



DELIVERABLE D.T1.2.3

**Territorial needs assessment for FRIULI
VENEZIA GIULIA REGION**

**Version 1.0
102017**

1. Overview of the selected region

1.1. Delimitation and basic geographical description of the pilot area

Friuli Venezia Giulia Region (FVG) is placed in north-east part of Italy and it directly borders with two foreign countries Slovenia (east side) and Austria (north side), while western border is represented by Veneto Region (Fig.1). FVG region is identified by NUTS2 code ITH4, while its four provinces (Pordenone, Udine, Gorizia and Trieste) are respectively identified by NUTS3 codes ITH41, ITH42, ITH43 and ITH44 (Fig. 2).



Fig. 1 - Borders, provinces and general framework of Friuli Venezia Giulia region.



Fig. 2 - NUTS codes according to EUROSTAT

FVG is one of the smallest regions of north-east Italy with about 7.856 km² and 1,2 million inhabitants distributed on its four provinces: Pordenone, Udine, Gorizia and Trieste, and on its 216 Municipalities. Even if Trieste is the seat of the Regional Government and main administrative centre of the Region, the majority of population (almost 70%) is distributed among the two main provinces of Udine and Pordenone: over 70% of municipalities (155 on 216) have in fact a population of less than 5.000 inhabitants, while only 6 main municipalities have more than 20.000 inhabitants (Fig. 3).

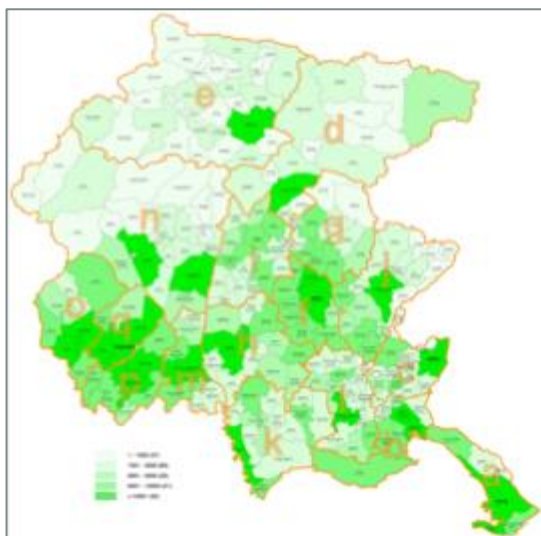


Fig. 3 - Municipalities and population



Fig. 4 - Mountainous relevance at regional level



These last ones are therefore representing the main centres where production activities and education centres are located, consequently attracting the majority of commuter flows of the region. In view of a widespread presence of villages and small municipalities characterized by a very limited demand of mobility (e.g. Municipalities located in the Mountainous area of the region - Fig. 3 & 4), those main centres are driving the distribution of transport demand along the main axis connecting them each-other.

A part from the four provinces, there are some more major municipalities able to attract remarkable touristic flows, with particular reference to seasonal tourism to the seaside during summer period (e.g. Lignano Sabbiadoro and Grado), and mountains during summer and winter period (e.g. Tarvisio, Sella Nevea, Ravascletto, Piancavallo) (Fig. 5). Together with those centres, other appreciated attractive locations are linked to archaeological and historical values (e.g. Aquileia, Cividale del Friuli, Palmanova) as well as natural or geological ones (e.g. Sgonico, Villanova) (Fig. 6).



Fig.5 - Localization of the main touristic destinations

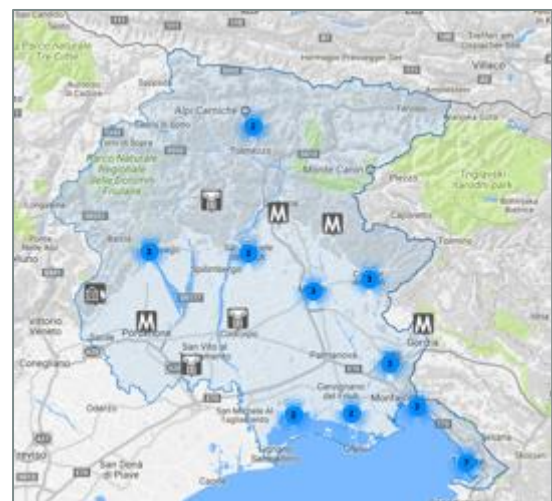


Fig.6 - Main cultural sites

It has also to be underlined how the productive texture of the region (i.e. main industrial productions) have been organized on a consolidated structure of industrial districts which are effectively contributing in shaping commuters request of mobility. Those are for example represented by the industrial districts of knife in Maniago (PN), on digital technologies in Tavagnacco (UD), the industrial districts of chairs, furniture and wood between Udine and Pordenone, where also the one of engineering industry is located, as well as the alimentary ones such as San Daniele ham and Trieste coffee (Fig. 7).

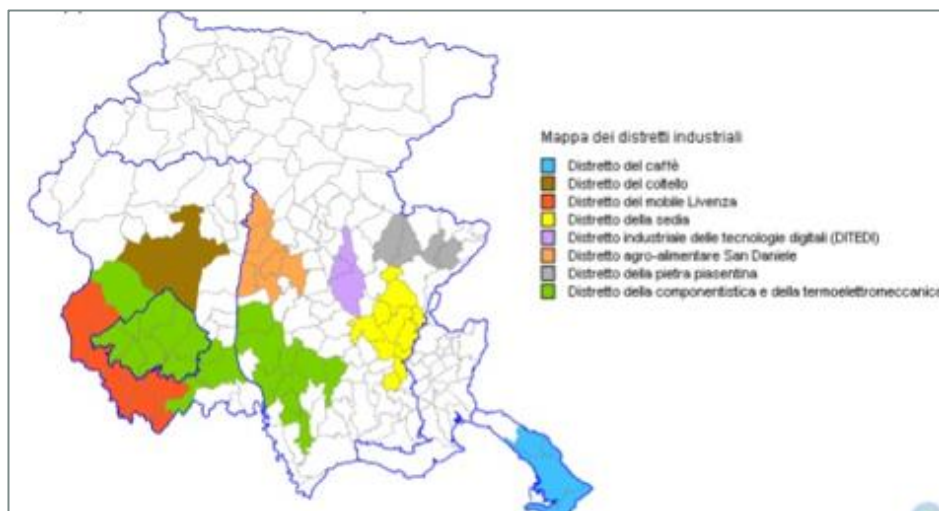


Fig. 7 - Localization of the main industrial districts

Another kind of nodes are then represented by the main accesses from outside the region: ports and airports in particular. As for the first category, FVG region has three major ports represented by Trieste, Monfalcone and San Giorgio di Nogaro, while an international airport in Ronchi dei Legionari (GO) is serving the region.

Last but not least is to mention the cross-border vocational dimension of the region where the borders, also from an historical point of view, have always been considered not a physical barrier but only a pure geographical limit. Commuters and cross-border connections are in fact part of the daily life of people living close to the borders and that contributed in the establishment of concrete and stable connections between Friuli Venezia Giulia region and both Austria (with particular reference to the cross-border section of Tarvisio-Boscoverde, where also a transnational train are operating on a daily basis) and Slovenia (with particular reference to Gorizia and Trieste cross-border sections).

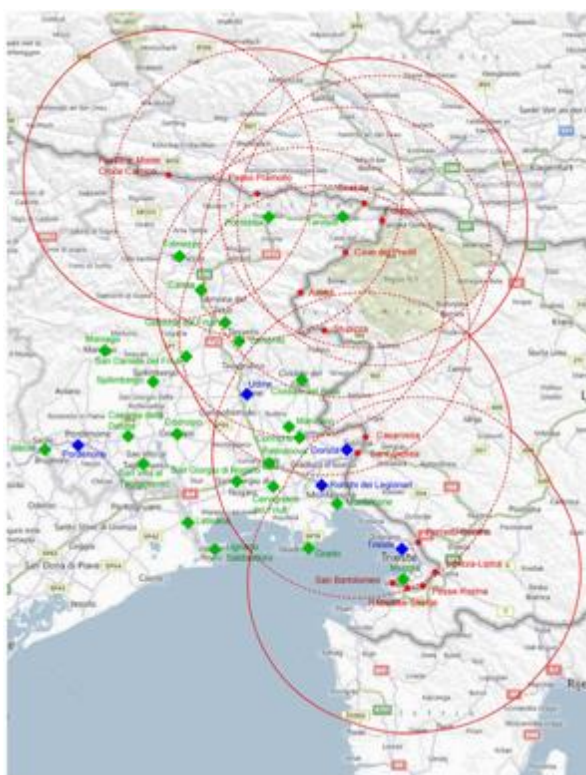


Fig. 8 - Cross-border highlight

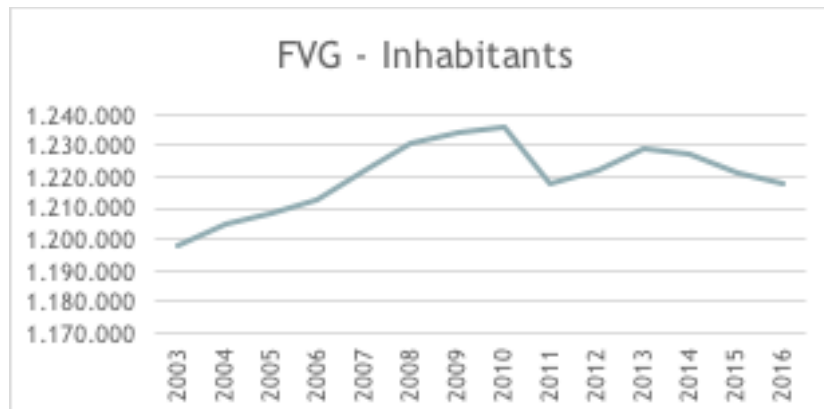
This last point it is strictly connected to the Pilot Actions that are going to be implemented in FVG territory within the CONNECT2CE project as far as they will focus on the enhancement on already functional axis connecting the main urban areas on a cross-border dimension. More into detail in fact:

- Pilot Action 1 (“*Experimental extension of the MICOTRA train to Trieste*”) will implement and extend the already existing cross-border train connecting Villach (Austria) to Udine (Italy) by promoting its prolongation to Trieste, thus enhancing and developing a consolidated axis Udine - Trieste;
- Pilot Action 6 (“*Cross-border integrated ticket ITA-SI*”) will optimize cross-border integrated ticketing system between Italy and Slovenia, thus completing the connection between the suburban area of Villa Opicina to Trieste city centre.



1.2. Recent population and demographic trends

According to the most recent statistics available on the regional database and elaborated on the basis of the National Statistics Institute (ISTAT), Friuli Venezia Giulia Region in late 2016 had a population of 1.217.872 inhabitants. Despite a general growth trend from 2000 to 2010-2011, a general decrease of the number of inhabitants has to be registered in the past years (Graph 1), while the balance between male and females in 2015 was almost equal and assessed at about 48% vs 51%.



Graph 1 - Regional population trend

As for the four main provinces of the region, they represent a differentiated share of population, underlining the main importance of Udine and Pordenone that are representing together almost 70% of the entire population of the region. This is also reflected in the distribution of population density: despite the wide mountainous area characterizing almost all the northern half of the region, density is very much focused on the main urban areas (up to 1.000 inhabitants/km² in Trieste Province) versus lower density of some very wide Provinces such as Udine (where density is 108 inhabitants/km²). At regional level, the average density is however of indicatively 150 inhabitants/km², more than 20% lower than the national average (201 inhabitants/km²) (Table 1).

	Inhabitants	% on total	Municipalities	% on total	Area (km ²)	% on total	Inh./km ²
Gorizia	139.673	11%	25	12%	466	6%	299,7
Pordenone	312.051	26%	50	23%	2.273	29%	137,3
Trieste	234.682	19%	6	3%	212	3%	1107,0
Udine	531.466	44%	135	63%	4.905	62%	108,4
	1.217.872		216		7.856		155,0

Table 1 - Municipalities, population distribution and density at provincial level

As for what regards age distribution, in 2015 over 25% of population was older than 65 and only 16,5% younger than 20 years. In the average section, more than half million people is included in the segment between 35 to 65 years, while 14% is included between 35 and 20 years old segment.

Also considering its nature of border region, the presence of foreign inhabitants is quite important with over 105.000 people (8,6% of the total), mainly coming from Europe (69%), Africa (14%) and Asia (12%). Those are mainly resident in the provinces of Udine and Pordenone and mainly represented by women (53%).

Foreign residents contributed significantly to the variation of population: in fact, despite a general reduction of population considering the average higher number of deaths in the region (14.100 versus 9.800 new born in the last 2003-2016 period), the general balance of the population was sustained by an increase of new residents coming from abroad, estimated in 5.500 people in the average in the same period.

1.3. Transport network and accessibility conditions

Friuli Venezia Giulia region is served by all modes of transport: an extended road and rail network crosses the entire regional territory, while air and water accessibility are ensured by the presence of relevant international ports (Trieste, Monfalcone and San Giorgio di Nogaro) and an airport (Ronchi dei Legionari-TRS).

As for the regional road network, FVG counts on almost 1.100 km of roads which are mainly owned and directly managed since 2007 by the Region through the regional company Friuli Venezia Giulia Strade S.p.A. Only 160 km are directly owned and managed by the national road company (ANAS S.p.A.). While the highway network, which in Friuli Venezia Giulia is extended for indicatively 280 km, serves all the urban areas represented by its four provinces (Udine, Gorizia, Pordenone and Trieste) (Fig. 9 & 10).

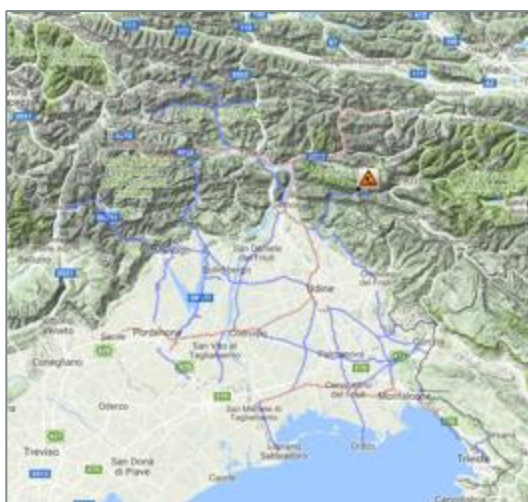


Fig.9 -Main regional and national roads



Fig.10 - Highways

Together with those four, some additional main urban areas have to be mentioned: they are in particular Sacile (PN) and Monfalcone (GO), which are attracting considerable traffic flows. Additionally, it has to be further underlined (especially if considering seasonal tourism), the attractiveness of the municipalities on the coastal area with particular reference to Lignano Sabbiadoro (UD) and Grado (GO).

As for cross-border connections, there are some main cross-border highway relations with Austria (Tarvisio/Coccau) and Slovenia (Gorizia, Ferneti and Škofije) and some minor cross-border road connections such as the Passo di Monte Croce Carnico and Passo Pramollo with Austria and several border connections with Slovenia as Rateče, Ucea, Robic, Caporetto, San Dorligo della Valle, (...).

The National register of Vehicles (ACI) registered in 2016 more than 780.000 vehicles in Friuli Venezia Giulia region, which it means an average of indicatively 650 cars/1.000 inhabitants. Considering the overall consistency of vehicles, the majority of them is still represented by diesel engines (50%) and with an average lifetime of over 10 years. Nonetheless, almost 80% of the vehicles belongs to the EURO 3 (or higher) standard.

As for the top ten commuting centres of the Region, those one are in particular represented by the four Provinces plus Monfalcone (GO), San Vito al Tagliamento (UD), Sacile (PN), Codroipo (UD), Porcia (PN) and Tavagnacco (UD). The municipality of Udine, due to the geographical position at the centre of the Region, is in particular the most important node for regional mobility, attracting 7,6% of the total mobility needs, followed by Trieste (6,9%), Pordenone (4,2%) and Gorizia (2,9%) (Fig. 11).

As for what regards the modal split of regional transport, the high demand for individual mobility based on the use of car puts this mode of transport at the first place, representing the 93% of regional domestic transports, while the use of bus and trains are very limited (7% and 2.2% respectively) (Fig. 12).

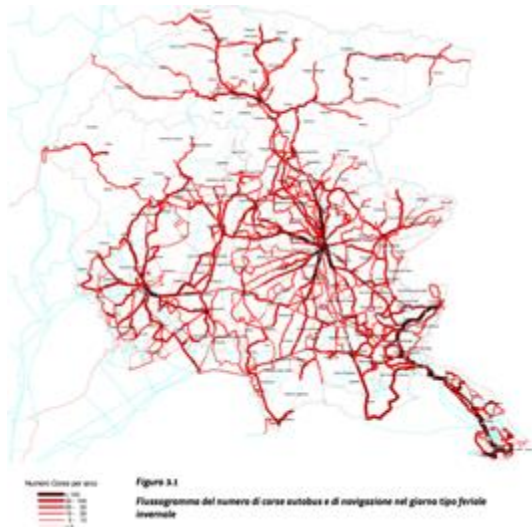


Fig.11 -Overview of daily bus services

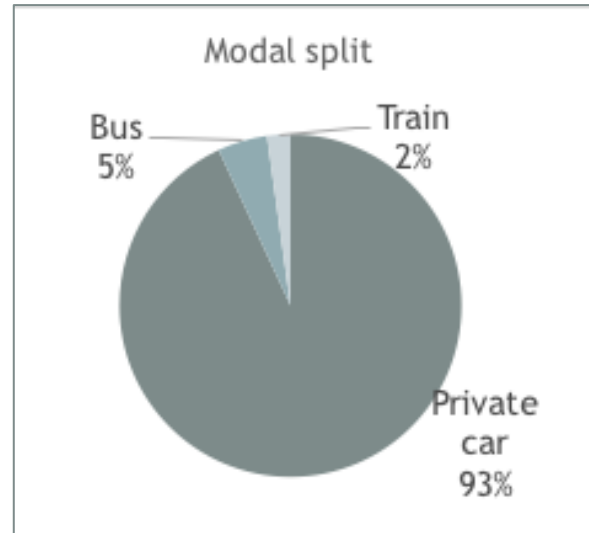


Fig.12 - Modal split

As for rail network, in Friuli Venezia Giulia there are 472 km of operative rail lines, 342 km (72%) represented by principal lines and 130 km by complementary lines. The majority of those lines are already electrified (82%) and double track (63%) with 38 operative train stations. Among those last ones, some main train station have to be mentioned with particular reference to Trieste, Udine and Pordenone train stations as well as Gorizia and Monfalcone, all included in the “Centostazioni” renovation initiative (Fig. 13).

The national railway companies Rete Ferroviaria italiana S.p.A. (national railway infrastructure manager) and Trenitalia S.p.A. (company responsible for providing rail service) are managing almost all the regional rail network apart from a minor section which it is managed by the regional company Ferrovie Udine - Cividale S.r.l. (*in house* company of the Autonomous Region of Friuli Venezia Giulia).



Fig. 13 - Regional rail network

As for cross-border rail sections, it has to be mentioned the operating line connecting Italy with Austria, where the MICOTRA train service is connecting daily Villach to Udine, while potential cross-border sections with Slovenia - even if functioning in the past - are currently not operating.

Considering maritime side, as previously mentioned, Friuli Venezia Giulia is served by three ports: Trieste, Monfalcone and San Giorgio di Nogaro. While the first one is representing one of the main port of the northern Adriatic Sea, devoted to both passenger and freight flows (almost 1,2 million of TEU and 200.000 passengers in 2016), the second one (Monfalcone) is mainly representing an industrial maritime port and San Giorgio di Nogaro an internal one.



From the logistics point of view, Friuli Venezia Giulia counts on the presence and operability of the intermodal logistics centres of Cervignano del Friuli, Pordenone and Ronchi dei Legionari, together with road terminals such as the one of Gorizia - S. Andrea and Ferneti.

Finally, as for what concerns air accessibility, Friuli Venezia Giulia is served by an international hub in the Province of Gorizia represented by the Aeroporto FVG Ronchi dei Legionari, used by over 720.000 passengers in 2016. Thanks to a specific project financed by the regional ERDF Operative programme 2007 - 2013 Regional Competitiveness and Employment, the regional airport of Ronchi dei Legionari is going to be linked to the railway network through a specific infrastructure that will guarantee improved passenger rail-air accessibility.

At European level, it has to be mentioned that the Region is crossed by two main EU Corridors, namely the Mediterranean and the Baltic Adriatic, which are serving the Region on both North-South and East-West directions. This presence is underlined by the acknowledge of some core nodes belonging to the core network corridors such as the Port of Trieste and the Rail-Road Terminal of Cervignano (Fig. 14).



Fig. 14 - TEN-T Corridors crossing FVG territory



1.4. Organisation of transport sector and key stakeholders

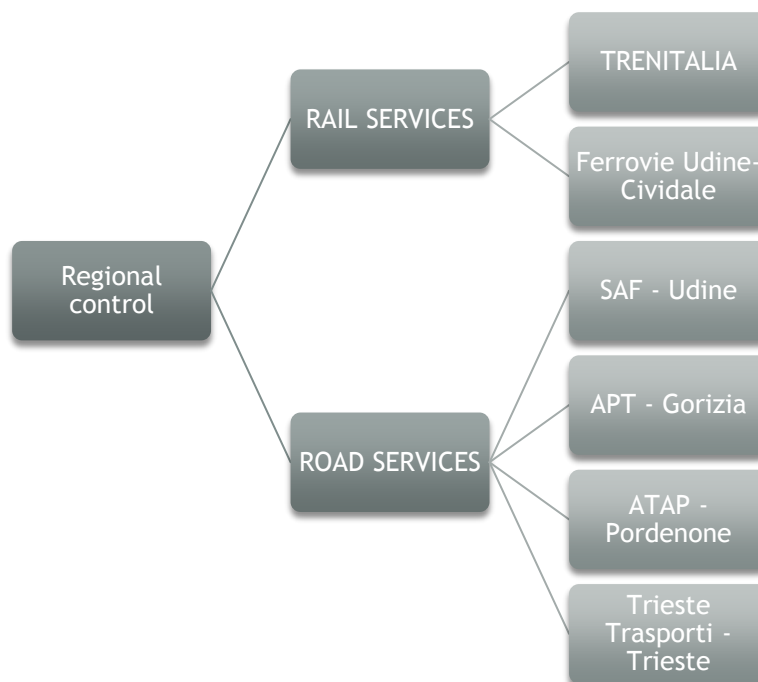
The transport sector in Friuli Venezia Giulia is structured on a multimodal network which includes road, rail and maritime transport services.

More in particular, as for what concerns the road and water transport services, it has to be mentioned how these ones are delivered by four companies, mainly reflecting the territorial subdivision of the four provinces of the region:

- Within the province of Gorizia, the main stakeholder is Azienda Provinciale Trasporti di Gorizia “APT Gorizia S.p.A.” which covers over the area of Gorizia and provides urban and extra-urban bus services, together with limited maritime transport services and a transnational service (Gorizia - Nova Gorica).
- Within the province of Pordenone, the main stakeholder is Azienda Trasporti Automobilistici Provinciali - ATAP S.p.A. which covers over the area of Pordenone and provides urban and extra-urban bus services.
- Within the province of Trieste, the main stakeholder is Trieste Trasporti S.p.A. which covers over the area of Trieste and provides urban bus services together with limited maritime and tram transport services.
- And within the province of Udine, the main stakeholder is Autoservizi F.V.G. S.p.A. - SAF, which covers over the area of Udine and provides urban and extra-urban bus services, together with limited maritime transport services.

As for what concerns train transport, only two operators have to be mentioned:

- from one side the national railway company Trenitalia S.p.A. which covers the majority of the regional lines and services;
- and from the other hand the regional company Ferrovie Udine - Cividale S.r.l. whose services are concentrated on the line connecting Udine to Cividale del Friuli and on the MICOTRA international train connection linking Villach to Udine.



At regional level, due to specific competences in public transport delegated by the national government (Decreto Legislativo 111/2004), the general direction for “Infrastructures, logistics and transport services” of the Region is entitled to manage and coordinate those services in order to optimize verify and monitor multimodal transport services. As a general overview, the services convey on yearly basis a supply of transports for citizens estimated as follows:

- almost 6,7 millions of train/km;
- 42 millions of km for bus services;
- 52.000 miles of nautical routes.

2. Territorial needs assessment

2.1. Connectivity

In 2014, on the basis of the results of the analysis delivered in the regional plan of public local transport (i.e. “Piano Regionale del Trasporto Pubblico Locale - PRTPL” approved on April 2013 by the regional government) the Friuli Venezia Giulia region launched an international tender to assign to a unique operator the public local transport services with reference to urban bus, extra-urban bus, tram and maritime services in the whole regional territory. The aim of this tender, which is currently ongoing, was in particular to identify a single provider delivering transport services in the entire region (bus, tram, maritime), thus guaranteeing an increased coordination of regional public transport and promoting positive effects in the process of harmonization of related tariffs and multimodal timetables with other operators (e.g. cross-border services from Austria and Slovenia) and modes of transport (i.e. train).

This will therefore lead to a general simplification of the organizational structure of those services which are currently based on public transport operators working on a territorial basis (i.e. Provincial competences) with no specific obligation of harmonizing timetables in the overlapping territorial competences. Therefore, it can be said that at this stage of development, the overall harmonisation of the multimodal timetable is not defined yet at regional level and that, among others, one of the purposes of the ongoing tender is also the start-up of innovative cross-border services through the harmonization of both timetable and ticketing services.

Despite this, some minor and limited examples of this harmonization are present in some specific territorial contexts also at cross-border level. This is the case in particular of:

- a cross-border urban bus service between Gorizia (I) and Nova Gorica (SI) active on a daily basis (20 routes/day). It represents a service contract between the Italian transport operator APT Gorizia (<http://www.apgorizia.it>) and Slovenian one AVRIGO (<https://www.avrigo.si/it/>) and which entails the harmonization of timetables between the two transport companies;
- a cross-border train service operating between Udine (I) and Villach (AT) is active since 2012. This service was developed as an output of the MI.CO.TRA Project (Improvement of cross-border public transport connections) which was financed under the Interreg IV Italia-Austria 2007-2013 Programme. Service is jointly operated by FUC (Italy) and OBB (Austria) with two couples of trains on a daily basis and included the development of harmonized timetables between the two services.

As for internal areas, some examples are also available of harmonized timetables:

- extra-urban and urban bus service with maritime transport service between Lignano and Marano, operated by SAF;
- train and bus service interconnection between Udine - Gemona and Tarvisio, jointly operated by Trenitalia and SAF.



Once the procedure to select the unique operator at regional level will be accomplished, the harmonization of timetables will be pursued in order to take in consideration all the modes of transport serving the region, thus enhancing the synergies with other transport operators (i.e. water, air and rail).

More into detail in fact, among the main aims in the medium-term, the enhancement of cross-border service should be focused on stricter connections with local transports systems through a better integration between the Italian and Austrian/Slovenian bus services operating near the borders, as well as through an enhanced synergy and coordination between the timetables of cross-border trains (Fig. 15 & 16).



Fig. 15 - Cross-border area

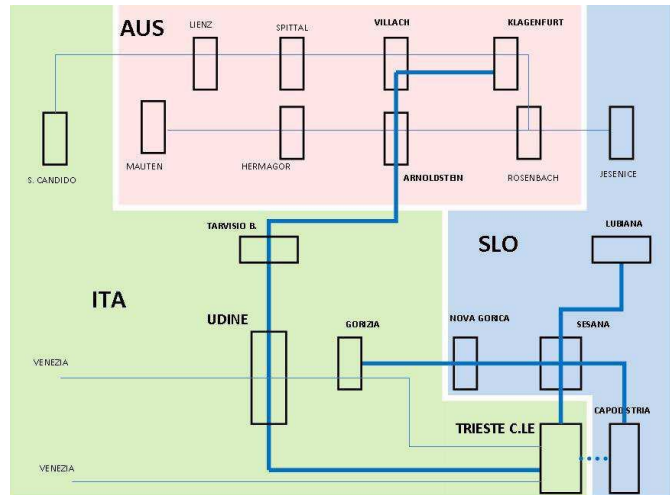


Fig. 16 - Cross-border train service schematization



2.2. Infomobility systems

Considering the variety of public transport operators working in Friuli Venezia Giulia region, several ICT solutions were separately developed and adopted in the different territorial contexts mainly represented by Provinces, thus leading to a fragmented overview of travel paths, especially if considering long-distance connections in different urban areas.

As for road transport (urban and extra-urban bus services) each operator developed its own travel planner available on its own website, while almost all of them (apart from APT - Gorizia) developed also dedicated apps with mobile and friendly-user interfaces.

As a result, a multiple source of information is available where to find timetables related to specific territorial context with limited overlapping information between two or more operators timetable.

The following tables are resuming what the different ICT systems offered by the regional operators of public transport are offering in terms of information before the trip (i.e. planning and organization the trip), and during the trip (i.e. including real-time information), as well as the kind of information provided in terms of geographical coverage.

As for what concerns what kind of travel service is provided, and on which geographical level can the user search for information, as well as which public transport modes does this travel information system include:

	APT	ATAP	SAF	TT
Pre-trip travel information system	X	X	X	X
On-trip travel information system	X	X	X	X
Mobile app		X	X	X
Local	X	X	X	X
Regional	X	X	X	
(Trans)National	X		X	
Geographical coverage (km ²)	775	2.273	4.905	212
Bus (urban)	X	X	X	X
Bus (interurban-regional)	X	X	X	
Tram				X
Train				
Water	X		X	X

As for what kind of information it is possible to find and about the possibility to book and purchase tickets:

	APT	ATAP	SAF	TT
Address	X	X	X	X
Stop	X	X	X	X
POI			X	X
Schedule		X	X	X



Route		X		X
Travel time	X	X	X	X
Changes			X	X
Stops		X	X	X
Fares		X	X	X
POI (Point of Interest)			X	X
Linked static timetables	X			
Linked timetables on stop level	X			
Online payment option		X	X	X
Ticketless system		X	X	X

As for train transport, the National railway company Trenitalia has its own travel planner as well as mobile app which is available for acquiring several kind of different information before and during the trip, while the regional operator Ferrovie Udine - Cividale - FUC, only developed a static website where information on timetables and train services (including the transnational MICOTRA service) are available.

As for geographical coverage and information available:

	TRENITALIA	FUC
Pre-trip travel information system	X	X
On-trip travel information system	X	X
Mobile app	X	
Local	X	X
Regional	X	
(Trans)National	X	X
Geographical coverage (km ²)	7.845	-
Bus (urban)		X
Bus (interurban-regional)	X	
Train		X

While for ticketing and information to be provided and then to be collected:

	TRENITALIA	FUC
Address	X	
Stop	X	



Schedule	X	X
Travel time	X	X
Changes	X	
Stops	X	
Fares	X	X
Linked static timetables		X
Linked timetables on stop level		X
Online payment option	X	
Ticketless system	X	

Some other operators are also providing public transport services in Friuli Venezia Giulia region: those are in particular the ones related to ATVO (bus operator from Veneto Region with partial overlapping territorial service in Pordenone province) as well as Austrian OBB train operator, which provides train services through the line connecting Trieste to Venice.

As for geographical coverage and info available:

	ATVO	OBB
Pre-trip travel information system	X	X
On-trip travel information system	X	X
Mobile app	X	X
Regional	X	
(Trans)National	X	X
Geographical coverage (km ²)	-	-
Bus (urban)	X	X
Bus (interurban-regional)	X	
Train		X

While for what concerns ticketing info etc.:

	ATVO	OBB-SCOTTY
Address	X	X
Stop	X	X
Schedule	X	X
Travel time	X	X
Changes	X	X
Stops	X	X



Fares	X	X
Online payment option	X	X
Ticketless system	X	X

The ongoing European tender to identify a unique operator at regional level that will provide transport services at regional level, set the basis for the overall modernization of the public transport services, enabling the completion of messaging systems dedicated to passengers and including both information on board and at the stops.

All the information provided by each operator are available at their own website:

- APT Gorizia - <http://www.apgorizia.it/RicercaOrari>
- ATAP Pordenone - <http://www.atap.pn.it/it/index.aspx>
- SAF Udine - http://www.saf.ud.it/ricercaorari2.aspx?area=*
- ATVO - <http://www.atvo.it/it-orari-e-autolinee.html>
- TRENITALIA - <http://www.viaggiatreno.it/viaggiatrenonew/index.jsp>
- TriesteTrasporti:
<https://www.google.it/maps/dir///@45.6491069,13.7749875,15z/data=!4m2!4m1!3e3>
- FUC - <http://www.ferrovieudinecivildale.it/>
- OBB <http://fahrplan.oebb.at/bin/query.exe/en?>

At the same time, some other interregional services not directly linked to the single operator are available to cover and partially overcome the fragmentation of travel paths on the long-distance perspective and related to private initiatives which are connecting timetables and services in order to compose and optimize routes connecting main urban areas also combining different modes of transport. These are for example:

- <http://www.mycicero.it/> (train + bus services)
- <https://www.trainline.it> (train + bus services)
- <https://www.logitravel.it/> (train services)
- <https://www.logitravel.it/> (train services)
- <https://www.goeuro.it> (train + bus services)
- <https://www.wanderio.com> (train + bus services)
- <https://www.busradar.it> (bus services)
- <https://www.checkmybus.it> (bus services)

2.3. Integrated ticketing and tariff schemes

In Friuli Venezia Region, there are at the moment only some limited examples of integrated ticketing combining (also) two modes of transport. Those are for example:

- extra-urban and urban bus service with maritime transport service between Lignano and Marano, operated by SAF which foresee a unique ticketing service;
- train and bus service interconnection between Udine - Gemona and Tarvisio, jointly operated by Trenitalia and SAF, which entitle passengers to use both means of transport with a unique ticket.

Additionally, some well-established international cross-border services have also to be mentioned:

- a cross-border urban bus service between Gorizia (I) and Nova Gorica (SI) active on a daily basis (20 routes/day). It represents a service contract between the Italian transport operator APT Gorizia (<http://www.apgorizia.it>) and Slovenian one AVRIGO (<https://www.avrigo.si/it/>) and which entails the harmonization of timetables between the two transport companies;
- a cross-border train service operating between Udine (I) and Villach (AT) is active since 2012. This service was developed as an output of the MI.CO.TRA Project (Improvement of cross-border public transport connections) which was financed under the Interreg IV Italia-Austria 2007-2013 Programme. Service is jointly operated by FUC (Italy) and OBB (Austria) with two couples of trains on a daily basis and included the development of harmonized timetables between the two services.
- a cross-border interregional bus service between Venice and Villach/Klagenfurt (passing through Udine) is operating with 2-6 daily bus routes. This service is operated by Austrian OBB company. A specific agreement allows to buy an integrate ticket to combine train from Salzburg to Villach, bus from Villach to Venice and then ATVO bus services to reach beaches near Venice.
- a specific cross-border maritime service was activated in 2014 thanks to the EASEAWAY Project funded under the IPA Adriatic Programme 2007-2013. In particular a passenger service was tested in terms of connection between Trieste, Slovenia (Pirano) and Istria Region (Rovigno and Pola). After the testing phase, Friuli Venezia Giulia Region decided to finance with own resources on yearly basis this service during summer period.
- since 2016, a daily bus service connecting Ljubljana to Trieste operated by Slovenske Železnice, Slovenian railway company.

Considering the specific request, it has also to be mentioned that FVG region approves on a yearly basis specific requirements for homogenous tariff schemes to be followed by transport operators within each single mode of transport (urban bus, extra-urban bus, train and water transport).

An alternative example, especially related to tourism perspective, is furthermore represented by the so called "FVG CARD" initiative (<http://www.turismofvg.it/en/FVG-Card>). This option for example, entitle a time-limited (48-72h or 7 days) possibility to use some transport facilities such as: urban bus service in Grado, Lignano, Udine, Pordenone and Gorizia, as well as trains from Udine to Cividale.

Also for this specific topic, once the unique transport operator will be assigned for serving the entire regional territory, then the integration of both ticketing and tariffs, as well as multimodal trip will be enhanced, thus allowing the overall reduction of typologies of ticketing services and the optimizing of different transport modes integration.



More in particular, at regional level, this will be achieved through several gradual steps, already partially accomplished by the actual operators and already foreseen in the regional transport plan (Piano Regionale del Trasporto Pubblico Locale - PRTPL) of 2013:

- integrated tariff schemes to be adopted by the different operators of both road and rail transport;
- adoption of integrated tariff schemes starting from periodic subscriptions (monthly/yearly, with special reference to commuters needs);
- adoption of specific clearing methods aimed at promoting intermodal integration;
- development of a dedicated ticketing system which will follow the adoption of an integrated tariff scheme;
- definition of tariff schemes tailor-made on promotional initiatives (touristic/education ...) thus supporting a differentiation of incomes also upon the different modes of transport.



3. SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Considering its territorial dimension, Friuli Venezia Giulia region is well equipped in terms of infrastructures (road, rail, ports) that can be used for transport services. • Despite its low degree of urbanization, Friuli Venezia Giulia regional transport system is quite simple to draw and understand, especially if considering the main flows connecting the principal urban areas. • Transport services, interchange infrastructures, harmonization of timetables and tariff schemes have been identified as priorities by the regional transport plan (<i>Piano Regionale del Trasporto Pubblico Locale - PRTPL</i>). • Cross-border public transport services have been identified by the PRTPL as important priorities to be implemented as regards to bus, rail and maritime public transport. • Cross-border innovative transport solutions have been developed thanks to some specific EU projects implemented by the Region (MICOTRA, EASEAWAY, ...). • Existence of ongoing initiatives on integrated ticketing system (also between different modes of transport) • Already operative agreements between transport operators jointly working on cross-border transport services. • Existence of regional coordination of tariffs for regional public transport. 	<ul style="list-style-type: none"> • Accessibility, considering the low population density, represents a problem to be faced when talking about a wide area of the region (with particular reference to rural and mountainous areas). • The high variety of transport operators currently working on the Region, with special reference to bus services, can somehow represent an obstacle to the adoption and implementation of a quick transition, with special reference to the need of unifying the approach of citizens to the new system; • The ongoing tender for identifying a unique bus public transport operator (published in 2014) is still ongoing: until it will be awarded, this should represent a bottleneck for the implementing innovative schemes in the public transport services.
Opportunities	Threats
<ul style="list-style-type: none"> • The additional competences coming from the national law (D.Lgs. 111/2004) transferred to the Friuli Venezia Giulia regional authority the management of several regional and interregional transport services, including the cross-border ones, thus activating a regional initiative based on specific territorial transport needs. 	<ul style="list-style-type: none"> • As one of the issues is represented by the renovation of both the fleets and infrastructural interchanges/stops etc. one limit could be represented by the lack of funds to be invested in such modernization. • The monitoring issue, which is clearly described as fundamental also in the regional transport plan (<i>Piano Regionale</i>



- The new competences assigned to the Regional Authority on transport, will permit to draw the regional transport service on the basis of functional specialization of services and the integration between different services in terms of modes and typologies.
- The new regional transport plan (*Piano Regionale del Trasporto Pubblico Locale - PRTP*) establishes general principles and criteria to re-organize the supply of transport services within the region without specific limitations in terms of its further evolution: this will give the opportunity to continuously adapt and enhance the services on the basis of the feedbacks (monitoring) coming from several typologies of stakeholders (e.g. local public authorities).
- The ongoing European tender for identifying unique operator responsible for regional transport (bus, tram and maritime service) represents an important opportunity to organize and harmonize the entire public transport sector of the Region, with particular reference to its cross-border characteristic and connections to be implemented.
- The monitoring system to be adopted at regional level will permit to strategically verify the overall management of transport services in the region. This initiative will therefore permit to identify eventual corrective measures thanks to stakeholder involvement in order to continuously implement services provided to citizens.

del Trasporto Pubblico Locale - PRTP) will need to be very precisely applied in order to obtain useful results to further contribute in the overall enhancement of harmonized and efficient transport services.

- Information and communication technologies to be used in order inform citizens on the option available (routes, timetables, ticketing etc.) will need to be clearly designed in order to be user-friendly and easily capture the ongoing and future trends of transport facilities at European level. On the contrary they would potentially hamper the access of citizens to the most appropriate kind of information on transport.

4. Overall conclusion

Friuli Venezia Giulia, as autonomous region, has specific competences to deal with topics such as transport and cross-border connections. This was in particular evident when looking at the regional decrees that on a yearly basis are establishing a common background to rule transport services at regional level, harmonizing and pushing for synergies between the public transport operators. If considering also the experiences matured within the common framework of European Territorial Cooperation Programmes, several initiatives were born, tested and - in some cases - established, thanks to such kind of cross-border cooperation. It is in particular the case of the MICOTRA train connecting Villach to Udine (that is going to be further enhanced within CONNECT2CE) and of the EASEAWAY project which tested a new cross-border maritime service and that are now representing a consolidated service provided to citizens with specific funds dedicated by the region.

The importance that Friuli Venezia Giulia region puts on the public transport initiative, is clearly highlighted in the regional transport plan (Piano Regionale del Trasporto Pubblico Locale - PRTPL) where the future steps to be accomplished in order to enhance the regional transport service are precisely identified.

Among those ones, a particular priority has been given to the necessity of harmonizing transport services (both in terms of typologies and modes) on the basis of the territorial needs that have to be continuously monitored, as well as the necessity to sustain cross-border connections, starting from what already achieved so far and promoting their further development.

In this context, the ongoing tender for the identification of a single operator responsible for the implementation of road and - partially - water transport services in entire regional territory represents an important opportunity for the scale-up of transport quality at regional and interregional level, even if actually partially hampered by the impasse currently limiting operator's initiatives.

When looking at the outlined SWOT, it is easy to underline the synergies with CONNECT2CE objectives, especially if considering that the Pilot Actions that are going to be implemented in the region, will focus on two specific aspects perfectly matching with priorities also highlighted in the regional transport plan, with particular reference to the cross-border initiative which will develop and upgrade an already existing cross-border service (MICOTRA) and to the promotion of integrated tariff schemes between different modes of transport which will also capitalize individual solutions adopted so far in some limited contexts.

Finally, the system of regional public transport will surely benefit also from the other activities/pilots and initiatives which are going to be carried out by the wide and heterogeneous partnership within the framework of CONNECT2CE project: since a strong connection is existing between the 3 priority areas of intervention of CONNECT2CE and the Regional priorities defined within the PRTPL, project's activities will be useful to further enhance and support the modernization of the regional transport services, representing a powerful background to share consolidated best practices.