DOCUMENTATION OF THE ACTION PLAN AND ITS ENDORSEMENT

D.T1.2.5 Documentation of the action plan and its endorsement **v.1 12/2021**

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1. Introduction

This deliverable is the output of the fifth step of the Activity T1.2 “Action plan for smart on-demand buses to connect better rural regions in Liguria” and concerns the documentation of the action plan and its endorsement.

As a whole, the T1.2 comprises 5 different activities:

- **Learning from aMo:** a summary of what has been learned from the ProntoBus experience in Modena and the software for its booking and service planning;
- **Action plan concept:** designing an action plan concept for the introduction of a smart on-demand bus network;
- **Territorial data analysis:** verification of currently available and planned datasets related to passengers’ PT mobility, assessing the feasibility of future implementation of big data analysis methodologies developed in SIADE/HORIZON;
- **Draft strategy & workshop:** workshop to receive feedback from decision-makers about the draft version of the action plan;
- **Final strategy & endorsement:** documentation of the action plan prepared for Liguria Regional Authority (AP) and its endorsement by the public authority's decision-makers.

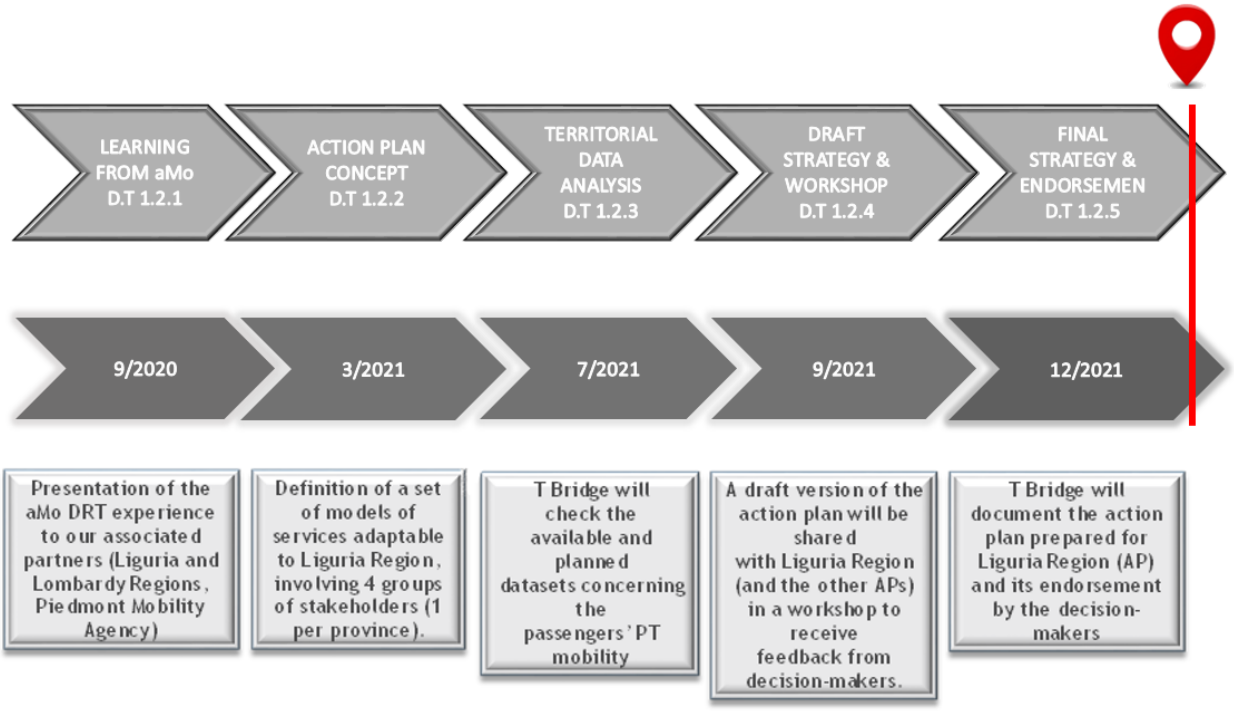

Figure 1 – Timeline Activity T 1.2

1.1. Goal of this document

The objective of this paper is to propose DRT service solutions in the **inner areas of Liguria**, taking inspiration from existing practices launched in Europe, Italy and other countries, and previous European projects.

The main focus is on improving accessibility for all people living in inner areas and it also aims at encouraging accessibility to transport system for vulnerable users (people who do not have access to transport service and/or live in low-demand area) and discouraging the use of private car, which is the most used means of transport in rural and peripheral areas.

In this light, it is possible to analyse the condition to overcome the isolation and social exclusion of people living in inner areas.

In this document, based on the studies introduced in DT1.2.4, it is analyse as the "to-be scenarios" proposed could find applicability in the inner areas of Liguria.

1.2. Methodology

In order to evaluate the suitable DRT solutions for people living in the inner areas of Liguria Region the following methodology is used:

1. Definition of the action plan (already done in DT1.2.4)
2. Definition and analysis of the planning tools of Liguria Region
3. Organization of a meeting between T Bridge and Liguria Region to integrate the proposals of the action plan with the planning tools of Liguria Region.

In the first phase, T Bridge defined four proposals for the rural areas of the Liguria Region. The following phases were considered in order to define these proposals:

1. Definition of the pilot area
2. Demand analysis
3. Analysis of the LPT offer
4. Proposal for the to-be scenario

In the second phase a set of planning tools of Liguria Region are studied in order to apply the action plan proposal by T Bridge to the inner areas of Liguria.

Finally, the third and last phase, concerns the meeting between T Bridge and the Liguria Region to better understand the possibility of implementing the scenarios proposed by T Bridge in the inland areas of the Liguria Region.

2. Action plan

In order to define the action plan for each study area were take into account the following four steps:

- Definition of the pilot area; analysing the territorial and environmental context in consideration of the settlements present, the population and the people employed in the various activities
- Demand analysis; analysing the current systematic and potential demand in the pilot area
- Analysis of the LPT offer; analysing the current public transport offer, the loads of local public transport in the study area and highlighting routes, frequencies, timetables, etc.
- Definition of the "To-be scenario"

2.1. La Spezia

The La Spezia pilot area is the Municipality of Sesta Godano that is located in Vara Valley and has 1,319 inhabitants (Godani) and an area of 69.5 square kilometres with a population density of 18.98 inhabitants per square kilometre. It rises 242 metres above the sea level and it is in the center of La Spezia area (figure 2).

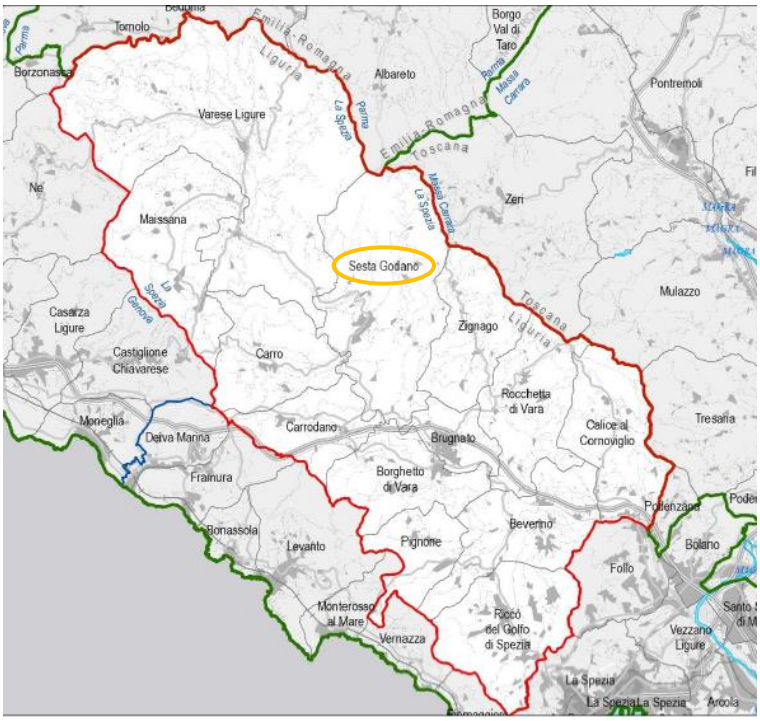

Figure 2 – Sesta Godano position.

Sesta Godano is located along Provincial Road 566, which connects the village of San Pietro Vara with Borghetto di Vara.

In addict, in Sesta Godano, it is possible to get the suburban line "La Spezia – Varese Ligure" and the nearest railway station are located in La Spezia and Sestri Levante. Figure 3, shows the multimodality systems that characterize the area of study.

Figure 3 – The multimodal system that characterize the area of study.

The starting point for analyze the demand is commuting matrix provided by ISTAT updated to 2011, which collects systematic travel between municipalities on a winter weekday.

Starting from this data, it is calculated the update OD matrix and then the potential demand, i.e. the share of demand that can be captured by the LPT once the service is increased. It is assuming, based on previous studies, that the enhancement of the LPT service in the pilot area produces a 10% modal shift towards the use of public transport, the potential daily demand is 13 people.

Total daily trips for private vehicles in Sesta Godano Municipality 2020	135
Potential daily demand in 2020	13

In the area of Sesta Godano the LPT offer was restructured at the end of 2019, in agreement with the municipality and the province, changing routes and timetables. The lines present on the municipal territory are currently six and connect the center of Sesta Godano with the neighboring localities (figure 4 and figure 5).

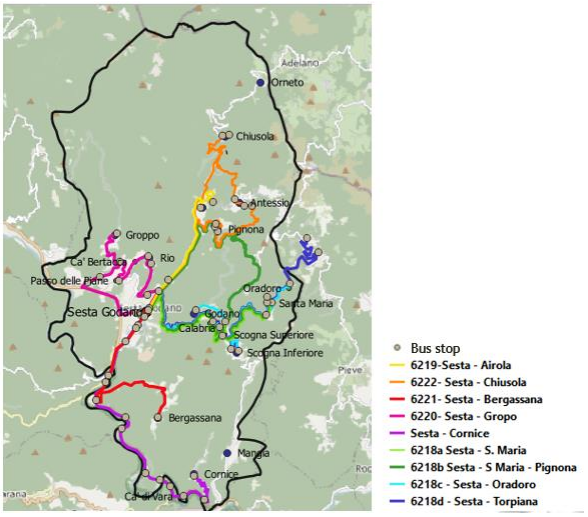

Figure 4 – Current LPT offer

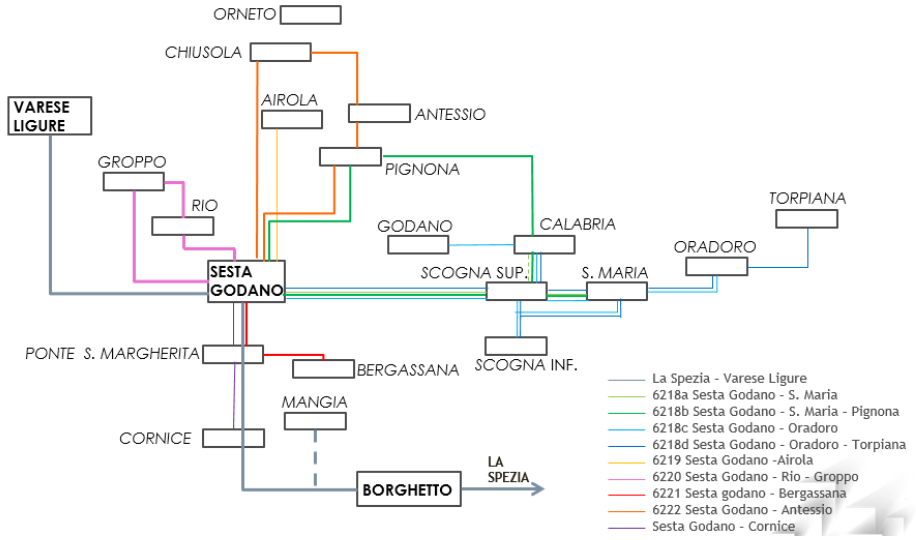

Figure 5 – Current LPT offer

They operate as traditional lines, with a fixed route and timetable and no need for reservations. The service model proposed in the to-be scenario is characterized by fixed route with deviations. For this kind of service, the line has a main route (fixed) while secondary stops, detached from the fixed line, served only in case of reservation (figure 6).

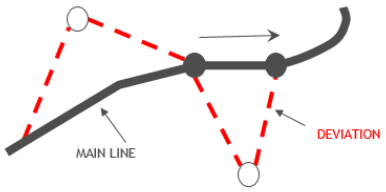

Figure 6 – The scheme of the transport system

Whit this kind of system, it is possible to limit the length of the line and the twisty of the routes to serve settlements dispersed over the territory.

The basic lines are defined in terms of route, while as far as the timetable is concerned, once the departure is fixed, the arrival time presents a certain degree of flexibility, due to the possible execution of deviations at the request of the user.

Are identified four main directions for the pilot area:

- Sesta Godano – Orneto
- Sesta Godano – Torpiana
- Sesta Godano – Cornice
- Sesta Godano – Groppo

Compared to the current LPT offer, it is proposed to include connections to Sesta Godano also from Orneto and Mangia (currently served by the extra-urban line "La Spezia - Varese Ligure") (figure 7).

Figure 7 – To-be scenario in the pilot area

2.2. Genova

The Genoa pilot area is the locality of Sambuco (figure 8) that is an area of a few dispersed houses located on the Voltri hill and it is located 400 metres above sea level. The village is belong to:

- 20 kilometres from the city centre of the Municipality of Genoa
- 9 km from Voltri railway station
- 3 km from the nearest traditional bus stop (line 97).

Figure 8 – Sambuco position.

The locality of Sambuco is part of the municipality of Genoa and it is possible to reach it only through a road: "Via Osvaldo Moretti".

For what concern the population, looked by ISTAT census section, in the pilot area the population is concentrated along “Via delle Fabbriche”, the road that connects Voltri with the village of Fabbriche. In Sambuco there are very few productive activities, the most important of which is famous, "Pasticceria di Sambuco" where about 5-10 people work.

The area on which the analysis is focused is the area located to the north of Fabbriche, it includes the villages of Sambuco and Case Brusinetti (figure 9).

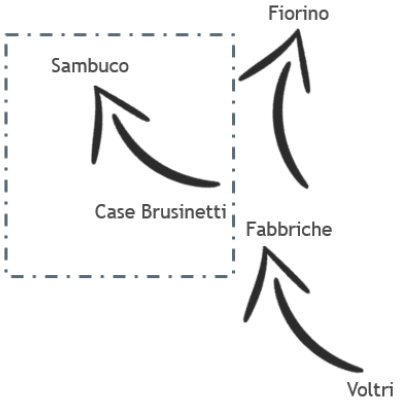

Figure 9 – The analysis area

The starting point for analyze the demand is the OD matrix provided by the Municipality of Genoa updated to 2016 with zoning by local municipalities. The OD matrix provided is calculated during a weekday in the winter period and is an average of the detected flow.

The movements considered are those with origin and destination within zone 7 “Municipio Ponente” (Voltri – Prà – Pegli), the zone in which there is the pilot area (figure 10).

Figure 10 – The movements considered

For estimate the mobility index for 2016 is used the resident population within municipality 7 updated to 2016.

The mobility index (MI) it is calculate as the ratio between all the movements done within zone 7 update at 2016 and the resident population in zone 7 in 2016, the value that is found is 0.76. Assuming that the mobility index is constant over time, it was possible to calculate the number of trips having origin or destination in Sambuco and Case Brusinetti and thus estimate the current systematic demand. To do this, multiply the resident population in Sambuco and Case Brusinetti in 2020 for the mobility index and is found the population living in the pilot area and moving that are 95.

Starting from these 95 people, based on the previous ration, the people that living in the pilot area and moving by private vehicles are 72 and the people that living in the pilot area and moving by bus are 23. Considering that the current systematic demand is 23 people, the demand to be satisfied is 10 people, which is the systematic demand less the actual satisfied demand.

For what concerned the LPT offert in the pilot area is main composed by these lines:

- 97 and 97/
- I31

The 97 and 97/ lines are traditional public transport services, operated by AMT, the local public transport company. The bus terminal is located in Voltri, Via della Libertà, and the service ends at Fiorino. The 97/ line start at the same location but make a shorter trip because ending at Fabbriche.

The line I31 is part of the public transport service managed through the Multitaxi system called “Taxibus” organized by AMT and operated by RadioTaxi. Although Taxibus is generally a reservation-based service, the I31 line is a "fixed" route, i.e. it must always be operated according to the timetable and for the entire route, without the need for customers to make a reservation. The runs are dispatched from the central office with the same modalities of the others, but they result booked from "Anonymous Customer" with ascent and descent in correspondence of the 2 terminals. The taxi driver to whom these trips will be assigned is therefore obliged to travel the entire route of the line and pick up unbooked customers at the stops.

The design of the to-be scenario took into account the possibility of encouraging multimodality during the user’s journey; in Voltri, to reach the city center, it’s possible do an interchange with bus line 1 or with train, for travel both west and east direction. In fact, figure 11 shows that the main possibility of transport that will consider:

- Line 1 (in yellow)
- Taxibus (in red)
- Train (in blue)

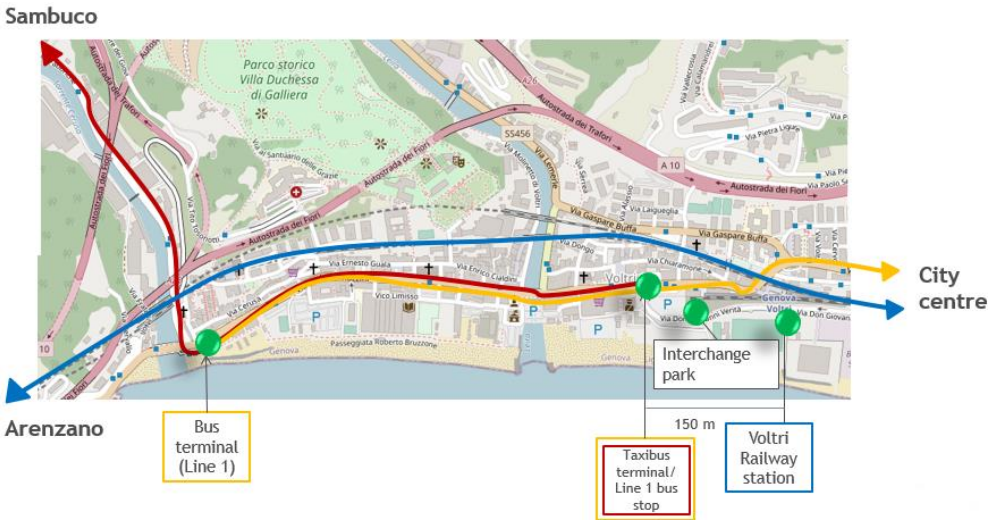

Figure 11 – Multimodality scenario

In the to-be scenario, it is proposed to add some journeys both in the peak and in the off-peak hours, based on the analysis of the current demand distribution: where there was more demand, additional journeys were added.

Due to the territorial conformation of the study area, characterized by a main road linking Voltri and Sambuco with no possible deviations, it is proposed to maintain a service with fixed routes and fixed timetables in the to-be scenarios. The travel time is about 30 minutes per direction; it would not be possible to guarantee a flexible in time service if a vehicle is already on the route.

2.3. Imperia

The Imperia pilot area is the Arroscia Valley. The Arroscia Valley has 4.396 inhabitants (ISTAT 2019) and an area of 253,78 square kilometers with a population density of 17.32 inhabitants per square kilometer.

On average, it rises 473 meters above the sea level and includes 11 municipalities (figure 12), that are:

- Aquila d'Arroscia (green)
- Armo (fuscia)
- Borghetto d'Arroscia (purple)
- Cosio d'Arroscia (beige)
- Mendatica (blue)
- Montegrosso Pian Latte (dark blue)
- Pieve di Teco (yellow)
- Pornassio (dark pink)
- Ranzo (light blue)
- Rezzo (red)
- Vessalico (light green)

Figure 12 – The Arroscia Valley municipalities.

The Arroscia Valley is located along Statal Road 28, which connects the city of Imperia (IM) with Genola (CN). In addict, the Valle Arroscia is connected to the railway line by two bus lines operated by RT:

- Line 202, which runs along the SS28 and arrives in Imperia
- Line 37, which runs along the SP453 and arrives in Albenga.

In figure 13, it is possible to note the multimodality systems that characterize the area of study.

Figure 13 – The multimodal system that characterize the area of study.

The starting point for analyse the demand is commuting matrix provided by ISTAT updated to 2011, which collects systematic travel between municipalities on a winter weekday.

In order to evaluate the potential demand, i.e. the share of demand that can be captured by the LPT once the service is increased, all trips made by private vehicles previously estimated are considered.

Based on the previous studies it is assuming that the enhancement of the LPT service in the pilot area produces a 10% modal shift towards the use of public transport, the potential daily demand is 16 people.

The current LPT in Arroscia Valley (figure 14) operate as traditional lines, with a fixed route and timetable and no need for reservations.

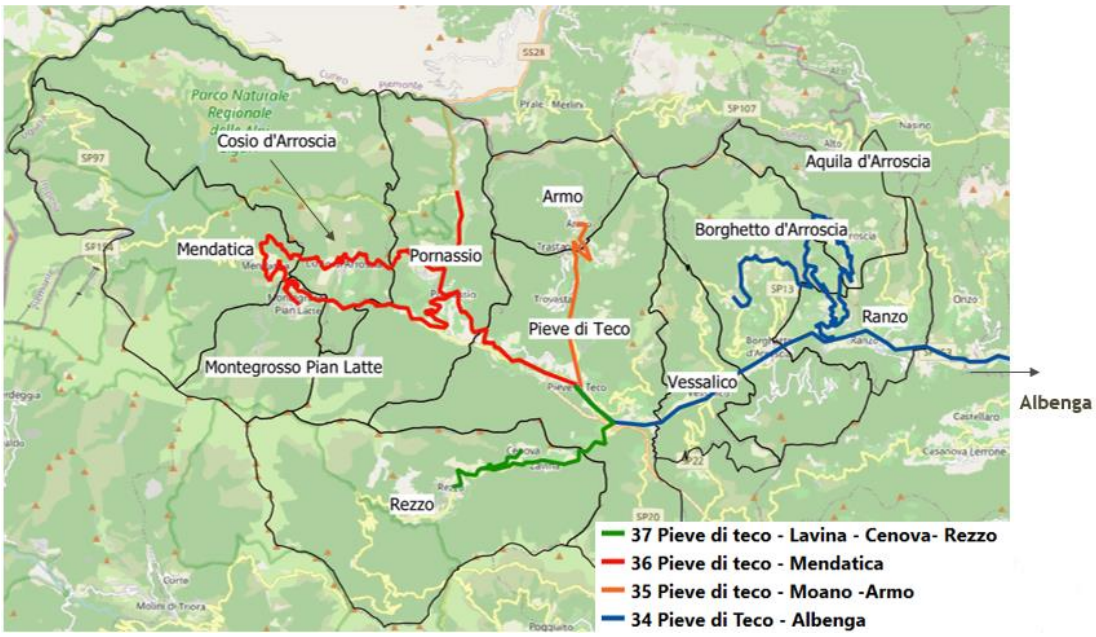

Figure 14 – The current LPT

For the pilot area of Valle Arroscia, it is proposed to maintain the traditional transport service for the valley floor (Pieve di Teco - Albenga) and to introduce a service model characterised by fixed timetable and fixed route with detours for the Alta Valle Arroscia area, gravitating on Pieve di Teco.

For this kind of service, the line has a main route (fixed) while secondary stops (figure 15), detached from the fixed line, are served only in case of reservation. In this case, it is possible to limit the length of the line and the twisty of the routes to serve settlements dispersed over the territory.

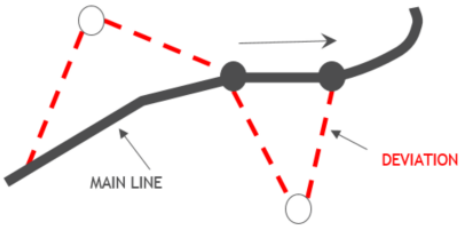

Figure 15 – The kind of service

The basic lines are defined in terms of route, while as far as the timetable is concerned, once the departure is fixed, the arrival time presents a certain degree of flexibility, due to the possible execution of deviations at the request of the user.

For the pilot area five main directions (figure 16) have been identified, that are:

1) Pieve di Teco – Armo
2) Pieve di Teco – Mendatica
3) Pieve di Teco – Rezzo

4) Pieve di Teco – Lovegno
5) Pieve di Teco – Lenzari

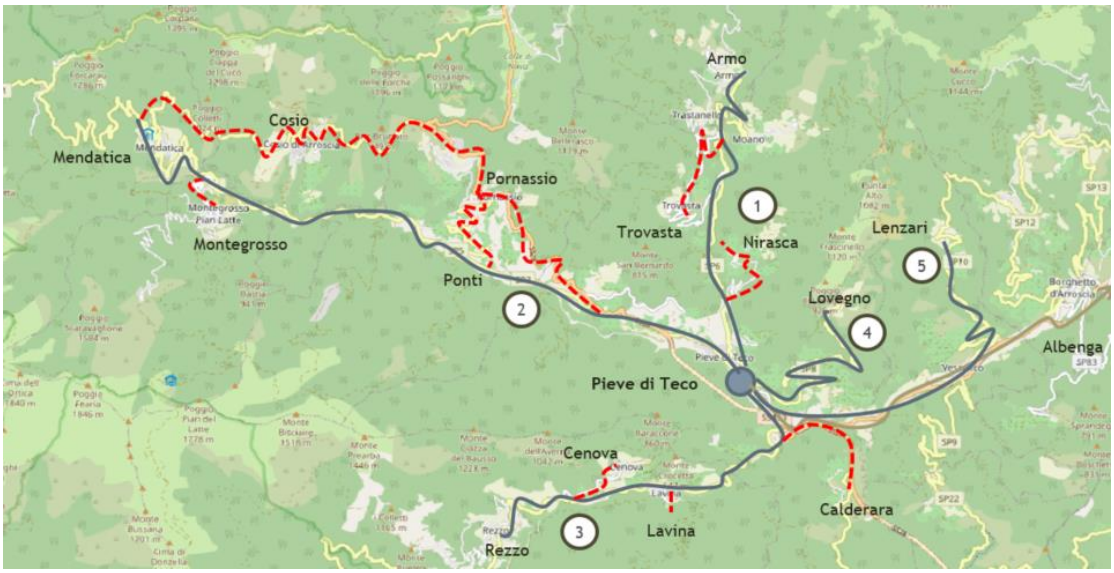

Figure 16 – The to be scenario

2.4. Savona

The Savona pilot area includes the districts of Lavagnola and the hamlets of Marmorassi and Ciantagalletto, which are located in the immediate hinterland of the city. The pilot area (figure 17) is located in the suburban area of Savona, and has about 1.800 inhabitants (ISTAT 2011) and an area of 0,6 square kilometres with a population density of 3.000 inhabitants per square kilometre.

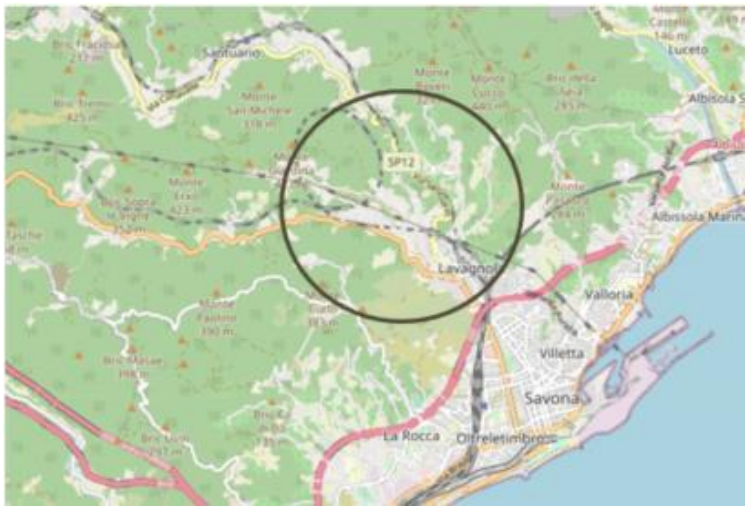

Figure 17 – The pilot area

In particular, the pilot area includes the census sections in the northern part of Lavagnola and the hamlets of Marmorassi and Ciantagalletto.

The location is characterized by three main roads that are (figure 18):

- Via Ciantagalletto
- Via Marmorassi
- Via Beato Antonio Botta

Figure 18 – The principal roads

The locality of Marmorassi is 2.8 km from Lavagnola. It rises 130 metres above sea level. In Marmorassi, there are 232 inhabitants (ISTAT 2011). The locality of Ciantagalletto is 1.6 km from Lavagnola. It rises 120 metres above sea level and there are 161 inhabitants (ISTAT 2011).

In addiction, Lavagnola and the localities of Marmorassi and Ciantagalletto are directly connected to the center of Savona and to Savona railway station via the Line 12, provided by TPL Linea. Figure 19 shows the multimodality systems that characterize the area of study.

Figure 19 – The multimodal system that characterize the area of study.

The starting point for analyse the demand is commuting matrix provided by ISTAT updated to 2011, which collects systematic travels between municipalities on a winter weekday. For the pilot area of Savona, a service model for the to-be scenario is characterised by fixed route with deviations (figure 20).

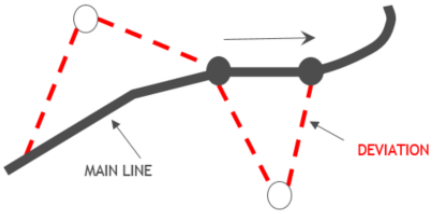

Figure 20 – The kind of service

For this kind of service, the line has a main route (fixed) while secondary stops, detached from the fixed line, served only in case of reservation. In this case, it is possible to limit the length of the line and the number of detours of the routes to serve settlements dispersed over the territory.

The basic lines are defined in terms of route, while as far as the timetable is concerned, once the departure is fixed, the arrival time presents a certain degree of flexibility, due to the possible execution of deviations at the request of the user.

For this pilot area, one main route has been identified whit 3 possible detours (figure 21). The main route connect Lavagnola with Piazza Memeli, as in the current state, while, the possible deviations are to:

- Savona FS
- Ciantagalletto
- Marmorassi

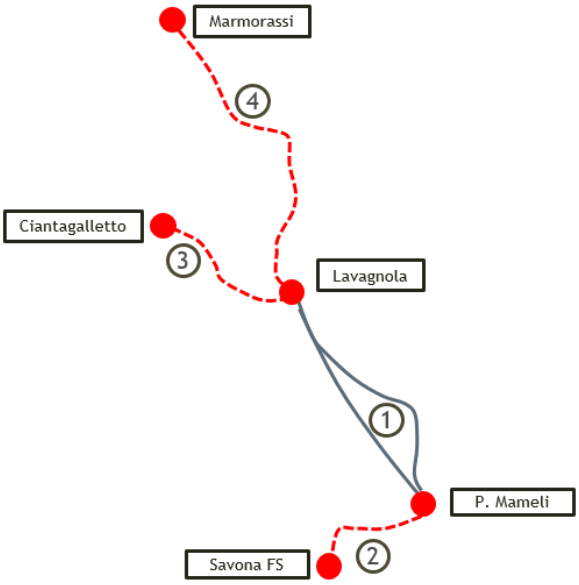

Figure 21 – The to be scenario

3. Analysis of the planning tools of Liguria Region

The planning tools of the Liguria Region have been examined to better understand if the scenarios proposed in the deliverable DT1.2.4 are in line with the requirements of the inland areas of Liguria Region.

The principal planning tools analyse are the following:

- The National Strategy for Internal Areas and the new Institutional assets
- Technical Committee for internal areas, preliminary report for the selection of internal areas
- PUMS - Sustainable Urban Mobility Plan
- Basin plan of mobility and transport of the territorial area of Savona
- Basin plan of local public transport
- PRIIMT - Integrated Regional Plan for Infrastructure, Mobility and Transport
- Liguria Region rural development plan

	Web Site	*Document*	*Date*	*Plan Editor*
1.	*https://www.regione.liguria.it/homepage/fondieuropei/strategia-nazionale-aree-interne.html*	*The National Strategy for Internal Areas and the new Institutional assets*	*2012*	*Liguria Region*
2.	*https://www.agenziacoesione.gov.it/wp-content/uploads/2020/07/Rapporto_Istruttoria_Selezione_Aree_Interne_Liguria.pdf*	*Technical Committee for internal areas, preliminary report for the selection of internal areas*	*2020*	*Liguria Region*
3.	*https://pums.cittametropolitana.genova.it/sites/default/files/Allegato_I%20-%20PUMS.pdf*	*PUMS - Sustainable Urban Mobility Plan*	*2019*	*Metropolitan City of Genoa*
4.	*https://www.provincia.savona.it/sites/default/files/allegati/avviso-pubblico/allegato6.pdf*	*Basin plan of mobility and transport of the territorial area of Savona*	*2021*	*Province of Savona*
5.	*-*	*Basin plan of local public transport*	*2019*	*Province of Imperia*
6.	*-*	*Basin plan of local public transport*	*2019*	*Province of La Spezia*
7.	*http://lrv.regione.liguria.it/liguriass_prod/articolo?urndoc=urn:nir:regione.liguria:legge:2019-12-27;31&pr=idx,0;artic,0;articparziale,1&anc=art14*	*PRIIMT - Integrated Regional Plan for Infrastructure, Mobility and Transport*	*On going*	*Liguria Region*
8.	*http://www.agriligurianet.it/it/impresa/sostegno-economico/programma-di-sviluppo-rurale-psr-liguria.html*	*Liguria Region rural development plan*	*2014*	*Liguria Region*

In the first document, "The national strategy for inland areas and the new institutional arrangements" drawn up by the Liguria Region in 2012, it is discussed the issue of the valorization of the asset of internal areas. In particular, it is evident from the text that the goals of the national strategy are mainly two: improve the quality of educational, health and mobility services, and at the same time, encouraging development projects that will enhance the natural and cultural heritage of these areas.

The selection process of the inland areas has taken place through a public inquiry procedure. For Liguria, the four inland areas identified in agreement with the Department for Development and Economic Cohesion (DPS) are the following:

- Antola and Tigullio Valleys - Genoa
- Beigua - Savona
- Arroscia Valley - Imperia
- Vara Valley - La Spezia

In the second document "Technical Committee for inland areas, preliminary report for the selection of inland areas" drawn up by the Liguria Region in 2020, it is shown that for the territory of La Spezia the main purpose are:

- The enhancement of mobility to/from the area, in order to improve local public transport. In this sense, the use of reservation-based transport services have been identified to reach the stations and facilitate the use of the train.
- Facilitate interchange in order to increase inter-mobility between public and private services.

Another important tool identified in the document is car sharing service, which offers advantages in terms of costs and pollution. For the Imperia territory, the use of the DRT bus service is hypothesized, because, in this area it is highlighted a "resilience" of the population on the use of public transport. For this reason, another goal of the future transport system for this territory is to reverse the trend towards the use of private mobility by increasing the use of public transport.

The third document is the "PUMS-Urban plan for sustainable mobility" drafted in 2019 by the metropolitan city of Genoa. This document point out that the focus for the Genoa area is to improve the connection networks between the coastal and valley systems. In the context of the PUMS, reference is made to the older PTVE (Piano del traffico e della viabilità extraurbana - 2008) which is focused on road safety, environmental protection (to be pursued through the reduction of noise and polluting emissions) and the promotion of the use of clean energy. To promote public transport, the plan promotes DRT buses for municipalities with less than 3 thousand inhabitants and proposes the installation of intelligent traffic lights that maintain green when the bus approaches.

The Savona Basin Mobility and Transport Plan (fourth document in the table) points out that currently the saturation coefficient (which is the main driver used in the re-scheduling of lines) is 70%. It is assumed that by classifying some lines as "on-call" in the future scenario the saturation coefficient can further increase by 30%. Moreover, according to the basin plan of mobility and transport of the Savona area, it is supposed to evaluate the possibility of organizing and coordinating forms of greater flexibility with the engagement of private systems of sharing mobility, car pooling, cooperatives or rental with driver to experiment flexible services such as:

- Partially free route service: this is a type of service without fixed routes and schedules, but with a free choice of route that, however, must be between certain points in the territory (local public

transport stops, poles of attraction/generation of mobility such as railway stations, shopping centers, schools, hospitals, etc.).

- Free service: it is a totally flexible service, which has no fixed points of ascent/descent. It is, however, included in the reference territory and/or in an established time slot.

In the Basin Plan of local public transport (fifth document in the table) drawn up by the Province of Imperia in 2019, it is clear that the primary future function of services in the suburban area will be the connection of the provincial territory, that is, the guarantee of reaching the main generative and attractive polarities, such as: educational institutions, industrial poles, hospitals and railway stations. The Basin Plan provides the classification of the network of suburban services according to the following classification:

- Basic network.
- Induction network.
- Capillarity network.
- Network of commuter services.

The services in areas of weak demand are part of the network defined as capillarity, that is, the local public transport network complementary to the main connection services. These services can be carried out in:

- Rigid mode (scheduled services).
- Flexible mode (on-line or off-line booking).
- Complementary mode (carpooling, cab cooperatives, rental with driver, other forms of sharing mobility).

In the Local Public Transport Basin Plan drawn up by the Province of La Spezia (document number 6 in the table), some specific guidelines are implemented in both the executive design phase of the service and in the planning phase, which include:

- Establishment of a direct line between Val di Vara and Sarzana, to connect Val di Vara with Sarzana hospital and other services offered.
- Establishment of "last mile services", with a high capillarity in the connection with smaller areas.

Through these two actions, it is expected to improve the use of public transport and its flexibility.

The Integrated Regional Plan for Infrastructure, Mobility and Transport (PRIIMT - document number 7 in the table), constitutes the strategic tool for the regional authorities to monitor and increase the structure of infrastructure, the sustainable development of mobility and the efficiency of the regional and local public transport system.

The PRIIMT, in accordance with the requirements of the Regional Territorial Plan (PTR) and with the regional planning and economic-financial programming acts, has the following aims:

- Define the objectives and strategic actions with the objective of overcoming the conditions of structural and functional gap in the Ligurian infrastructure.
- Improve the conditions of connectivity with other regions and with European countries in order to achieve competitiveness and socio-economic progress.
- Improve the conditions of accessibility of the territory and the reorganization of the infrastructure system, with particular attention to critical situations, through actions of integration and

coordination with the infrastructure networks of state competence and with the regional and local ones, to achieve better living conditions for citizens, also through the development of alternative mobility plans.

- Create an integrated and efficient network of infrastructures and services for the sustainable mobility of people and goods through the development of modal integration.
- Efficient external costs of the system of regional and local public transport services, including through the balance and integration of transport modes, the development of the rail network, the promotion of the use of public transport and shared mobility and the realization of better conditions of safety and quality.

The last document analyzed is the Rural Development Plan drawn up by the Liguria Region, which represents the fundamental tool for the development of agriculture, the forestry, the natural environment and the economy of rural areas in Liguria.

The new programming is focused on a major theme: smart, sustainable and inclusive growth. The available public resources will be used mainly to increase the competitiveness of the agricultural and forestry sector through the support of interventions for the restructuring and modernization of enterprises. Particular attention will also be paid to innovation, economic development of rural areas, social inclusion and protection, restoration and enhancement of the territory.

4. Conclusions

The collaboration between T Bridge and Liguria Regional Authority led to the design of the action plan concept for smart on-demand buses to connect better rural areas in Liguria.

Since the main objective was to obtain a set of suitable DRT service models for Liguria Regional Authority in relation to the territorial aspects and mobility needs of user in the inner areas, the work carried out had to go through the following stages:

1. Definition of the action plan (already done in DT1.2.4)
2. Definition and analysis of the planning tools of Liguria Region
3. Organization of a meeting between T Bridge and Liguria Region for integrate the proposals of the action plan with the planning tools of Liguria Region

The definition of the action plan include some analysis to better understand the possible to-be scenario. In more detail, the analysis included are:

- Analysis on the territorial and the environmental in consideration of the settlements present, the population and the people employed in the various activities.
- Analysis of current systematic and potential demand in the pilot area.
- Analysis of the current public transport offer, analyzing the loads of public transport in the study area and highlighting routes, frequencies, timetables, etc.
- Definition of the to-be scenario

With the support of Liguria Regional Authority two possible typologies of transport have been defined, one for each province of Liguria Region.

- Fixed timetable and fixed route with detours (specifically for Arroscia valley and Sambuco)
- Fixed route with deviations (specifically for Sesta Godano and Savona)

These possible typologies of transport are due to some common points between the four pilot areas. The common point take into account for established the to-be scenario are:

- The population dispersion,
- The edge of the populations
- The size of the territory
- The complexity of the bodies to be involved
- The state of art of the offer and the data availability

For Sesta Godano (La Spezia), a service model characterised by fixed route with deviations has been suggested.

For Sambuco (Genova), due to the territorial conformation of the studied area, the suggestion has been to maintain a service with fixed routes and fixed timetables in the to-be scenarios. The travel time is about 30 minutes per direction and it would not be possible to guarantee a flexibility in time service if a vehicle is already on the route, in this case, some routes with required reservation are applied.

For the Arroscia Valley (Imperia), the suggestion would be to maintain the traditional transport service for the valley floor (Pieve di Teco - Albenga) and to introduce a service model characterised by fixed timetable and fixed route with detours for the Alta Valle Arroscia area, gravitating on Pieve di Teco.

Finally, for the area of Savona, a service model characterised by fixed route with deviations has been proposed. One main route connects Lavagnola with Piazza Mameli, as in the current state but the possibility to have three deviations to Savona FS, Ciantagalletto and Marmorassi has been added.

Further, the planning tools of the Liguria Region for inland areas were defined, analyzed and discussed to better understand how the scenarios proposed in deliverable DT1.2.4 can be applied. The principal planning tools analyse are:

- The National Strategy for Internal Areas and the new Institutional assets
- Technical Committee for internal areas, preliminary report for the selection of internal areas
- PUMS - Sustainable Urban Mobility Plan
- Basin plan of mobility and transport of the territorial area of Savona
- Basin plan of local public transport
- PRIIMT - Integrated Regional Plan for Infrastructure, Mobility and Transport
- Liguria Region rural development plan

During the meeting between TBridge and Liguria Region, Liguria Region pointed out that there are some aspects in line between the proposed scenarios and the planning tools, such as:

1. The studies proposed in REGIAMOBIL are in line with the objectives of the National Strategy for Inner Areas. This is because the actions proposed for La Spezia and Imperia areas would promote and valorize the heritage of the internal areas as provided by the national strategy.
2. For both areas covered by the technical committee, Imperia and La Spezia, it is possible find coherence with the application of the REGIAMOBIL study. In particular, with respect to the possibility of introducing the DRT bus, in REGIAMOBIL it is assumed that a service model characterized by fixed timetables and routes with possible deviations by reservation will be implemented. It is expected that this change will bring an increase in the use of public transport by encouraging intermodality between public and private services, that is one of the goals of the Technical Committee for internal areas, preliminary report for the selection of internal areas.
3. For Liguria Region the REGIAMOBIL study is also in line with the PUMS, in particular, the future scenario proposed for the pilot area of the city of Genoa includes a more efficient DRT service, increasing the number of daily trips. This element appears to be fundamental to promote public transport by reservation as provided in the PUMS.
4. The REGIAMOBIL study is consistent with the mobility and transport plan of the Savona area. In particular, for Liguria Region the REGIAMOBIL study aims to give greater flexibility to the public transport system in the Savona area, hypothesizing the management of some routes currently "traditionally" served by "reservation".

   Among the possible detour by reservation considered there is the detour from/to the Savona railway station, this element is essential to increase intermodality in the Savona area as foreseen by the Savona mobility and transport plan.

5. For Liguria Region, the REGIAMOBIL study is coherent with the mobility and transport plan of the Imperia area. In particular, the REGIAMOBIL study for the Imperia area aims to give greater flexibility to the public transport system, assuming the management of some routes currently served "traditionally" with fixed-route modes with detours.
6. In the REGIAMOBIL study for the La Spezia area, the objective is to give greater flexibility to the public transport system, hypothesizing the management of some routes currently "traditionally" served by fixed-route modes with possible detours. For these reasons, for Liguria Region, it is possible to assume that the REGIAMOBIL study is in line with the mobility and transport plan of the La Spezia area, which has as its aim the increasing use of public transport.
7. For Liguria Region, the REGIAMOBIL study appears to be consistent with the provisions of the Integrated Regional Infrastructure, Mobility and Transport Plan (PRIIMT). In fact, in all the studies carried out, the theme of multimodality has been considered, with the objective of providing not only the development of connections in rural areas, but also the integration of DRT services with the existing transport network.
   In addition, for Liguria Region, the proposed scenario is also in line with the PTR, since the planned interventions would implement one of the objectives of the PTR, that is; improve the conditions of accessibility of the territory and the reorganization of the infrastructure system, with particular attention to critical situations, through actions of integration and coordination with the infrastructure networks of state competence and with the regional and local ones, to achieve better living conditions for citizens, also through the development of alternative mobility plans.
8. The studies proposed in REGIAMOBIL aim to increase economic development and social inclusion in the areas studied through greater use of public transport, for this reason, for Liguria Region it is possible established that the REGIAMOBIL study is in line with the provisions of the development plan for rural areas which aims to give priority to public transport and to ensure greater efficiency and social inclusion.

Finally, for the question addressed to Liguria Region by TBridge about a possible implementation of the proposed scenarios in the future, Regione Liguria answered that considering the coherence between the action plan and the planning tools, it is very likely that the proposed guidelines will be considered.

Indeed, the coherence between the proposed REGIAMOBIL scenarios and the planning tools, on the opinion of Liguria Region, aims at enhancing the transport system for the future in order to overcome the isolation and social exclusion of people living in inner areas.