



Jointly for our common future



# SETA South East Transport Axis

Bratislava Eisenstadt Sopron Szombathely

Rijeka Koper Monfalcone

Western Balkans

#### **Preface**



Efficient railway connections between the landlocked regions of Central Europe and the Northern Adriatic ports — this was the vision which brought together 11 partners from 6 countries 4 years ago.

After 39 months of work we can proudly say that we have taken a big step in this direction. As soon as we had identified the main organizational and infrastructural bottlenecks along the existing railway corridor connecting Vienna/Bratislava via Western Hungary with the Northern Adriatic ports we started to work on the development of adequate solutions. In order to highlight the realisability of the developed solutions demonstration trains have been implemented.

On the 28th of September 2012 the SETA train ran on the route Zagreb — Vienna in 5 hours! The reduction of travel time from more than 6 hours to 5 hours has been achieved by overcoming the identified organizational bottlenecks.

The 2nd highlight concerning the optimization of train connections was a passenger demonstration train which ran from Monfalcone to Rijeka on May 11th, 2013. The train left at 11:15 and arrived at 15:30, meaning a reduced travel time by almost 2 hours.

These demonstration trains have been the first mile stones in the project. In parallel to the organisation of the demonstration trains, the SETA experts started to develop adequate solutions to overcome the infrastructural bottlenecks. The overall objective in this respect was to come up with small scale investments which will improve the existing infrastructure in the short term. An extensive list of measures has been evaluated against the background of their impact on the economy, the environment and the people living along the corridor. The results of this work have been summarized in the SETA Corridor Development Plan. You will find the main facts about the necessary development measures and their impact in this brochure.

But this is not the end of our work. The SETA Corridor Development Plan provides us with a guideline — which has been agreed by all project partners — for the implementation of the recommended measures. In order to secure the implementation beyond project lifetime, the partners agree to install a monitoring body, which will supervise the implementation process.

The reasons why we managed to implement our project successfully are manifold. The most important reason for sure was the fruitful cooperation with relevant stakeholders from the regions, the railway companies, with other projects being implemented in the framework of European Territorial Cooperation. With joint forces we managed to bring forward the project issues far beyond the resources and competences of the eleven SETA project partners. Representing the Lead Partner of the project SETA, I would like to thank all of our cooperation partners for their spirit and support. We are looking forward for further cooperation in the near future.

Hans Niessl

Governor of Burgenland

Lead partner of the project SETA

# 1 The project

#### Optimization and small scale investments for improved railway connections

The transport connection from Central Europe to the Northern Adriatic ports and further on to the Western Balkans is of major importance for the regions in Central and South East Europe. In times of limited budgets and long-term planning schedules for new infrastructure stretches, the focus must be switched to the improvement and efficient use of existing rail infrastructure.

Following a common vision, 11 partners from 6 countries between Vienna/Bratislava and the Northern Adriatic ports of Rijeka, Koper and Monfalcone applied

"We are on the verge of a new time, time of renewed interest for goods on rail, rather than on road, time of great European links, time for a new Europe of welfare for all. I wish that the Mediterranean and Central Europe come together soon, supported by the SETA project, via Rijeka."

Vojko Obersnel, Mayor of the City of Rijeka

for project funding from the European Fund for Regional Development (ERDF). In spring 2011 the project has been approved by the South East Europe Transnational Cooperation Programme (www.southeast-europe.net).

It is the objective of the project SETA to improve the accessibility and logistic work flows in South East Europe. This objective will be reached by the development and implementation of short and medium term transport infrastructure measures and the improvement of organizational framework conditions. The provision of enhanced railway infrastructure and new services along the shortest route between Central Europe and the Northern Adriatic ports enables efficient and competitive railway transport between the regions from the Baltic to the Adriatic Sea.

"The SETA axis provides an important regional supplement to the Trans European Core Network. The SETA project demonstrated the cooperation between the different stakeholders along the axis very well."

Doris Bures — Austrian Federal Minister for Transport, Innovation and Technology





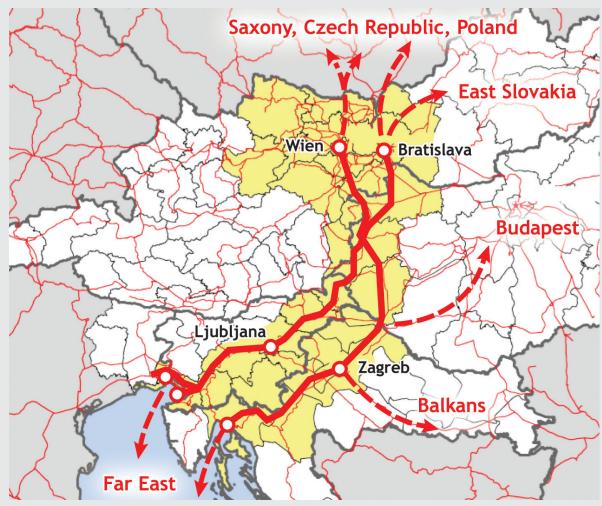






#### **SETA Corridor**

The SETA Corridor provides an efficient railway connection on existing tracks between the European Core Network Corridors, the Baltic Adriatic Corridor, the Mediterranean Corridor, the Orient/East-Med Corridor and the Rhine-Danube Corridor.



SETA Corridor

#### The following railway sections are included in the SETA corridor

- The Austrian section Wien Meidling Wr. Neustadt Sopron and Wien Meidling Ebenfurth Sopron
- ullet The Slovak section from Bratislava hl st. Rajka (Hungarian border)
- The Hungarian sections Sopron Szombathely Zalaszentiván Nagykanisza Gyékényes (Croatian border)
- The Hungarian sections Rajka Hegyeshalom Csorna Porpác Szombathely
- The Hungarian sections Zalaszentiván Hodoš (Őrihodos)
- The Slovenian sections Hodoš Murska Sobota Pragersko, Pragersko Zidani most Ljubljana —
   Pivka Divača Villa Opicina, Divača Koper and Pivka Šapjane
- The Croatian sections Botovo Koprivnica Zagreb Karlovac Rijeka and Rijeka Šapjane
- The Italian sections Villa Opicina Trieste, Trieste Monfalcone

# 2 SETA Corridor Development Plan

#### Organizational measures

Inefficiencies of operation are — besides infrastructural problems — the main constraints for the provision of competitive rail connections in freight and passenger transport. Together with the experts of the responsible railway companies the SETA experts have identified a list of measures necessary to overcome the existing organizational bottlenecks along the corridor.

COUNTRY	RAILWAY SECTIONS	TYPE OF MEASURE
AT	Wr.Neustadt — Sopron	new timetable considering new sidetracks (improve capacity)
SK	Rajka — Hegyeshalom	reduction of border crossing waiting time
		shorten the procedure of bilateral authorization of border crossing locomotives
		training of locomotive drivers for border crossing interoperability
HU/HR	Szombathely Station	acceleration of the dispatch of international trains
	Zalaegerszeg — Nagykanisza	reduction of stops for international trains
	Gyékényes – Botovo	customs clearance in the train (passenger trains)
		shorten procedure of bilateral authorization of border crossing locomotives
		training of locomotive drivers for border crossing interoperability
SLO	Divača — Koper	new operation program for optimal use of side tracks
SLO/HR	Pivka — Šapjane	shorten procedure of bilateral authorization of border crossing locomotives
IT/SLO/HR	Monfalcone — Sežana — Rijeka	operation program for regular connection (Demotrain)

List of organisational measures to be implemented along the SETA corridor

With the support of the railway companies and the responsible authorities it was possible to demonstrate the feasibility of the solutions developed in the project SETA: On the 28th of September 2012 the SETA demonstration train ran on the route Zagreb — Vienna in 5 hours. The new electro-diesel train from the Croatian railways reduced the travel time on 371km long route between the two European capitals by more than 1 hour. In order to overcome the existing bottlenecks between the port cities Monfalcone and Rijeka and to highlight the potential of a direct rail connection along this route touching Italy, Slovenia and Croatia another pilot action within the project SETA has been implemented. On the 11th of May 2013 the "Train for Europe" connected the two port cities within 4:15 hours instead of 4:52 up to 6:01 hours at the moment. For the successful implementation of the SETA corridor these organizational measures have to be implemented along with the following infrastructural measures.

"The path of international cooperation run through the project SETA is an added value for a municipality which is profoundly European, open to different cultures, dedicated to provide modern infrastructures to its citizens and accessibility to/from its territories. Within this context Monfalcone developed the SETA pilot passenger "Train for Europe" to Rijeka which has brought European railways companies to evaluate the sound possibility to market direct connections between Italy and Croatia."

Silvia Altran, Mayor — Municipality of Monfalcone

#### Competitive international passenger transport services along the SETA corridor

Current transport services along the SETA corridor can't compete with trips using private cars. With travel times of more than 6 hours e.g. between Zagreb and Vienna the existing railway connections are more than 2 hours slower than on the same trip on the road. It was the ambitious objective of the project SETA to provide efficient and competitive railway connections (passengers & freight) by improving the organizational framework conditions and small scale investments in the existing railway infrastructure.



# SETA Demonstration trains — Zagreb-Vienna & Monfalcone-Rijeka

With the support of the railway companies and the responsible authorities, it was possible to demonstrate the feasibility of the organizational measures developed in the project SETA: On the 28th of September 2012 the SETA train ran on the route Zagreb — Vienna in 5 hours! The new electro-diesel train from the Croatian railways reduced the travel time on 371km long route between the two European capitals by more than 1 hour.



The 2nd highlight concerning the optimization of train connections was a passenger demonstration train which ran from Monfalcone to Rijeka on May 11th, 2013. The train left at 11:15 and arrived at 15:30, meaning a reduced travel-time by almost 2 hours. The pilot initiative "Train for Europe" highlighted the possibilities to establish a connection between the port citied of the Northern Adriatic. In both cases the reduction of travel time has been achieved by overcoming the identified organizational bottlenecks (police & custom control, number of stops, reduced waiting times, etc.). These demonstration trains were the first step to introduce competitive international passenger transport services along the SETA corridor.





"For GYSEV the SETA Demo train was a very positive example on how to reach more than 1 hour travel time reduction between Zagreb-Vienna with organisational optimization. The flexibility and creativity, which was really noticeable along the organisation of this train running, is very close to GYSEV's philosophy "Seek the solution instead of running around". We hope that the infrastructure developments stated in the SETA Corridor Development Plan will support the creation of a competitive direct train connection between Zagreb and Vienna. On the one hand to provide attractive services for passengers, on the other hand to create a real alternative to freight transport on the road. We believe that together with the project partners we can find the necessary funding sources to realise these technical and organisational developments."

Szilárd Kövesdi, CEO – GYSEV

#### Infrastructural measures

Adequate railway infrastructure is the basis for providing competitive services along the SETA corridor. The experts of the SETA project have identified infrastructure development measures which are already included in the infrastructure development plans of the regions and countries along the SETA corridor.

COUNTRY	SETA- RAILWAY SECTION	TYPE OF MEASURES	INVESTMENT COSTS (MEUR)	YEAR OF REALISATION
AT	Wien-Meidling — Wien Blumental	2nd track, upgrading of stations and alignement	0,70	2018
	Wien-Blumental — Wampersdorf	2nd track	583,90	2020/2023
HU	Mosonszolnok — Porpác	Electrification	42,40	2015
	Szombathely — Zalaszentiván	Electrification	26,40	2015
HR	Koprvinica – Križevci	2nd track, upgrading of stations and alignement, clearance gauge, axle load 22,5 t	237,80	2019
	Križevci — Dugo Selo	2nd track, upgrading of stations and alignement, clearance gauge, axle load 22,5 t	175,90	2017
	Dugo Selo — Zagreb GK (Zaprešic)	2nd track, upgrading of stations and alignement, freight train bypass, axle load 22,5 t	798,20	2022
	Zagreb GK — Karlovac	new double track line Leskovac-Karlovac, axle load 22,5	341,60	2018
	Karlovac — Oštarije	new double track line	202,20	2020
	Oštarije — Moravice	reconstruction of the existing railway line	376,80	2025
	Moravice — Škrljevo	reconstruction of the existing railway line, axle load, 20 t, double track n sections	1.244,70	2024
SLO	Koper — Divača	realignment of a double track raillway line	1.197,40	2030
Total	Investment costs (ME	UR)	5.228,00	

List of already planned infrastructure development measures

Based on this list of already planned measures the SETA experts together with the experts from the railway companies and the regions have identified a set of necessary additional small scale infrastructure investment measures which will allow competitive services along the corridor.

For the evaluation the necessary additional measures (AM) have been clustered. In short, the three alternatives can be summarized as follows:

- Alternative 1 includes all measures that reduce travel time
- Alternative 2 includes all measures that reduce travel time (Alternative 1) and eliminates capacity constraints on the line Škrljevo-Rijeka.
- · Alternative 3 comprises Alternative 1 and Alternative 2 and further capacity improvements

COUNTRY	ADDITIONAL MEASURES (AM)	INVESTMENT COSTS MIO EUR 2020		
		Alter- native 1	Alter- native 2	Alter- native 3
AT	Side tracks Neudörfl, Sauerbrunn, Mattersburg	2,80	2,80	2,80
	Electrification Wr.Neustadt — Sopron	28,40	28,40	28,40
	Loop Ebenfurth	44,80	44,80	44,80
	Side track Steinbrunn	13,00	13,00	13,00
HU	Bősárkány & Csorna reduction of block distance	0,70	0,70	0,70
	Hegyeshalom $-$ Csorna increasing the loading class*			33,90
	Szombathely reduction of block distance + reconstruction of station	7,50	7,50	7,50
	Csorna — Porpác increasing the loading class*			47,90
	Nagycenk & Lövő electrification of third side track	0,30	0,30	0,30
	Upgrading of Körmend — Zalalövö line (and electrification)			22,10
	Vasvár & Egervár lengthening of side tracks	0,60	0,60	0,60
	Increasing axle loading class Szombathely — Zalaszentiván*			44,40
	Electrification Zalaszentiván — Nagykanizsa	31,00	31,00	31,00
	Zalaszentiván loop	6,00	6,00	6,00
	Increasing axle loading class Zalaszentiván — Nagykanizsa*			44,50
	Nagykanizsa lenghten side track	2,40	2,40	2,40
	Loop Gyékényes/Zákány	6,00	6,00	6,00
HR	2nd track Koprvinica — Kotoriba			161,90
	Dry port connection Škrljevo — Rijeka — Miklavje		189,10	189,10
SLO	3 side tracks Koper — Divača	6,80	6,80	6,80
Total	Investment costs (MEUR)	150,20	339,30	694,00

<sup>\*</sup> preliminary estimation

List of additional infrastructure measures to be implemented for competitive rail services along the SETA corridor

In order to achieve the project objectives of efficient railway connections between Central Europe and the Northern Adriatic ports the additional measures of all three alternatives have to be implemented together with the organizational measures listed in the previous section. According to the results of the evaluation carried out within the project SETA the most promising development measures out of the identified ones will be recommended for implementation.

"The results from the project SETA have additionally confirmed the urgent need for efficient railway connections from the Port of Koper to Central and Eastern Europe, where our main cargo flows are allocated. It is important to highlight that already some short-term organisational optimization and small scale investments in the existing railway infrastructure can significantly improve the transport route capacities via our port towards a faster and sounder long-term sustainable regional development."

Gašpar Gašpar Mišič, President of the Management Board — Port of Koper

#### Future transport demand, travel time reductions

For the calculation of future transport demand the TRANSTOOLS model has been used. It includes road, rail and inland waterway transport for passengers and freight taking into account future economic and spatial development.

The calculation of the future transport flows is based on infrastructure measures (Reference case RC = already included in the national development plans; AM = additional SETA measures) and the proposed organizational measures. According to the realization horizon of the different measures the following scenarios have been developed:

- Scenario 2015 "short-term measures"
- Scenario 2020 "medium-term measures"
- Scenario 2030 "long term measures"

In passenger transport, average increases of volume of passenger over all periods (2012-2030) were calculated up to 25% (RC). Together with the additional measures (RC + AM) an increase of 40% can be expected.

Especially in the period 2012-2020 it is quite evident that from the already planned measures (RC) only small increases in passenger traffic can be expected (+13%). If the implementation of the proposed additional measures will be carried out in time (as proposed) the volume of passengers will increase up to +31% (RC + AM).

The results of demand model calculations (2012-2030) show another situation for railway freight traffic: freight volumes will increase by 71%. The effect of the additional measures for the same period was calculated to be 23% higher compared to a situation without the proposed additional measures.

2012-2020 the increase of railway freight traffic for the situation without additional measures was calculated with 50,5%. For the same period the effect of the additional measures was calculated to be +37% higher.

As an input for the consolidated economic analysis the reduction in generalized costs (like tolls, fuel costs, or time) approximated by a reduction in travel time savings resulting from the organizational and infrastructural measures has been calculated. The following list highlights the travel time reduction on important routes using the SETA corridor:

Vienna — Zagreb	from 6.01 h (2012) to 3.50 h (2020)
Vienna — Zagreb — Rijeka	from 9.25 h (2013) to 6.50 h (2020)
Bratislava Petržalka — Zagreb	from 8.12 h (2013) to 4.00 h (2020)
Budapest — Zagreb	from 6.21 h (2013) to 5.10 h (2020)
Budapest — Rijeka	from 12.45 h (2013) to 8.10 h (2020)
Monfalcone — Sežana — Rijeka	from 6.01 h (2013) to 2.52 h (2020)
Koper — Bratislava	from 11.38 h (2013) to 6.27 h (2020)
Koper — Budapest	from 12.58 h (2013) to 7.38 h (2020)
Koper — Vienna	from 9.38 h (2013) to 6.07 via SETA Corridor (2020)

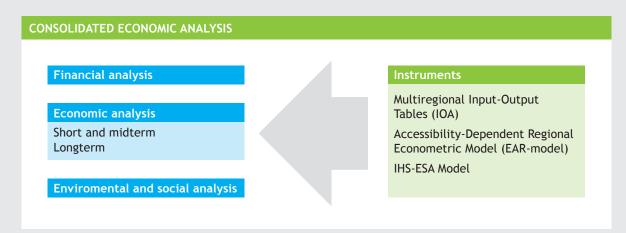
Travel time savings resulting from implementation of RC & AM along the SETA corridor until 2020

"Being a smart city and, at the same time, an important transport hub in the European context, Vienna supports the improvement of railway infrastructure to the South East with the SETA Corridor Development Plan. The rail connection has a huge potential to bring together people and inspire economic development in Central Europe and the Northern Adriatic region while relying on a sustainable transport mode."

Maria Vassilakou, Vice-Mayor and Vice-Governor of the City of Vienna, Executive City Councillor for Urban Planning, Traffic & Transport, Climate Protection, Energy and Public Participation

#### Evaluation of additional measures

The measures developed in the project SETA will create benefits for people, businesses and the whole economy. In order to quantify the benefits resulting from the additional measures a detailed Consolidated Economic Analysis has been carried out. This approach represents a complete analysis of an investment project including economic, societal, and environmental effects.



Consolidated Economic Analysis, Institute for Advanced Studies, 2013

#### 1. Financial Analysis

The financial analysis concentrates on analyzing the effects from the point of view of the railway operating or railway infrastructure owning company. This includes the investment costs, the maintenance and operating costs, as well as the operating revenues. The financial analysis does not include any external effects.

→ Output: Financial net present value FNPV and financial internal rate of return FIRR

#### 2. Short term economic analysis

The assessment of short and midterm effects is based on methods of multiregional input-output analysis. Within this framework, the IHS model concentrates on detailed regionalized input-output tables, which are compiled as a supplement to national accounts and show the linkages between individual production sectors of an economy and between regions.

→ Output: Effects on gross value added, employment, taxes

#### 3. Long term economic analysis

Main economic benefits of infrastructure projects become apparent only with time. To estimate these effects, Institute of Advanced Studies has developed an accessibility-dependent regional model (EAR-model). Since improvements in accessibility facilitate a higher degree of economic interaction, the emphasis of this model is to evaluate — on a NUTS2 level — the improved infrastructure in terms of additionally generated gross domestic product or gross value added.

→ Output: Effects on gross value added, employment potential, taxes

#### 4. Environmental and social analysis

New or upgraded infrastructure does not only improve the accessibility between regions and nations. They also reduce the overall level of negative externalities like accidents, air pollution, noise, and global warming.

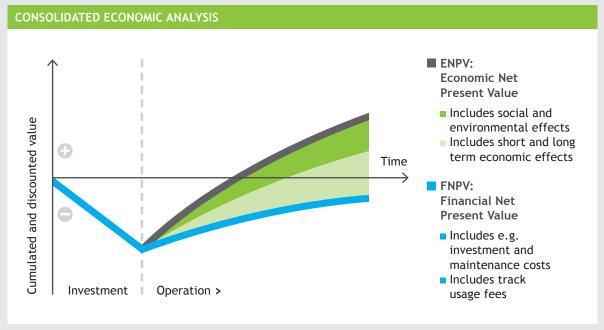
- → Output: Air pollution, global warming
- → Overall output: Economic Net Present Value ENPV, Benefit-Cost Ratio

#### **Consolidated Economic Analysis**

The Consolidated Economic Analysis used for the evaluation of in the SETA project was developed at the Institute for Advanced Studies in Vienna (IHS) and was designed in accordance with 2008 EU Cost-Benefit Analysis guideline. As in every cost-benefit analysis two performance indicators are of particular importance: the financial net present value (FNPV) and the economic net present value (ENPV).

Whereas the financial net present value of an infrastructure project represents the point of view of a railway infrastructure owning company, the economic net present value of the project takes the point of view of the society as a whole. Thus, it includes not only investment costs or track usage fees but all economic, societal, and environmental effects. These are for instance the improved accessibility which facilitates a higher degree of economic interaction or the reduction of negative externalities like pollution or noise. Since not all variables are measurable in monetary terms, values like e.g. tonnes of CO2 have first to be monetised. Both, the FNPV and the ENPV, represent a discounted monetary value of costs and benefits in accordance to the present value method.

All infrastructure projects that are profitable for the railway infrastructure owning company will be implemented by that company itself without the help of public funding. However, these projects are very rare. The more realistic case is the one depicted in the Figure below. The FNPV will stay negative at all points in time. As such an investment project is not profitable for the infrastructure owning company no private funding will be provided. But since many projects are profitable from the point of view of the society as a whole (positive ENPV at some point in the future) public funding of such infrastructure projects can be justified.



Infrastructure project with negative FNPV and positive ENPV, Institute for Advanced Studies, 2013

#### Recommendation

As the project partners are seeking support from financing institutions for the implementation of the SETA measures, the recommendation is reflecting the requirements of the EU "Guide to Cost Benefit Analysis of Investment Projects". It includes the results of the financial analysis, the regional accessibility-dependent model EAR, which explains the long term economic effects and the environmental and socioeconomic analysis. The results of the input-output analysis – short term economic effects – are not included.

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Financial Analysis: Costs	157,00 €	378,00 €	744,00 €
Financial Analysis: Benefits	127,00 €	145,00 €	145,00 €
Long term economic effects (EAR)	2.240,00 €	2.739,00 €	2.739,00 €
Environmental effects (ESA)	16,00€	20,00 €	20,00 €
Net present value (NPV)	2.226,00 €	2.526,00 €	2.161,00 €
Benefit-cost-ratio	14,20 Ratio	6,70 Ratio	2,90 Ratio

Aggregation of Results for SETA-countries — Source: IHS, 2013

According to the EU-Guide to Cost Benefit Analysis of Investment Projects the preferred performance indicator is the Net Present Value (NPV). The results show that Alternative 1 has a positive NPV in any case, but it is also shown that the NPV will grow if the additional measures in Alternative 2 are also implemented. The step to Alternative 3 would decrease the NPV. From each point of view Alternative 2 is the best solution — the NPV is highest for this alternative in any case. That is why from a consolidated economic point of view the implementation of Alternative 2 till 2020 (including Alternative 1 measures) is recommended.

It has to be mentioned that the calculated benefits resulting from the suggested development measures will only become effective if all regions are acting in concert. Since there are several regions involved, it needs just one that is not able to allocate the necessary funds or not willing to provide the funds since the SETA project might be competing with other projects for the same funds. In this case the benefits from such an investment for the remaining countries would potentially decrease drastically. Therefore the involvement of a supra-national financing institution (e.g. EIB) is strongly recommended.

In addition the profit of the EU28 as well as EFTA countries (SETA countries excluded) from the upgrading of the SETA corridor is estimated to be around 1 billion EUR.

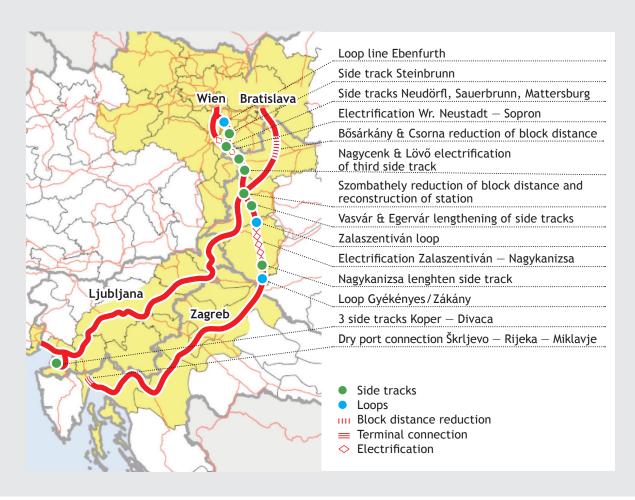
Finally, there are not many projects that show Benefit-Cost Ratios of up to 14. In this presented case of upgrading the SETA Corridor, however, this is not surprising at all. To the contrary, it is a simple consequence of the SETA project's overall aim to eliminate organizational and infrastructural bottlenecks in order to trigger — through small adjustments — large improvements in prosperity for the regions involved and around.

"Lower Austria is located in the intersection of important European transport corridors. Currently major financial and technical efforts are taken — especially in Austria — to realise a high capacity rail connection to Northern Italy. With the growing importance of the ports as gateways to the international markets, an alternative connection to the Northern Adriatic ports Koper and Rijeka is becoming more and more important for the business location Lower Austria. Aiming at the development of efficient and competitive rail connections, the SETA project is of major importance concerning transport policy on the one hand. On the other hand the project's approach to eliminate weaknesses in current railway system and subsequently reduce travel times from 6 to 4 hours on the route from Vienna to Zagreb until 2020 with organizational measures and small scale investments rather than costly new construction is very valuable and effective in times of limited budgets."

Erwin Pröll, Governor of Lower Austria

COUNTRY	ADDITIONAL MEASURES (SETA MEASURES) ALTERNATIVE 2	INVESTMENT COSTS MIO EUR 2020
		Alternative 2
AT	Side tracks Neudörfl, Sauerbrunn, Mattersburg	2,80
	Electrification Wr.Neustadt — Sopron	28,40
	Loop Ebenfurth	44,80
	side track Steinbrunn	13,00
HU	Bősárkány & Csorna reduction of block distance	0,68
	Szombathely reduction of block distance+reconstruction of station	7,50
	Nagycenk & Lövő electrification of third side track	0,25
	Vasvár & Egervár lengthening of side tracks	0,25
	Electrification Zalaszentiván — Nagykanizsa	31,00
	Zalaszentiván loop	6,00
	Nagykanizsa lenghten side track	2,40
	Loop Gyékényes/Zákány	6,00
HR	Dry port connection Škrljevo - Rijeka — Miklavje	189,10
SLO	3 side tracks Koper — Divača	6,80
Total	Investment costs (MEUR)	339,28

 $Alternative \ 2-List \ of \ additional \ infrastructure \ measures \ to \ be \ implemented \ for \ competitive \ rail \ services \ along \ the \ SETA \ corridor$ 



#### **Effects of SETA Measures on SETA Countries**



**SETA Countries** 

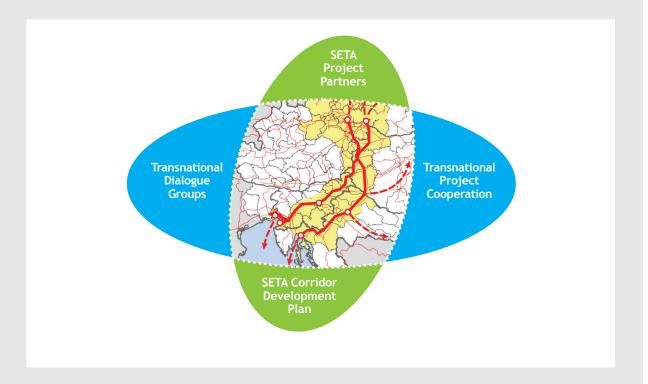
			DESCRIPTION		
Investment cost of additional SETA measures					
SETA measures (Alternative 2)	339.3	in Mio. EUR	Nominal value		
Additional effects on gross value added <sup>B</sup>					
Short-term¹ economic effects (IOA)	273	in Mio. EUR	Present value in 2012		
Long-term <sup>2</sup> economic effects (EAR)	2.739	in Mio. EUR	Present value in 2012 Additional yearly GDP growth		
Environmental effects (ESA)	20	in Mio. EUR	Present value in 2012		
Additional employment effects					
Construction phase <sup>3</sup>					
Construction (IOA)	1.250	in persons	Average additional employment		
Operational phase <sup>2</sup>					
Operation/maintenance (IOA)	100	in persons	Average additional employment		
Improved accessibility (EAR)	4.625	in persons	Average additional employment		
Additional tax revenue contributing to the overall state revenues <sup>c</sup>					
Short-term¹ economic effects (IOA)	99	in Mio. EUR	Present value in 2012		
Long-term <sup>2</sup> economic effects (EAR)	1.020	in Mio. EUR	Present value in 2012		

Important: The effects shown here will only be realised if all regions install the corresponding SETA measures.

- a) Source: Eurostat (latest available data: pop: 2012; emp: 2012; GVA: 2011).
- b) Since Alternative 2 is recommended, all additional effects shown here refer to Alternative 2.
- c) Since tax systems differ among SETA regions the additional tax revenue for regional governments could not be evaluated.
- 1) Main effects take place in the period 2012—2020. 2) 2015—2049. 3) 2015—2020.
- $IOA: input-output\ model;\ ESA:\ socio-environmental\ model;\ EAR:\ regional\ accessibility\ model.$

#### **SETA Transnational cooperation platform**

The most important reason for the successful implementation of the SETA project was the fruitful cooperation with relevant stakeholders from the regions, the railway companies, with other projects being implemented in the framework of European Territorial Cooperation.



The main outputs of the transnational cooperation have been:

- Centrope capacity project (Central Europe programme) and SETA launched a joint lobbying initiative on the European level, which resulted in the integration of all missing railway sections of the SETA corridor within the centrope region into the TEN-T comprehensive network
- As a result of the close cooperation with UN ECE it was possible to present the SETA results during Transport Trends and Economics Meeting Working Party 5 in Geneva in September 2013
- The implementation of the two demonstration trains would not have been possible without the close cooperation with the national railway companies, especially Croatian railways

Based on cooperation agreements, information, data and know-how have been exchanged with the following projects being implemented in the framework of the European Territorial Cooperation programs: BATCo, Scandria, centrope capacity, SoNorA, SEETAC. In the course of the general capitalization process launched by the South East Europe Transnational Cooperation Programme further cooperation has been established with the projects ADB Multiplatform, ACROSSEE and GIFT. During the Transnational Dialogue Group Meetings a large number of stakeholders from the economy reflected the project results against the background of their specific requirements and provided us with valuable input for the following activities.

"Improving the quality of rail services in the region is necessary to provide an attractive alternative for commuters, tourists as well as companies, who currently depend on their private car or trucks. The SETA project has highlighted that improvements are possible without spending large sums of money. By implementing organizational measures and selected small scale investments in the existing infrastructure it is possible not only to provide people of the West-Transdanubian region with better transport services but also to improve the quality of location for businesses. This will result in economic growth and improve social wellbeing in our region."

István Breznovits, CEO — West-Transdanubian Regional Development Agency

### 3 MoU and how to proceed

Memorandum of Understanding to support the implementation of the SETA Corridor as an efficient railway connection between Central Europe and the Northern Adriatic ports in the short term

Besides the efforts set for developing the trans-European networks (including the Connecting Europe Facility), actions have to be defined to provide efficient connections between and to the main transport corridors. These connections are of major importance for the regions which are not directly linked to one of these corridors.

Therefore the SETA partners consider the SETA Corridor an important - already existing - link between the Central European regions and the Northern Adriatic Sea.

Connecting the Baltic Adriatic Corridor, the Mediterranean Corridor, the Orient/East-Med Corridor and the Rhine-Danube Corridor, the SETA corridor could provide the Central and South East European regions with efficient and fast connections to the Northern Adriatic Sea in the short term (until 2020).

With the MoU the signatories are underlining the importance of developing an efficient, environmentally sustainable, intermodal transport system, particularly on rail, to ease existing organizational and infrastructural bottlenecks, in order to improve quality of location and service as an important pre-condition for further economic growth in the regions along the SETA corridor.

Based on the analyses carried out in the project SETA and its recommendations summarized in the SETA Corridor Development Plan, the signatories agree to:

Urge the responsible institutions on the regional, the national and the European level to adopt any necessary means in order to assure the implementation of the already planned development measures and to integrate the additionally necessary measures defined in the SETA Corridor Development Plan into the regional/national development & business plans.

The signatories will support the implementation of the SETA Corridor Development Plan within their own resources and competences. In order to secure the implementation of the recommended development measures the signatories agree on the provision of relevant data/information on the implementation progress and to participate in the yearly meetings organized by UN ECE.

#### Monitoring

In order to secure the implementation of the recommended measures, the partners agree to install a monitoring body. This body will supervise the implementation process beyond project lifetime. Mr. Andreas Zimmer, deputy project manager of TER at the UN ECE transport division (United Nations Economic Commission for Europe), will take over the responsibility after the end of the project. Within the running activities of UN ECE he will:

- Ask the responsible stakeholders to provide a status of implementation (once a year)
- Consolidate the feedback based on the list of measures included in the SETA Corridor Development Plan
- Organize an annual meeting of relevant stakeholders (national authorities, railway operators, etc.)
   including the project partners

"The transport connection from Vienna via Burgenland and Western Hungary has always been of high importance for our region. Already the Romans have transported goods along this route to the cities at the Northern Adriatic coast. With the measures recommended in the project SETA it will be possible to reach these destinations more quickly and efficiently — an important precondition for further economic growth and cooperation within and between our regions."

Hans Niessl, Governor of Burgenland

## 4 The SETA partnership

The main focus of SETA is to improve the accessibility and logistic work flows of and within the SEE regions involved by better connecting primary and secondary transport networks as well as to improve intermodal transport offers.

In order to achieve these goals, the SETA partnership is composed as a multi-sectoral consortium utilizing existing expertise and different functionalities in a complimentary way. To enhance the chances of implementation of commonly identified measures within the SETA project, the partnership comprises a wide range of regional and national authorities of the regions concerned as important key actors for further evolving transport development measures. Observing partners from the surrounding regions accomplish the SETA partnership, highlighting the importance of the project's objectives beyond the borders of the SEE region and the core actors involved.

#### Partners supported by the European Regional Development Fund (ERDF)

#### **Lead Partner**

Regional Government of Burgenland Eisenstadt, Austria www.burgenland.at

#### **ERDF** partners

**01 Regional Government of Lower Austria** St. Pölten, Austria www.noel.gv.at

**02 City of Vienna** Vienna, Austria www.wien.gv.at

03 Federal Ministry of Transport, Innovation and Technology Vienna, Austria www.bmvit.gv.at O4 Ministry of Transport, Construction and Regional Development of the Slovak Republic Bratislava, Slovak Republic www.mindop.sk

**05 Győr-Sopron-Ebenfurti Railway Corp.** Sopron, Hungary www.gysev.hu

**06 Port of Koper PLC.** Koper, Slovenia www.luka-kp.si

07 West-Transdanubian Regional Development Agency Non-profit Limited Liability Company Sopron, Hungary www.westpa.hu **08 Municipality of Monfalcone**Monfalcone, Italy
www.comune.monfalcone.go.it

#### 10% partners

**01 City of Rijeka** Rijeka, Croatia www.rijeka.hr

02 Croatian Academy of Engineering Zagreb, Croatia www.hatz.hr

#### **Imprint**

#### Contracting party

SETA Lead Partner — Regional Government of Burgenland on behalf of the whole SETA partnership Amt der Burgenländischen Landesregierung LAD Raumordnung Europaplatz 1 A-7000 Eisenstadt

Contributing authors (alphabetical order)
Andreas Friedwagner, VERRACON GmbH, Austria
Sebastian Koch, Institute of Advanced Studies (IHS), Austria
Gerhard Platzer, TMC Counsulting Ltd., Austria
Alexander Schnabl, Institute of Advanced Studies (IHS), Austria

Layout, Print Barbara Veit February 2014

