Railway projects of Serbia

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Presentation plan

• Flow of goods
• Railway in Serbia today
• Priority railway projects of Serbia
• Technical documentation
• Attractive for investments: Railway line: Szeged-Kikinda-Timisoara
• Public-Private Partnership
• Tourist railway tracks
Export flow of goods due to districts

2012:
11.4 billion USD
Partners: Italy
Bosnia & Herzegovina
Germany
Romania
Goods: Steel
Metal
Machines
Grains
Vegetables

Population without Kosovo: 7,498,001
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of certain sections of the Belgrade-Šid and Velika Plana-Niš (double-track and electrified) all other lines have outdated technical and technological parameters.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
Transport in Vojvodina:
- 4,5% water
- 11% railway
- 80% road

- North region of R Serbia
- The most developed
- Area: 21,506 km²
- Population: 1,931,809

- 39% of Serbian export
- 43% of Serbian import
Railway system in AP Vojvodina

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>100km/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 pressure 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 pressure of 22.5t/ax
PRIORITIZED PROJECTS
Corridor X

There is no valid technical documentation

- **Novi Sad–Inđija**: 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 baypass: 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-Novisad: 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
<table>
<thead>
<tr>
<th>Railway track</th>
<th>Estimated value of work</th>
</tr>
</thead>
</table>
| Szeged-Kikinda-Timisoara (Kikinda-Noviběče) | • Temisoara-Kikinda is in function, should be improved  
• Kikinda-Szeged missing  
12km+rekonstruktion  
• 210 million € |
<p>| 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 € |</p>
<table>
<thead>
<tr>
<th>Railway track</th>
<th>Estimated value of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zrenjanin-Kikinda (main project missing)</td>
<td>20 million €</td>
</tr>
<tr>
<td>Banatsko Miloševo-Senta-Subotica (main project missing)</td>
<td>27,5 million €</td>
</tr>
<tr>
<td>Subotica-Horgoš-border (main project missing)</td>
<td>8,3 million €</td>
</tr>
<tr>
<td>Novi Sad-Bečej-Senta-Horgoš (main project missing)</td>
<td>44,2 million €</td>
</tr>
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Solution of railway nodes:

- Novi Sad
- Subotica
- Pančevo
- Vršac
- Zrenjanin

**TOTAL:** \( \approx 340 \text{ million } \€ \) 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 Inđija-Novi 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
Railway network of Banat
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-Novi Sad
  Senta-Novi Kneževac
RAILWAY TRACK:
NOVI SAD – BEČEJ – SENTA – KANJIŽA –
HORGOS AND BEČEJ – VRBAS
"POTISJE HIGHWAY"
Revitalization of railway in Potisje and South Bačka district
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

- Orient-Express (1883-1914, 1919-1939, 1945-1962, with connection over water in the Black Sea until 1889)
- Simplon-Orient-Express (1919-1939, 1945-1962), then Direct-Orient-Express (until 1977)
- Arlberg-Orient-Express (1930-1939, 1945-1962)
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 (DKMTEuroregion)

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
(I step: Feasibility study: about 1 million €, 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
How it seems today:
Best practice: Tourism track
Shargan 8
Tourism track Shargan 8
Thank You!

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