



Current Condition and Investment Activities

“SERBIN RAILWAYS” jsc

2013, April

WHAT IS OUR POSITION AND WHAT IS AT OUR DISPOSAL?



INFRASTRUCTURE

- **3809 km** of railway network
 - **3162 km** in service
- **283 km double track lines 7.5 % of network**
- 1286 km electrified **33% of network**
- 875 km of lines along Corridor X
- Maximum designed speed 120 km/h
- 690 stations/stops, 334 tunnels, 981 bridges,
2136 level crossings
- 9.47 million tons of goods transported in 2012
- 16.63 million of passengers transported in 2012

SCOPE OF ACTIVITIES OF JSC "Serbian Railways"

1985 -2011

PASSENGER SERVICE VOLUME

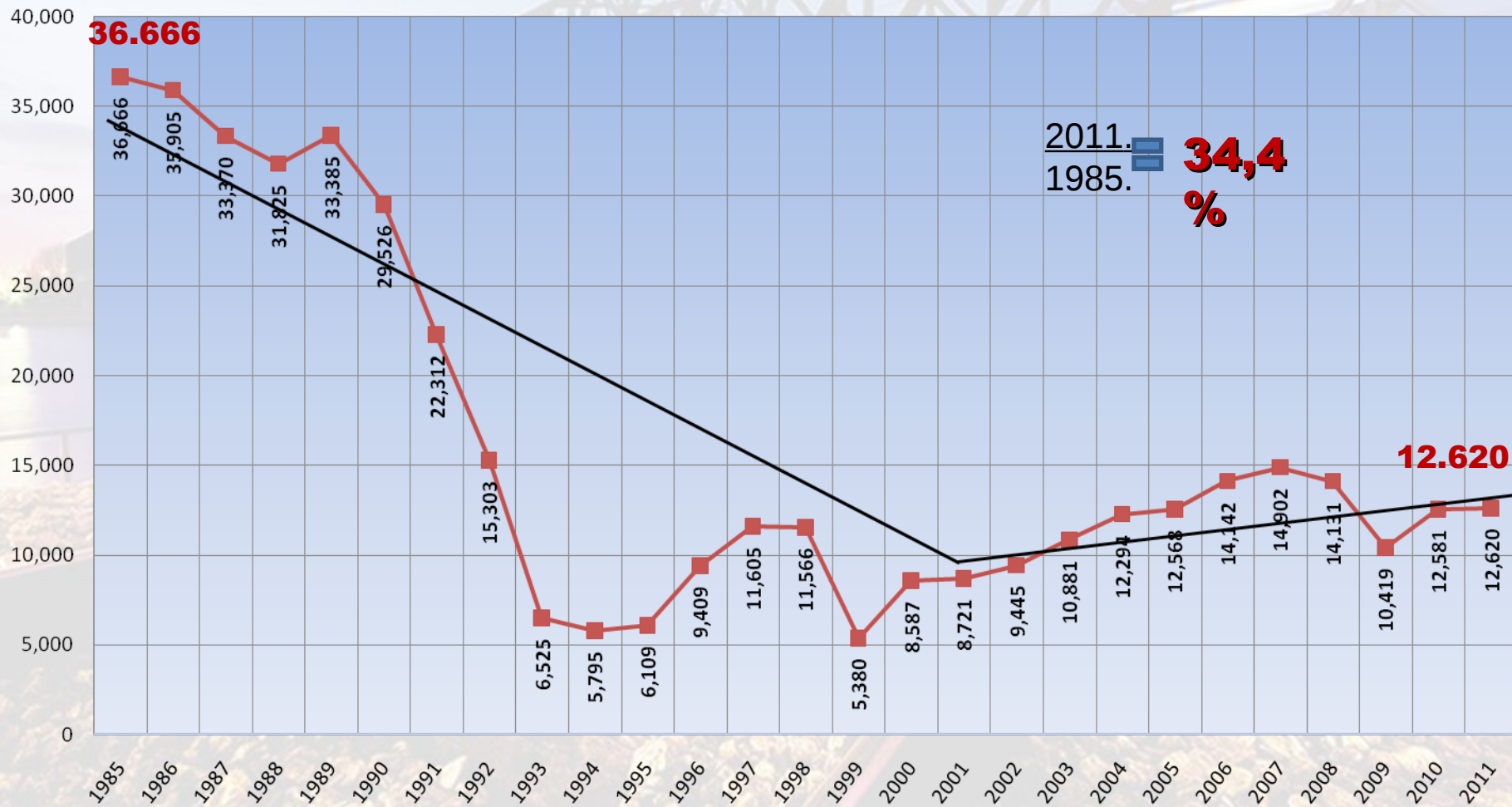
in national and international traffic in thousands



SCOPE OF ACTIVITIES OF JSC "Serbian Railways" 1985 -2011

FREIGHT SERVICE VOLUME

in national and international traffic in thousand of tons



Railway Network Condition

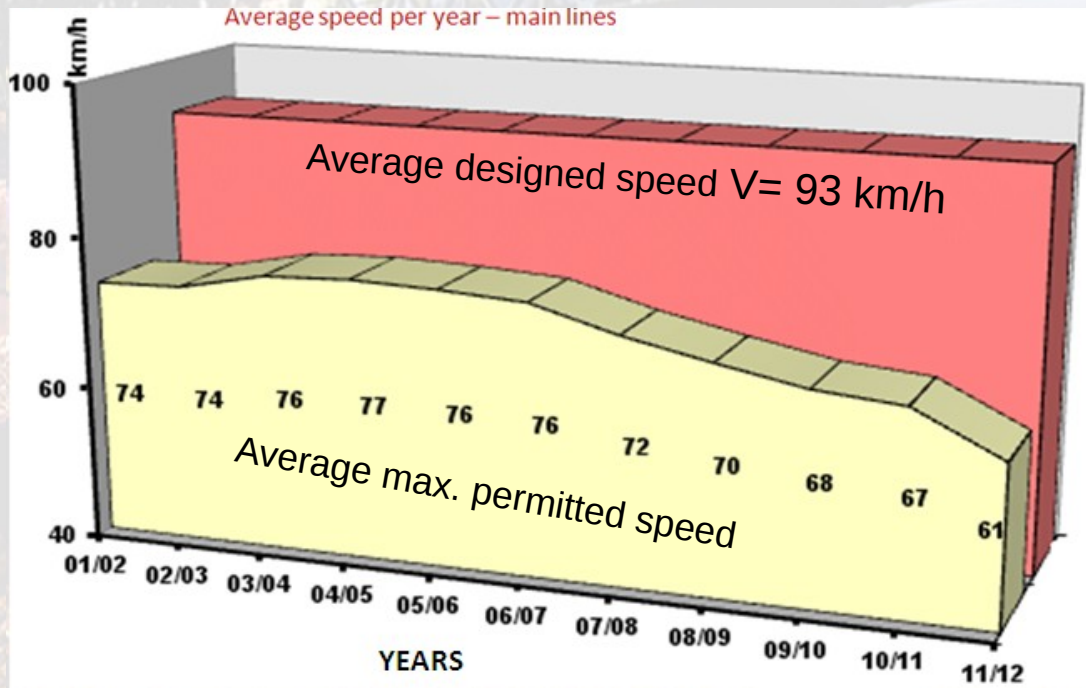
There is an increasing difference between:

Average designed speed

and

Real average maximum permitted speed

In 2012, prescribed average speeds on main lines of „Serbian Railways“ JSC have been **66%** out of average designed speeds i.e. they are **NEARLY 1/3 LOWER.**

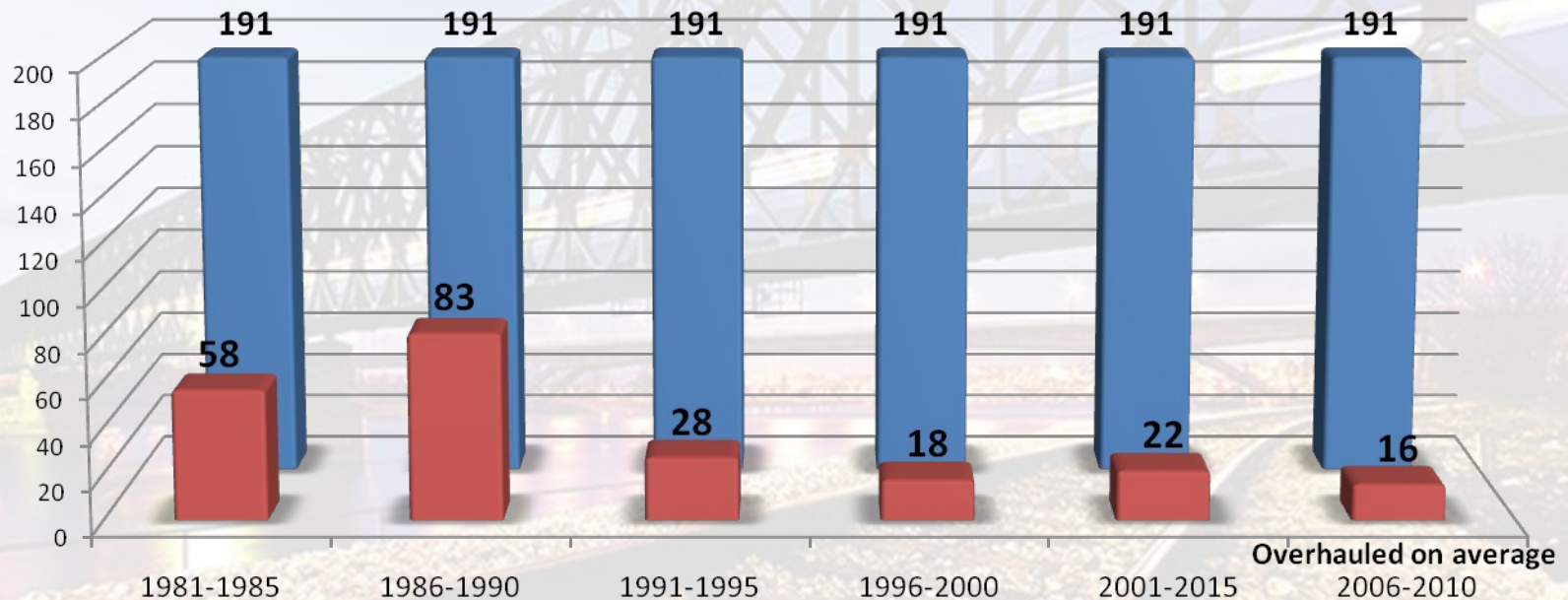


ESTIMATION

Rehabilitation of weak spots on the network of JSC “Serbian Railways” requires approx. 350 million €

OVERHAUL OF LINES: 1981 – 2010

To be overhauled



- **191 km** is required to undergo a general repair
- **38 km or 20%** were overhauled on average from 1981 to 2010

While 11% out of the required lines were totally overhauled in the last 20 years

- **We plan to enter this cycle in the following 5 years**

General Master Plan (TMP) in Serbia

Lists of the projects in MP resulted from the analysis of the current condition and envisaged development.

MINIMUM INVESTMENT SCENARIO comprises the existing network and projects underway or the ones whereof implementation has been decided upon.

DEVELOPMENT SCENARIO includes all identified development projects along with the forecasts for future traffic along the network.

Minimum Scenario Costs (2009-2027)

Transport mode	Investment	Maintenance	Total costs million €
Railways	112	2128	2240
Roads	336	4600	4936
Airports	66	250	316
Waterways	9	43	52
Intermodal	17	9	26
TOTAL	540	7030	7570

Development Scenario Costs (2009-2027)

Transport mode	Investment	Maintenance	Total costs million €
Railways	5100	2346	7446
Roads	8707	5044	13751
Airports	105	270	376
Waterways	349	126	475
Intermodal	88	48	136
TOTAL	14349	7833	22183

The data clearly indicate that MAINTENANCE OF RAILWAY INFRASTRUCTURE SHOULD BE PRIORITY, whereas the modernisation will depend on the decision of the State and its orientation towards the investment in railways in the period 2009 - 2027

Modernisation of railway lines of „Serbian Railways“ JSC

First stage

1. Stara Pazova – Novi Sad

Double track line
Length **45 km**
Budget - **340 mil €**

2. Stalać -Đunis

Double track line
Length **18 km**
Budget - **105 mil €**

3. Niš – Dimitrovgrad

Reconstruction and electrification
Length **106 km**
Budget - **120 mil €**

4. Niš –Preševo

Major overhaul with upgrading
of certain sections
Length **166 km**
Budget - **270 mil €**

5. Beograd Centar – Pančevo

Double track line
Length **16 km**
Budget - **55 mil €**

6. Pančevo - Vršac

Modernization and electrification
Length **80 km**
Budget - **50 mil €**

7. Resnik - Vrbnica

Major overhaul
Length **285 km**
Budget - **250 mil €**

8. Valjevo - Loznica

Construction of the new line
Length **68 km**
Budget - **259 mil €**

Second stage

1. Novi Sad – Subotica

Reconstruction of the existing
and construction of the second track
Length **110 km**
Budget – **360 mil €**

2. Resnik – Velika Plana

Construction of new double track line
Length **76 km**
Budget – **370 mil €**

Total budget:

I stage.....1 233 mil €

II stage.....730 mil

€

mil €

Σ 1 963



This is our choice

The result of the first and second stage implementation:

- 1) Elimination of “weak spots” and general **upgrading of technical characteristics of the lines**. Setting the conditions for providing quality service.
- 2) **Construction of 154.5 km of new lines**. New length of the lines in operation- 3316.5 km.
- 3) Construction of **the second track on the existing lines in the length of 257.5 km – TOTALLY 540.5 km i.e. 16% of lines in operation**
- 4) **Electrification of 254 km i.e. totally 46 % of network in operation.**
- 5) **By gradual usage of materials obtained by overhaul** regional lines would be maintained.



INFRASTRUCTURE Projects Underway

The establishment of THE SYSTEM FOR THE ANALYSIS OF TRACK CONDITION IN SERBIA- Railway Management System (RMS)

Source of finance: Donation of the EU Delegation to the Republic of Serbia amounting EUR 3,000,000

Contractor: "Italferr", Rome, as selected by the donator

Deadline for works completion: October 2013

OBJECTIVE:

Establishment of a completely computerised maintenance and construction of railway infrastructure management system.

The implementation of this system will:

- enable quick recording and marking of railway infrastructure
- quick and efficient control over civil engineering works
- give assistance in line maintenance and reconstruction
- reduce costs relating to maintenance and reconstruction
- facilitate future investment projects



INFRASTRUCTURE Projects Underway

CONSTRUCTION OF THE BRIDGE over the Danube River in Novi Sad at the site of the demolished “Žeželj Bridge”

Source of finance: EU - IPA fund EUR 26.2 mil. and the Republic of Serbia EUR 19.1 mil.

PROJECT VALUE: EUR 45.3 million.

Commencement of Works: April 2012

Deadline for Works Completion: November 2013

The bridge will be 450 m long, 31 m wide with 2 carriage ways, 2 railway tracks and 2 sidewalks



▶ **INFRASTRUCTURE Projects Underway**

RAILWAY REHABILITATION PROJECT II

Source of Finance: European Investment Bank EIB

**Reconstruction and modernisation of the Gilje – Čuprija –
Paraćin
section of the Belgrade –Niš Railway Line**

**Construction of the double-track bridge over the Velika Morava River
– span is 322 meters**

TOTAL VALUE OF WORKS 8.9 mil. €

Deadline for completion of works by the end of 2013

Construction of the new double track line in the length of 10.5 km.

Civil engineering part: 16.162.200 €, The contract is signed, work in progress

Electrical & technical part: 6.500.000 € Tender is und

TOTAL VALUE OF WORKS 45 mil. €.

Deadline for completion of works: 2014



INFRASTRUCTURE Projects Underway

CORRIDOR X- EBRD IV

Source of Finance:
European Bank for Reconstruction
and Development EBRD

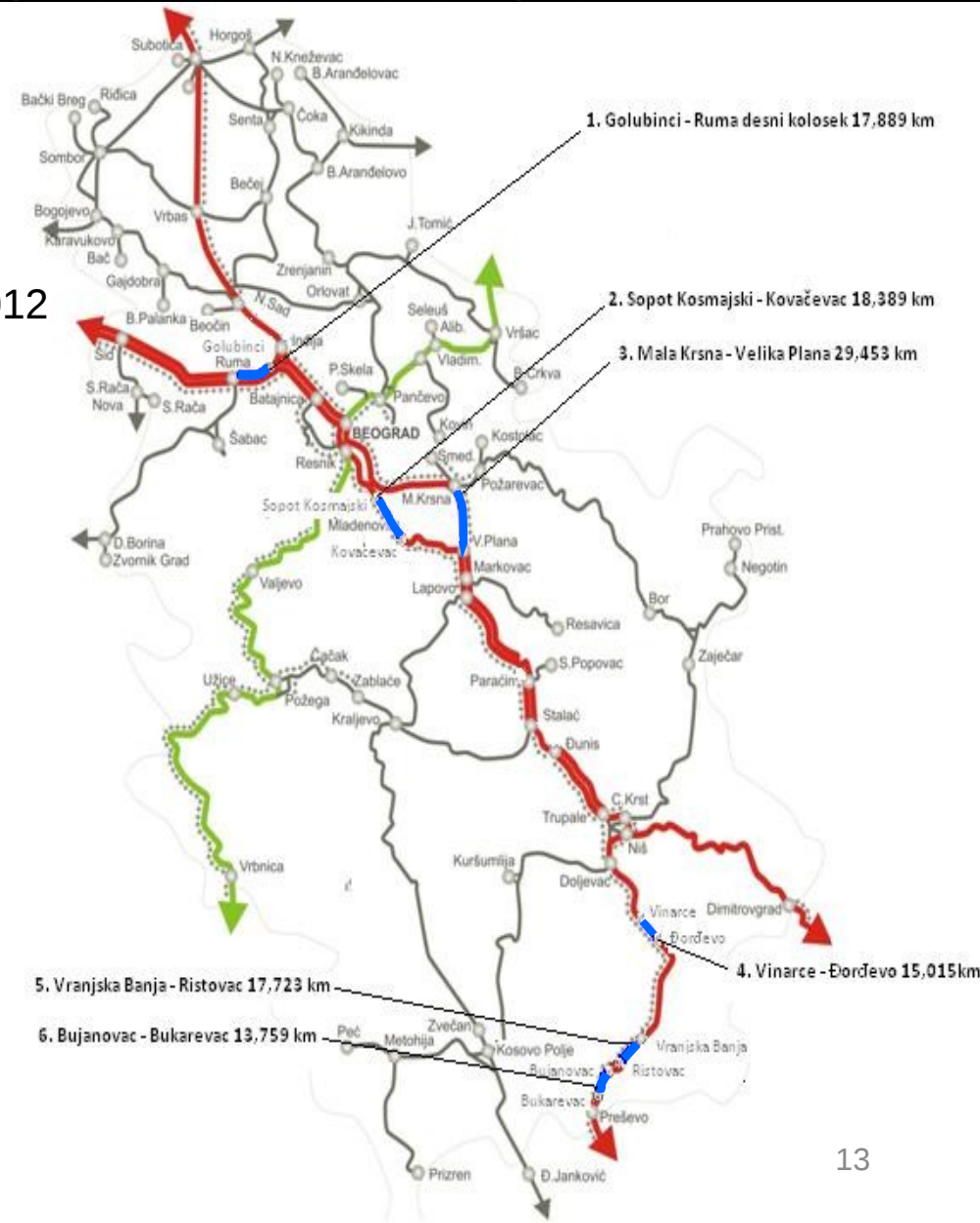
Tender is underway – tender opening on 08.10.2012

1. Procurement of material for
reconstruction of 6 sections of Corridor X
the length of approx 112 km

TOTAL VALUE 30 mil. €

Deadline for works completion: 2014

2. Procurement of track
maintenance machines
TOTAL VALUE 5 mil. €.



INFRASTRUCTURE Projects Underway

REHABILITATION OF LINES – EBRD V – Contract signed on January 2012

Source of Finance: European Bank for Reconstruction and Development

1. Reconstruction and modernization of section Beograd-Resnik

Procurement of material and executing of works

Total Value 95 mil. €

2. Rehabilitation of civil engineering and electrical & technical infrastructure on Corridor X

Tender issuing 2013.

2.1 Station Mala Krsna

2.2 Lapovo- Bagrdan left and right track

2.3 Paraćin - Čičevac right track

2.4 Čičevac - Stalać left track

Procurement of material and executing of works

TOTAL VALUE 21 mil. €

3. Rehabilitation of electrical & technical facilities on Corridor X

Procurement of material

TOTAL VALUE 20 mil. €

4. Procurement of machines for maintenance of civil engineering and electrical & technical infrastructure

TOTAL VALUE (8+4) 12 mil. €

INFRASTRUCTURE Projects Underway

Railway station BEOGRAD CENTAR

Phase 1 construction of infrastructure for train movement acceptance, dispatching and control

Source of Finance: Kuwait Fund for Arab Economic Development



Dinars (approx. 67.0 million EUR)

ender
orks 2

► INFRASTRUCTURE Projects Underway

Construction of Telecommunications Infrastructure on ŽS network

TOTAL VALUE: 24 mil. €

The plan is to install the fiber-optic cables along the regional and main lines in the total length of 2 013 km in 3 phases.

Contract for phase 1 was signed in January 2014

Phase 1: 444 kilometers Belgrade Railway Node
Belgrade - Niš 230 km
Belgrade - Šid 101 km

ESTIMATED VALUE OF WORKS 5.33 mil. €.



▶ ROLLING STOCK Projects Underway

1. Procurement of 12 DMUs

- Source of finance: **Eurofima**
- Budget 43 million CHF
- All 12 DMUs have been delivered by company Metrovagonmash from Russia

2. Procurement of 21 EMUs

- Source of finance **EBRD III**
- Contract signed in May 2009
- Budget 100 million EUR
- Tender ended
- EMUs will be delivered in 2014 and 2015 by company Stadler from Swiss



► INFRASTRUCTURE Future Projects

	Project	Potential Source of Finance	Loan Value
1	1.1 Modernization of line Stara Pazova – Novi Sad	Loan from the Russian Federation Government	840 mil.USD for infrastructure Projects
	1.2 Line doubling Pančevački Most – Pančevo Main Station		
	1.3 Executing of works on 6 sections of Corridor X in the length of approx. 112 km		
	1.4 Overhaul of Serbian part of line Beograd – Bar		
2	Overhaul and electrification of line Niš – Dimitrovgrad	Czech Export Bank	120 mil. €

▶ ROLLING STOCK Future Projects

1. Procurement of 15 multisystem locomotives

- Source of finance **EBRD IV**
- Budget 64 million EUR
- Contract signed in September 2010
- Tender is underway

2. Procurement of additional DMUs

- Loan from the Russian Federation
- Budget 10 million EUR





**Thank you for your
attention!**

April 2013