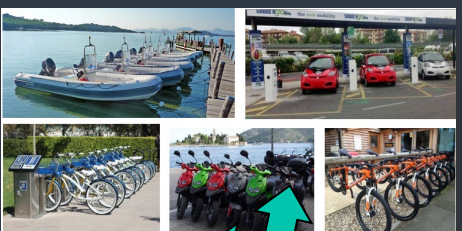


Currently, Rezo Pouce is active in more than 1800 French municipalities



Shared Use Mobility Agency, Elba Island, Italy

- Users as potential mobility service provider
- Cooperation Networking schemes
- IT platform and connectivity
- "Notice board" for sharing the different trips

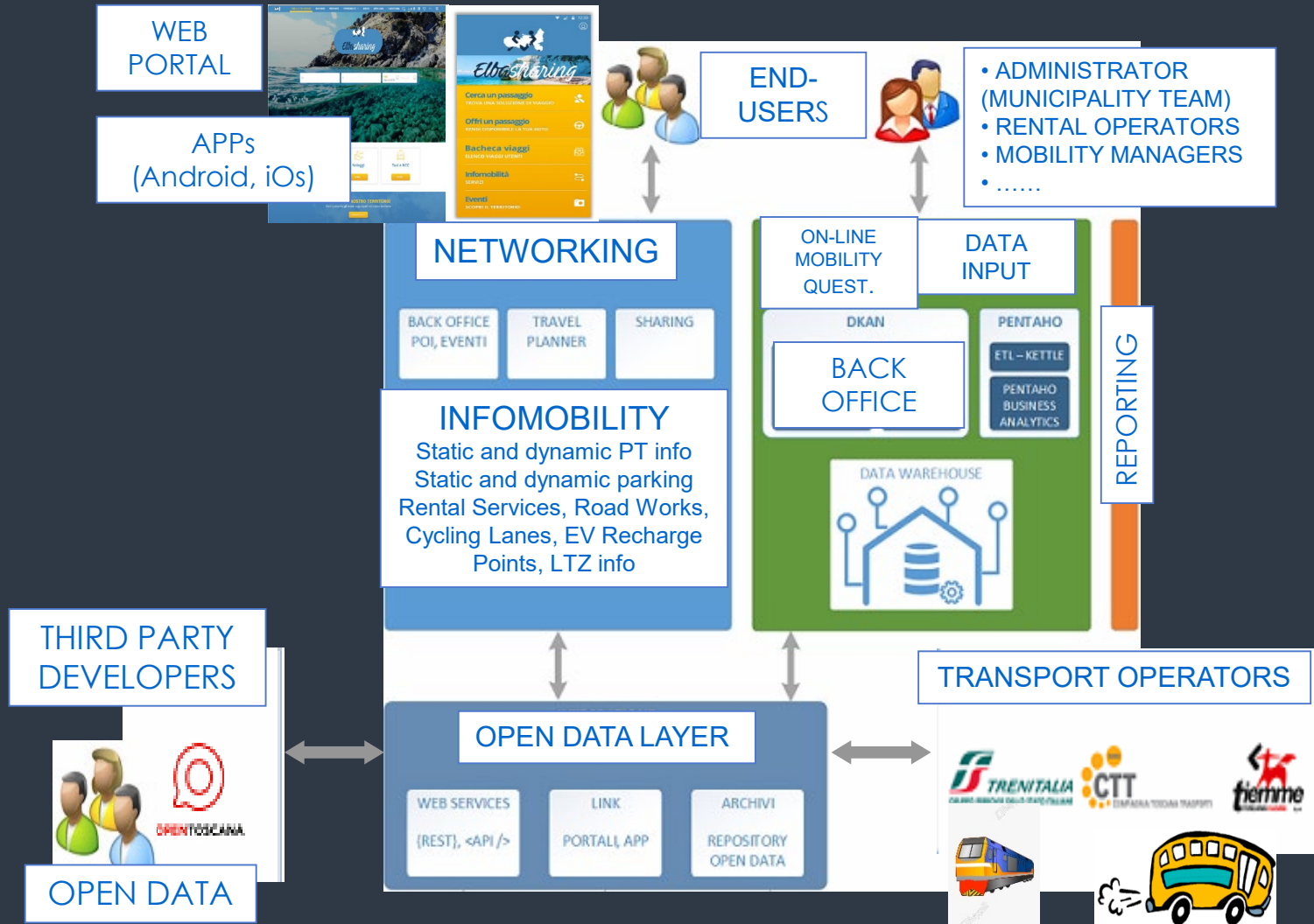


First "step" of a future MaaS scenario in Elba

Center for planning, managing and coordinating ride sharing services, infomobility and transport services networking



Shared Use Mobility Agency, Elba Island, Italy



2020

CiViTAS
Create and Active Transport in Cities DESTINATIONS

Elbasharing

Shared Use Mobility Agency: the MaaS approach implemented in Elba island

Giorgio Ambrosino
Severio Gini

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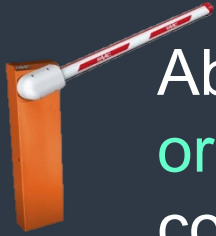
MemEx

The Booklet (pdf version) is available at: <http://www.memexitaly.it/en>



Starting the Cross Analysis of GPs

DRT and Flexible Transport Services



Absence of an **integrated transport organizer** who can provide overall coordination, organization, etc.

VS

Positive initiative in **Belgium** and **Denmark**

Political barriers and **competition regulation**

Conventional PT procurement

Lack of a detailed economic analysis

Funding reserved only for starting the implementation



Financial barriers

DRT service **subsidied** following the same parameters **as** **conventional** lines

Lack of a set of quantitative and qualitative **indicators**

Few **tenders** give effective **specifications** on DRT services

VS



Cyprus



Malta

What's Next

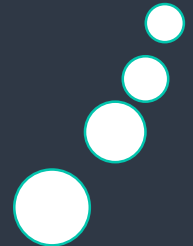
3rd May 2018

November 2020



Source: <http://www.unsabenculturali.it>

Deeper answers to the questions facing European Commission, regional, administration and practitioner layers.



How policy should be developed for rural shared mobility



*What solutions work best in what contexts?
What impacts they can have on economic, social and environmental challenges?*

*Whether/how to develop shared mobility solutions integrated with public transport?
Which level of ITS implementation?*



Which are the appropriate roles for communities, authorities and private sector





TIME TO



**RURAL
MOBILITY**



Thank you!

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