



European Union  
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# **OPTITRANS GRANADA PEER REVIEW 23 - 26 OCTOBER 2018**

# **REPORT**



Version 1  
Date: 16 November 2018



## Peer reviews

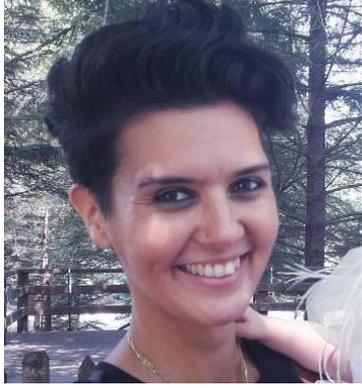
*Each region/country will be peer reviewed by a small group of other regions/countries*

- *Who: 4-5 persons representing different partner territories (OptiTrans project managers and external stakeholders)*
- *Preparatory half-day training in Berlin (4<sup>th</sup> September 2018)*
- *Before the visit:*
  - *team members get to know each other and exchange via Skype or similar*
  - *baseline study provided by reviewed partner as starting point*
- *During the visit...*
  - *arrival day dinner with local project manager and selected stakeholders*
  - *interviews and small workshops with local stakeholders (minimum: researcher, business representative, public authority representative) and those responsible for the implementation (management) of the selected policy*
  - *review team may split up to cover more*
  - *final day: public presentation and discussion of peer review findings*
- *After the visit:*
  - *team review members elaborate a joint report summarising the review*
  - *production of recommendations for the reviewed territory/partner*
  - *side effects include better knowledge about another partner territory's good practices and challenges – and possibilities to transfer successful approaches*

*Following the peer review visit, a comprehensive written report should summarize the review's implementation, describe the learning effects of the participants and give recommendations to the policy actors of the visited and reviewed territory. The report is elaborated under the responsibility of the peer review team leader, usually a member of the OptiTrans project team, with all other peer review team members as well as the project manager of the local partner in the reviewed territory contributing. Those having participated in peer review visits will brief the local project manager and their own Stakeholder Support Group about their findings abroad to share their learning. The report is drafted in English language and **must be available at the latest four weeks following the peer review**. Its length should be around 10 pages (content, without index, open page, etc.) and photos and presentations used during the visit should be added as an appendix.*

## A Peer review team

### Brief presentation of the peer review team members:

	<p><b>Eirini Bekiari (Greece)</b> Staff member of the Region of Thessaly since 2001. Educational background as Civil Engineer. Working in the Department of Spatial Planning of the Directorate of Environment and Spatial Planning of the Region. Involved in the monitoring of the implementation of spatial plans in urban, semi-urban and rural areas of the Region. Previous occupation at the Sector of public infrastructure of the Region, responsible for the management and monitoring of infrastructure projects.</p>
	<p><b>Katerina Lappa (Greece)</b> Region of Thessaly secretarial support &amp; public relations to the Governor's office. Driving examiner to passenger vehicles (category B). Previous occupation, secretarial support to the Construction Department of TRAM S.A. Previous experience to INTERREG Europe, administration support to EXTRAMET INTERREG IIIB MEDOCC (The rural space in the context of the new metropolization), CONNECTED CITIES INTERREG IIIC WEST participation to the workshop "Mobility problems in Mountain Cities – The case of Covilhã, Portugal.</p>
	<p><b>Kalliopi Kotsira (Greece)</b> Interreg OptiTrans Stakeholder. Civil Engineer specialised in transportation management. Employee in the Department of Technical Services in the Municipality of Trikala. Main occupation: Sustainable mobility planning, transportation and traffic planning.</p>

	<p><b>Kairi Kuusik (Estonia)</b>  OptiTrans team member. Quality manager of Tartu public transport.  Since 2010, Kairi has worked in a public sector as a project assistant, public transport specialist and quality manager of public transport. Kairi was in charge of preparing planning EU project applications different transportation related documents, collecting information as well as organizing of many different activities. She is involved in several transport related cooperation projects including smart- and sustainable transportation. She was in charge of development of e-ticketing system in Tartu City.</p>
	<p><b>Kadi Metsma (Estonia)</b>  Interreg OptiTrans Stakeholder.  Specialist of the traffic department of Tartu City Government. Since 2012, Kadi is working in public sector and is involved in development of different cooperation projects and development plans – transport, road safety. Kadi is responsible for arranging the road safety and transport related campaigns (car free day, cycling, etc) in Tartu City. Engagement of public and stakeholders is a new expertise which has been added in recent years.</p>
	<p><b>Laura Remmelgas (Estonia)</b>  Interreg OptiTrans Stakeholder. Interreg BSR project “Sustainable Urban Mobility and Commuting in Baltic Cities” (SUMBA) Estonian country coordinator and workpackage lead.  Expert and project coordinator at the Baltic Environmental Forum Estonia (BEF EE). Educational background in social sciences (EU policies) and urban landscape management. Working at BEF EE since 2010 on the topics related to spatial planning, urban mobility, energy efficiency and climate change adaptation and mitigation. Member of national mobility related working groups and a member of the national Climate Change Policy steering committee, and was participating as an expert in a working group that provided input for the strategy from the perspective of energy production and industry and on transport.</p>
	<p><b>Stipe Stagličić (Croatia)</b>  Interreg OptiTrans Stakeholder.  CEO at Smart Solutions Zadar, software company which is working on developing smart mobile and web application. Creator and developer of CityBus Zadar mobile application in 2017. Responsible for maintaining and upgrading Android and iPhone application.  Previously finished master’s degree at Faculty of Organisation and Informatics in Varaždin in 2014. Experience of 4 years in</p>

	private sector, involved in development of Zadar public transportation model in last year.
	<p><b>Ivan Plazina (Croatia)</b>  Staff member Zadar Municipality.  Senior Associate for the preparation and implementation of EU Projects in the City of Zadar, in the EU funds department. By profession, an environmental engineer, working on projects related to the environment, traffic management and waste management. Used to work in the environmental department and edited databases related to wild waste landfills, organized and supervised the disposal of waste of wild landfills.</p>

### **Background**

The modal split shows an important mobility walking, both in the city of Granada and in the metropolitan area. The use of private vehicles in the city of Granada is lower than in other similar Spanish cities, thanks to a good network of alternative public transport systems. At the metropolitan level, this percentage is higher. Cycling is still in quite low percentages, both in the city (0.4%) and in the metropolitan area (2%), where there is no good cycling infrastructure. In the case of public transport, in the city of Granada the use is 20.3% and 13% in the metropolitan area. The configuration of the transport network, it is conditioned by the territorial characterization of the metropolitan area of Granada. The configuration of the metropolitan area of Granada is the most dispersed of Andalusia, integrated by the city of Granada and 31 adjacent municipalities.

There is a wide range of plans and strategies that regulate initiatives for sustainable public transport, at national, regional and local levels. They are focus on aspects of innovation, infrastructure, cycling, urban sustainability, energy efficiency and sustainable mobility.

## **B Characteristics of public transport policies for green Mobility and sustainable transport system of Granada region**

As a result of workshop, interviews and meetings held during the visit, the Peer review team has reached the following general conclusions regarding the development of public transport- and sustainable transport policies in the region of Granada:

1) In the urban area of Granada, great attention has been paid to the development of public transport. Good bus connections have been developed and a new solution has recently been

introduced - the tram line. The use of public transport is convenient for the residents, and the ticketing system is an advantage. PPP is well developed thanks to concession system.

2) The main strategies, national and regional plans that set the policy to follow with initiatives for a sustainable public transport are summarized in: Innovation Plan for transport and infrastructure 2017-2020 (National) Land Use Planning of Andalusia (POTA) (Autonomic) Plan PISTA 2020 Infrastructure Plan for the Sustainability of Transport (Autonomic) Andalusian bicycle plan 2014 - 2020 (Autonomic) Andalusian Strategy for Urban Sustainability (Autonomic).

The POTA clearly establishes that public administrations are obliged to "promote a multimodal and integral transportation system based on public transport services and the promotion of journeys in non-motorized ways (by bicycle, on foot), in front of the automobile. The transport should contribute to the reduction of unnecessary mobility.

Andalusian Urban Sustainability Strategy sets clear strategic targets: "i) to make mobility and transport decisive factors for quality of life, social cohesion and progress , ii)to improve the energy efficiency of transport reducing energy consumption and the emissions, and iii) avoid the expansion of urban spaces which depend on the automobile, slowing down disorderly urban planning, considering public transport as a basic service in the new urban developments and not allowing new developments without a planned accessibility in public transport".

3) The dispersion of urban centers, due the increase of residential areas in the periphery of cities and in the municipalities of metropolitan areas make it difficult for citizens to access work areas by public transport, increasing the use of private vehicles. There is a weakness in the public transport service, affected by the vicious circle that involves competition with the private vehicle. In addition, the existence of numerous taxi services and individuals to meet the demand in schedules not served by public transport services. Therefore, public transport only attends to captive demand and is presented as uncompetitive compared to the automobile.

4) There are different initiatives to enhance the sustainable transport system. One of them is a Comparte project what is based on the concept of car sharing. It is a project promoted by the Provincial Energy Agency of Granada and the Diputación de Granada, and co-financed by the Andalusian Energy Agency and the Institute for Energy Diversification and Saving (IDAE), through a program of subsidy for the sustainable energy development of Andalusia, and within the framework of the 2008-2012 Action Plan of the Energy Saving and Efficiency Strategy in Spain (PAE4 +).

**At the current stage, the main actions to improve mobility in Granada metropolitan and rural areas are:**

- Development of the tram system in Granada metropolitan area and thus improved capacity of public transport in the region.

- Integrated ticketing system in public transport.
- Improvement of bus line system. There is already established a bus line network with very good coverage. The system includes the High Capacity Line, which at the beginning was going to be the only one running along the highway axis of Constitución Ave. Gran Vía, Reyes Católicos and Acera del Darro and developed further so now there are four more lines that cross the city center by the Gran Vía (lines SN1, SN4, C1 and C2).
- In the Granada region, the demand-based transport system (taxis), which primarily serves less populated and dispersed has been successfully implemented is being developed further.
- Restrictions on passenger car traffic has a positive impact on the modal distribution of mobility. Relatively high proportion of pedestrian traffic will have a very positive impact on the quality of the living environment.

**Weaknesses and problems identified during the review what need to be considered for improvement of the situation of public transport in the Granada region:**

1. Urbanisation is causing depopulation in remote areas and thus the offer of public transport services is reduced.
2. Existing public transport system has limited service hours.
3. The transport in rural areas is deficient. Therefore, the only way to reduce losses is to reduce costs, which implies a low quality service, and consequently, it is used only because there is no other alternative.
4. There is no study of each municipality, when each one really works in a different way. For example, in rural municipalities in the eastern part of the province of Granada, there are populations of 400 inhabitants who have some needs. In contrast, there are other municipalities with a more youthful population whose routes do not meet their needs.
5. Public transport information was not easily available (especially at stops and especially for tourists in English), which in some cases forced the choice of a less sustainable mode of transport - a taxi.

**Finally:** There are a lot of measures and initiatives for a sustainable urban transport, innovation, infrastructures, energy efficiency and sustainable mobility. The public transport services are facing the dispersion of the towns and city sprawl, the high captivity of the traveler (it does not have another way of transport) and a cultural problem of the irrational use of private vehicles. In conclusion, the use of public transport in the rural area of Granada is currently very small and low. There is a very low offer of public transport services in rural

areas that make people do not use the public transport services. There are some successful experiences such as Demand Responsive Transport with taxis in rural areas, which must be extended to other areas. Transport services on demand should multiply which would optimize the use and exploitation of public transport, improve travel times and be more competitive. It is necessary to promote car sharing measures, especially in points of great attraction of recurrent trips such as universities and in business, industrial and service parks. The Public Platform ([www.grnadacomparte.com](http://www.grnadacomparte.com)), is a good example and opportunity for that.

## C Good practices

During the peer review was discussed different good practices in order to solve identified weaknesses and occurred problems in the public transport system of Granada metropolitan and rural areas. In next we will present just some of them which seem like a most promising practices to follow in Granada:

### **New concept of the Public Transport Network /Bus in the Saale-Holzland-County:**

The Saale-Holzland-County has a very inhomogeneous settlement structure; e.g. 64 of 195 villages have less than 100 inhabitants and in addition the number of inhabitants is steadily decreasing. Main goal was to restructure the network in order to allow that “Every citizen should have a minimum range of mobility options available by public transport, irrespective of the availability an individual car.”

The main network should guarantee a hourly tacted traffic with similar departure and arrival times. The supplementary network the services will be compressed in a demand oriented way and taking economy into account (single day services).

**Pesaro bike network implementation:** The city of Pesaro in the Marche region in Italy has reached around 30% split mode of bikers through implementation of different policies that are combined in its “BICIPOLITANA” initiative. A continuous a connected network of bike lanes, well maintained and with a very good signalization combined with a metro-type map to be able to reach main points of the city by bike.

## D Policy context

The focus of Granada region within the OptiTrans project is set on sustainable transport. This was also the main focus point of peers during of the review visit. Peers have learnt during the visit next:

- a. The main objective in the region is to enhance cycling and increase the quality of public transport and thus get more people out of cars. There are strong policies and measures for that in national-, regional- and in local levels set up. In the regional level dedicated funds are available for financing sustainable transport solutions.
- b. In the Granada region exists strong stakeholders promoting sustainable transport and helping to design policy instruments – for example The Provincial Agency for Energy of Granada (APEGR), Associations of the bicycle in Granada, Association of metropolitan taxis of Granada etc.
- c. Transport system of the Granada metropolitan area is lead by the Consortium of Metropolitan Transport of the area of Granada and Center for Integral Management of Mobility. Cooperation in the level of municipalities is well organized and will give a great advantage to develop further sustainable transport system in the region.
- d. Mentioned policies don't have specific indicators for the Granada region in context of sustainable transportation but in general the commitment is clear and accepted by all involved parties.

Detailed information about this section can be found in the annexes of this document.

## **E Positive examples**

During the visit, the Peer review team introduced various transport solutions and also took on technical issues. Here we would like to highlight two solutions that other regions in Europe could take as a model

1) Introducing Trams - This is a very good example of how a successful multimodal single transport system can be built up from zero within a relatively short period of time with bold political decisions, in-depth planning activities and public engagement.



2) Bus stops (labeling) - at first glance, it seems to be a very simple and natural thing, but in quite a number of cities it is not clear what stops stop. The labeling system used in Granada is clear and conspicuous so that people who notice it from a distance, and people with poor eyesight, are quite easy to understand whether the desired bus passes the given stop.



## F Recommendations

Summarizing the peer review, it can be said that in Granada region and in the Granada city, a lot has been done in recent years to develop public transport and multimodality. The main objective at regional and local level is to develop the public transport system and reduce the number of private vehicles by increasing the number of public transport, bicycle users and sharing services. The clear goals set in development documents have allowed to achieve good results in previous periods. One of the most important areas for development is bicycle traffic. The Peer Review meetings showed that stakeholders have a fairly clear and coherent understanding of where the transport arrangements in the Granada region could move in the future. For our part, we would like to make some recommendations here, which will help to develop the region's transport sector:

- 1) Despite the fact that the region has a high proportion of foot traffic and the unsuccessfully tested bicycle rental system in Granada, it makes sense to make efforts to develop the segmentation service in partnership with the private sector. Possible solutions for developing car distribution systems and electric bike-sharing schemes in the region have been discussed in different groups. In the regional and local development documents, the need for sharing services is clearly highlighted.

- 2) Peers, using the local bus several times noticed that bus stops were mostly lacking information on bus timetables and, in general, there was very little information on public transport in English. It is therefore proposed that all bus stops be equipped with up-to-date timetables in both Spanish and English. In the long run, we recommend that you consider installing real-time signboards at all bus stops. This change will certainly increase the attractiveness of public transport and make the public transport service more accessible for local users and for tourists as well.
- 3) Although the recently opened tram system has been very successful, we estimate that the average speed of trams (20.6 km / h) is rather low to compete in the long term with car traffic. One way to reduce car traffic is to impose different restrictions on car traffic, but another alternative is to increase the speed of public transport, for example. In this situation we believe that in the long run it is necessary to increase the average speed of the trams and this can be done quite easily with traffic management means.
- 4) The baseline study shows that the number of daily usage of private cars has been growing in the region over the last 20 years. On the one hand, the development of public transport definitely helps to stop the growth of car use and hopefully to reduce car use in the future. On the other hand, it is obvious that cars will remain important part of the transport system in the coming decades. In order to reduce the environmental impact of private vehicles, it is advisable, in cooperation with the private sector, to look for viable business models for the development of electric transport and the use of biomethane in private transport. Administrative measures - parking incentives, tax exemptions, etc. - also play an important role here.
- 5) The use of bicycles is very low in both Granada city and the region. At the same time, it is a climatically very suitable condition for using a bicycle. There are also many students living in the area who could use a bicycle for everyday activities. Here, our recommendation is to include a plan for the development of a network of cycling routes, particularly in the urban area, with a focus on secure and fast connections between the city centre and suburban settlements. In addition to bicycle lanes, attention is also paid to the establishment of a service infrastructure (bicycle parking lots, repairs).
- 6) The big challenge for cities today is urban sprawl. Granada's urban area is also facing the same problem. In order to respond early to the changes that are taking place and to anticipate potential problems in the future, it is highly advisable to start designing multimodal centers at the city border, where those from further afield can park their car comfortably and move on either by public transport, using a bicycle or walking. Here we mean, in particular, centers where the user can park the bicycle quickly and safely, move on by tram or bus. Bicycle and car sharing services should also be available at such hubs.

## **F List of bibliography**

- Granada metropolitan area Baseline Study
- Granada rural area Baseline Study
- OptiTrans database of Good Practices
- Presentations given within the peer review by local stakeholders
- Interviews with stakeholders

## **G Annex section**

- Agenda of peer review visit
- Lists of participants
- Photos taken during the peer review
- Presentations from workshop
- Registration sheets
- ANNEX 1 - Feedback of Peers
- ANNEX 2 - Checklist