



# Korridor X PLUS

## Goals and Tasks

[\[www.kx-plus.com\]](http://www.kx-plus.com)

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**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

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## **Preface**

### **Our Vision**

Our vision is to enhance the attractiveness and quality of the transport routes that connect people and markets from Central Europe to South Eastern Europe and the Asian continent.

### **Our Mission**

We connect and strengthen our regions by selective market and research projects to ensure that people and goods in Europe, which is growing together, can be transported safely, economically and quickly to their destinations.

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## The Purpose of Korridor X PLUS

ARGE Korridor X (AKX) had been acting on Corridor X from the year 2001 until 2008.

- the follow-up association Korridor X PLUS was founded on December 16<sup>th</sup>, 2008
- in order to push railway subjects on Pan-European Corridor X in close co-operation between the railway organisations
- in order to generate and carry out market projects with the knowledge of 6 railways
- in order to collectively represent common activities and targets of the members and to implement them efficiently
- in order to attract more traffic on Corridor X

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# Korridor X PLUS Members

## • Foundation Partners

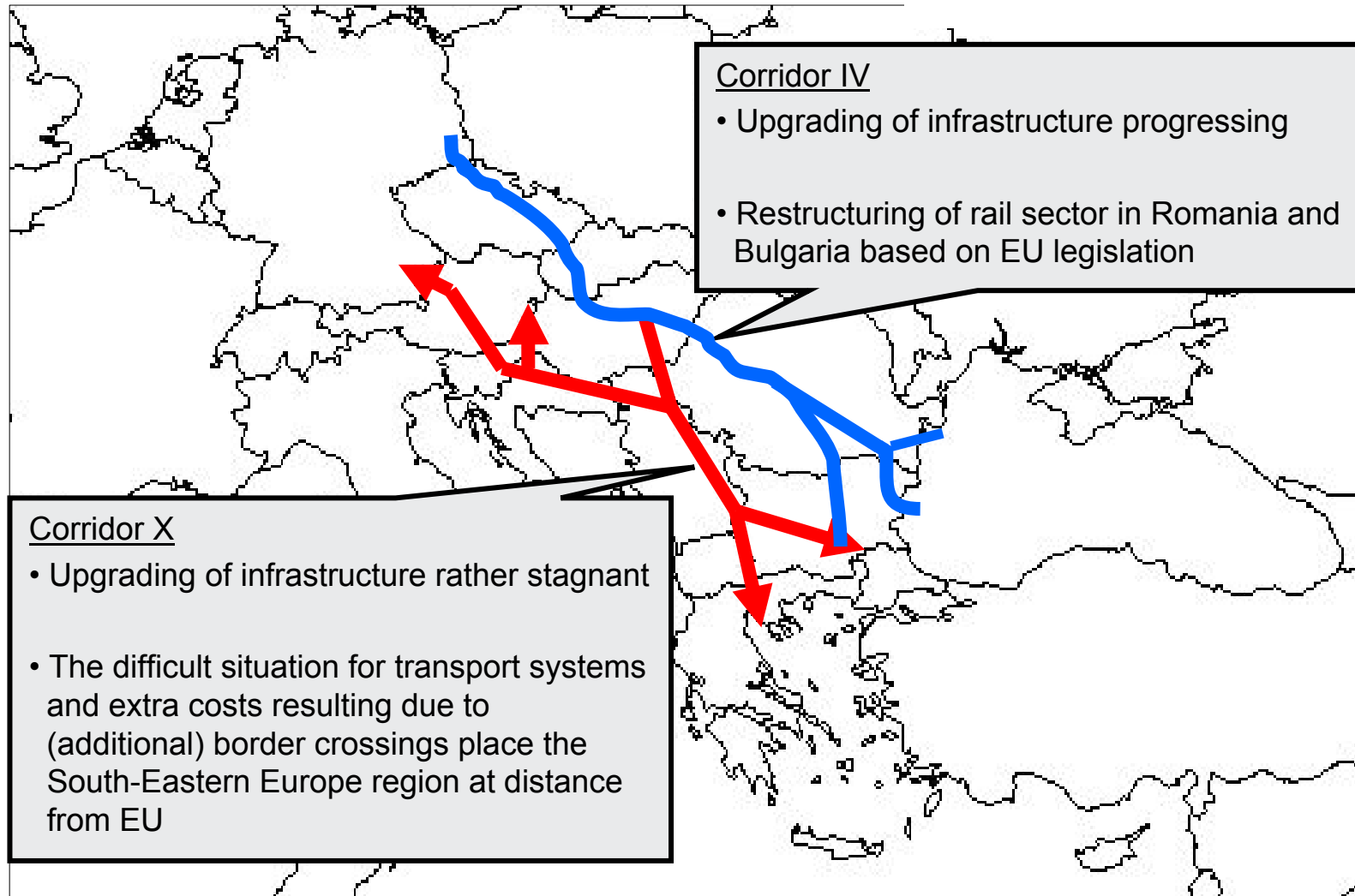
|      |                           |     |                     |
|------|---------------------------|-----|---------------------|
| ÖBB  | Austrian Federal Railways | SZ  | Slovenian Railways  |
| NRIC | Bulgarian Railways        | ZS  | Serbian Railways    |
| HZ   | Croatian Railways         | GKB | Graz-Köflacher-Bahn |

## • Collaboration with

|                          |       |  |
|--------------------------|-------|--|
| Since foundation of AKX: | PEC X | Steering Committee of Pan-European Corridor X        |
| Since 2006:              | TCDD  | Turkish State Railways                               |
|                          | ZFBH  | Railways of the Federation of Bosnia and Herzegovina |
|                          | ZRS   | Railways of the Republic of Srpska                   |

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## Current Situation Corridor X and EU



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## Current (Market) Projects:

### **MP 1: Cutting Running Times**

Achievement of satisfying running times  
(Salzburg – Thessaloniki max. 36 hrs., Salzburg – Halkali max. 48 hrs.)

### **MP 4: Assessment and Use of Market Potentials**

Attraction of additional traffic on Corridor X.

### **MP 6: Co-ordination of Infrastructure Investments**

Members act in favour of a common position on infrastructure investments;  
definitions of infrastructure projects.

### **MP 7: Cutting Stops in Border Stations**

Shortest possible stops in border stations; project managed by project leader  
Serbian Railways ZS.

### **MP 8: Establishing One Stop Shops (OSS)**

Coordinated approach to customers on Corridor X

### **EUROPTIRAILS** (European Train Monitoring and Reporting)

Up-to-date train information on Corridor X and on other European transport axis

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# Market Project Highlights and Results

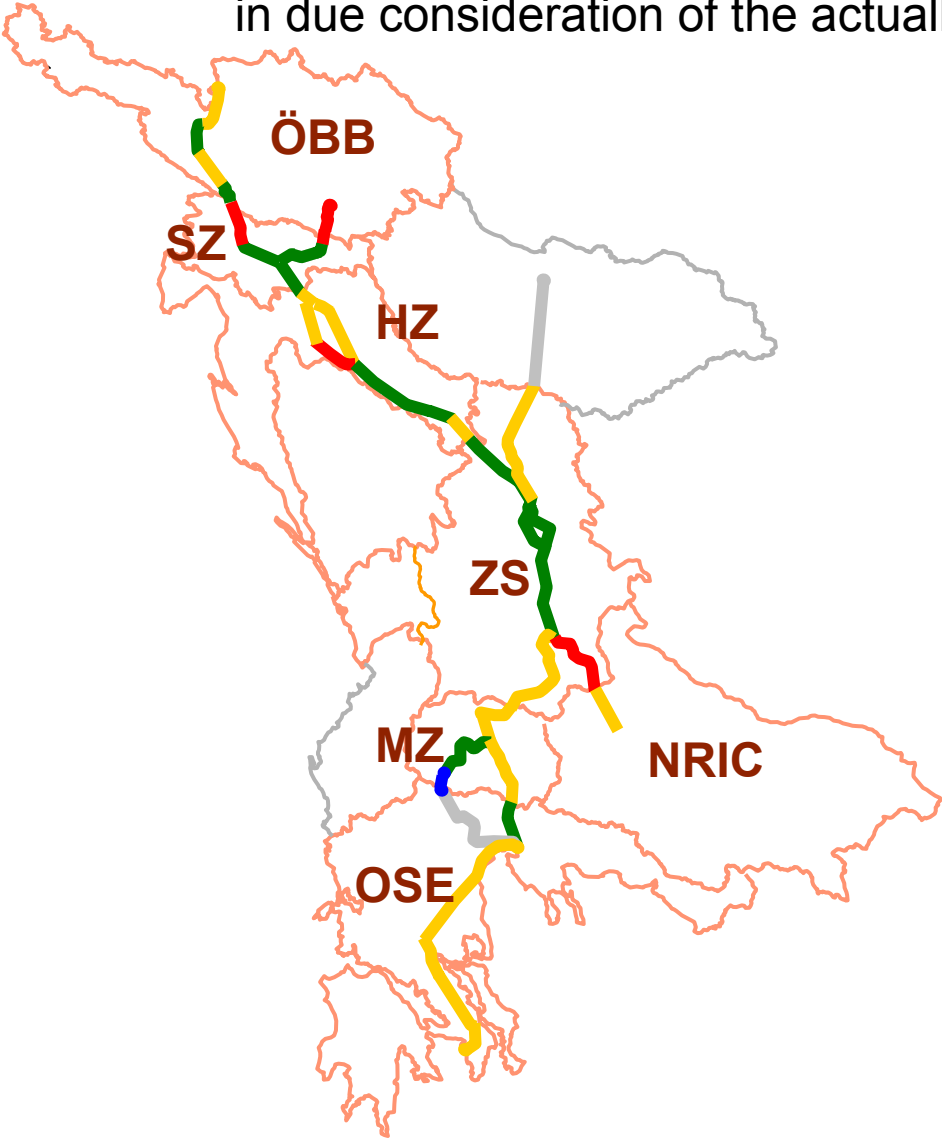


- MP 1:** Running times have already been cut (train-related):  
Between Thessaloniki and Salzburg from 49 to 44 hrs. (target 36 hrs.) and between Halkali (Turkey) and Salzburg from 73 to 63 hrs. (target 48 hrs.)
- MP 2 + 3:** Publication of a Corridor X Network Access Description and a Corridor X Product Catalogue 2008 since 2008 (updated at least once a year)
- MP 4:** 2008 New trains: Zeebrugge – Ljubljana (and v. v.)  
2008 Planned: Wels – Istanbul Halkali (and v. v.)  
Nuremberg – Istanbul Halkali (and v. v.)  
Thessaloniki – Unna/Bönen (and v. v.)  
Judenburg – Radinac (and v. v.)  
as well as a train pair between Vienna resp. Wels and Belgrade
- MP 7:** Border stops at the Bulgarian/Serbian border Dragoman/ Dimitrovgrad cut down by more than 50 percent in December 2006

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# Highlight MP 5 Corridor X Capacity Profile

in due consideration of the actually possible running speeds



**LEGEND**

- > 100% Capacity Utilization
- > 80% und < 100% Capacity Utilization
- < 80% Capacity Utilization
- Section out of Operation
- Data currently unavailable (to be provided)

The Capacity Utilization is calculated over a 24 hour operation.  
All double-track sections include the critical direction only.

## Principal Activities for 2009

- Forcing of **market projects 7, 1, 2+3, 6 and 8** (see p. 7,8)
- Implementing of **Europtirails** on Corridor X in order to approach the European standard, to attract Investors and to aim at public fund raising (see p. 7)
- As a very important gateway to Asia, the **Turkish State Railways (TCDD)** should be invited to work closer together with <Korridor X PLUS>
- **Lobbying** on all organizations which are important decision makers for us such as ministries, European Commission, CER (Community of European Railways), EIB (European Investment Bank) etc. With those organizations a good cooperation is intended too

# Activities of Railway Undertakings (RU)



- In autumn 2006 test runs of an unaccompanied Rolling Road piggyback service (ROLA) between Wels (Austria) and Istanbul-Halkali (Turkey) via Salzburg – Jesenice – Ljubljana – Zagreb – Belgrade – Sofia (and vice versa)
- Since December 2008: New longdistance offer Germany – Salzburg –Villach – Ljubljana – Zagreb with additional direct EC-connection Zagreb – Frankfurt and cut running time, through locomotive with a short border stop in Jesenice at all EC/IC/D-trains
- Since December 2008 regular EC-trains services every second hour on the section Vienna-Graz-Maribor

## Future Plans of the RU (Freight Transport)

Unaccompanied combined shuttle trains

- between Vienna/Wels (Austria) und Belgrade (Serbia) starting in the 2nd half of 2009

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## ÖBB-Group: Planned Investments

| Project location (line/ section)                 | Problems - short description | Negative consequences (if project not executed) | Planned project - short description   | Phase of the project | Estimated implementation time | Overall estimate costs [Mio. €] |
|--|------------------------------|---|---|----------------------|-------------------------------|---------------------------------|
| Schwarzach-St. Veit – branch-off point Pusarnitz |                              |   | Double Track Upgrade between Schlossbachgraben and Angertal                   | Construction         | Completed in 2010             | 17                              |
| Schwarzach-St. Veit – branch-off point Pusarnitz |                              |   | Double Track Upgrade between Kolbnitz and branch-off point Pusarnitz, 110km/h | Construction         | Completed in 2009             | 90                              |
| Graz – Spielfeld-Strass                          | Capacity Constraints         | Decreasing Quality of Service                   | Double Track Upgrade between Lebring and Leibnitz (9 km), 160km/h             | Construction         | Completed in 2009             | 70                              |

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# SZ – Slovenske železnice d.o.o. (Slovenian Railways, Ltd.) – 1

## Business News

- Following the Memorandum of Understanding concerning the establishment of a regular international intermodal train service between Turkey and Slovenia, signed on November 21<sup>st</sup>, 2007 by the Slovenian Railways SZ and Turkish State Railways TCDD, the product Bosphorus-Europe-Express was introduced to the market by the companies Adria Kombi and Kombiverkehr. Since March 30<sup>th</sup>, 2008 the train circulates between the container terminals in Istanbul/Halkali and Ljubljana/Moste once a week.
- On March 16<sup>th</sup> and 17<sup>th</sup>, 2009 the railways made a test run of the Bosphorus-Europe-Express with the objective of reducing the transport time of currently ca. 60 hours; the train needed only 35 hours to cover a distance of 1577 km. The result was achieved thanks to the good cooperation among the railways and the involved national authorities.
- In the field of freight transport several products have been introduced, such as Ljubljana Cargo Line between Ljubljana and Munich, Steel Express Serbia between Ljubljana and Radinac.
- With the implementation of the timetable for 2009 Slovenian Railways SZ have started to offer very attractive and inexpensive return tickets from Ljubljana to the neighbouring metropolitan cities Vienna, Munich, Zagreb and Belgrade.

# SZ – Slovenske železnice, d.o.o. (Slovenian Railways Ltd.) – 2



Excerpt from the Infrastructure Atlas of the „Group of 4 Infrastructure Experts“ of September 2006:

The draft National program for the development of the railway infrastructure has been worked out by the Republic of Slovenia for the period from 2006 to 2020. The goal of the program is to provide capacities on the two major corridors in order to improve the quality of the passenger and freight transport through Slovenia, to meet the demands of TSI (Technical Specification for Interoperability) for conventional lines as well as for planned high capacity lines and to guarantee other necessary improvements.

This program gives the framework for the most important investments on the Pan-European Corridors X and V, as follows:

| <b>Investment / Years</b> | <b>2006 – 2013</b>  | <b>2014 – 2020</b>  |
|---------------------------|---------------------|---------------------|
| <b>Renewal</b>            | 1117.1 mil €        | 272.0 mil €         |
| <b>Upgrading</b>          | 1324.1 mil €        | 522.4 mil €         |
| <b>New construction</b>   | 1154.4 mil €        | 1440.2 mil €        |
| <b>Total</b>              | <b>3595.6 mil €</b> | <b>2234.6 mil €</b> |

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# **SZ – Slovenske železnice, d.o.o.**

## **(Slovenian Railways Ltd.) – 3**



Besides regular maintenance works it is essential to carry out the following improvement measures up to 2023 on Corridor X in order to meet the traffic requirements of the future:

- Construction works for the increase of line speed and axle load:
  - Zidani Most – Celje (2006-2020) as well as Celje – Pragersko (2006-2019)
  - Grade-separated accesses (over- or underpasses) for travellers in railway stations (2007-2012)
- Elimination of level crossings
- Renewal of the safety- and telecommunication-installations on the lines Ljubljana – Dobova, Zidani Most – Sentilj and Ljubljana – Jesenice (2008-2015):
  - Installation of ERMTS/ETCS system (2008-2015) as well as GSM-R system (2006-2010)
  - During the time period 2006 to 2020 it is also planned to upgrade several level railway crossings
- Renewal of existing devices on the lines Ljubljana – Dobova, Zidani Most – Sentilj, Ljubljana – Jesenice
- Installation of remote control devices for the fixed electrical installations
- Construction plans of new infrastructure:
  - second track Maribor – Sentilj (2008-2015)
  - second track Ljubljana – Jesenice (2008-2020) and construction of the branch to the Ljubljana Airport
  - line speed increase between Ljubljana and Zidani Most (2007-2020)

# HZ – Holding Hrvatske Željeznice (Croatian Railways) – 1



In the year 2009 in Croatia the estimated amount to be spent for railway upgrade on Corridor X is 278,3 million Kuna (approx. 37,1 million €).

The most important activities on Corridor X are:

- Continuation of renewal and upgrade on the Vinkovci – Tovarnik line section
- Completion of renewal on the Greda – Turopolje line section
- Renewal of catenary equipment and other works on energy subsystem
- Continuation of setting up optical fiber infrastructure

According to the National Railway Infrastructure Program for the period 2008-2012 the planned investments for railway upgrade on Corridor X will amount to 2,479 million Kuna (approx. 338.4 million €), but unfortunately due to the global financial crisis those investments will be reduced.

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# HZ – Holding Hrvatske Željeznice (Croatian Railways) – 2



In this period major railway upgrade investments on Corridor X will be:

- Complete renewal and partial infrastructure upgrade on the following double track line sections – co-financed through EU funds (ISPA and IPA):
  - Novska – Okučani (2x 19.5 km) – 2010-2012
  - Vinkovci – Tovarnik – state border (2x 33.4 km) – to be completed 2011
- Renewal of 211.3 km of tracks on the following line sections:
  - Savski Marof – Zagreb Glavni kolodvor (2011-2012)
  - Zagreb Borongaj – Dugo Selo – Moslovačka Gračenica (2010-2012)
  - Zagreb Glavni kolodvor (Gk) – Zagreb Klara (2010-2011)
  - Velika Gorica – Sunja and Sibenj – Slavonski Brod (2011-2012)
- Renewal and upgrade of energy subsystem (during the entire period)
- Reconstruction of Sisak railway station (2009-2010)
- Rail communication cable replacement on the Zagreb Gk – Sisak – Novska line (2009-2012)
- Replacement of deteriorated switches and crossings (during the entire period)

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# HZ – Holding Hrvatske Željeznice (Croatian Railways) – 3



Due to this renewals, upgrading and the other infrastructure investments better infrastructure conditions will be established. This will also raise the performance quality on Corridor X (cutting travelling times in the field of passenger transport from 4 hrs. 41 min. down to 3 – 3½ hrs. and transit times in the field of freight transport from 7 – 8 hrs. down to 5 – 5½ hrs.).

Investments planned in rolling stock (such as purchasing and rebuilding locomotives, motor coaches, multiple units, passenger and freight wagons) will also contribute to raise the performance quality on Corridor X.

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# ZS – Železnice Srbije (Serbian Railways) – 1



## Infrastructure Investment Program along Pan-European Corridor X in Detail (1)

### Belgrade – Sid (state border with Croatia)

|   |                       |
|---|-----------------------|
| Reconstruction of a line section between Belgrade and Batajnica (2009-2011)<br>(20km of a double-track line)                              | 33 Mio. EUR           |
| Reconstruction of a line section between Batajnica and Golubinci (2007-2008)<br>(7km of a double-track line and 10 km of the right track) | 25 Mio. EUR           |
| Reconstruction of a line section (right track) between Golubinci and Sid (2010-2012)  | 70 Mio. EUR           |
|   | <b>∑ 128 Mio. EUR</b> |

### Belgrade – Nis

|   |                       |
|---|-----------------------|
| Reconstruction on the line section Gilje – Cuprija – Paracin (2008-2009)  | 32 Mio. EUR           |
| Reconstruction of a line section between Resnik and Velika Plana (2008-2012)<br>(double-track line, speed up to 160 km/h) | 320 Mio. EUR          |
| Reconstruction of a line section between Velika Plana and Stalac (2012-2014)<br>(speed up to 160 km/h)                    | 160 Mio. EUR          |
| Reconstruction of a line section between Stalac and Djunis (2012-2014)<br>(double-track line, speed up to 160 km/h)       | 155 Mio. EUR          |
| Reconstruction of a line section between Djunis and Trupale (2012-2014)<br>(speed up to 160 km/h)                         | 100 Mio. EUR          |
| Reconstruction of a line section between Trupale and Nis (2012-2014)<br>(double-track line, speed up to 160 km/h)         | 18 Mio. EUR           |
|   | <b>∑ 785 Mio. EUR</b> |

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# ZS – Železnice Srbije (Serbian Railways) – 2



## Infrastructure Investment Program along Pan-European Corridor X in Detail (2)

### **Nis – Presevo (state border with Macedonia / FYROM)**

Reconstruction of the whole (length: 157 km) section (2008-2010)  
(speed up to 160 km/h)

**Σ 120 Mio. EUR**

### **(Belgrade –) Stara Pazova – Subotica (state border with Hungary)**

Reconstruction of a line section between Stara Pazova and Cortanovci (2008-2009)

45 Mio. EUR

Reconstruction of a line section between Petrovaradin and Subotica state border  
(2009-2012)

137 Mio. EUR

Construction of a double-track railway bridge across the Danube in Novi Sad (2007-2012)

34 Mio. EUR

**Σ 216 Mio. EUR**

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# ZS – Zeleznice Srbije (Serbian Railways) – 3



## Infrastructure Investment Program along Pan-European Corridor X in Detail (3)

### Nis – Dimitrovgrad (state border with Bulgaria)

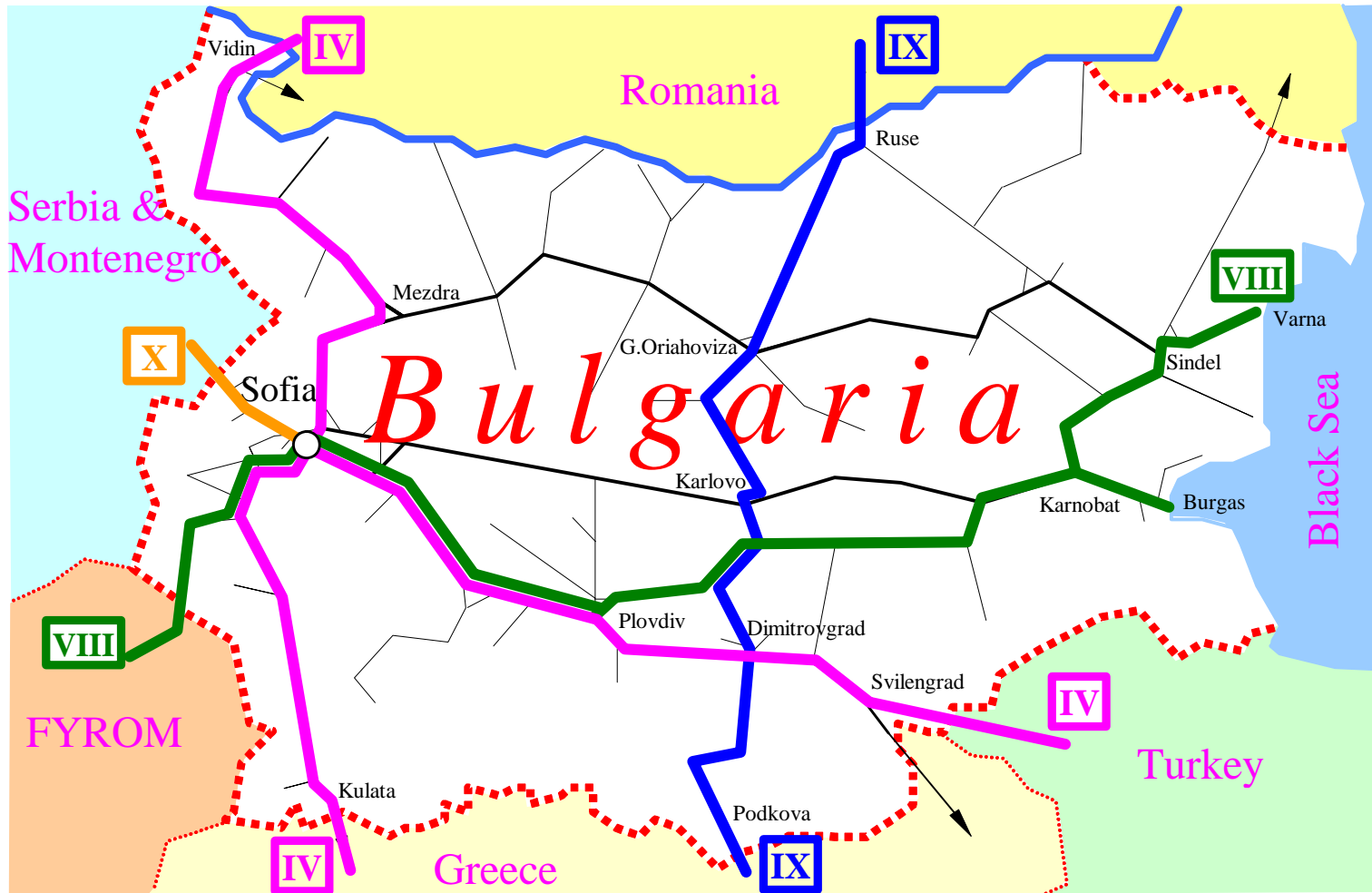
|   |                       |
|---|-----------------------|
| Reconstruction of a line section between Cele Kula and Stanicenje (2004-2009)   | 27 Mio. EUR           |
| Reconstruction of a line section between Nis and Cele Kula as well as between Stanicenje and Dimitrovgrad (2007-2012) | 25 Mio. EUR           |
| Modernization of electro-technical equipment (2006-2011)  | 42 Mio. EUR           |
| Reconstruction of the Nis node (2012-2016)  | 79 Mio. EUR           |
| Reconstruction of the Nis marshalling yard (2012-2014)  | 5 Mio. EUR            |
|   | <b>Σ 178 Mio. EUR</b> |

### Development of the Belgrade node

|  |                       |
|--|-----------------------|
| Construction of Belgrade freight terminal / Belgrade marshalling yard (2009-2014)  | 90 Mio. EUR           |
| Construction of other freight terminals in Belgrade – Karaburma and Batajnica (2009-2012)                                | 35 Mio. EUR           |
| Construction of lines within the Belgrade node (2008-2012)   | 65 Mio. EUR           |
| Reconstruction of Belgrade marshalling yard (2009-2011)  | 14 Mio. EUR           |
| Construction of Belgrade central station and reconstruction of the stations Zemun, Novi Beograd and Rakovica (2008-2012) | 95 Mio. EUR           |
|  | <b>Σ 299 Mio. EUR</b> |

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# NRIC – National Railway Infrastructure Company (Bulgaria)



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# MAIN PROJECTS ON CORRIDOR X



1. **Reconstruction and electrification of the railway line Plovdiv-Svilengrad-Turkish Border**
2. **Modernization of the railway line Sofia-Plovdiv**
3. **Modernization of the railway line Sofia-Pernik-Radomir**
4. **Modernization of the railway line Sofia-Dragoman**
5. **Renovation of the section Dragoman-Kalotina west-Serbian Border**
6. **Permanent traction power substation Aldomirovtzi**
7. **Modernization of the traction power substation Voluyak**
8. **Construction of Inter-modal Terminal Sofia**
9. **Construction of Inter-modal Terminal Plovdiv**
  - Expected volume of TEU - 5.500
  - Space needed - 50.000m<sup>2</sup>

for more detailed information please see next pages from 30 to 38

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# 1. Project “Reconstruction and electrification of the railway line Plovdiv-Svilengrad-Turkish Border

**Completion term – 2010**

## **Technical parameters**

### **Before project’s beginning:**

- Speed - 80/100 km/h
- Travelling time - 2 h 40 min
- Non-electrified railway line



### **After project’s completion:**

- Speed - 160 km/h
- Travelling time - 1 h 30 min
- Electrification - 25 kV/50 Hz
- ERTMS/ETCS level 1 and GSM-R

## **Benefits:**

- Travelling time reduction of more than 40%.
- More comfort, security and safety.
- Creation of 1000-1200 working positions per year in the project region.
- Additional services: optical cable, GSM-R, and other installed high-tech equipment.
- Opportunities for business development and especially railway transport.
- Improvement of the ecology in the project’s region.

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## 2. Project “Modernization of the railway line Sofia-Plovdiv”

**Construction term - 2014**

### **Technical parameters**

#### **Before the project’s beginning :**

- Speed - 70/130 km/h
- Travelling time - 2 h 30 min
- Electrification - 25 kV/50 Hz



#### **After the project’s completion :**

- Speed - 160 km/h
- Travelling time - 1 h 30 min
- Electrification - 25 kV/50 Hz
- ERTMS/ETCS level 1 and GSM-R

### **Benefits:**

- Travelling time reduction of more than 30%.
- More comfort, security and safety.
- Creation of 800-1000 working positions per year in the region of the project. Increasing of the land’s prices approximately with 30% in the project’s region.
- Additional services: optical cable, GSM-R, and other installed high-tech equipment.
- Opportunities for business development and especially railway transport.
- Opportunities for use of financial schemes like Public Private Partnership with investments guaranteed by the state.
- Improvement of the ecology in the project’s region.

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### 3. Project “Modernization of the railway line Sofia-Pernik-Radomir”

**Construction term - 2013**

#### **Technical parameters**

##### **Before the project’s beginning :**

- Speed - 70/90 km/h
- Travelling time - 1 h
- Electrification - 25 kV/50 Hz



##### **After the project’s completion:**

- Speed - 160 km/h
- Travelling time - 35 min
- Electrification - 25 kV/50 Hz
- ERTMS/ETCS level 1 and GSM-R

#### **Benefits:**

- Travelling time reduction of more than 40%.
- More comfort, security and safety.
- Creation of 500-700 working positions per year in the region of the project. Increasing of the land’s prices approximately with 25% in the project’s region.
- Additional services: optical cable, GSM-R, and other installed high-tech equipment.
- Opportunities for business development and especially railway transport.
- Opportunities for use of financial schemes like Public Private Partnership with investments guaranteed by the state.
- Improvement of the ecology in the project’s region.

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## 4. Project “Modernization of the railway line Sofia-Dragoman

**Construction term - 2013**

### **Technical parameters**

#### **Before the project’s beginning :**

- Speed - 70/100 km/h
- Travelling time - 45 min
- Electrification - 25 kV/50 Hz



#### **After the project’s completion:**

- Speed - 160 km/h
- Travelling time - 25 min
- Electrification - 25 kV/50 Hz
- ERTMS/ETCS level 1 and GSM-R

### **Benefits:**

- Travelling time reduction of more than 40%.
- More comfort, security and safety.
- Creation of 800-1000 working positions per year in the project region. Increasing of the land’s prices approximately with 25% in the project’s region.
- Additional services: optical cable, GSM-R, and other installed high-tech equipment.
- Opportunities for business development and especially railway transport.
- Opportunities for use of financial schemes like Public Private Partnership with investments guaranteed by the state.
- Improvement of the ecology in the project’s region.

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## 5. Project “Renovation of the railway line and draining activities in the section Dragoman-Kalotina west-Serbian Border”

**Construction term - 2009**

**Technical parameters**

### **Before the project’s beginning**

- Speed: 50km/h and sections with temporary limitation of the speed.
- Travelling time – 35 min
- Electrification - 25 kV/50 Hz



### **After the project’s completion:**

- Reaching of the designed speed – 70 km/h
- Travelling time - 20 min
- Electrification- 25 kV/50 Hz

### **Basic works executed in the conditions of trains and power “windows” :**

- Renovation of the upper construction of the railway sections between the stations Dragoman-Dragoil-Kalotina west-Serbian Border and tracks in the stations Dragoil-Kalotina west having a total length 13.624 meters.
- Complete change of the bridge’s sleepers and foot pathes in the same sections.
- Construction of the permanent draining systems and repairing of the existing draining systems.
- Hardening of the weak points.
- Replacement of the old shunts with the new type – UIC 60.
- Systems for control of overheated axles, loading etc.

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## 6. Project “Permanent traction power substation Aldomirovtzi”

**Construction term - 2010**

**Technical parameters**

### **Before the project’s beginning:**

- External power supply as a “blind” bypass of ВЛ110кV “Gaber”
- Moveable traction power substation with one traction transformer.



### **After the project’s completion:**

- Distribution equipment type KPY 27,5 KV equipped with computerized protective system
- 24 fibers optical cable for tele-communication control of the TPSS.

**Basic construction works**

- The PPSS construction is important for insuring of power supply with good quality and stability and also reserving this power supply on the Bulgarian territory as well as the territory of the Republic of Serbia – station Dimitrovgrad.
- Protocol No 2 for the beginning of the construction procedure is signed on 30.09.2008
- The basic construction works are in a process.

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## 7. Project “Modernization of the traction power substation Voluyak”

### Construction term - 2010

### Technical parameters

#### Before the project's beginning :

- Destroyed fundamentals and flooded cable channels.
- Old equipment with limited performance.
- No possibility for telecommunication control implementation.



#### After the project's completion:

- Installation of distribution equipment type KPY 27,5 KV equipped with computerized protective systems.
- 24 fibers optical cable for telecommunication control of the TPSS.
- Basic TPSS for the hub Sofia, insuring power supply for speed 160/200 km/h

### Basic construction works

- Complete replacement of the technological equipment.
- Implementation of the system SCADA for remote control of the electrical equipment from CDS (Central Dispatch Station) with optical cable.

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## 9. Project “Construction of inter-modal terminal Sofia”

**Construction term:  
2009**

**Technical parameters /forecast 2010**

- **Expected volume 59 000 TEU**
- **Needed area 110.000m<sup>2</sup>**

**Benefits for the society:**

- Construction of new infrastructure for inter-modal transport.
- Partnerships for construction, maintenance and management of the new infrastructure.
- Creation of 1000-1200 working positions per year in Sofia region.
- Container's transport time reduction by 30%.
- Improvement of the ecology of the region. Even diesel locomotives are 25% better for the environment than the diesel cars.
- Opportunities for business development and especially inter-modal transport.
- Increase of the land prices in the region of the terminal exceeding 60 %.
- Opportunities for the use of financial schemes like Public Private Partnership with investments guaranteed by the state.
- Additional incomes for the local municipalities.
- Additional incomes for NRIC coming from infrastructure taxes after traffic's increase and involvement in commercial partnerships.

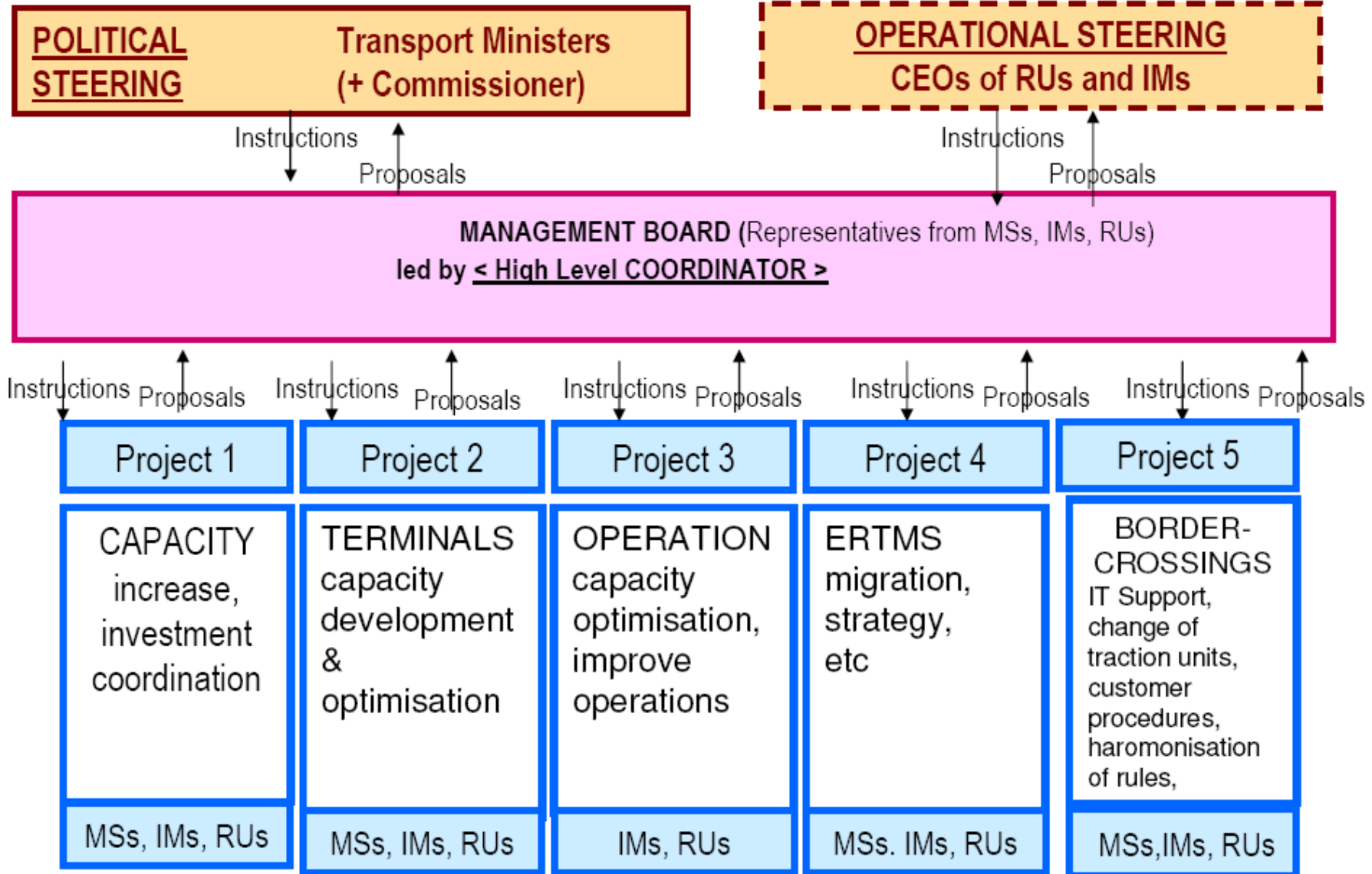
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## 10. Construction of inter-modal terminal Plovdiv

### Benefits for the society:

- Construction of new infrastructure for inter-modal transport including inter-modal terminals and opportunities for freight villages development.
- Partnerships for construction, maintenance and management of the new infrastructure.
- Creation of 600-1200 new jobs per year in the region.
- Increase of the standard of living of the population and urbanization of the less developed region.
- Decrease of the container's transport time with 30%, increase of the quality, security and safety of the intermodal railway transport.
- Improvement of the ecology of the region. Even diesel locomotives are 25% better for the environment than the diesel cars.
- Opportunities for business development and especially inter-modal transport.
- Decrease of border crossing times.
- Construction of freight villages and logistic freight chains along the inter-modal routes “Railway – Sea” and “Danube river – Railway – Sea”.
- Increase of the land prices in the regions of the terminals with more than 60 %.
- Opportunities for use of financial schemes like Public Private Partnership with investments guaranteed by the state.
- Additional incomes for the local municipalities.
- Additional incomes for NRIC coming from infrastructure taxes after traffic's increase and participation in commercial partnerships.

# Possible Korridor X Structure (CER)



## OVERALL OBJECTIVE OF THE ASSOCIATION KORRIDOR X PLUS IS TO ATTRACT MORE FREIGHT AND PASSENGERS ON CORRIDOR X

### Market Project (MP) – Portfolio:

- MP 1 Cutting Running Times
- MP 2 Corridor X Product Catalogue
- MP 3 Corridor X Network Access Description
- MP 4 Assessment and Use of Market Potentials
- MP 5 Assessment of Available Infrastructure Capacity
- MP 6 Co-ordination of Infrastructure Investments
- MP 7 Cutting Stops in Border Stations
- MP 8 Establishing One Stop Shops (OSS)

**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

## MP 1: Cutting Running Times

**Objective:** Shorter running times for already existing and new trains

**Status:** ▪ Status analyses together with railway undertakings (RU) – completed

- Potentials to make train paths faster – defined (achievable only partly due to lacking availability of locomotives)
- Higher priority for international train paths (focus on origin/destination) – launched
- New/faster train paths (running times shortened by about 10%) – offered

**Start:** January 2006

**End:** When running times will be satisfying (freight trains Salzburg – Thessaloniki max. 36 hrs., Salzburg – Halkali [Turkey] max. 48 hrs.)

**Project leader:** ÖBB Infrastruktur Betrieb AG (Railnet Austria Inc.)

**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

## MP 2: Corridor X Product Catalogue 2008

**Objective:** Establishing international products and quality standards

**Status:**

- Market analyses; focus on better/new products – to be deepened
- Harmonizing existing national products – to be deepened
- Definition of international products and quality standards – to be deepened
- Establishing a corridor product catalogue as part of a corridor network access description – completed (see [www.kx-plus.com](http://www.kx-plus.com))

**Start:** January 2006

**End:** November 2007  
Corridor X Network Access Description available as download

**Project leader:** ÖBB Infrastruktur Betrieb AG (Railnet Austria Inc.)

**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

## **MP 3: Corridor X Network Access Description 2008**

**Objective:** Documentation of conditions for using Corridor X

- Status:**
- Description of commercial, technical and administrative conditions for using the corridor on respective networks – completed
  - Definition of a common structure to ensure a transnational approach – completed
  - Publishing the Corridor X Network Access Description via internet (see: [www.kx-plus.com](http://www.kx-plus.com)) – completed

**Start:** January 2006

**End:** November 2007  
Corridor X Network Access Description available as download

**Project leader:** ÖBB Infrastruktur Betrieb AG (Railnet Austria Inc.)

**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

## **MP 4: Assessment and Use of Market Potentials**

**Objective:** Attraction of additional traffic on Corridor X

**Status:** Kick-off-meeting held on May 31st, 2007 in Vienna

- Tasks:**
- Gain and improve knowledge of the branches of industry and trade; get in contact with customers
  - Make the lack of production resources transparent (e.g. locomotives)
  - Use better market knowledge for new or improved products → MP 2
  - Implementation of concrete projects; no elaboration of new studies
  - Bear in mind the infrastructure capacity situation → MP 5

**Start:** January 2006

**End:** ongoing                      **Project leader:** collectively by association members

**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

## **MP 5: Assessment of Available Infrastructure Capacity**

**Objective:** Making the infrastructure performance transparent

- Status:**
- Assessment of the existing infrastructure capacity (section by section) in due consideration of the actually possible running speeds – done
  - Assessment of the actual number of trains (section by section) – done
  - Graphical presentation of still available infrastructure capacity (Corridor X capacity profile – see page 9) – done
  - Providing an input for infrastructure investments → MP 6

**Start:** January 2006

**End:** July 2007 (further detailed analyses can be done if necessary)

**Project leader:** HZ (Croatian Railways)

**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

## **MP 6: Co-ordination of Infrastructure Investments**

**Objective:** AKX Members act in favour of a common position on infrastructure investments

**Tasks:**

- Definition of infrastructure projects based on capacity analyses (→ MP 5) – initiated
- Criteria for evaluation of projects – defined
- Prioritization of projects on the basis of criteria – subsequently
- Organization of external communication (e.g. → SEETO!) – initiated

**Start:** January 2006

**End:** ongoing

**Project leader:** SZ (Slovenian Railways)

**ATTRACTING MORE TRAFFIC TO CORRIDOR X**

## MP 7: Cutting Stops in Border Stations

**Objective:** Shortest possible stops in border stations

- Status:**
- Analysis concerning reasons for stops (using existing studies! – e.g. UIC-study) – carried out for the most part
  - Measures for reduction of stops – defined
  - Clarification of potential for short and mid term reduction together with parties involved – ongoing
  - **Absolutely necessary co-ordination with state authorities – initiated**

**Start:** January 2006

**End:** ongoing

**Project leader:** ZS (Serbian Railways)

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## **MP 8: Establishing One Stop Shops (OSS)**

**Objective:** Implementation of the „One face to the customer“-principle on Corridor X

- Status:**
- Selection of suitable staff and creation of an international network – selection finished on September 30<sup>th</sup>, 2007
  - Implementation of OSS in national railway organizations – within EU no bigger problem to adopt OSS, more difficult in countries not being EU-Members – in progress
  - Improvement of tools and skills – to intensify
  - Ensuring professional business performance of the selected staff before starting – guaranteed

**Start:** January 2006

**End:** November 2009

**Project leader:** SZ (Slovenian Railways) (change in the timetable 2009/2010)

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