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Railway projects of Serbia

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Joint Workshop on "Financing Transport Infrastructure"
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Presentation plan

- Flow of goods
- Railway in Serbia today
- Priority railway projects of Serbia
- Technical documentation
- **Atractive for investments:**
Railway line: Szeged-Kikinda-Timisoara
- **Public-Private Partnership**
- Tourist railway tracks

Population without Kosovo: 7.498.001

Export flow of goods due to districts

2012 :

11.4 billion USD

Partners: Italy

Bosnia&Herzegovina

Germany

Romania

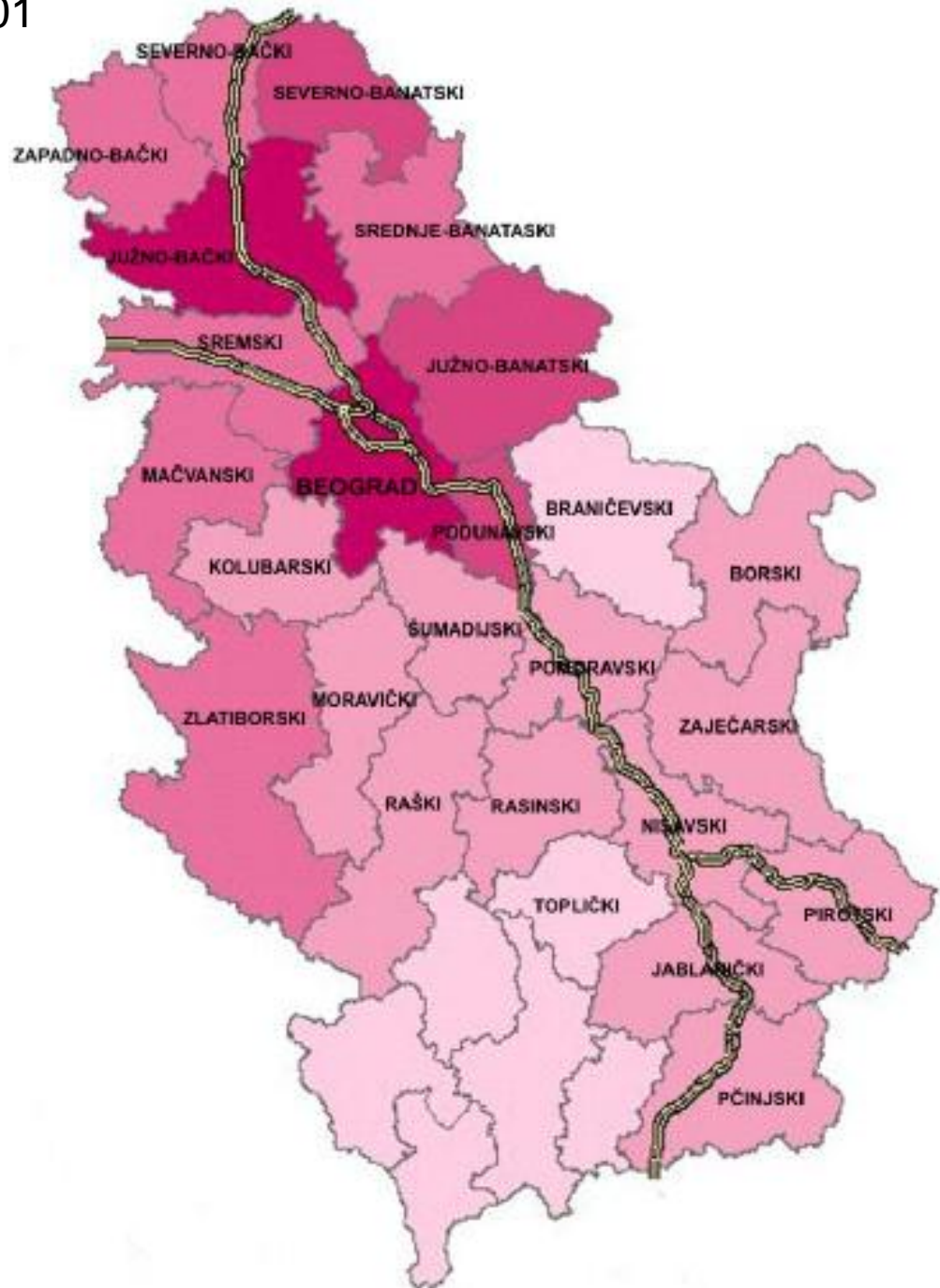
Goods: Steel

Metal

Machines

Grains

Vegetables



Import flow of goods due to districts

2012

19.3 billion USD

Partners: Russian Federation

Germany

Italy

China

Hungary

Goods:

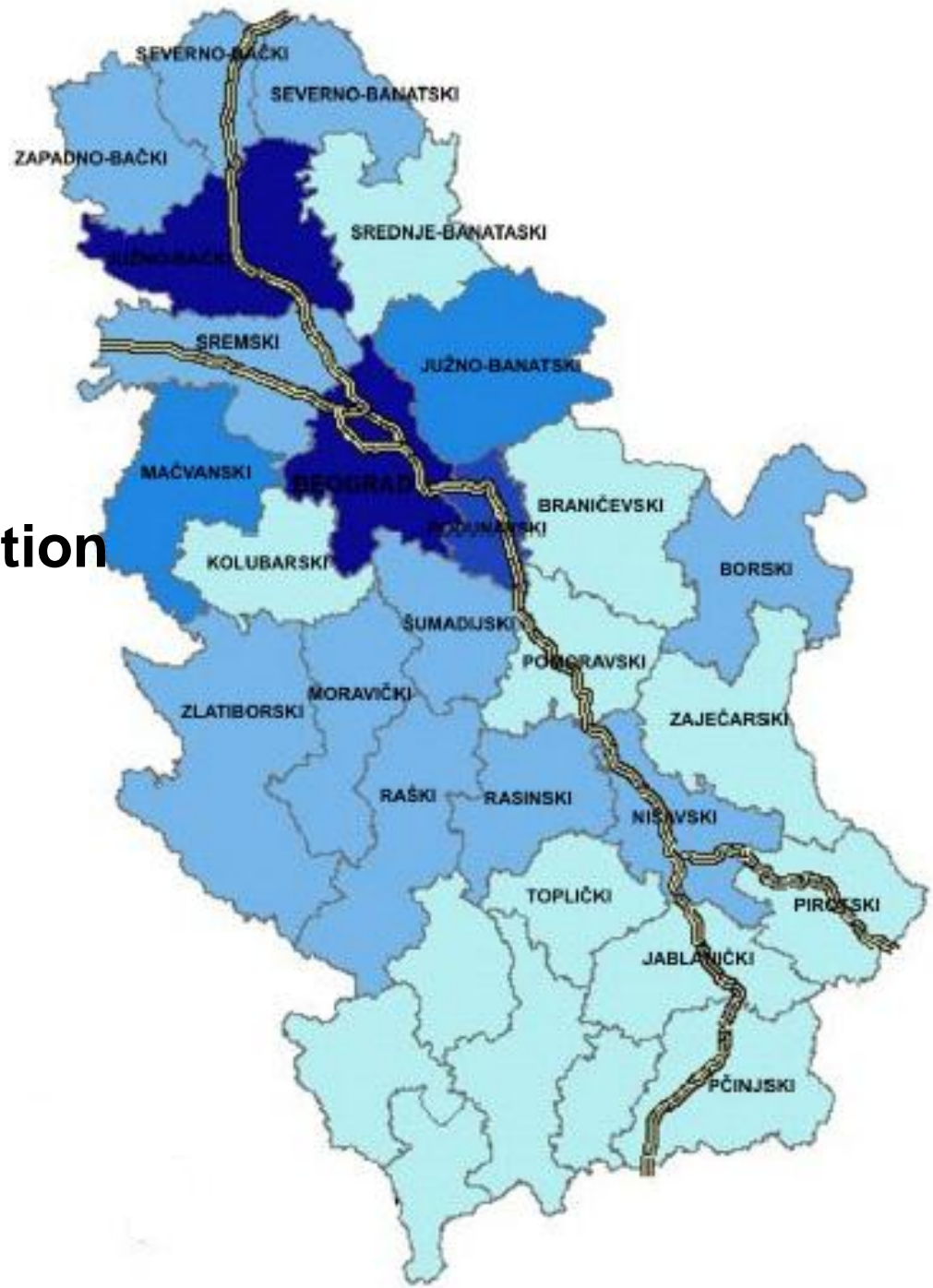
Petrol

Gas

Metal

Machines

Fe and steel



Railway transport in the Republic of Serbia

Corridor X

- The most important road and rail direction in Serbia.
- 769 km of railway tracks at Corridor X in Serbia



Railway transport in the R. Serbia

- Intersections of main railway lines: Belgrade and Niš.
- **Total length** of the railway network **3,809 km**
- Electrified: 1,196 km (32.7%).
- 276 km (7%) double track.
- The average acceptable network density very uneven, significantly decreases towards the south.
- 875km (25%) of the main lines located on Corridor X and its branches Xb and Xc.
- 45%: axle load of 22.5 tons, 30%: below 16 tones.

Railway transport in the R. Serbia

- 2.5% lines: maximum speed exceeds 100 km/h
- 62%: maximum speed of 60 km/h.
- With the exception of certain sections of the Belgrade-Šid and Velika Plana-Niš (double-track and electrified) all other lines have outdated technical and technological parameters.

What we need?

- Need of tracks reconditioning and modernization: **1,000 km** of main lines (57% of main lines and 26% of the railroad network).
- Rehabilitation and improvement: on **the whole length of Corridor X**, which is the backbone of the system
- Estimation: For the rehabilitation and maintenance of the railway network in the next ten years, **about 3.9 billion euros**.

Railway transport in Autonomous Province of Vojvodina



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- North region of R Serbia
- The most developed
- Area: 21,506 km²
- Population: 1,931,809
- 39% of Serbian export
- 43% of Serbian import

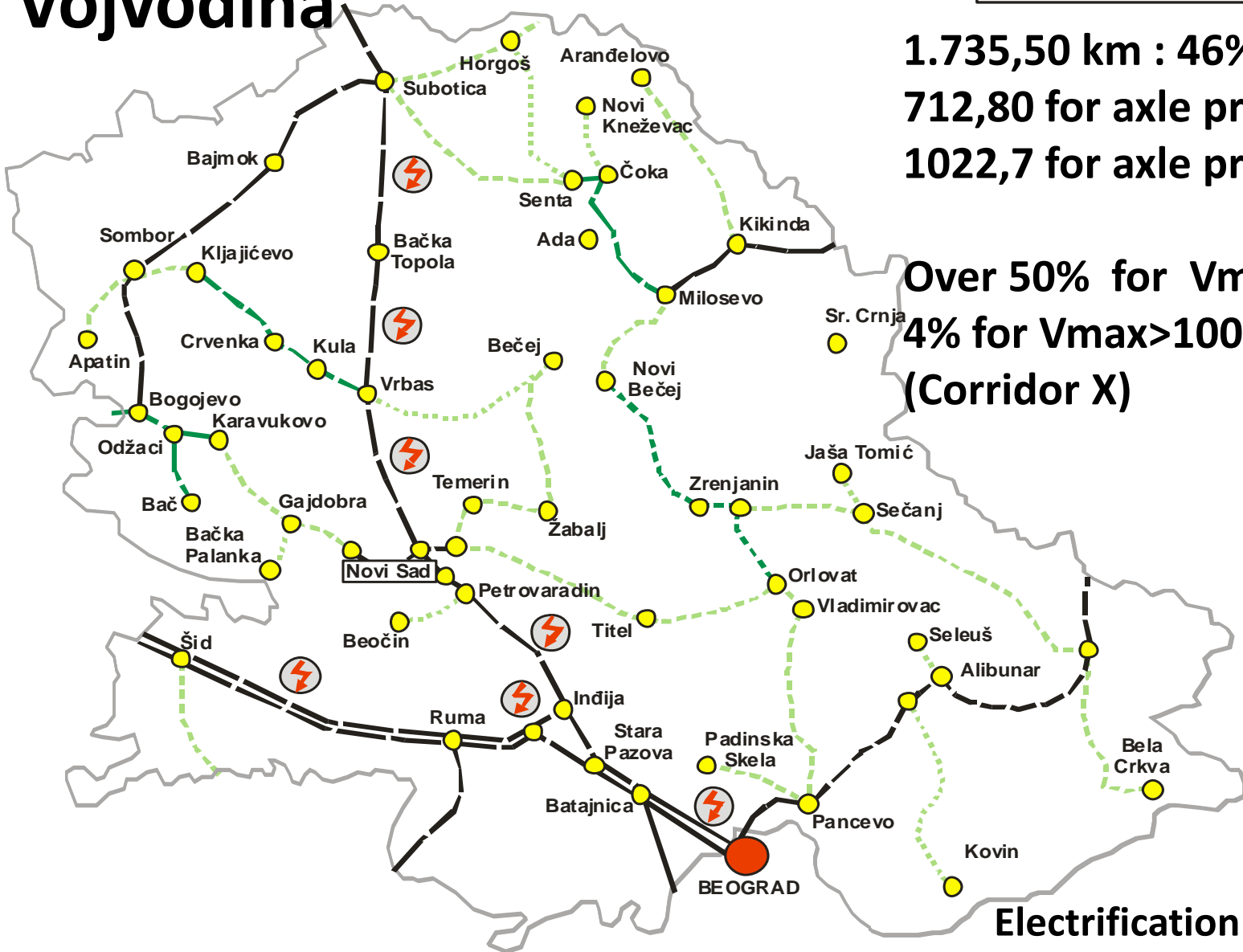


Transport in
Vojvodina:

- 4,5% water
- 11% railway
- 80% road

Railway system in AP Vojvodina

t/m	22.5t	20.0t	<18.0t
8.0			
7.2			
6.4			
5.0			
4.0			



1.735,50 km : 46% of total
 712,80 for axle pressure > 20t
 1022,7 for axle pressure < 20t

Over 50% for Vmax < 40 km/h
 4% for Vmax > 100 km/h
 (Corridor X)

Electrification: only
 Corridor. X



Development plans of Serbian railways

Basic principles:

1. High tracks on Corridor X:

- Maximum speed of 160km/h, where possible to 250km/h.
- Double tracks on Corridor X
- Axal presure of 22,5t/ax, where possible 25t/ax

2. Regional and other high tracks

- Maximum speed of 120km/h, where possible to 160km/h
- Axal presure of 22,5t/ax

PRIORITY PROJECTS

Corridor X

There is no valid technical documentation

- Novi Sad-Indija: just finished tender procedure for the elaboration of the design of approval and the main project
- Novi Sad-Subotica: tender procedure for the main project should be done soon

Central and South Serbia

- **Projects in operation:** Pančevo-Vršac-Romanian border: design for approval for modernization
- Railway node Belgrade: Project for reconstruction and modernization
- **Further plans for 2013:**
- Station Belgrade Centre: technical control of the main project and construction (Cuwait credit)
- Section: Gilje-Ćuprija-Paraćin of Belgrade-Niš: project for reconstruction
- Belgrade-Rakovica-Resnik: project for reconstruction
- Belgrade-Pančevo: construction and electrification of the second track
- Stara Pazova-Noví Sad: modernization
- Belgrade-Vrbnica-Montenegro border: reconstruction
- Žeželj bridge in Novi Sad: construction

Central and South Serbia: plans for 2014-2018:

- Belgrade-Bar: design for approval for reconstruction is elaborated (done by Italfair-Italy and CIP)
- Niš-Dimitrovgrad: design for approval for reconstruction
- Niš-Brestovac and Niš-Preševo-border: design for approval for reconstruction (IPA CBC)
- Niš bypass: design for approval (IPA CBC)
- Stalać-Đunis from Belgrade-Niš: design for approval (mod. and 2. track) and construction

Central and South Serbia: plans for 2014-2018:

- Belgrade-Pančevo-Vršac- Romanian border: modernization and electrification
- Stara Pazova-Novı Sad: modernization
- Novi Sad-Subotica-Hungary: design for approval
- Belgrade-Budapest: construction of the 2nd track
- Valjevo-Loznica: construction of new line (has documentation)
- Intermodal terminal Batajnica: construction
- Stations: Beograd centar and Zemun: construction

AP Vojvodina I cycle

Railway track	Estimated vaue of work
Szeged-Kikinda-Timisoara (Kikinda-Novi Bečej)	<ul style="list-style-type: none">• Temisoara-Kikinda is in function, should be improved• Kikinda-Szeged missing 12km+rekonstruction •210 million €
Bogojevo-Sombor-Subotica (investment maintainance)	400.000 €
Novi Sad-Odžaci-Bogojevo (main project missing)	3,7 million €
Pančevo-Zrenjanin (main project missing)	17,5 million €
Sombor-Vrbas (main project missing)	8,8 million €

AP Vojvodina II cycle

Railway track	Estimated value of work
Zrenjanin-Kikinda (main project missing)	20 million €
Banatsko Miloševo-Senta-Subotica (main project missing)	27,5 million €
Subotica-Horgoš-border (main project missing)	8,3 million €
Novi Sad-Bečej-Senta-Horgoš (main project missing)	44,2 million €

Solution of railway nodes:

- Novi Sad
- Subotica
- Pančevo
- Vršac
- Zrenjanin

TOTAL: \approx 340 million €

without nodes,

440 million € with nodes

First PPP:

- Petrovaradin-Beočin:
- Agreement for PPP: 4 companies, local community Beočin, municipality Novi Sad, government of APV

Current realization in AP Vojvodina:

- Main railway (corridor X): Main project
Indija-Noví Sad
- Elaboration of design for approval of
Szeged-Roske-Horgoš-Subotica
(IPA CBC Hungary-Serbia)

Existing technical documentation in AP Vojvodina

Studies

Secretary for economy, employment and gender equality has financed the following studies:

- Study of railway model in AP Vojvodina
- Study for realization of a Pilot project for transfer of railway infrastructure management to APV for the railway track Novi Sad-Bogojevo-Sombor

Vojvodina

Feasibility studies

1. Study for revitalization of railway tracks in region South Banat:

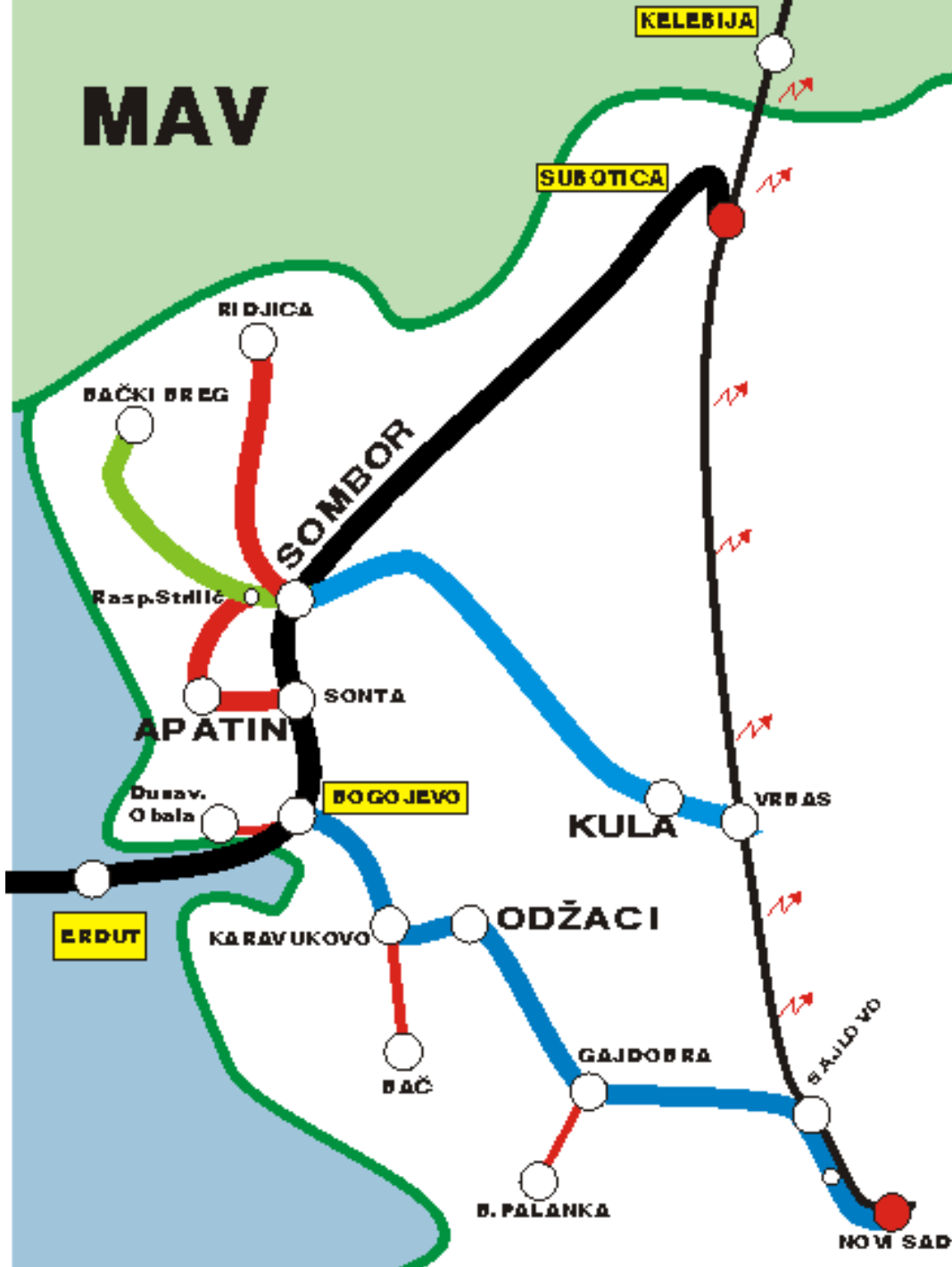
Prefeasibility studies for:

- Pančevo-Vršac with connections to:
- Bela Crkva - Vršac - Zrenjanin
- Vladimirovac - Kovin

2. Study for revitalization of railway tracks in region West Bačka:

Prefeasibility studies for:

- Novi Sad-Odžaci-Bogojevo
- Bogojevo-Sombor-Subotica
- Sombor-Vrbas
- Sonta-Apatin-Sombor
- Bogojevo-Port Dunav
- Gajdobra-Bačka Palanka



Revitalization of railway in West Bačka district

APATIN
KULA
ODŽACI
SOMBOR

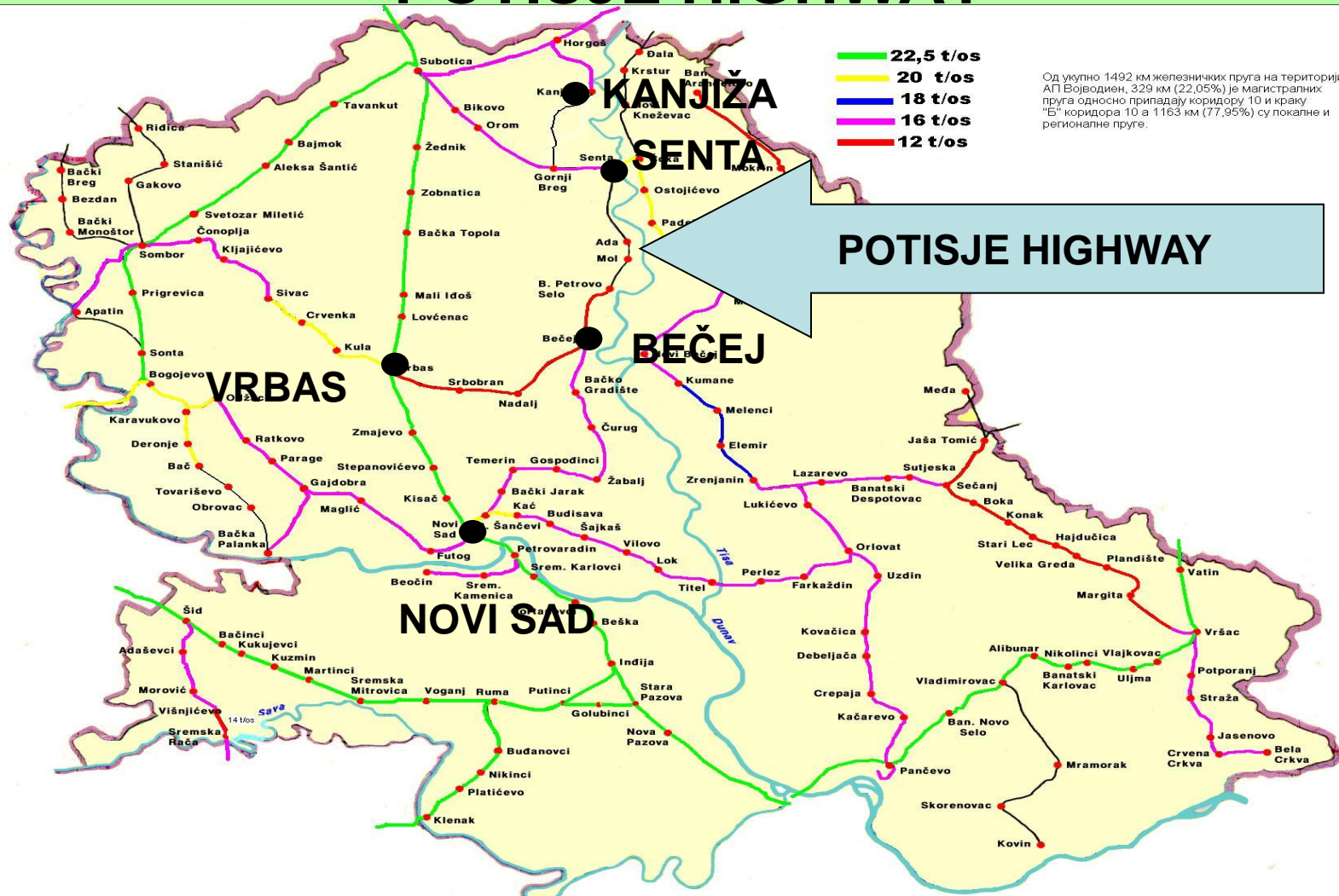
NOVI SAD

3. Study for revitalization of railway tracks in the region of Potisje:

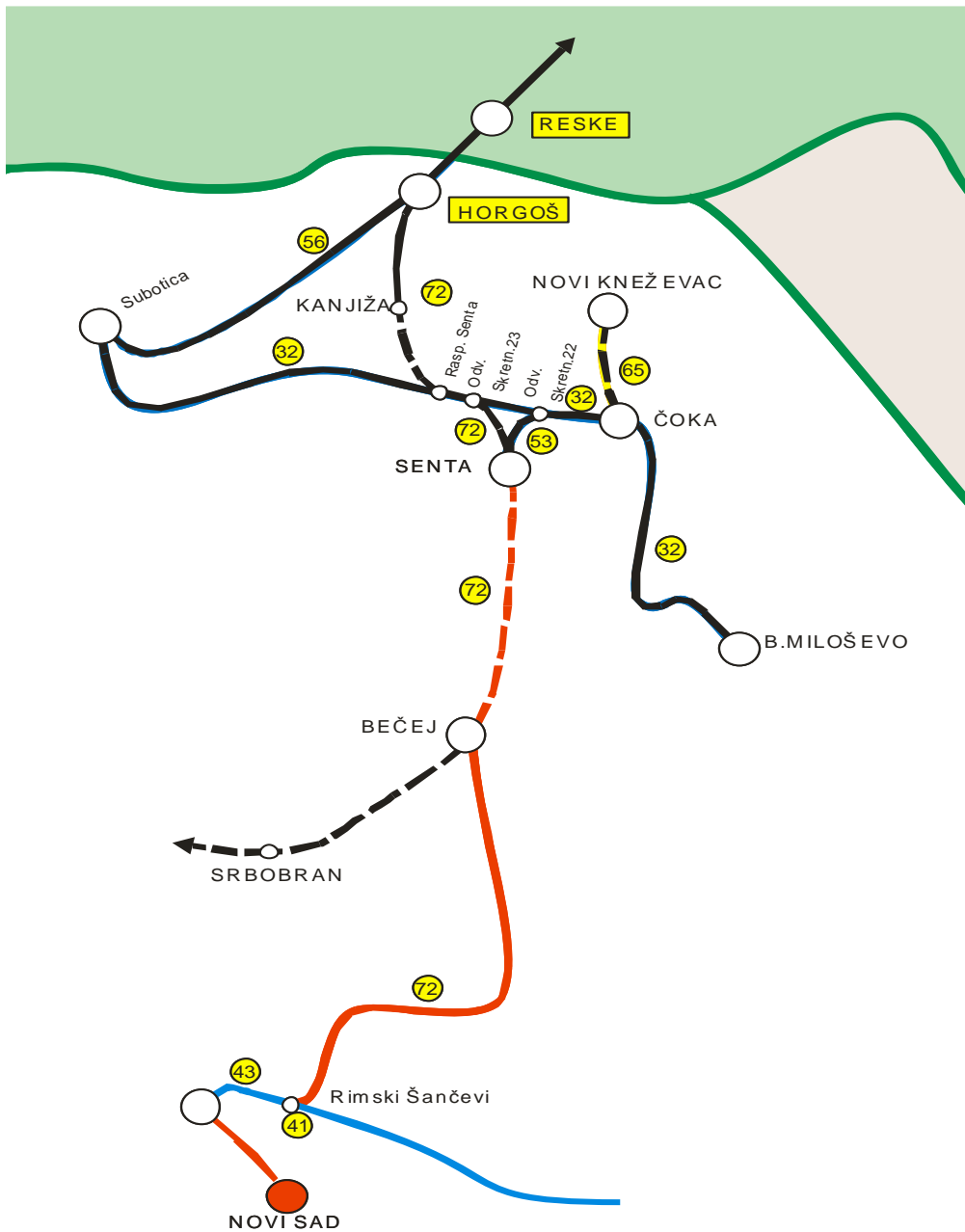
Prefeasibility studies for:

- Novi Sad-Bečej-Banatsko Miloševo-Senta Subotica with possibilities to revitalize the track till Horgoš
- possibility to construct new tracks:
Zenjanin-Žabalj-Novu Sad
Senta-Novu Kneževac

RAILWAY TRACK: NOVI SAD – BEČEJ – SENTA – KANJIŽA – HORGOSŽ AND BEČEJ – VRBAS “POTISJE HIGHWAY”



Revitalization of railway in Potisje and South Bačka district



**ADA
BEČEJ
ČOKA
KANJIŽA
NOVI KNEŽEVAC
SENTA
SRBOBRAN
TEMERIN
ŽABALJ**

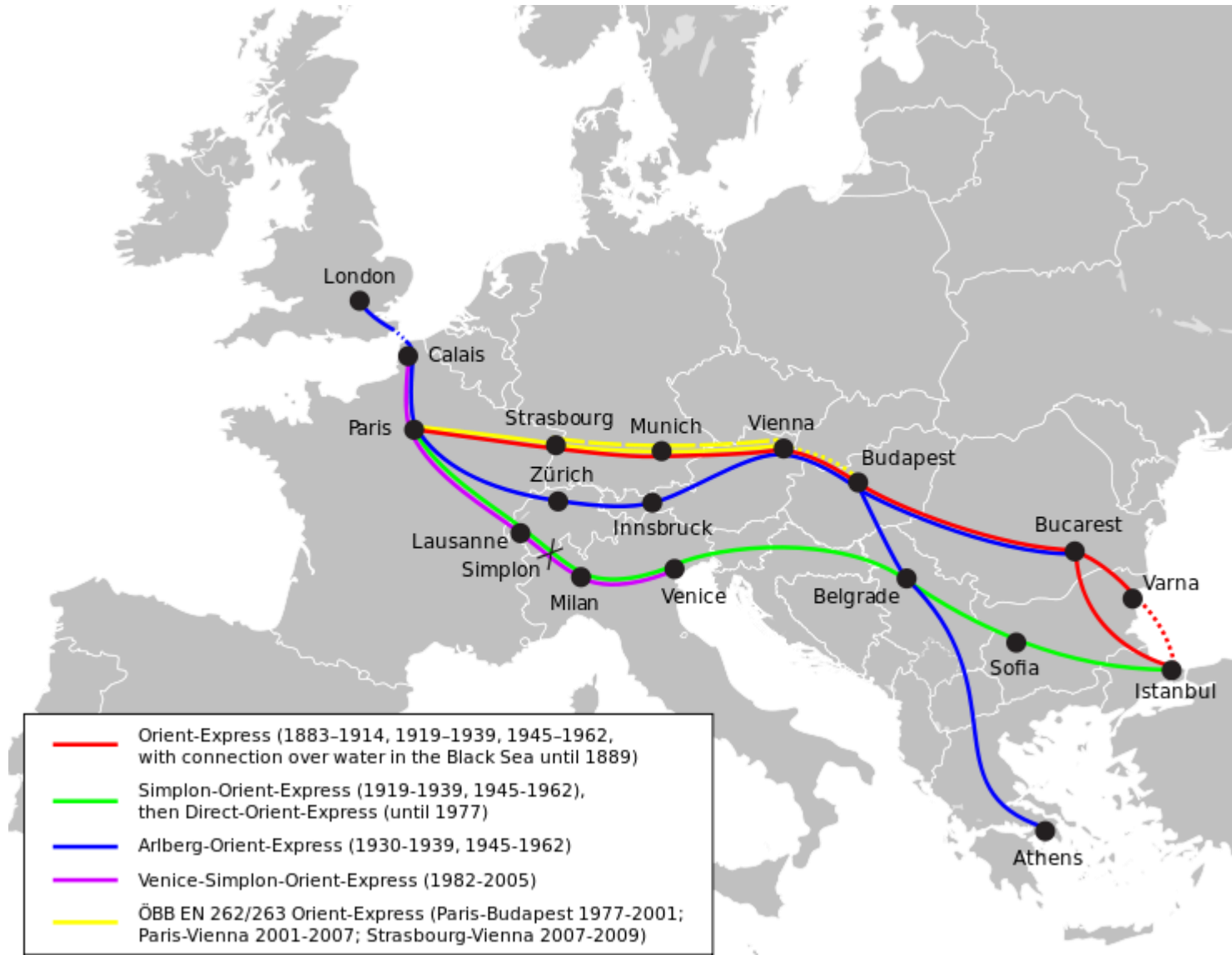
Atractive for investments: Railway line Szeged-Kikinda- Timisoara

- Inclusion into the project of Transeuropean railway in charge of Economic commission of UN for Europe

Orient Express

- This railroad station Kikinda has important role in the 19th century:
- Oriental express line (1878) has connected Vienna - Budapest - Kikinda - Bucharest,
- Orient express (1883) has connected Boulogne - Paris - Vienna - Kikinda - Bucharest,
- since 1895 Ostende express has connected London - Ostende - Brussels - Vienna - Kikinda - Constanza - Istanbul.

Orient Express line



Chronology of activities on the revitalization of railway lines in Banat

- Feasibility study for construction and modernization Szeged - Kikinda - Timisoara, CIP, 2001
- Study of northern Banat railways, CIP, 2005
- Meeting of Economic Commission of UNECE in Kikinda: support for reconstruction of railway track Timisoara-Kikinda-Szeged, 2012

The railroad Szeged - Kikinda - Timisoara was opened to traffic on 15 November 1857



-In 1945 The bridge over the Tisza River was destroyed and dismantled railway track length of about 12 km

-Trains are traveling between Serbia and Romania

Danube - Kris - Mures - Tisa region (DKMT Euroregion)

Major cities:

Szeged,
Bekerščaba,
Kecskemét,
Szolnok

Novi Sad

Timisoara,
Arad

Gravitation zone
of the track:

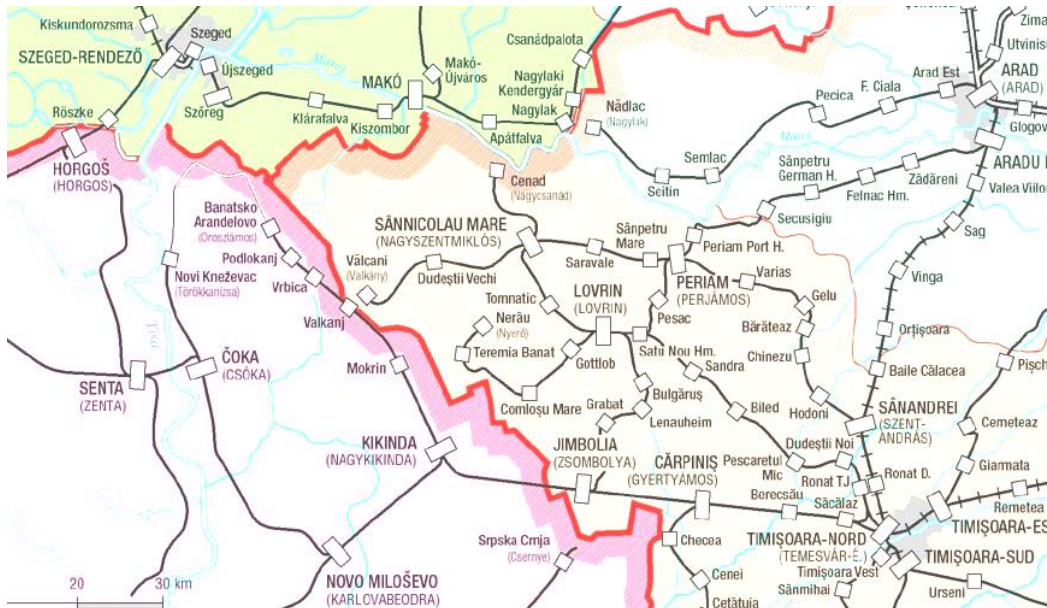
Area: **26.016 km²**

Population:
2.000.000



The importance of re-establishing the rail link

- Discharging of Corridor X and connect the Pan-European Corridor IV and X;
- Connecting to track Kikinda - Pančevo - Belgrade, and thus the link with the other countries of South East Europe



Length: 114 km

Investment: 210 million €

Duration: 40 months

(1 step: Feasibility study : about 1million €, duration: 6-9 months)

Track will connect Kikinda with Vienna and Budapest: fresh organic agricultural products from Kikinda every morning at their markets!

Models for financing railway tracks revitalization

1. Railway of Serbia
2. National funds:
 - republic: Fund for capital investments, Development fund
 - provincial: Development fund of AP Vojvodina, Guarantee fund of AP Vojvodina,
 - local: Funds of local municipalities
3. EU funds (IPA CBC....)
4. Credits: EBRD, WB...
5. Donations
6. **Public-private partnership (PPP):
BIG CHANCE!**

Possible state intervention for revitalization and maintenance of railway:

- part of income from petrol, part of motor vehicles registration tax, special tax for transport of danger substances, special tax for transfer of massive goods

Public Private Partnership

- Railway of Serbia is state owned. The company Railways of Serbia, Ltd. has right to manage the railway system
- PPP: Cooperation of public sector (Serbian railways, national, provincial and local administrations) with private sector
- Legislation: Exists, Law of public private partnership and concession
(*“Official journal of Republic of Serbia”, no. 88/2011*)

How it seems today:



Best practice: Tourism track Shargan 8



Tourism track Shargan 8



Thank You!

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