



Action plan for Project Partner 6 Abruzzo Region



Part I – General information

Project: - OptiTrans – Optimisation of Public Transport Policies for Green Mobility

Partner organisation: Abruzzo Region PP6

Other partner organisations involved (if relevant): //

Country: Italy

NUTS2 region: Abruzzo - ITF1

Contact person: Sergio Iacoboni / Tobia Monaco

email address: optitrans.abruzzo@gmail.com

phone number: +39 085 7672059

Part II – Policy context

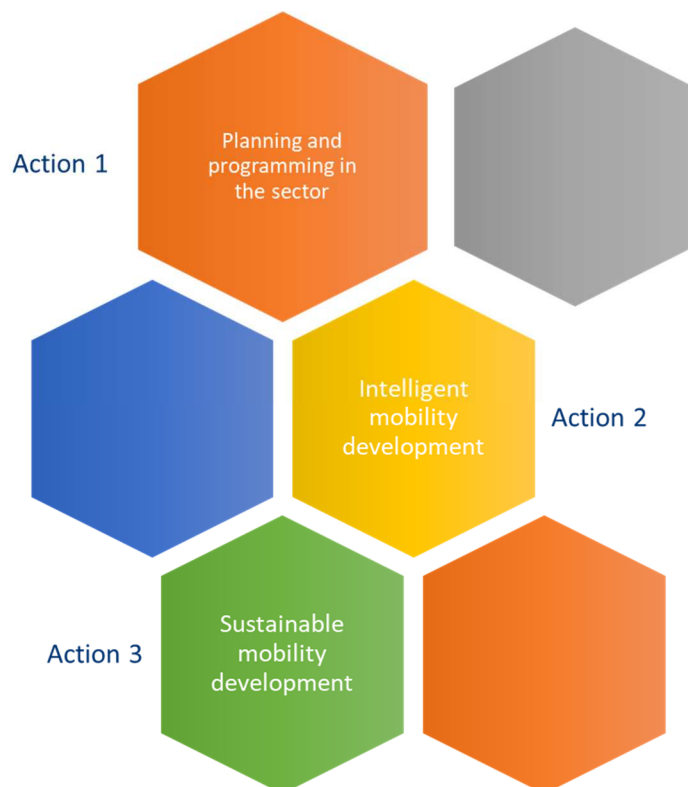
The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed:

Abruzzo Region ERDF 2021-2027 ROP priority axis VII "Sustainable urban transport", investment priority 4E

In addition, the Triennial Transport Service Planning as the Regional Strategic Plan on Public Transportation was also directly addressed, as its adoption was due in the same time framework and from such strategic document other sources of funding are triggered, both at regional and national level to comply with the standards set forth.



Preface

OPTITRANS PROJECT

OptiTrans Project is a Project funded by Interreg EUROPE 2014-2020 Programme funds and it is encompassed within the Programme broad objective of low carbon economy.

As a general objective OptiTrans Project aims at improving the policies on promoting green mobility and developing intermodal low-carbon public transport and other alternative types of mobility. The Project involves the Ministry for Infrastructure and Agriculture of Thuringia, Germany, as Lead Partner and other Partners: Baia Mare Metropolitan Area Association, Romania (PP2), City of Zadar, Croatia (PP3), Tartu City Government, Estonia (PP4), Region of Thessaly, Greece (PP5), Abruzzo Region, Italy (PP6) and Granada Energy Agency (Granada Provincial Council), Spain (PP7). Each Project Partner represents a different EU country and Public institution in order to jointly analyse policies at local level, and strengthen the modal split share of public transport, with special focus on suburban and rural areas. The sharing of experiences and best practices is related to policy instruments and funding schemes with the aim at improving the integration of different low-carbon transport modes but also public policies on public transport also through integrated and sustainable decision-making on better ticketing options, routes and timetables, and by increasing the use of ICT in the so-called fluctuating demands. An indirect impact of the Project is to deliver improved perception of the transport services by end users, and promoting higher passenger comfort and improved image of public transport by means of communication actions aiming at the stakeholders and end users of services.

The workplan is broadly divided by the Programme into Phase 1 and 2. The first Phase can also be divided in two: one was preliminary and has been devoted to the study and analysis of the state-of-the-art of public transportation in each Partner's Region, by observing the national and regional/local transport systems in the legal framework of competence, in order to complete the preparation of a document, called "Baseline Study". Such output has been discussed among Partners in specific meetings and study visits sessions of Peer Reviews to make sure that all relevant topics of the Project are addressed. Abruzzo Region held a Peer Review meeting in February 2019 and achieved the chance to present some relevant regional/local policies and practices and to receive feedback from some of the Partners and their Stakeholders. Such comments and suggestions were taken into consideration for the improvement of a better internal cohesion strategy among the technicians, decision makers and stakeholders of the Region, in order to increase the shared goal mentality of sustainable public transportation, oriented to its users and to the reduction of air pollution, and to achieve a better standard of environmental protection policies.

The other part of Phase 1, ending on 31.12.2019, has been devoted by each of the Partners to receive feedbacks to the Baseline studies during Peer Reviews and to elaborate internally to regional Working Groups the relevant good practices identified on field, thanks to research activity and involvement of Stakeholders by Project Partners. The whole activities lead to the preparation of a regional Action Plan to select specific actions in the areas of sustainable mobility and CO2 reduction to be applied in the regional transport system.

The following two-years (2020-2021) defined as Phase 2 are devoted to implementation, through specific policies, practices, lines of action, projects and operational programs - of the

measures identified in the Action Plan developed during the previous phase, with the aim of enhancing the common goals of the OptiTrans Project and achieve common standards of sustainability and CO2 reduction, by monitoring the progress of the implementation and the criticalities of the proposed Actions.

Furthermore, there is an overarching objective, which is common to all Interreg Europe Programme philosophy, of improving specific administrative knowledge and capacity building through active learning processes, involving Partners and their Stakeholders on the issues at stake during thematic seminars, mutual investigation on good practices and exchange of experiences, also by using the Policy Learning Platform and the resources library that is accessible through it. In this specific case, the goal is improving capacity building of each Partner's public Authorities and their subordinated bodies responsible for public transport planning and organisation, and follow a common methodology on public transport policies that takes also into account the exchange of experiences to a wider perspective.

With regards to finances, Abruzzo Region has a budget of € 170k circa and it covers all relevant activities including Peer Review Session participation and organisation with its staff members of the Working Group and external expert support. Regione Abruzzo has actively participated to all activities and has been positively impacted by Study Visits and Peer Review Sessions in Granada, Thuringia, Zadar and Thessaly. A Peer Review Session was also organised in Pescara during Phase 1 of the Project.

Policy Context Detail: Abruzzo Region Action Plan and Public Transport Challenges in Coordination of Competences and Territory

The methodology of involving directly Stakeholders in the configuration of needs assessment and to propose measures and initiatives was inspired by the OptiTrans Good Practices, Peer Review on Baseline Studies and Exchange of Experiences among Partners and Stakeholders has been used by Abruzzo Region in order to create a strategic approach, divided into several areas of intervention, where available resources can focus in terms of planning and programming.

The proposals were formulated taking into account the lesson learnt thanks to the OptiTrans Project Partners and Stakeholders (Companies, Business Associations, Governmental Bodies, Public and Private Transport Companies, Agencies, etc.) with other Regional Administrations, in order to acquire up-to-date and specific knowledge and identify and assess the specific needs of the area covered by Abruzzo Region, as it will be mentioned in each presented action and sub-action.

On the other hand, the Action Plan is also adopted in the framework of Italian legislation. Only at the end of 2019, the Central Government assigned the Regions the responsibility for planning sustainable development. From 2019 on, the regulatory framework provides for the first time that Regions also prepare a special Plan: this new framework legal reference occurs in a scenario characterised by extreme differentiation among Regions, in terms of ability to promote and activate specific policies on sustainable development. For several years, some Regions exercised their competence sporadically by operational actions and experimental projects or via sector plans and programmes, rather limited to specific issues, such as electric recharging stations or regional development of distribution systems in the field of alternative energies for transportation.

In Abruzzo Region, for example, only some local Authorities have been active on sustaining alternative, multimodal and gentle transportation and mobility networks, often only aimed at tourism development.

The new Regional competence therefore requires specific and direct programming skills which need to be increased and exercised in the short span of a few years: the OptiTrans experience has proven crucial to achieve the goal of identifying the needs of the local communities through Stakeholder's involvement and coordinating them at the Regional level. The interregionality of the Project has been providing several useful examples to inspire the direction of the Action Plan. Here we can just briefly refer to Study Visits in Granada, Zadar and Tartu Municipalities which were in fact very useful to understand points of contact with the issue of the local Municipalities in Abruzzo Region, but also Study Visit in Thuringia, which was very effective in focusing on the relationship of competence between central government and regions. More specifically shared observations during exchange of experience were very important to consider several aspects involved in planning public transportation effectively. To mention a few, the metropolitan tram line in Granada had a great impact on assessing what is the need for modern and efficient transportation mean in a City that wants to reduce pollution, while Tartu electronic ticketing system is an evidence of the possibility of integrating transport systems both at local and regional level in order to save money on the ticketing chain. Other inspiration came from referring to Zadar Masterplan in the evolution of the transport services offered to the community, heavily impacted by seasonal traffic – just like the Abruzzo Region coast during summer- and to Thessaly Regional attempt to achieve an integrated system of connection together with Thuringia pilot project solutions to cover last-mile transport needs with electric vehicles, whose costs are covered by European funds and only in part by local rural communities.

Abruzzo Region's public transport is challenged by the geomorphic characteristics of the region (mountains 65%, hills 34% and only 1% level ground) and both population and industry are concentrated on the coast with detriment of internal regions, exacerbated by the 2009 earthquake's destruction in the L'Aquila area, still heavily felt over 10 years later. The morphological part constitutes a context and scenario for the assessment which refers to the results of the Baseline Study: by a majority of $\frac{3}{4}$ the territory constitutes of rural areas, one of the main target areas for the Project, because it has a weaker demand of public transport and the costs of traditional local public transport offer are significantly high and very low in efficiency. The occasion to discuss multi-modality in action in other Partner's territories, such as use of tram, trolley-buses, but also bicycle trails or routes, on-demand mobility provided by community-based private services with some sort of public funding/incentives or other innovative pilot solutions have been taken into account during the Peer Reviews and the Study Visits in order to bring back some new experiences to be implemented on the regional-specific area.

The proposed actions concern the creation of a mobility offer tailored to the kind of demands to be addressed.

Action 1 *is oriented to capacity building in transport planning and programming through professional training in order to achieve a better understanding and response of public transport service.*

Action 2 is oriented to intelligent transport mobility through renewal of the fleet and planning improvement oriented to rural areas dedicated mobility

Action 3 is oriented to sustainable mobility promotion through a series of converging measures that have the common goal of setting a positive environmental-friendly mobility tangible route to build upon in the next programming period 2021-27. Some are already on their way to implementation and some others are being set up at present but the effects will be visible over a longer time. At present we present the Cycle mobility measures, which are included into two different funding schemes, as it will be specified later on.

Among policies, in achieving these actions, planning has a crucial role for good quality Public Transport Service.

In this light, there are two policy instruments: one is the Regional Integrated Transport Plan (PRIT) that has an infrastructure part and a services part.

In the case of service operations, the financing from the PRT is 180 million per year, i.e. the need for transport services current costs (all transport concession companies that carry out the transport lines). On the other hand, the investments in infrastructure, is chapter 5 of the PRIT. Infrastructures need to follow a specific competence line: they have been approved by the Regional Council which set the programmatic framework for investment programmes that subsequently are actually funded. However, such programmes, at the present time, are still in the stage of detailing what are the specific needs to complete the infrastructures that were planned long ago (e.g. roads, rail transport schemes and so on). At this point of development, there are no longer new infrastructures to be set out in a strict sense. In other words, the PRIT can be defined a strategic programme that covers both the services part and the infrastructure part, but while the services part is financed by the transport fund (180 million per year for current expenses), the infrastructure part it is financed by other instruments, foreseen by other programmes. On closer inspection, in fact, all infrastructures, such as highways or road axes, have a medium-long term construction time horizon of about 25 years, with a schedule that can be renewed and changed every 5 years. For example, the infrastructures that are being built today, were originally set out by programming in the early 2000s, later approved by the Regional Council in 2016, then they were subject to executive planning, which is going to take about another 6 years, and then there is a technical time needed to prepare the tender and the actual construction sites.

Vice versa, transport services horizon is annual based and it needs to be reviewed every 3 years through the Three-Year Service Plan, Triennial Service Transport Plan (PTS). So the time horizon is different and partially intertwining.

Part III – Details of the actions envisaged

ACTION 1 – CAPACITY BUILDING IN PROGRAMMING AND TRAINING FOR PUBLIC TRANSPORT - Improve the technical and managerial capacity of staff in relation to the Visum traffic analysis tool.

The background

OptiTrans Project is coaxial with Abruzzo Region goal of coordinating local policies in the area of pollution reduction and sustainable and green transport incentive.

It is more than necessary that Administration Staff increase their technical skills and get instructed in the use of planning and programming tools, which the Administration is equipped with, by adequate methodology, as well as on specific issues involved.

Thanks to the exchange of experiences of the OptiTrans Partners and Stakeholders during Thuringia Peer Review and Study Visit it was clearly understood that a strong human competence factor is co-essential to the use of digital tool. The multifaceted competences necessary to govern a workstation that controls public transport service are a shortage in Abruzzo Region as a matter of fact.

The Good Practice of “new concept of the Public Transport Network/Bus” explained by Thuringian Ministry of Transport was very interesting and inspiring in terms of Stakeholders involvement and public-private partnership in forming and training a common framework of competences and skills in the staff, both private and public via exchange of experience and direct specialised training.

Description of Action 1: The new challenges of ICT use in public transport services, infrastructure and planning are extremely demanding. The shortage in competence on the subject matter requires that the Regions develop programming skills and training primarily requires effective confrontation with Administrations that already have experience in this area, both at National and International level.

For this purpose, the participation of Staff in European Territorial Cooperation Projects, such as OptiTrans, and the Policy Learning Platform resources aim at acquiring a general policy making process know-how, but also of specific and targeted training, in the transport sector.

A first major area in which the region must work is human resources training within the Regional Administration, devoted to programming for sustainable development in general.

Abruzzo Region is equipped with fairly sophisticated tools for planning in the transport sector with *ad hoc* software. However, it is not yet fully mastered by the involved Staff, due to turnover and changes of Staff organizational events affecting the Regional Department of Transport.

Brief description of the software Visum

Visum is an extremely complex software based on a programming graph based on data from the regional relevant networks that graph is built upon: roads, bus stops, resting places, intersection junctions between roads, railways and infrastructures in general. Over the course of time, a series of information concerning transport services have been put in the database and elaborated: e.g. what are the bus stops (which are also picked up by the transport information apps e.g. moovit), what distance, which route, which intersections between lines, between roads, between stops and so on.

This software allows to make simulations on the hypothesis of changing a bus-route or moving a stop on the route in terms of potential loss of users, changes in local traffic, changes in timing in the route etc. This is just to describe an elementary level, but there are also many additional potential uses that are not currently known by the staff who manage the software.

With the planned training, the staff who use the software will be put in a position to make the best use of it: computer skills to make a graph from the data, to feed the database, to geo-referencing a stop, etc. Furthermore, over time the officials have changed and those who had received the training courses are no longer in service and this creates a difficulty in activating this tool. Training is therefore necessary to give the technical skills necessary to understand and use the tool and insert it in the administrative practice relating to its management and its potential in terms of planning.

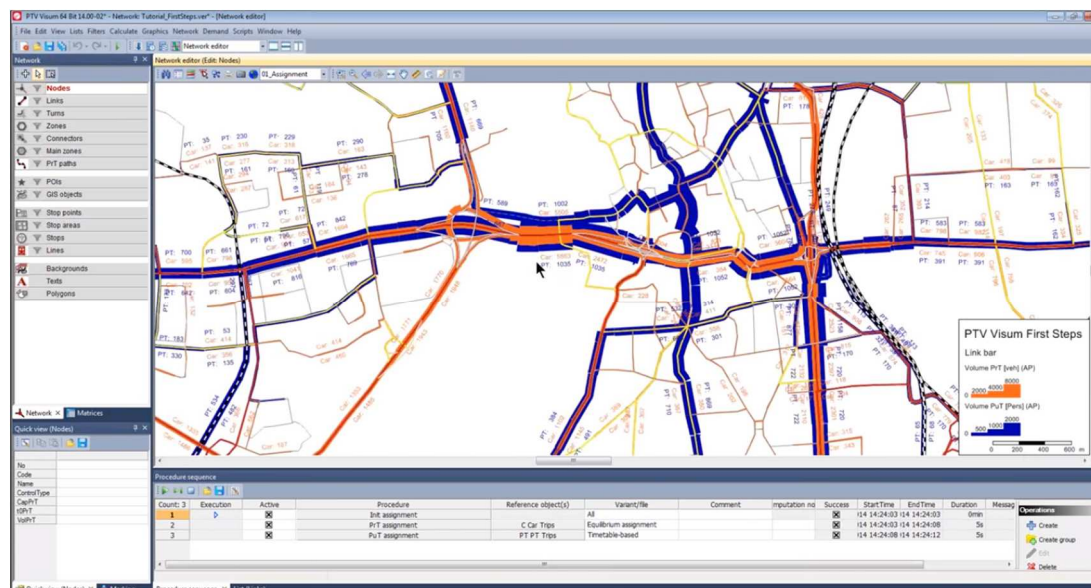


Fig. 1 – Visum software “first steps” planning

The lack of impactful change is probably also related to weak monitoring and evaluation on spent sums and reflects the need for general and specialised training on ICT available tools. It is therefore necessary that the regional structures acquire the ability to use the ICT planning tools through the training of the Staff and their interaction with the Staff of the private service providers and local Authorities involved in the same activities for gaining momentum from networking in skills and exchange of design practices.

It is of extreme Importance to improve the skills to manage the transport planning center, both of a technical-IT nature, both from a technical-transport point of view (transport engineering), and with specific knowledge and skills of transport planning (of a technical-administrative nature to do calls for tenders and service contracts), and economic-business skills to evaluate economic offers.

These are specific areas that need to be increased to obtain better administrative capacity and it also helps to define courses and target groups.

First of all, the use and planning skills must be acquired: the software provider operates this first level of training and also provides a more advanced level. In addition to the purely IT knowledge, there is the technical-engineering planning skills of the transproti and the theme of tenders for the definition of the services, planning (service plans, needs, connections, ways and terms), choice of the contractor and all the legal aspects related to the preparation and management of transport service contracts, including economic planning to evaluate the economic offers during the tender.

The reality of reference is in fact very complex, it has various facets and concerns different disciplines, with a rather advanced level of in-depth analysis: it is a series of wide-ranging skills.

Specific staff training projects will be followed for the use of information systems for transport planning generally speaking, and with particular reference to the mentioned Visum software at present in use to the Department.

The Action will contribute to improving the programming and management skills of the ERDF programme and achieve specific goals, as better governance capacity in planning and management for the transport system.

Also, in the same area of intervention, it is necessary to optimize the use of human and instrumental resources and the skills acquired in the area and by the Administration with the previous Actions put in place to pursue the goal of increased administrative capacity through exchange of experience and skills direct transfer Entities that have the same framework and need to progress in the ability to design sustainable development measures in order to jointly create a real Observatory of sustainable mobility with local authorities.

Finally, but not least in order of importance, this Action is going to make a substantial contribution to the main product of sustainable mobility policy, which is the realization of a Sustainable Mobility Plan at Regional Level, and not only at Municipality level, because it needs to take into account rural and less served areas. Beyond becoming a formal fulfilment required by the new National Law, this Action

grants enhancing skills and competences among Staff and Stakeholders directly and indirectly involved.

Duration and costs:

The personnel and human resources in the P.A. that deal with Public Transport processes are going to be involved. It is a group of Regional staff of around 5 people that can be also joined by one or two representatives of technical Stakeholders of the Region.

The need for professional specific and software-oriented software was triggered by looking at the experience in Thuringia, where Regione Abruzzo representative were able to see trolley-lines network and infrastructures and how dedicated staff is able to deal with extremely detailed equipment and software and the clarifications given during the study visit were helpful and inspiring although in the different context of Abruzzo Region,

The training is going to be offered in several ways, both in the form of catalogue on specific issues, and in the form of on-demand training, or by specific bodies and training companies on specific issues, on-the-job, also in synergy with other activities or projects.

The training is intended to be provided in the form of one basic course and one intermediate course, plus assistance during software updates and training on-the-job when the software is installed and updated.

We can foresee an annual budget to be used for the entire duration of the OptiTrans project (2020 and 2021) for participating in catalogue courses by the software provider company (PTV) at various levels, for a total of around 50 thousand euros per year. Such amount can provide training 101 for the involved personnel for both years.

The supply of hardware and updated versions of Visum software cannot follow the ordinary budget funding procedure as it is related to supplementary activities other than ordinary ones.

It can also be planned, for the period of the whole OptiTrans Project's duration, to purchase dedicated hardware to be used for the use of the Visum program and its most updated versions and to purchase hardware and software and for the training of staff who deal with the management of service contracts.

Source of fundings for this activity is going to be funded in the framework of the ROP in the 2021-27 programming period.

Proposed result indicators can be defined by the number of employees who participate in training courses organized by PTV Italia company, exclusive agent for the production and distribution of Visum software and supplier of services for the related training, or the relationship between employees trained at various levels (basic course and advanced courses) and employees dedicated to software management, data processing and use, over the total of employees in the transport sector.

Other Indicators of achievement, progress and results of the project can be: purchase of hardware and related management software (in the number of 2, with baseline 0); and number of employees trained in the use of the software or number in relation to the number of employees assigned to program and control the LPT activities.

The last two indicators are aimed at their realisation, that is, when Observatory and Annual Mobility Plan are delivered: their complete implementation can predictably be set by the end of a three-year period (2022).

ACTION 2 – INTELLIGENT MOBILITY DEVELOPMENT – Renewal of the fleet with ICT tools and better planning with on-demand public transport offer

The background:

Sustainable mobility is a goal that can be achieved only by convergent measures: interregional learning was crucial in achieving this awareness. As the legal framework of competences is a given factor in this context and it involves different levels and sectors in a sort of matrix point-of-view. However, by participating to OptiTrans Project it was inspiring to see how to optimize the coordination among levels and layers of competences. Examples of such interconnections were the Thuringia and Baia Mare exchange of experiences, because they were able to show the intersection of roles and responsibilities of central government level, regional level, municipal level and to some extent also private sector contribution under the subsidiarity principle.

The necessary connection and constant coordination between Regional, National and Local entities also via the important role of the Transport Associations showing the importance of organizing convergent actions also by involving the private side with technical stakeholders, such as vendors and providers, and public decision makers in the process of innovating the equipment and planning routes.

OptiTrans Project Partners have all shared their experience of fleet turnover towards a more efficient and less polluting one in various times and ways of funding and of operating the turnover in order to maximise the economic investment effort implied in the change, over a reasonable time to monitor the effects.

Description of the action:

This Action has two components.

Sub-action 1: Renewal of the Fleet with Local Transport Low Impact Fleet

European policies are increasingly orientating public administrations, bodies, companies and utilities managers to the replacement of the respective fleet of cars, buses and public utility vehicles with the purchase of at least 25% of vehicles CNG or LNG or electric vehicles or hybrid vehicles with external charging or, in the case of buses, hybrid tout-court.

The containment of energy consumption and environmental impact has boosted the technological innovation of both urban and suburban road vehicles in recent years. In fact, the performance of vehicles fueled by conventional fuels derived from petroleum has improved, and the use of new energy carriers is spreading, albeit slowly, from compressed and liquefied methane, through the use of fuels of biological matrix and grid electricity.

In Abruzzo, there is a distribution of rolling stock on a regional basis by type of service characterized by the use of 1375 vehicles, of which 500 in the urban area and 875 in the suburban area. Diesel is the most widespread supply mode for Local Public Transport, due to the lower purchase cost and a capillary refueling infrastructure. The following table shows the distribution by emission class of the 1375 vehicles in use of the Abruzzo LPT.

Class o typology	Number	%
Euro 0	132	9,60
Euro 1	6	0,44
Euro 2	230	16,73
Euro 3	460	33,45
Euro 4	57	4,15
Euro 5	369	26,84
Euro 6	113	8,22
Elettric Vehicles	8	0,58
Total	1.375	100,00

Table 1: Units available according to type of vehicle

From the analysis of the fleet, diesel engines are the most used for buses for local public transport and constitute the starting point to be considered as a reference in

the evaluation of technological innovation scenarios. The latter is not exempt from critical issues because the purchase costs of innovative vehicles is higher than that of traditional vehicles. In addition, the use of new energy sources implies the purchase of new infrastructures and different plants that also require new knowledge from operators.

In the new calls for tenders for public transport service, all the instruments that must be compulsorily included in the new means supplied are analytically included. As for the sources of finance, they are financed only with ministerial resources, with a 60% incentive on the investment for the budget.

Two distinct investment programmes are underway in this regard for next programming period, with new equipment for dealers, with an improvement in quality in relation to the services rendered (control systems, people counters, GPS, traffic control, possibility of automating routes, forecast of the travel planner also on the reference site of the Region and quality of service evaluation).

Duration and costs:

The gradual replacement of the vehicles currently in circulation with those with a lower environmental impact requires an initial investment of 40 million euros which would allow the Region to acquire a first endowment of vehicles with the related systems / infrastructure to be used where the territorial context allows it.

This amount may be supplemented by the co-financing portions of the LPT companies and can be gradually implemented starting from the 2020-2023 period.

The Fund for Development and Cohesion (FSC) is, together with the European Structural Funds, the main financial instrument through which policies for the development of economic, social and territorial cohesion are implemented. These include the implementation of actions dedicated to the recovery of the fleet for local public transport. The FSC operational plans as well as the National Strategic Plan for Sustainable Mobility help to implement the aforementioned strategic guidelines and to pursue the EU's priorities in the field of transport infrastructures with targeted lines of activity.

Sub-action 2: internal zones transport services - Rural areas dedicated mobility

There are so called Internal Zones that national legislation for development strategy define as crucial for the role public transport plays together with others services.

The tools to improve the quality of service that put together in an integrated vision come from different programmes and different funds, and also have multilevel programming matrices: Region / State / Europe.

In this sense, there is a strong interaction with stakeholders to build an operational programme for next programming period on the basis of real issues from the territory, to be strengthened by community-related consultations, both for

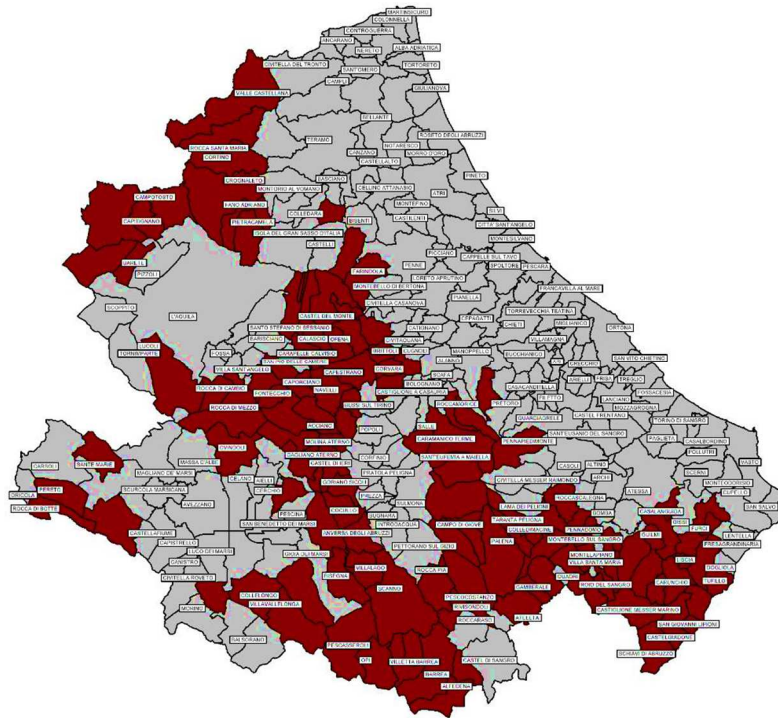


Fig. 2 Areas of weak demand in Abruzzo Region (red colored)

Municipalities and other Stakeholders.

In fact, these types of interventions are transversal in nature with respect to transport in the strict sense: from the point of view of matter and skills, there is a complex organization that sees a strong interference between exclusive State competences or competing State – Region's competence. In such case, there are vertical lines, sector-related and along these lines, there are also horizontal lines that relate to multilevel programming, peculiar to the Italian reality, in relation to the configuration of the legal system in terms of public transport capacity and service.

Management is therefore unitary at regional level, but it depends and has a vertical and horizontal impact at different levels.

This Sub-action consists of introducing, in specific areas identified in red on the figure, Collective Dedicated Transport Systems, which have the value of conjunction and integration between private and public transport, with specific reference to the collective taxi which is considered a specification of local public transport because of this it preserves the traditional nature of the predefined routes with table operating

hours, to which it combines, however, the seat reservation, as well as the possibility of providing, on request, route and timetable diversions.

The establishment of an "on call" type service responds to the primary need to ensure the right to mobility for all groups of users, including those who cannot or do not want to use the public transport service, but who from this new offer other factors may be attracted:

1. need to contribute to territorial development, thanks to the offer of this type of connections in areas that would otherwise be poorly served;
2. opportunity to improve the image of the public transport service from a social and environmental point of view also thanks to an evolution of public transport legislation;
3. economic convenience of the operator, rationalizing the offer.

Duration and costs:

Such an intervention falls within the scope of the streamlining process of local public transport and, therefore, the costs to support this type of transport are also those of the LPT Fun.

ACTION 3 – SUSTAINABLE MOBILITY DEVELOPMENT

The Background:

The main objective of low carbon economy in the transport sector is to reduce pollution levels deriving from the intense use of private vehicles and increase livability of the urban environment through requalification of the integrated urban environment. Interregional learning on this topic with OptiTrans Project was powerful as it showed the important effort by all the Project Partners to introduce policy instruments and specific measures intending to favour to pursue of such objective.

The background relation with OptiTrans Project is supported by Granada and Thuringia experience of promotion of bicycle use by providing docking stations in strategic areas close to other public transport means to favour intermodality of transport means. Such learning was inspiring for this Action in order to create new patterns of citizens' mobility and cultural change both in the urban environment and in rural areas in order to increase the satisfaction of users increasingly attentive to the quality of the services offered, and spread the principles of sharing economy.

Description of Action 3:

Cycle mobility

European Union countries are involved in a transnational cycle network Project, called "Eurovelo", created in 1995 by the ECF - *European Cyclists' Federation*, together with the Danish company *De Frie Fugle* and the English company *Sunstrans*.

The network has been managed solely by the ECF since August 2007, and was made its own by the European Parliament which commissioned two studies (Lumsdon et al., 1999; Weston et al., 2012), where marketing-related aspects are studied in depth cycling tourism; infrastructure (with a focus on the so-called Route 13); integration with other means of public transport, in particular with railways; to good practices. The network that currently has 14 itineraries covering the entire European continent, for a total of over 70,000 km of cycle routes, consisting not only of cycle paths on their own premises, but also of low-density traffic routes with high safety for cyclists.

The study by the European Parliament (Weston et al., 2012) on the economic impact of the Eurovelo network, calculates that 2 billion 295 million cycling holidays are carried out in Europe, for a value of over 44 billion euros per year. The number of nights spent by cyclists is 20.4 million, with an annual expenditure of around 9 billion euros. The same study also estimates the economic effects resulting from bicycle tourism in the countries of the European Union, and Italy ranks seventh, among the top ten nations that have the highest estimated economic benefits, with 103 million day trips and over a million overnight stays, for a total of two billion euros of economic impact. The network project, recently renewed, includes 18 itineraries that integrate the Eurovelo network crossing the whole Italian Peninsula, from North to South and from East to West.

Abruzzo is affected, in the North-South axis, by the itinerary Route BI 6 - Adriatic Cycle Route: - from Trieste to Santa Maria di Leuca (LE) – which is following part of the Eurovelo Route no. 8 (stretch from Trieste to Venice) and crosses the Regions: Friuli Venezia Giulia, Veneto, Emilia Romagna, Marche, Abruzzo, Molise, Puglia, for a total of 1,300 km.

The Abruzzo Region, with the "Bike to Coast" project, financed the completion of the coastal cycle path from Martinsicuro (TE) to San Salvo (CH), incorporating the project of the Green Road of the Costa dei Trabocchi which provides for the conversion of the disused track of the Adriatic railway to be converted in cycle route.



Fig. 3 – Bike-to-Coast line: 131 km of cycle route

The aim of this Sub-action is to integrate the route currently under construction, to comply with European cycle routes standards, which in addition to the necessary completion of the actual infrastructure, needs to:

- study of indication / tourist signs compliant with Bicitalia standard, its construction and location on the route (kilometric indications of the locations, indication of points of interest, explanatory tables of the route and of the places concerned, etc.) and in the adjacent road network, so as to easily identify the cycle and pedestrian path and facilitate its use;
- connection of the coastal cycle path, through cycle paths (on its own site or with another type), to the railway stations located on the Adriatic line, in order to facilitate bicycle / train intermodality;
- creation of refreshment / service points along the cycle path (bike grill);
- the racks for parking the velocipedes, benches and preferably tree-shaded areas, drinking water fountains every 5 km of track, etc. (art.3, paragraph 1, letter d, D.M. 557/1999);
- elimination, in the existing sections, of the architectural barriers, and implementation of measures for full accessibility to subjects with disabilities, of the whole route;
- homogenization of materials and finishes of the route, street furniture, completion works;

- creation of protected parking lots (art. 11, paragraph 2, Ministerial Decree 557/1999) _ see also Project 3.1;

- adequate vegetation equipment, where possible, in order to provide shading to the users of the cycle path, harmoniously insert it into the environment and constitute, through the coastal path, a green infrastructure element useful to reduce the fragmentation of the existing ecological corridors, especially in the river valleys.

In addition to completing the cycle infrastructure and complementary works, the following actions will be necessary for the tourist promotion of the route:

- promotion of the itinerary nationally and internationally with advertising in newspapers (newspapers, periodicals, sector publications);

- creation of an app with the route map, the places of interest traversed, timetables of local public transport services and public and private services, services for cyclists (bicycle workshops, hospitality dedicated to cyclists, sale of accessories, etc.).

Duration and costs:

For the mentioned works, an estimated cost of € 5 million is foreseeable, while horizontal and vertical signs; cycle crossings; side protection elements; etc. are worth an estimated cost of € 1,500,000. It can also be divided into several phases by distributing the investment over a multi-year period.

Funding is going to be provided by National and Regional funds.

Results are expected by the end of 2021, with the implementation of part of the cycle-route.

Action Plan Players involved

- Abruzzo Region - Department of Public Transport Planning, Department of the Presidency and European Affairs, Executive Body (Giunta Regionale) for the formal commitment to the Actions described

- Representatives of the four main cities: Chieti, Pescara, L'Aquila and Teramo: the four municipalities are the main beneficiaries of ERDF funds under the addressed policy instrument and the responsible for the implementation of local actions

- Società Unica di Trasporto Abruzzese - TUA Spa: is a local transport operator that manages 80 per cent of Abruzzo's public transport of passengers through rail and bus services

- Società Abruzzese Gestione Aeroporto - SAGA Spa: is an airport operator

- Trenitalia as Railway operator

- University of L'Aquila research hub and training institution that closely collaborates with Abruzzo Region on regional development, including transport

Timeframe

Phase 2 monitoring: 01/01/2020 – 31/12/2021

Funding sources (if relevant):

ROP and National funds (National Laws, Regional Masterplan, Action for South, other funding schemes) **for the Programming Period 2021-2027.**

Date: 08.06.2020

Signature: *Abruzzo Region Department of Presidency and Department of Transportation*