





# Sustainable mobility along the newest EuroVelo route, the Iron Curtain Trail

# WP 3.5 Preparation of the developments

# ERDF PP6

# ANTIGONE -

# Information and Documentation Centre on Racism, Ecology, Peace and Non Violence

# Feasibility Study to improve the combined (public transport and cycling) services

December 2014





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the EuroVelo



# 1. Background

## 1.1 Mission of the project, objectives of the feasibility study

EuroVelo is a network of 14 long distance cycle routes connecting and uniting the whole European continent. The routes can be used by cycle tourists as well as by local people making daily journeys and it is envisaged that the network will be substantially completed by 2020. One of the network's newest routes is the Iron Curtain Trail, EuroVelo 13, which leads from the Barents Sea to the Black Sea and is more than 10,400 km long. The ICT is the longest route of the European cycle route network and it is expected to annually generate 3.3 million daily trips and 849,000 holiday trips, while having an economic impact of 355 million Euro when fully developed. In order to reach its full potential as the EuroVelo 13 route, we collect and evaluate potential itineraries, services, promotion /marketing conditions, the organisational and financial background of the ICT and we define the necessary actions until 2020. With the support of the South East Europe Programme the Southern section of the Iron Curtain Trail will manage to catch up with the more developed sections and become the engine of all cycle related development in the region.

Main objectives of the project:

- To improve the accessibility of the South East Europe (SEE) regions by bicycle;
- To connect SEE region by a European long distance cycling route;
- To realise opportunities for cycling and public transport connections;
- To promote cycling and combined sustainable transportation as a means of sustainable mobility and tourism;
- To improve knowledge, exchange experiences and raise awareness on cycling and public transport related developments.

The objectives of this feasibility study is to improve the combined (public transport and cycling) services so as to consist a research of the current physical, regulatory and











service conditions and evaluate alternative solutions to improve it, in order to use the fullest potential of the Iron Curtain Trail and provide a real developing framework of the route in Greece.

# 1.2 Organisation

The project is managed and coordinated by West Pannon Regional and Economic Development Nonprofit Ltd from Hungary (Szombathely). Participating partners are regional development bodies and non-governmental organisations (NGOs) from the South East European Programme Space including:

- BGLD Regional Government of Land Burgenland Eisenstadt, Austria;
- EKOPOLIS Ekopolis Foundation Banská Bystrica, Slovakia;
- HCA Hungarian Cycling Alliance Budapest, Hungary;
- RRA MURA Regional Development Agency Mura Ltd Murska Sobota, Slovenia;
- BCA Bulgarian Cycling Association Burgas, Bulgaria
- ANTIGONE Information and Documentation Centre on Racism, Ecology, Peace and Non-Violence Thessaloniki, Greece;
- STRDA South Transdanubian Regional Development Agency Nonprofit Public Ltd. Pécs, Hungary;
- NAKVI National Agricultural Advisory, Educational and Rural Development Institute – Budapest, Hungary;
- ASWM Association of South-western Municipalities Blagoevgrad, Bulgaria;
- BAAT Bulgarian Association of Alternative Tourism Sofia, Bulgaria;
- INCDT National Institute for Research and Development in Tourism Bucharest, Romania;
- Tourist Authority of Koprivnica, Croatia;
- DCC Danube Competence Centre Belgrade, Serbia;
- Association Center for Development And Promotion Promo Idea (PI) Strumica, Former Yugoslav Republic of Macedonia







The current study was prepared by ANTIGONE - Information and Documentation Centre on Racism, Ecology, Peace and Non Violence with the involvement of external experts.

# 1.3 Methodology

No feasibility Study for Public Transport services had been coducted during previous projects such as "Development of Long-term Strategy and Networks for Promotion and Implementation of the Iron Curtain Trail in its Balkan Section (StrategIC)" coordinated by the Bulgarian Association for Alternative Tourism (Bulgaria) and implemented with the participation of the Municipality of Thassos (Greece) as well as The Balkan Velo Trail (BVT 13)" project coordinated by "Association of South-western Municipalities", Bulgaria and implemented with the participation of Kato Nevrokopi Municipality (Greece).

The feasibility study was based on reports conducted by the Municipality of Thassos and Kato Nevrokopi and was based on 2011 project activities, field trips, bilateral interviews with local and national stakeholders, regional governments and development agencies, cycling associations ' data, desk and internet research, European and national transport studies.







# 2. Analysis of current status

Current offers for combined trips with bicycle and public transportation services can be summarised as followed:

• Poor transport offer in quantitative and qualitative terms (lack of connections offering bicycle carriage, necessity to buy additional bicycle tickets during the journey as well as lack of existing choice to reserve a bicycle space for the entire connection origin-destination);

- Complicated and unfriendly procedures for ticket and reservation purchase
- Difficult access to information

As a result, in many cases customers are not aware of the possibility to take their bicycles on long-distance trains, they get discouraged by unclear rules and procedures and are afraid of complications and failures in the service provision. Potential customers are therefore increasingly looking at alternative forms of bicycle carriage (private car, bus trailers etc).

#### 2.1 Legislation

Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road is of major importance for the organisation and financing of public transport services by bus, tram, metro and rail in the Member States. Its Article 1 states that its purpose "is to define how, in accordance with the rules of Union law, competent authorities may act in the field of public passenger transport to guarantee the provision of services of general interest which are among other things more numerous, safer, of a higher quality or provided at lower cost than those that market forces alone would have allowed." For











this purpose, competent authorities may define public service obligations for the operation of public transport services.

Regulation (EC) No 1370/2007 aims to create an internal market for public passenger transport services while confirming Member States' competence to define public transport services according to the needs of the population. The Regulation achieves this by complementing the general rules on public procurement. It also lays down the conditions under which compensation payments stipulated in public service contracts and concessions for public service obligations in public passenger transport services shall be deemed compatible with the rules of the internal market in the EU and exempt from prior State aid notification to the Commission, which would be otherwise required.

#### 2.2 Transport characteristics of the Greek side of the Iron Curtain Trail border region.

Region of Central Macedonia. The region has one airport, Thessaloniki's international airport, with daily connections throughout Greece, to Europe and the Balkans. The rail network to Thessaloniki daily connects with Kozani, Florina, Larissa and Volos, while there are five express intercity train services to Athens per day. The harbour in Thessaloniki is the main commercial port, with ferry connections to mainland Greece, the Greek islands and Turkey. The 670km Egnatia Odos motorway is widely accepted as one of the largest and most ambitious civil engineering projects currently in Europe. The motorway runs across northern Greece from its starting-point at Igoumenitsa, across the prefectures of Thesprotia, Ioannina, Grevena, Kozani, Imathia, Thessaloniki, Kavala, Xanthi, Rodopi and Evros, to the village of Kipi on the Turkish border. It follows (approximately) the route of the old Roman road, the via Engatia. Designed to the specifications of the Trans-European Road Network, it is a 24.5 m wide dual carriageway with two lanes of traffic and an emergency lane in each direction. Nine major vertical axes connect the motorway with Albania, "The former Yugoslav Republic of Macedonia", Bulgaria and Turkey. As part of the European Intercontinental Transportation Network, the Egnatia Odos motorway will also be a collector route for the Balkan and south-eastern European transport system. Trans-European Corridors X













(Berlin-Sofia-Thessalonika), IX (Helsinki-Alexandroupolis) and IV (Vienna-Belgrade-Thessalonika) all end at the Egnatia Road.

**Region of East Macedonia and Thrace** contains the prefectures of Drama, Evros, Kavala, Xanthi and Rodopi. The region provides easy access to Bulgaria and Turkey through good road and rail networks. Large ports connect to Greek and foreign harbours for easy transfer of goods and people. Concerning the infrastructures on the Greek side of the border, in East Macedonia and Thrace the region has two airports in Kavala and Alexandroupoli with daily flights from and to Athens. There is an extensive rail network of passenger and commercial trains. The harbours of Kavala and Alexandroupoli are the two main commercial ports, and there are ferry connections to mainland Greece, the Greek islands and Turkey. An extensive network of intercity buses serves the towns of the region.

#### Greek - Bulgaria borders

Along the Greek-Bulgarian border, there are five international border crossings (Kulata-Promachonas, Svilengrad-Ormenio, Ilinden- Exohi, Zlatograd-Thermes and Ivaylovgrad-Kyprinos). The 494 km border between Bulgaria and Greece runs in an east-west direction. The demarcation line runs from Mount Tumba (1,883 m above sea level and the meeting point of the borders of three states - Greece, The former Yugoslav Republic of Macedonia" and Bulgaria) to the junction with the Turkish-Bulgarian border. The Greek border regions are Central Macedonia and Eastern Macedonia-Thrace and the border prefectures within them are Evros (143,752), Kavala (135,937), Xanthi (91,063), Rodopi (103,190), Drama (96,544), Serres (192,828), Kilkis (81,710) and Thessaloniki (946,846). The main cities in the area are Komotini (Rodopi), Xanthi (Xanthi), Orestiada and Alexandroupolis (Evros), Thessaloniki (Thessaloniki), Drama (Drama), Serres (Serres) and Kilkis (Kilkis).

#### **Greek – Turkey borders**

The land border area is characterised by two territorial sub-areas. The prefecture of Evros, located on the Greek side and belonging to the Eastern Macedonian and Thracian













region, extends for 4,242 km with 149,354 inhabitants (representing 3.5% of the national total) almost equally distributed in rural (43.2%) and urban (56.8%) areas, with a density of 34 inhabitants per square km. Alexandroupolis (52,720 inhabitants), Orestiada (21,730 inhabitants) and Didimoticho (18,948 inhabitants) which are the main cities of the region (Source: Prefecture of Evros, 2001). The Edirne province, located on the Turkish side and belonging to the region of Marmara, extends for 6,276 km. It has 402,617 inhabitants distributed in rural (43%) and urban (57%) areas and the main cities are: Edirne (119,316), Keşan (42,755), Havsa, Uzunköprü, Ipsala and Enez. There are two border crossings between Greece and Turkey. One is located in the northern part (Kastanies-Pazarkule), while the other is situated in the southern part (Kipi-Ipsala) of the border. The first is hampered significantly owing to the poor road conditions on both sides of the border which is a major obstacle to car traffic for tourism and especially for commerce. The latter, however, is interesting because of the "Egnatia Odos" project which led to the construction of a modern highway linking the Ionic Sea (from Igoumenitsa) to the Greek-Turkish border. The highway will then link the border area to Istanbul, and further projects should also be designed in order to improve the existing bridge over the Maritza river. The internal road next to the border, between the cities of Alexandroupolis and Orestiada (134 km), and between Keşan and Edirne (approximately 100 km) is being restructured and enlarged, thus giving hope to positive influences for cross-border co-operation. The rail network however is still very limited and scarcely developed.

#### 2.3 Transport services and key actors

As fas as it regards the national connectivity of Iron Curtain Trail, the involved actors are railway operators, Intercity Bus providers and the Airport. Until 2008, the use of private cars was the first choice of the majority of travelers within Greece. However, the last five years a significant change in the interurban mobility patterns in the country was realized. To what it concerns the national trips, the modal split along the Greek transport network studied is presented in Table 1.







Table 1. Modal split for the core Greek network (2010)			
Train (TRAINOSE)	30,07%		
Bus (KTEL)	22,39%		
Car	25,71%		
Airplane	21,82%		

All modes, present a high decrease in passenger volumes starting the years 2007 and 2008 and leveling off in 2010. The decrease is sharper in the road traffic (totaling 60% in the period 2002 – 2010) and less so in the other modes: The reduction in the total number of the rail passengers during the last three years 2007 – 2010 is almost 30%, and for the buses in the same period is a lot less (approximately 1.5 – 2 %). The main reasons for this decrease are the economic situation and the steep decrease in household income following the recession. For air transport there is an increase per year of the order of 8% until 2008 when it peaks off and then decreases sharply (almost 10% for 2009) before rebounding slightly again (1%) between 2009 and 2010. The main decrease is evident in private car road transport (private car traffic) followed by that in the railway traffic. Both trends seem to be continuing although with signs of leveling off in 2010. These outcomes show that the results of the economic crisis in Greece have become very visible in the transport sector since 2007 but that the modes react differently to it, with air and buses having the "best" performance in terms of the magnitude of their fluctuations.

#### 2.4 Railway network

Thessaloniki is the most important nodal point of the national railway network running through northern Greece. The region's rail network runs from east to west connecting











the region of Eastern Macedonia and Thrace with Western Macedonia; from the borders of Bulgaria and FYROM (Pan European Rail Corridor X) in the north; and to central Greece, Athens and the Peloponnese in the south, with the wider area of Thessaloniki being a main node in this network.

There are 530.3 km of rail lines in the region with 114 km being double. Although the average density of railway lines for the region is high compared to the country average, this average is very low when compared to European standards, thus displaying low availability of railway infrastructure in general.

The main railway corridor is the one connecting Thessaloniki to Athens. In the past, international rail trips of the region were served via its northern border crossing to Bulgaria and FYROM and Turkey in the east. Currently, all the above mentioned rail connections have stopped. For the case of Thessaloniki – Sofia connection, TRAINOSE is operating a bus line once per day covering in this way transportation needs to the neighbouring country. However, during the next period, TRAINOSE will restart the operation of the rail service to Sofia and to Skopje, an action that will give rise to virtuous cycle in South East Railway use.

The Greek railway network covers the backbone of Greece connecting Patras – Athens – Thessaloniki – Eidomeni. The lines connected with the Iron Curtain Trail route are:

#### Primary rail network

- Athens Larissa Thessaloniki
- Thessaloniki Idomeni

#### Secondary rail network

- Thessaloniki Edessa Amyntaio Kozani / Florina
- Thessaloniki Alexandroupoli Svilengrad

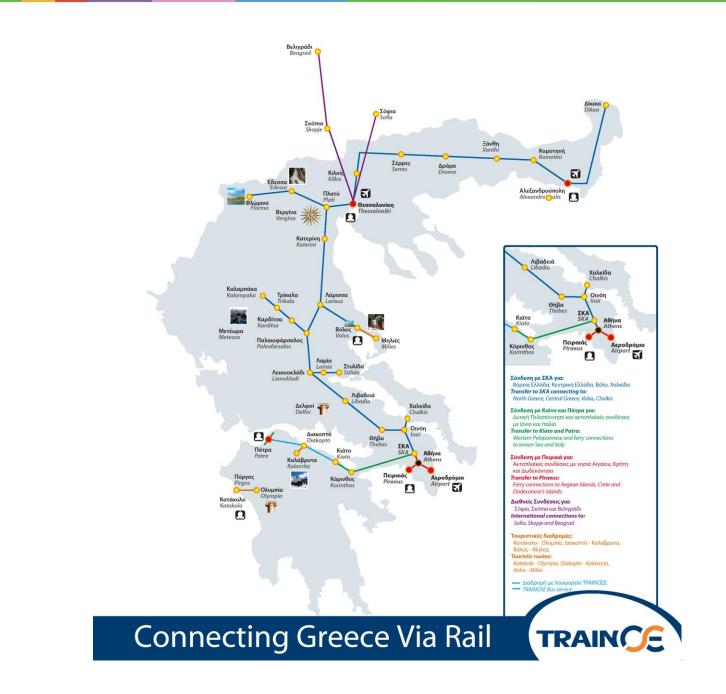












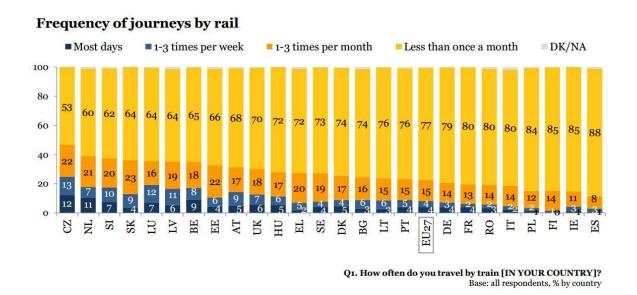








Within the EU, rail passengers were interviewed about their satisfaction with various features of rail services, including trains and train stations in their country. Rail passengers said that they took the train in Greece less than once a month (77%) and only a small proportion (7%) frequently.

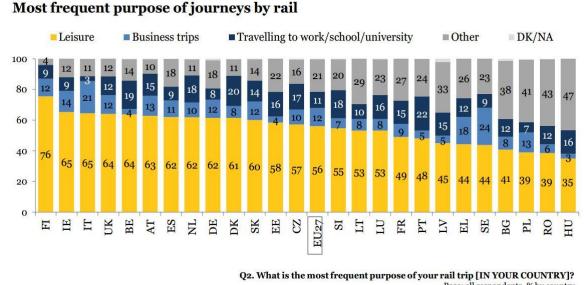


A part (44%) of respondents said that most of their domestic journeys by rail were for leisure purposes. Roughly a tenth (12%) of rail passengers in Greece mainly took the train to go to their work, school or university (i.e. commuted) and a higher proportion (18%) said that most of their rail journeys were on business. Finally, 26% of respondents listed purposes other than the ones mentioned above.



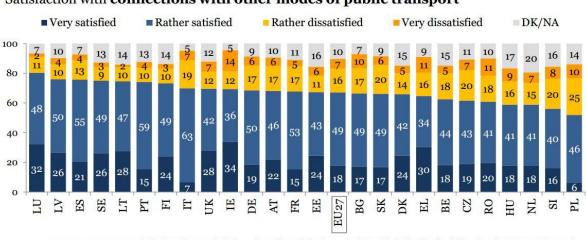






Base: all respondents, % by country

Rail passengers in Greece were likely to be satisfied (64%), with the available public transport connections in the stations in their country with more than a quarter of respondents were dissatisfied (27%).



#### Satisfaction with connections with other modes of public transport

Q3. Are you very satisfied, rather satisfied, rather dissatisfied or very dissatisfied with the following features of the train stations [IN YOUR COUNTRY]? Base: all respondents, % by country

Thessaloniki hub is the main reference node for Northern Greece and is part of the TEN-T core network being crossed by core network corridor N 4, Hamburg – (Piraeus) Lefkosia. Concerning service operating in the network, obviously Thessaloniki has been











impacted by the recent (2011) decision of cancelling international trains form/to Greece. Direct rail connection with Sofia is of high relevance, being the only direct connection with other rail hub linking to other destination as interchange point. Nowadays, TRAINOSE operates an International bus lane connecting Thessaloniki – Sofia. Furthermore, only recently, and for the summer period, TRAINOSE, operated the connection between Thessaloniki and Skopje. However in the short term plans of TRAINOSE (in spring 2013) is the re-operation of the rail connection between Thessaloniki – Sofia (and Thessaloniki – Sofia – Plovdiv) and also Thessaloniki - Skopje.

Table 2 : Entrance Passenger Traffic / Rail								
Frontier Points (main	2008	2009	%	2010	%			
origin countries)			2009/2008		2010/2009			
Kulata (Bulgary/ Romania /	70.539	66.463	-6	56.549	-15			
Russia)								
Svilengrad (Bulgary)	5.409		-100	1.224				
Pithio (Turkey)	17.919	16.354	-9	10.118	-38			
Gevgelija (Skopje / Serbia /	41.397	40.413	-2	42.550	5			
Hungary)								
Patras (Italy)	8.255	7.216	-13		-100			
TOTAL	143.519	130.446	-9	110.44	-15			
				1				

The above table is indicative of the fact that the rail connection Thessaloniki – Sofia was presenting an important demand.













## 2.5 Association of Bus Operators (KTEL)

Greece is divided into 51 prefectures – currently regional unities - each of which has its own Bus Operating Company called KTEL (Association of Bus Operators). KTELs are privately owned and operated by cooperatives consisting of shareholders who are also the bus owners. Each KTEL Company offers intra and inter-regional transport services according to Law 2963/2001. All KTEL Companies are controlled by the Ministry of Transport and Networks and the respective department of the Regional Authority where it each KTELs belongs, KTEL companies are not subsidized by the Government with the exception of routes at isolated areas and students' commuting.

It has already been under consultation the draft Law referring to the deregulation of long distance road transport, which foresees three categories of routes: routes of exclusive rights to the operator, the remote unprofitable routes and the routes of free choice. In the case of routes of exclusive right, the operator will ensure exclusivity and will pursue all the routes of a geographical area for 10 years, and possibility of extension for another five years, following an open competition. These lines will connect the municipal units with the centers of Kallikratis municipalities and then the centers of regional units. Exclusivity and compensation is ensured to the operators of unprofitable routes, after open competitive tendering, while routes of free choice with commercial interest, all the operators will be allowed to offer their services with pricing that will be determined by the rules of free market. In the latter category would belong interregional connections between urban and regional centers and the connections between city centers ports, airports etc, except Athens and Thessaloniki.

In full liberalization will enter only routes of free choice until 2015. The segregation of the routes will be based on geographical, transportation and population criteria, while responsible for setting the routes at each class, procure, draft the contracts and determine the amount of subsidy will be the National Authority of Land Passenger Transport, evolution of the Railway Regulatory Authority. For routes of exclusive right and the unprofitable routes the National Authority will set the maximum value (price limit per passenger) of all operators.











Thessaloniki's KTEL (intercity buses) connects the hub with almost all other Greek Prefectures. Furthermore, KTEL from other Prefectures also transport passengers to Thessaloniki's hub.













#### INTERCITY AND LOCAL BUS INFORMATION

#### **From Drama**

To Nevrokopi

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
06:30	06:30	06:30	06:30	06:30	09:00	
10:30	10:30	10:30	10:30	10:30		1
13:15	13:15	13:15	13:15	13:15	14:30	14:30
15:30	15:30	15:30	15:30	15:30		
20:10	20:10	20:10	20:10	20:10	18:00	18:00

#### **From Thessaloniki**

To Drama

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
07:30	07:30	07:30	07:30	07:30	08:00	08:00
09:00	09:00	09:00	09:00	09:00	10:00	10:00
10:30	10:30	10:30	10:30	10:30	11:30	11:30
12:00	12:00	12:00	12:00	12:00		
13:30	13:30	13:30	13:30	13:30	13:00	13:00
15:00	15:00	15:00	15:00	15:00	14:00	14:30
16:00	16:00	16:00	16:00	16:00	15:30	16:00
17:00	17:00	17:00	17:00	17:00	17:00	17:00
18:00	18:00	18:00	18:00	18:00	18:00	18:00
19:30	19:30	19:30	19:30	19:30	19:30	19:30
21:00	21:00	21:00	21:00	21:00	21:00	21:00

With Red colour stops also to Asprovalta

#### **KTEL DRAMAS**

Capital-city: Drama Address: 1 Vitsi str - P.C.66100 Distance from Thessaloniki: 147km **Contact:** 00302521032421 Drama (Ticket-office) 00302310595420 Thessaloniki (Ticket-office) 00302310595420 Thessaloniki (Warehouse) 00302105130220 Athens (Kifisos St.-Ticket-office) 00302105130220 Athens (Kifisos St.-Warehouse) Fax:2521035641 Site: www.kteldramas.gr E-mail: elsa-dra@otenet.gr Macedonia Intercity Bus Station http://ktelmacedonia.gr/











#### INTERCITY AND LOCAL BUS INFORMATION

#### From Alexandroupoli

To Didymoteicho, Orestiada

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
04:15	04:15	04:15	04:15	04:15	04:15	04:15
05:15	05:15	05:15	05:15	05:15		
06:20	06:20	06:20	06:20	06:20	06:30	06:30
		(				5-
07:45	07:45	07:45	07:45	07:45	07:30(*)	
08:45	08:45	08:45	08:45	08:45	08:45	08:45
10:00	10:00	10:00	10:00	10:00	10:00	10:00
11:15	11:15	11:15	11:15	11:15	11:15	11:15
12:30	12:30	12:30	12:30	12:30	12:30	12:30
14:30	14:30	14:30	14:30	14:30	14:30	14:30
15:30	15:30	15:30	15:30	15:30	15:30	15:30
17:00	17:00	17:00	17:00	17:00	17:00	17:00
19:00	19:00	19:00	19:00	19:00	19:00	19:00
20:45	20:45	20:45	20:45	20:45	20:45	20:45

#### From Thessaloniki

To Alexandroupoli

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
08:00	08:00	08:00	08:00	08:00	08:00	08:00
10:15	10:15	10:15	10:15	10:15	10:15	10:15
(Express)						
12:45	12:45	12:45	12:45	12:45	12:45	12:45
(Express)						
14:30	14:30	14:30	14:30	14:30	14:30	14:30
(Express)						
16:30	16:30	16:30	16:30	16:30	16:30	16:30
(Express)						
19:00	19:00	19:00	19:00	19:00	19:00	19:00
(Express)						
23:30	23:30	23:30	23:30	23:30	23:30	23:30













#### From Thessaloniki

To Didymoteicho, Orestiada:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
08:00	08:00	08:00	08:00	08:00	08:00	08:00
10:15	10:15	10:15	10:15	10:15	10:15	10:15
(Express)						
12:45	12:45	12:45	12:45	12:45	12:45	12:45
(Express)						
14:30	14:30	14:30	14:30	14:30	14:30	14:30
(Express)						
15:30	15:30	15:30	15:30	15:30		15:30
(Express)	(Express)	(Express)	(Express)	(Express)		(Express)
16:30	16:30	16:30	16:30	16:30	16:30	16:30
(Express)						
19:00	19:00	19:00	19:00	19:00	19:00	19:00
(Express)						
23:30	23:30	23:30	23:30	23:30	23:30	23:30

#### **KTEL EVROU**

Capital-city: Alexandroupolis Address: 36 El.Venizelou str - P.C.68100 Distance from Thessaloniki: 301 km Contact: 00302551026479 Alexandroupolis (Ticket-office) 00302551025126 Alexandroupolis (Warehouse) 00302554022291 Soufli 00302553022366 Didimotiho 00302552022550 Orestiada 00302555022219 Ferres 00302310595439 Thessaloniki (Ticket-office) 00302310595469 Thessaloniki (Warehouse) 00302105133280 Athens (Kifisos St.-Ticket-office) 00302105133280 Athens (Kifisos St.-Warehouse) Fax: 2551029948 Site: www.ktelevrou.gr E-mail: ktelebr@axd.forthnet.gr

Macedonia Intercity Bus Station http://ktelmacedonia.gr/











# 3. Best Practices

#### At weekends bikes travel for free on trains in Emilia Romagna region (Italy)



From April 8<sup>th</sup> until October 7<sup>th</sup> the initiative Your bike travels for free on the train which allows cyclists to catch the train with their bikes then leave the train and start riding wherever they choose, to discover the surrounding areas of the main cities in the Emilia Romagna Region. Thanks to Inter-Regio-

Rail project funds, the Region Emilia Romagna, Trasporto Passeggeri Emilia Romagna and Ferrovie Emilia Romagna have jointly launched this healthy, money-saving and sustainable initiative. During holidays and on weekends, bicycles are allowed on trains for free. The project will cover several railways in the Emilia Romagna Region, for different periods. It will start with the Bologna-Vignola section (8th April-3rd June), which will be followed by the Rimini-Ravenna section (1st July-26th August) and the Suzzara-Ferrara and Ferrara-Codigoro (16th September-7th October). Each train on these sections will be provided with a special wagon for carrying bicycles 8 times per day (both for the outward and the return journey). Users have to book online the day they want to travel on the website of Ferrovia Emilia Romagna(link is external). A 10% reduction is provided for groups of 10 or more people (if accompanied by their bicycles).

#### Changing the dynamics of bicycle transportation via train in Romania



In 2008 the main Romanian passenger train operator adapted to passenger demands and shifted its policy regarding bicycle transportation. In 2012 specially equipped carriages were introduced to 14 national and 2 international train routes. The company (The National

Society of Railway Passenger Transport - CFR Calatori) monitored increasing requests from travellers to carry their bikes by train and consequently introduced this new











facility on their trains. In the current travel plan, the implementation of which started in December 2011, the circulation of specially equipped carriages for bicycle transportation was introduced on 14 national and 2 international train routes. After the initiative of the subway operator in Bucharest to allow bicycles in subways, the railway transport operator stepped forward to support sustainable transport at a national level. The first train carriages equipped with bike storage facilities were introduced in November 2008 on the Bucharest - Brasov route. This initiative was a great success and people demanded more routes for bike transportation to be made available, on touristic routes, from Bucharest to Constanta on the Black Sea coast, to Northern Moldavia and to Budapest, via Transylvanian cities. In 2011, CFR Calatori answered passenger requests for bicycle transportation on a high demand route: Brasov - Budapest. In April 2011, during the warm season (April - October), a new carriage was attached to existing trains, provided with dedicated spaces for bicycle storage during the journey. The two trains specially equipped with this facility are the "Harghita" Intercity on the Brasov -Budapest route.. Since 2011, the price for the bicycle international ticket for a one-way journey has been 5 Euro per bicycle and has remained unchanged. The price is fixed, there is no discount for children or for groups of bikes. The operator allows most types of bikes to be transported. Regarding trains which don't have special carriages for bikes, access is allowed and bike transportation benefits from fairly relaxed conditions and good prices. All types of fixed-frame bicycles can be stored in any type of train that has enough interior space available, at the price of 5 lei for Regio trains and 10 lei for InterRegio trains. Moreover, there is no fee for foldable bicycles and bikes are allowed as hand luggage in all trains according to space availability, both 1st and 2nd class.

#### Free transportation of bicycles on Mazovian trains this summer (Poland)



The new railway company of the province of Mazovia in central Poland has introduced a special offer for travellers. Until the end of the summer holidays, all passengers with a valid ticket will be













able to carry bikes and dogs free of charge. The offer is valid from 28 April to 30 September and is already very popular among travellers after being successfully run in previous years. Mazovian Railways have been owned by the provincial government since 2008. The company ensures that it is not only modern and reliable but also friendly to passengers. The Mazovian region features many interesting attractions and cycling routes, with cycling infrastructure constantly being developed. Being able to take a bike by train to a favourite destination for free is a very attractive option. It extends the touristic offer of the region while promoting active recreation. The trains have suitable conditions for the transportation of bicycles as designated locations are provided. The Masovian Railways Tourist Service also publishes a free 'Kolejowskaz' guide to assist in the planning of cycle-train trips. It can be downloaded from: www.kolejowskaz.pl(link is external). Over 120 bicycle and walking routes are outlined.

#### Free bicycle hire with purchase of a train ticket on the Silesian Railways (Poland)



When purchasing a train ticket for the Silesian Mountains, customers now receive a free cycle hire voucher. During the summer holidays many special offers have been introduced by the Polish railways for the promotion of cycling. The new "train to ride" option is offered for those who want to ride a bicycle in the Silesian Beskids Mountains, but either don't own their own bikes or don't

want to carry them on the train. This unusual initiative is organised by the Silesian Railways and the City Council of Wisla, one of the main tourist destinations. Everyone travelling by train can claim a free bike hire at their destination. The voucher must be used on the same day. Only one voucher can be obtained with a single ticket. The offer applies to the Wisla – Uzdrowisko train station, where a bike hire company participating in the project is located. Free bike rental is possible on September 1, 8 and 15. A free map of bicycle routes is included in the cycle hire. Additional information about places of interest and tourist attractions in the Silesian Beskids area is also











provided by a guide. The Polish word for "train" also means "predisposition". Therefore "train to ride" also means "predisposition to ride", making it a very attractive slogan for the project. The special tickets can be purchased in four cities of Silesia: Katowice, Gliwice, Czastochowie and Sosnowiec.

#### Bike and Train interchange at Val Venosta



The Province of Bolzano started in May 2005 with a specific plan to promote the use of Bike+Train in Val Venosta. In the frame of the innovative train system implemented in that valley, it is the intent of the Administration to strengthen the potential of sustainable means of transport for leisure

purposes. The Bike+Train service will be complementary to the bicycle route network offering more flexibility, better geographical diffusion and thus more competitiveness with cars tourism mobility. In the area of the Province of Bolzano there are more than 250.000 cars. The majority of weekend trips are made by car. For example, in the city of Bolzano the use of the car is higher during the leisure time than for everyday duty. The morphology of the places (mountains) makes that people prefer the flexibility of their cars instead of public trains or buses. The "Nuova Ferrovia della Val Venosta", the new train system, is modern and environmentally friendly (bipower electric engine) and also, last but not least, it has a modern design. The objective of the new train service is to offer tourist and domestic travellers a cheap, modern and flexible alternative for their usual car trip. The Province of Bolzano implemented a special rental system connected to the Val Venosta train. Circa 600 bikes (400 mountain-bike, 100 city-bike and 100 child-bike) are now available for rent. All the bike are modern and new, with all the security system (lights, locks, helmets,...), a light resort packet (water and snack). This supply is target not just to the tourist from abroad, bur to the resident too. Six train stations (Merano, Laces, Malles, Naturno, Silandro e Spondigna) have specific bike parking for this service. To improve the service the Province provided a special ticket Val Venosta Train + rent bike at 14 €. In that way everybody could use train an bike all













over the track for a long day of pleasure and discover. The only negative aspect of this initiative is that now is too famous and too much people want to use it. The trains are not so big and in peak hours some cyclists can't access the coaches. The train serves the area between Merano and Malles, makes every day more than 70.000 trips and even more during the weekend. After one year, the success couldn't be ignored. One of the reasons for the success was the offer of a tran+bike alternative to cars for the millions of tourist of that area . Thanks to visionary planning, the train service could offer this addon service from day one. The next step is to provide a even better train+bike system to improve the use of the system for more. The information campaign that accompanied the launch of the new service was critical for its success. Being a popular touristic destination, the service was even promoted to potential tourists from abroad. The initiative runs better and better and even the supply will be adequate to the growing demand. Other regions of the Province have launched similar services (Val Pusteria).

#### Guildford train station to welcome the first Brompton Bike Dock scheme (UK)



South West Trains has launched a self-service 'bike dock' at Guildford train station. The dock is the latest stage of a partnership between the rail company and folding cycle manufacturer Brompton Bicycle. The dock is a block of lockers which can store up to eighty folding bikes in the station car park. The lockers are

UK made from recycled material and are powered by solar panels. The dock uses smart card operated locks. The rail company offers Brompton bikes for rental to season ticket holders and the general public. The bikes, when folded and stowed as luggage, can be taken on the trains. Passengers wishing to use the bicycles buy a smart card for GBP50 ( $\in$ 57), and can rent a bicycle for GP1,60 ( $\in$ 1,8)per day. The bike dock at Guildford station is the first self service Brompton hire facility in the United Kingdom. Both Brompton bicycles and South West Trains are sure that the scheme will prove to be a success. It is promoted as simple, convenient bike hire and as a new concept in flexible











personal travel by Brompton. It is another step to encourage more passengers to think of alternatives to the car.

#### Extension of the Bike-Bus Scheme/ La Rochelle (France)



Since 1999, 2 bike-buses have been running during the summer between the city centre of La Rochelle and the lle de Ré. This service is highly appreciated by the inhabitants as well as the tourists and there is a growing demand for its development. The bike-bus

consists in combining two modes of transport, namely bus and bike and thus contributes to encourage intermodality. A bike-bus is an articulated bus equipped with 2 separate compartments: one for passengers (in the bus front) and one for bikes (in the rear). It enables users to easily reach a secure area for cycling, in the city or in the countryside. Market Study Preliminary contacts were taken with bus manufacturers to consider possible technical options to carry bikes within buses. A call for tender procedure was launch originally for the purchase of new vehicles equipped with specific facilities for bikes. But, as no tender was received, a new procedure for the transformation of buses was launched. Through experimentation on new routes 3 different itineraries were analysed according to user's expectations. However, the conclusions of the study recommended bolstering the existing summer bike-bus service between La Rochelle and Ile de Ré instead of creating a new route. Notably, the route between La Rochelle and Châtelaillon was scrapped due to major difficulties (e.g. excessive running times, the need to redesign bus stops etc). Extension of the bike-bus service improved quality of service (through increased frequency) from summer 2008. One new bike-bus has been running since mid-July 2007 and the second one from July 2008. A specific livery was designed on the new bike-buses. More passengers resorting to the bike-bus service (from 13,618 in 2007 to 18,016 in 2008 - i.e 32% increase of trips with or without a bike. Increased level of awareness for the bike-bus service. Very good level of acceptance among the general public: 97% among the 300 people surveyed thought that the possibility of taking their bike on a bus was a worthwhile







initiative. Degree of satisfaction: virtually all users (99%) that took a bike onto the bus expressed their satisfaction.

#### Bicycles on the bus in the Netherlands



Summer of 2006, about 100 cyclists made us of the "tail wind arrangement" introduced by the BBA Veluwe. Cyclists rode their bike with tail wind and took the bus back to avoid the head wind. First results show that the travellers were happy with this service. Buses in the region of the Veluwe offered space for two

bicycles on off-peak hours. As earlier initiatives to take the bike on regular public transport buses failed, the BBA Veluwe introduced a new, very simple system to store bicycles on the balconies in the bus. This system seemed to work out well. Besides, it was easy for travellers to put their bikes on the bus, because all buses in the Veluwe have a low threshold. A very simple construction made the buses suitable for transporting bicycles. For a fare of 5 euros, people could take their bike on the bus. Every traveller that took its bike on the bus was asked to fill in a survey. Research on this survey is still going on, but first results learn that the price of the ticket wasn't a threshold for taking the bike on the bus. Depending on the final results, the tail wind arrangement will be re-introduced next year. The arrangement even might be introduced year-round.

#### Cyclobus: bicycles on buses (Czech Republic. Jablonec)



Transport operators in the Czech Republic responded to the continuously increasing interest in mountain biking and decided to help cyclist with a special dispatched bus connection to the Jizerské hory, introducing the 'Cyclobus'.











Jizerské hory is an important Czech holiday area and provides great opportunities for summer mountain-biking and hiking. The idea of transporting passengers by bus to Jizerské hory with their bikes came up at one of the joint-session of the Jablonec n.N. municipality at the beginning of the year 1998. That same year Jablonec was the first town in the Czech Republic with Cyclobuses. The Cyclobus enables cyclists taking a trip to the beautiful countryside of Jizerske hory. Moreover, the decrease of cars in the mountain parking spaces helps to protect the environment. This unique innovation inspired PT operators in other towns as well. Today, the cyclobuses are not only introduced in Jablonec, but in other towns as well, for example in Teplice, Dièín, Chomutov, Litvínov or Brno. Although most of them don't have adapted buses and use cycle-trailers. The cyclobuses used in Jablonec differ from the others because they are divided into two parts - in one part there are seats for the passengers and in the rear end there are special bikeracks for 23 bikes. In case of the Jablonec Cyclobus, we are talking about perfect cooperation between the town municipality and transport operators. The town not only agreed to set-up this line but also to subsidize it in case of losses. During the first season of 1998, 1907 passengers used the Cyclobus. The number of passengers grew in 1999 up to 4028; to 5125 in 2001and 7936 in 2003. After the first evaluation in the fall of 1998, line 530210 emerged, providing the transport of cyclists from Jablonec and Liberec to Bedøichov in Jizerské hory from April till October. In 2002, under the teamwork of Jablonec Bus Company and Semily Bus Company, a new bus connection Liberec-Jablonec-Turnov was being established. This bus line takes the passengers in the direction of Jièín district and from there the cyclist can set out on a biking trip, all through the Bohemian paradise. Vice versa, the cyclists from the Bohemian paradise, which would like to cycle in the mountains, have a chance to get off to Jizerské hory.

#### CycleBus to overcome longer distances and altitudes in Saxony. Germany



Since 2008 regular buses along attractive cycle routes in Saxony have been equipped with trailers









which can carry around 20 bikes, allowing people to travel longer distances and to higher altitudes with their bicycles. This is an attractive travel option for tourists and residents of the Dresden metropolitan area who enjoy exploring the countryside by bicycle. The region of Oberelbe, with the Saxon Elbland, the Saxon Switzerland and the Oberlausitz, is an excellent recreation area for cyclists. It has Idyllic landscapes, a huge variety of attractions and a well-developed network of cycle paths. Cycle tourism is becoming increasingly important, particularly for the local economy - the annual turnover of cycle tourism in the area is about €5 billion. According to the ADFC (German bicycle community), 2.2 million Germans plan to take their bicycle on holiday each year. Public transport providers should promote this development with suitable services for cyclists. To this end, the local bus operator, the local transport association VVO and local municipalities together developed CycleBus, a bus with a trailer for bicycles. By taking a CycleBus people can easily get to the starting point of their cycling tour and reach many beautiful places. This is a particularly attractive option for older people. Many still like to ride their bicycle but can no longer cycle for longer distances or to higher altitudes. And of course, CycleBus is an important recreation offering for the residents of nearby Dresden and Pirna, as it allows them to reach this popular region in Saxony very quickly and comfortably. City inhabitants can also simply take the S-Bahn or cycle on the famous Elberadweg cycle path along the river Elbe to this recreational area, then take the on-site CycleBus. The trailers were bought in 2007 and operate annually from April to October, on weekends and holidays. To inform customers about the service, 200 "Cycle Bus Line" signs were installed. CycleBus services were also marked in bus timetables with the symbol of a bicycle. Both turists and locals are encouraged to use the service. It is also possible to rent the CycleBus on a private basis. The CycleBus is advertised on the Internet, on regular buses and in the local press. The price for transporting a bicycle is  $\notin$ 1.40 for a short single trip or  $\notin$ 2.60 for the whole transport network with all involved vehicles (train, bus, tram) during one day. Permanent users can also purchase a monthly ticket with costs about €15. One problem encountered was the cost of acquiring the trailers, which had to be covered completely by the public transport service provider. Now it self-finances through sales revenue. The measure has been extremely successful, with great demand for the service quickly developing on











most routes. By offering a bus service for cyclists and their bikes, the local authority meets the growing demand for cycle tourism and combines it perfectly with the existing local transport services. Furthermore the operation of the CycleBus on two additional routes (218 and 219) since autumn 2008 indicates that the measure has been adopted well. In 2011 about 3,000 cyclists used the CycleBus and consequently another CycleBus route to the Lausitzer Seenland was established in 2012.

#### Bicycle stands on buses in Jaworzno (Poland)



Jaworzno is the first town in the Upper Silesia region to introduce a legal way of taking your bicycle on the bus. The only requirement is investing a 2 PLN coin, which is returned when releasing the bike from the dedicated stand. The rules of travelling on a bus with your bicycle are

simple. There is no extra charge except a 2 PLN coin (ca.  $\notin 0,50$ ) but like in a supermarket trolley, the money is returned when the bicycle is released from the special mounting device. The mounting device is installed outside - on the back of the bus. As taking a bike on board of a regular bus is usually forbidden, the local cyclists are very happy about the new solution that provides the opportunity of getting a lift with their bicycles whenever they need to. Other towns in the region are watching the new solution in Jaworzno closely with the perspective of adopting the idea in other municipalities. The bus drivers are also keen on this option as the outside bike stand be can operated only by the cyclists. Jaworzno now has 5 bicycle-friendly buses. Each bus can carry up to 4 bikes. The mounting and dismounting of the bicycles is allowed at selected bus stops. Information on the route and theses bicycle-friendly stops is provided at the stops.









## 4. Possible measures

#### **Bike+Train**

1. Bicycle carriage of 'complete' bicycles must be possible on all train categories and train services. At least 8 spaces for bicycles in a dedicated area. Bicycles can be locked and e-bicycles can be recharged. Ideally, there is sufficient space for storing and maneuvering tandems, recumbents and bike trailers. If coaches are not on ground level, loading and unloading of bicycles is made easier by providing ramps.

2. Information (website; on the platforms of railway stations; on the rolling stock): Online timetable search engines come with a bicycle carriage query function. Railway company websites must have a dedicated page providing all necessary information on bicycles (i.e. terms and conditions) to the customer. At the railway station, timetables, either in paper or electronic version, must indicate which coach carries bicycles; in addition, there are platform announcements; on the rolling stock, visible bicycle signs must clearly indicate which coaches include the bicycle compartments.

3. Accessibility to platforms: Bicycles, in particular electric ones, can be heavy items for every age group. Even more so, if they carry luggage as it is the case with many cycling tourists. Elevators at busy stations should be a standard facility to help improving access to platforms. At smaller stations where elevators are too expensive to operate, bicycle escalators or bicycle stairways should be provided for.

4. Prices of bicycle tickets should be per journey, not per train. The cost for a bicycle ticket as accompanied luggage on a national train should not exceed 10 Euro. The cost for an international bicycle ticket as accompanied luggage should not exceed 15 Euro. Ideally, frequent travellers can benefit from annual bike passes or multipacks of 1-day bike passes.

5. Ticket reservation schemes and sales channels: When buying a ticket, a bicycle space can be reserved and bought at counters, automatic machines and online. The reservation is optional, and seats can be reserved near the bicycle.











6. Bicycle parking at railway stations: Depending on the size of the railway station, bicycles can be stored and accessed at least 15 minutes before the first and after the last train service at guarded stations with management, or 24/7 at stations with automated access systems or in bicycle lockers.

7. Bike-sharing systems operated by railway companies: For customers without their own bicycle, bicycles can be rented from the railway companies' own bike-sharing system. If the railway company is not rolling out its own system, integrated ticketing with local bike-sharing providers should ensure door-to-door seamless transport.

#### Bike+Bus

For ensuring a satisfactory level of inter-modality, the implementation of any bike-bus service and route needed to originate from / to destinations which offered high-quality infrastructures for cycling (cycle lanes / paths). Bus stops had to be designed for easily putting on and taking off bikes along the bike-bus route. Specific attention must be paid at bus stops so that the waiting area for passengers with a bike did not block the flow of pedestrians on sidewalks. Bus lines for ICT destinations and bus stops equipped with bicycle racks, flyer with map and information for the services. No extra ticket.

#### 4.1 Detail description of measures

 Establish bike storage capacity on railway, there are 2 trips every day along the Iron Curtain Trail area (1 InterCity, 1 with change to Alexandroupoli station) starting from Thessaloniki Hub station to Dikaia station with 71 stops along the way. We propose to install bike storage infrastructure in all 36 IC stations and in 9 major cities facilities with more capacity and surveillance in short term with medium priority. THESSALONIKI (IC), Nea Philadelphia Toumbas, Gallikos (IC), Pedino, KILKIS (IC), Metallikos, Hersos (IC), Kallindia, Doirani, Akrolimni, Mouries (IC), Kastanoussa (IC), Kalochori Serron, Rodopolis (IC), Sidirochori Serron, Livadia Kerkinis (IC), Mandraki, Akritochorion, Vyronia (IC), Neo Petritsi (IC), Strymonas, Sidirokastro (IC), Skotoussa, SERRES (IC), Gazoros, Lefkothea Alistratis, Fotolivos, DRAMA (IC), Nikiforos, Platania, Paranesti (IC), Neochorion,













Stavroupoli of XANTHI (IC), Livera, Toxotes (IC), Xanthi (IC), Polysitos, Iasmos, Polyanthos, KOMOTINI (IC), Venna, Mesti, Sykorrachi (IC), Kirki (IC), ALEXANDROUPOLI (IC), Ferres (IC), Peplos (IC), Tychero (IC), Fylakton, Lagina (IC), Kornofolia, Soufli (IC), Mandra, Lavara (IC), Amorio, DIDYMOTEICHON (IC), Praggi, Petrades, Pythion of Didymoteicho , Pythion (IC), Rigion, Sofiko, Thourion, Chimonion, ORESTIADA (IC), Sakkos, Vissa (IC), Kastanee (IC), Marasia (IC), Dilofos (IC), Dikaia (IC). Estimated budget: 17.000 Euro. Proposed partners: Ministry of Infrastructure, Transport and Networks, Ministry of Macedonia and Thrace, Regional governments and Development Agencies, Public Railways Operator, Local Municipalities. Financing: European funds, national funds, regional funds, local funds

- 2. Improve bike transportation conditions on railways. The bike transportation on national railways is possible but not regulated or priced and you can carry it as language or in freight wagon but without any provision of space or price. We need to improve the bike carriage possibility on trains. At Thessaloniki-Alexandroupoli railway connection for 2 trains each direction per day we propose provisions so that it can accommodate 2-4 bicycles in short-term with high priority in order to avoid bad route condition in Section 1.
- 3. In all sections of the route we need in short-term with high priority to create the bike carriage possibility on buses (by installing bicycle racks). Developing national technical standard for installing bike racks on buses is needed. The installment of bus racks for bicycles in Greece requires special license. Estimated budget: 25000 Euro. Proposed partners: Ministry of Infrastructure, Transport and Networks, Regional Bus Operators, Local authorities, Tour Operators. Financing: European funds, national funds, regional funds, local funds, private funds. The new services will be included in all printed materials of the Bus Company and local tourism and transport partners. The services will be proposed to partner tour companies operating domestic travel. It will be also present at the partners' websites as well as the website for EuroVelo in Greece as











cycle friendly service. The services will be also presented at local and national transport and tourism fairs in Greece. Destination and bus stops: 1. Bus Route Iraklia-Sidirokastro (Agkistro, Promahonas, Sidirokastro), 2. Bus Route Drama – Paggaio (Ano Vrontou), 3. Bus Route Prosotsani (Kali Vrisi, Aggitis river springs), 4. Bus Route Nevrokopi (Nevrokopi), 5. Bus Route Kirgion (Falakro).









# 5. Conclusion

The enormous changes wrought in the transport sector by opening up to competition and by technological progress should not obscure the fact that transport is not only a commodity subject to market rules; it is also a service of general interest for the public benefit. This is why the Commission wants to encourage measures in favour of intermodality for people and pursue its action on users' rights in all modes of transport, while also considering whether in future it might not also introduce user obligations. In passenger transport, there is considerable scope for improvements to make travelling conditions easier and facilitate modal transfers, which are still highly problematic. Far too often passengers are put off using different modes of transport for a single journey. They have problems obtaining information and ordering tickets when the journey involves several transport companies or different means of transport, and transferring from one mode to another can be complicated by inadequate infrastructure (lack of parking space for cars or bicycles, for example). There is a growing imbalance between modes of transport in the European Union. The increasing success of road and air transport is resulting in ever worsening congestion, while, paradoxically, failure to exploit the full potential of rail and shortsea shipping is impeding the development of real alternatives to road haulage. Intermodality is of fundamental importance for developing competitive alternatives to road transport. Priority must be given to building infrastructure that encourages intermodality, especially railway lines, and offers a more environmentally friendly alternative. This persisting situation is leading to an uneven distribution of traffic, generating increasing congestion, particularly on the main trans-European corridors and in towns and cities. To solve this problem, two priority objectives:

- regulated competition between modes;

- a link-up of modes for successful intermodality.

Actions to be taken:











- Integrated ticketing, to facilitate transfers from one network or mode to another, encouragement needs to be given to the introduction of ticketing systems which are integrated (and thus ensure transparency of fares) between rail companies or between modes of transport (air - coach - ferry - public transport – bicycle rentals -car parks).
- Baggage handling. Intermodality also means providing related services, especially baggage handling.
- Continuity of journeys. Journeys have to be thought of as continuous, which means land-use and town planning policies will play a vital role. The main metro, train and bus stations and car and bicycle parks should be geared towards exchanges between the car, the bicycle and public transport and should offer related services (and so encourage the use of public transport, which causes less pollution. Adapting public transport to carry bicycles is another way of encouraging a certain form of intermodality over short distances. It should be recognised that the bicycle is still too often neglected as a mode of transport, even though some 50 million journeys (i.e. 5% of the total) are made by bicycle each day in Europe.

Equally, the development of intelligent traffic systems to inform passengers of transport conditions should eventually help reduce the time lost on transferring between modes. Successful intermodality obviously depends also on easy access to all transport modes. In this context, it is important that account be taken of the difficulties encountered by people with reduced mobility who use public transport, for whom changing from one mode to another can sometimes be a real obstacle.









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