



Slovenske železnice



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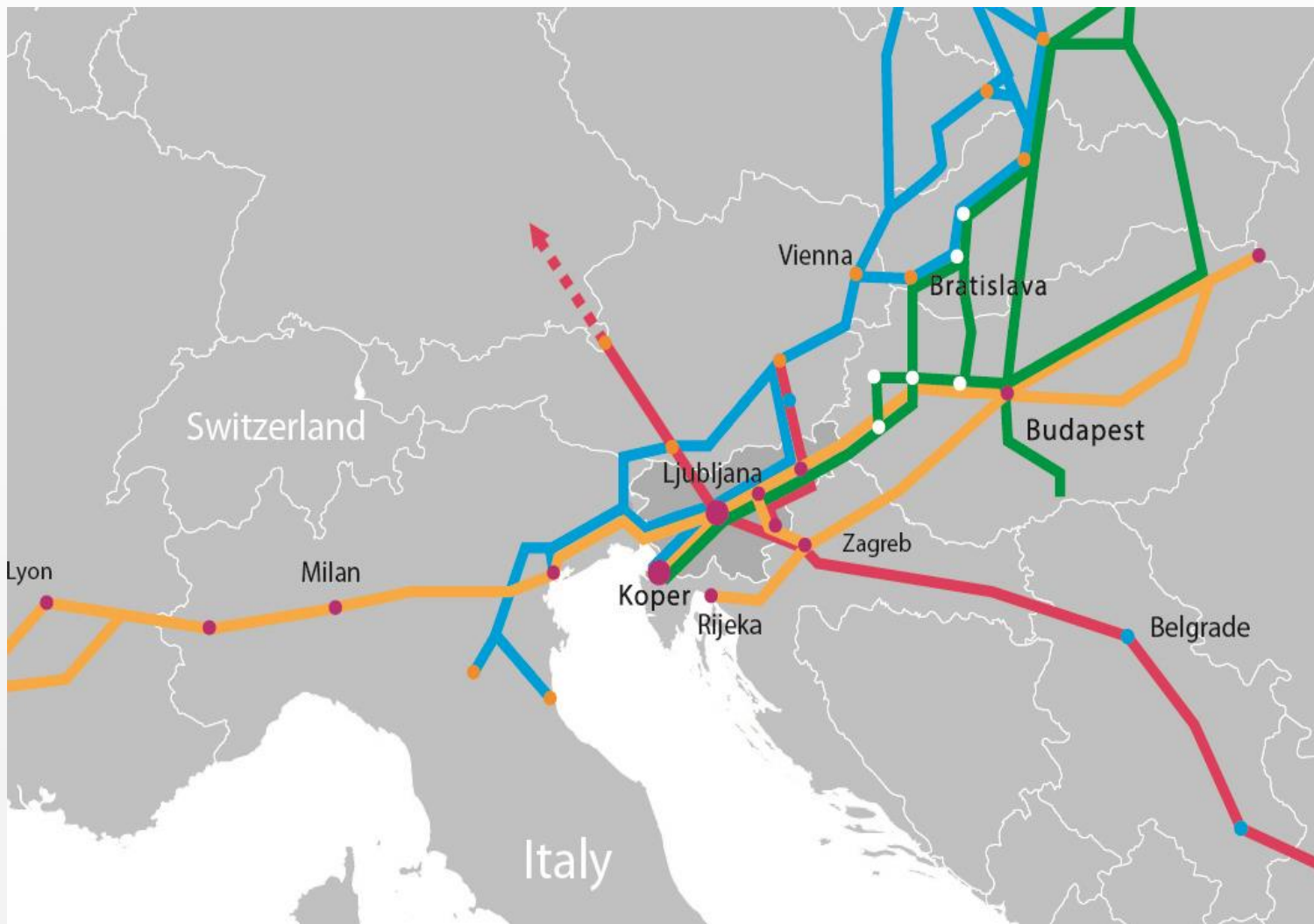
Potential of regional railway cooperation and infrastructure investment „View of Slovenian Railways“





Dr. Peter Verlič

Transport & Logistics Conference 2018

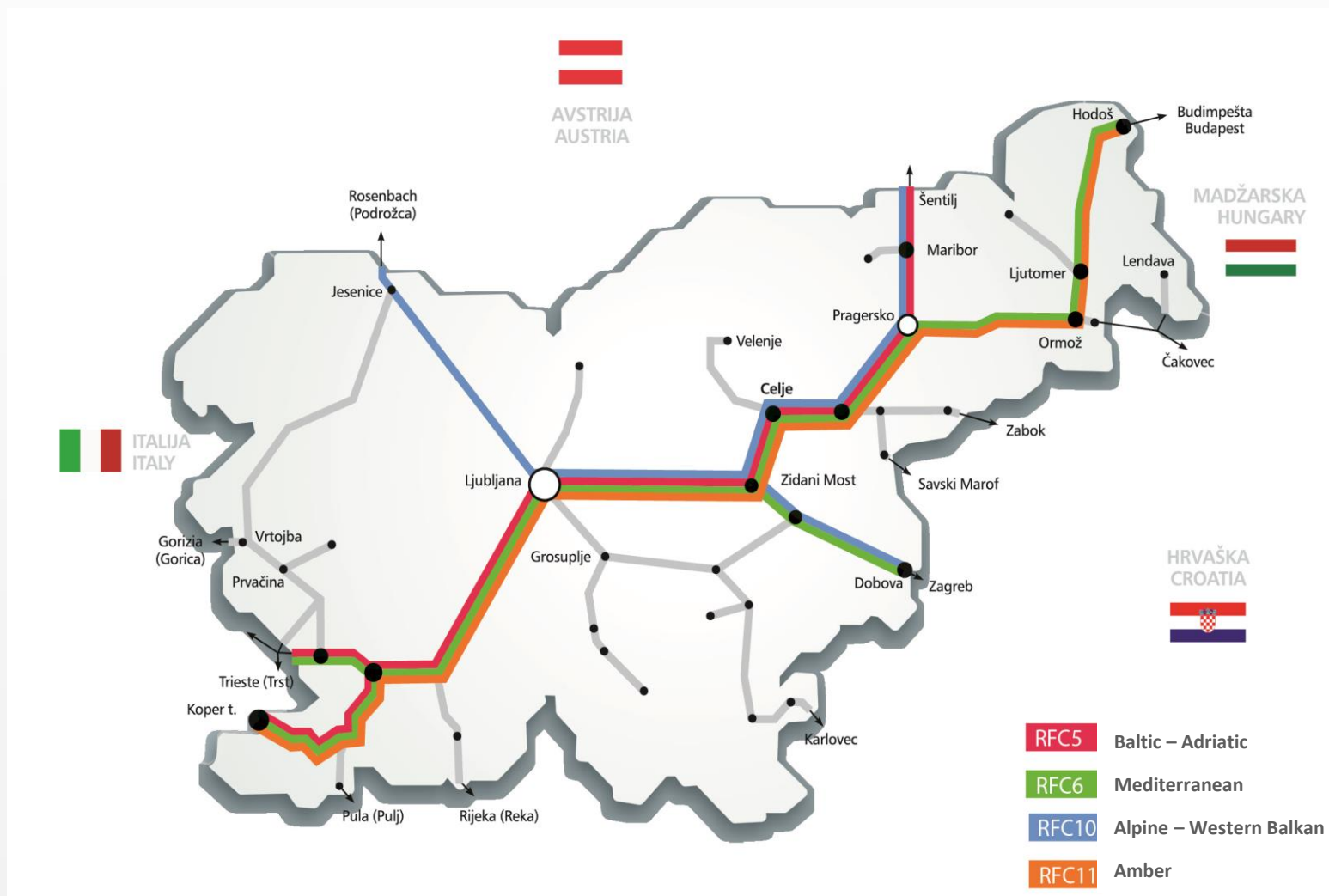
Brussels, 22 March 2018

Slovenian Railways – At the Crossroads of European Corridors (1)



-  Baltic-Adriatic Corridor RFC 5
-  Mediterranean Corridor RFC 6
-  Amber Corridor RFC 11
-  XPC Corridor (future RFC 10 – Alpine-Western Balkan Rail Freight Corridor) in establishment

Slovenian Railways – At the Crossroads of European Corridors (2)



- **Line length of Rail Freight Corridors on SŽ rail network:**

Corridor RFC 5 337 km

Corridor RFC 6 395 km

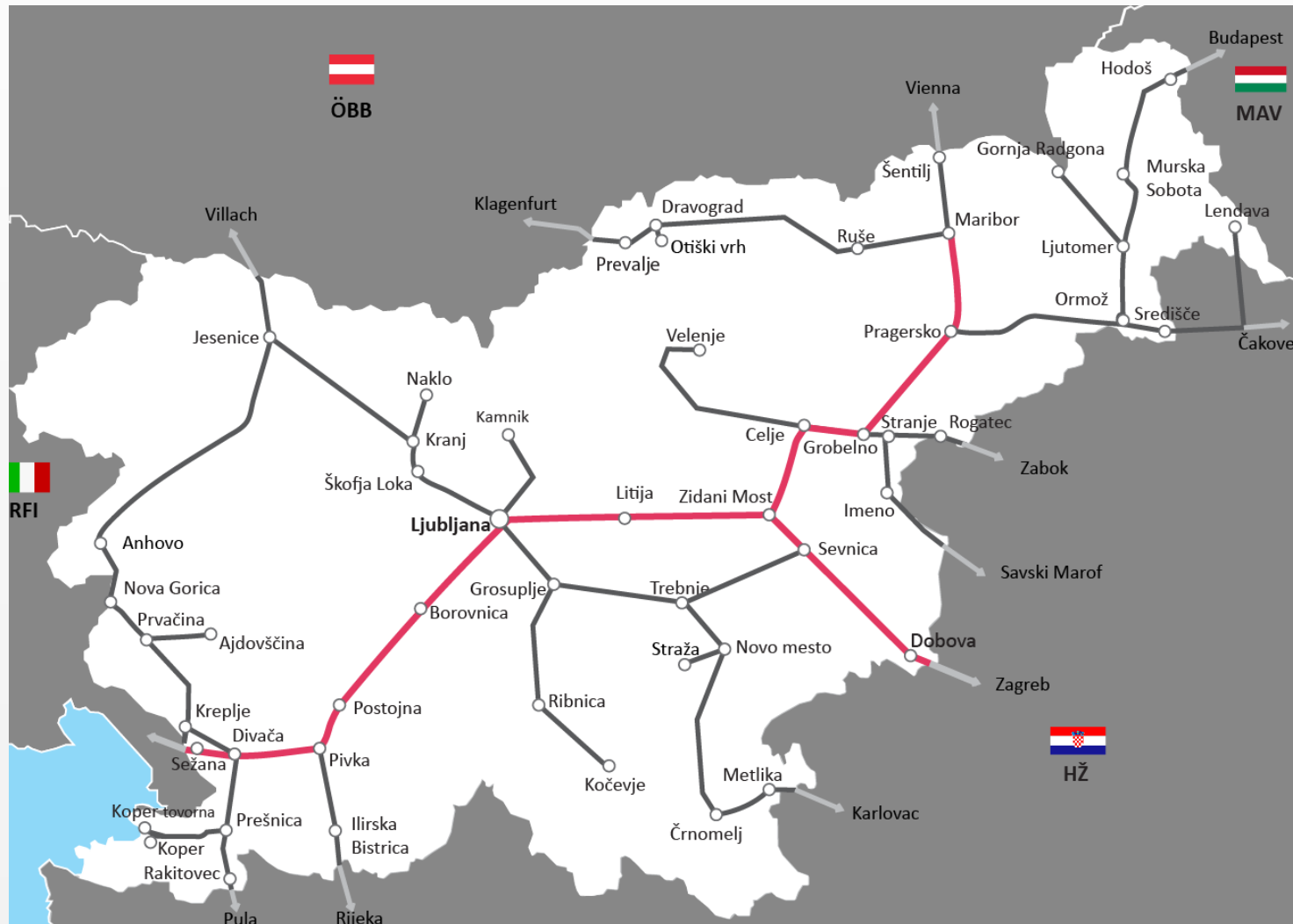
Corridor XPC 186 km
(future RFC 10)

Corridor RFC 11 382 km

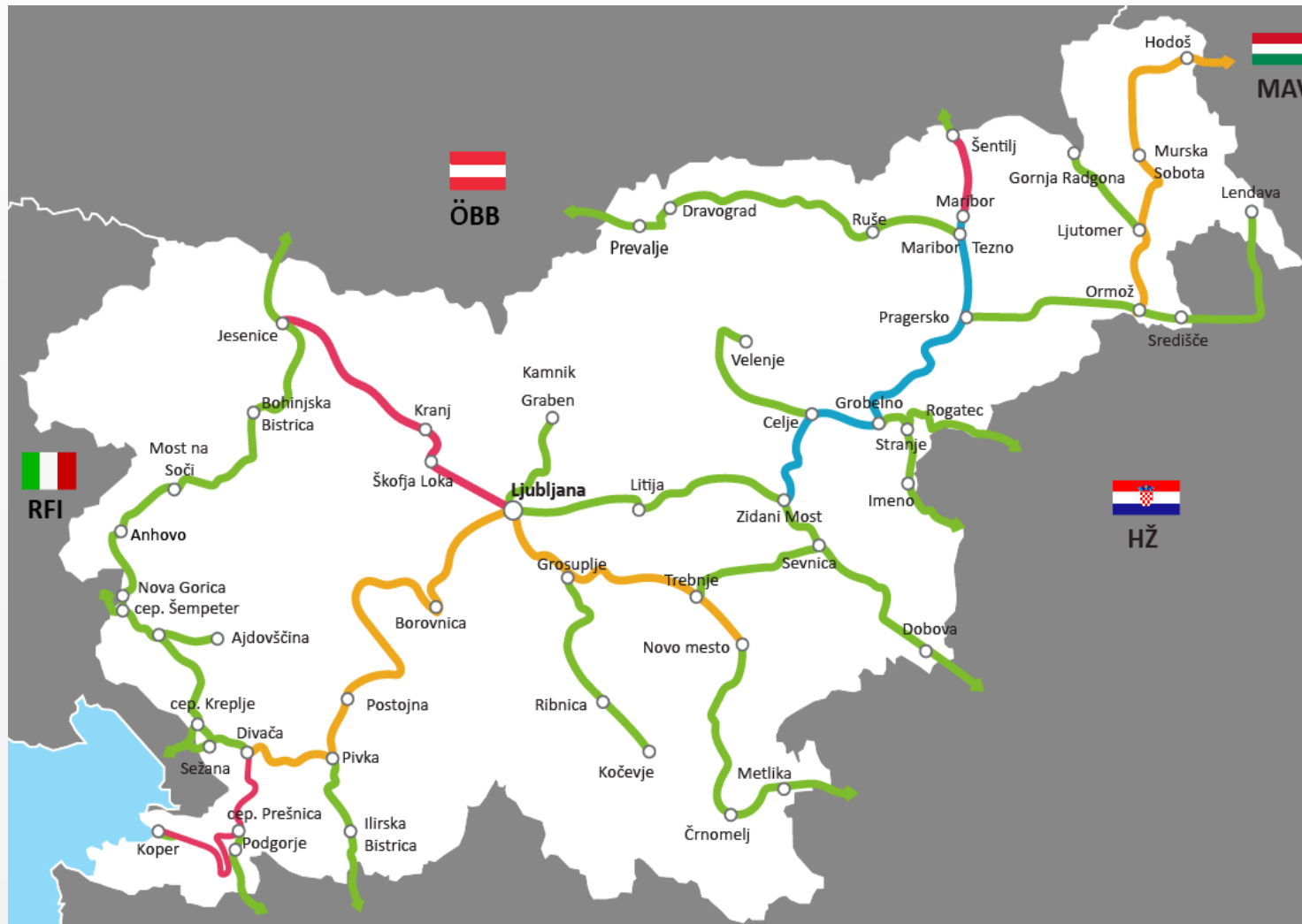
- **Planned rail investments on RFCs:**

Infrastructure upgrades to facilitate interoperability on RFCs
(ETCS, double-track lines, remote control traffic management system ...)

Slovenian Railways – Key Facts of SŽ Rail Network



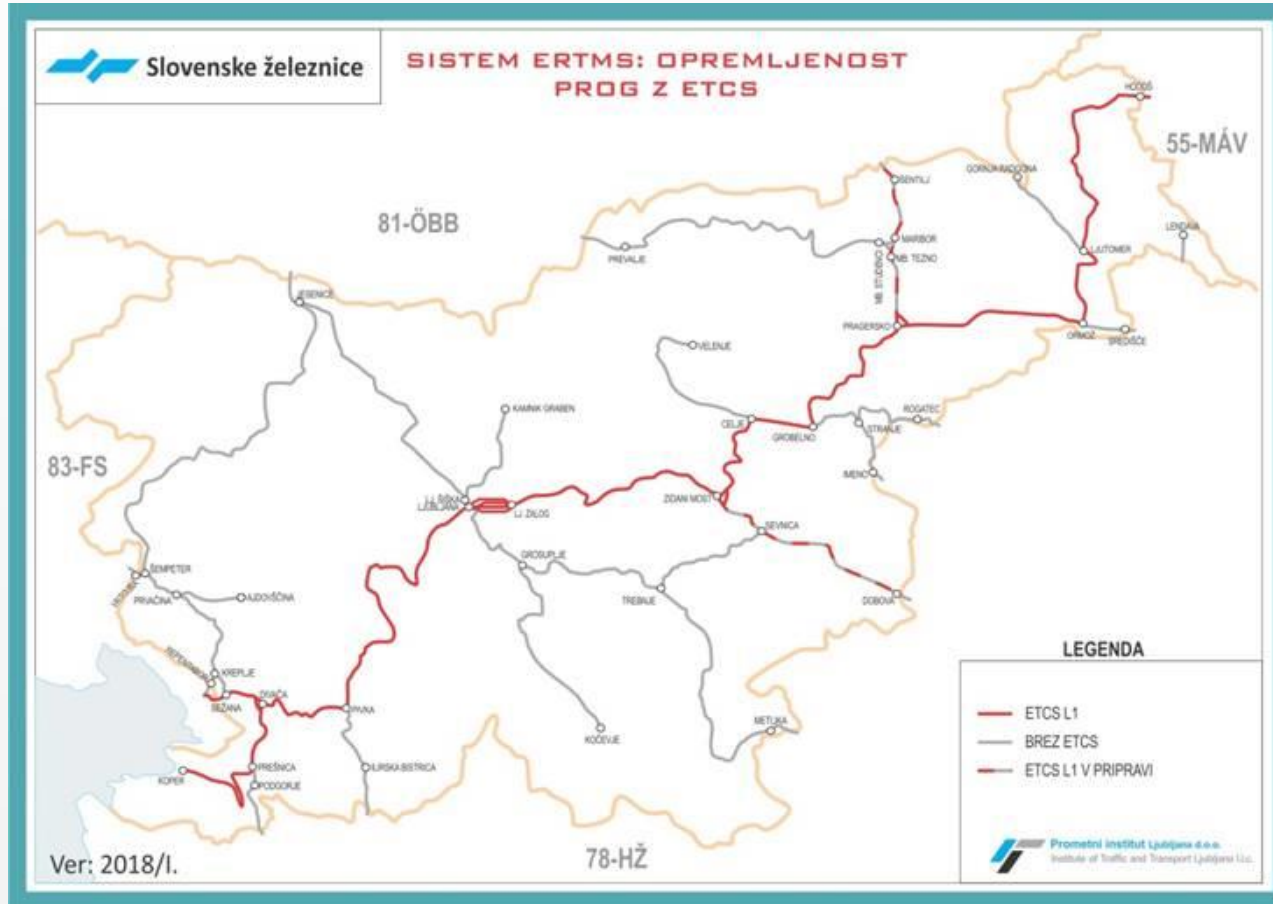
Slovenian Railways – Planned Increases of Line Capacity (in %)



Track sections where the increase of throughput capacity (number of trains per day) is necessary:

- up to 20%
- 20% - 40%
- more than 40%
- adequate throughput capacity

Slovenian Railways – ERTMS deployment on SŽ Rail Network



Entered into service in 2017:

- ETCS Level 1 installed on the Koper/Sežana-Hodoš line (ETCS fully deployed on this line – 412 km)
- GSM-R installed on the entire Slovenian rail network

Future challenges:

- ETCS Level 1 deployment currently in progress on the Pragersko-Šentilj-State border line and Zidani Most-Dobova-State border line (total length of 90 km, works completed in 2023)
- Installation of ETCS on-board equipment on SŽ Cargo and SŽ Passenger rolling stock as a key ERTMS component

Slovenian Railways – Planned Major Medium to Long-term Rail Investments (1)



- Construction of a new second track (27 km) on the Divača-Koper line
- Upgrading of the Divača-Ljubljana line
- Reconstruction of the Ljubljana Traffic Node; upgrading of the shunting yard Ljubljana-Zalog
- Construction of a second track (71 km) on the Ljubljana-Jesenice line; upgrading of the existing line
- Upgrading of all major lines to D4 category:
 - Zidani Most-Celje, Poljčane-Slovenska Bistrica, Maribor-Šentilj single line and upgrading of Pragersko node
- Construction of a second track (16.5 km) on the Maribor-Šentilj line

Slovenian Railways – Planned Major Medium to Long-term Rail Investments (2)

Investment maintenance and investments, including public-private partnership:

- 2016–2022: 2,286 mio EUR
 - 2023–2030: 1,114 mio EUR
- } 3,400 mio EUR

Investments in regular maintenance, subsidies and compensations :

- 2016–2022: 905 mio EUR
 - 2023–2030: 1,088 mio EUR
- } 1,993 mio EUR

Source: Resolution on the National Programme for the Development of Transport in the Republic of Slovenia until 2030 (Ministry of Infrastructure, June 2017)

Slovenian Railways – Key Facts of SŽ Cargo

KEY FIGURES		2016
Goods	mio tonnes	19.2
Work performed	mio NTKM	4,552
Total revenues	mio EUR	197.1
Wagons		2,992
Locomotives		139
D-loc		69
E-loc		70
Employees		1,230

SŽ Cargo and the Port of Koper

- 60% of total port cargo transported by rail
- SŽ Cargo performs 85% of the rail transports of the port of Koper

KEY MARKETS			
Austria	7.2 mio tonnes	Italy	2.5 mio tonnes
Hungary	2.4 mio tonnes	Slovakia	2.2 mio tonnes
Germany	0.9 mio tonnes	Czech Republic	0.9 mio tonnes

ROLLING STOCK INVESTMENT PLAN 2016 – 2020		
<ul style="list-style-type: none">■ Purchase of 4 new diesel shunting locomotives■ Engine replacement in 12 diesel shunting locomotives■ Purchase of 270 new wagons■ Modernisation of 240 Ea wagons		} Estimated investment value: 43 mio EUR
LONG-TERM INVESTMENT PLAN		
2021–2025	2026–2030	2031–2035
20 loc.	50 loc.	24 loc.
506 wag.	767 wag.	

Slovenian Railways – Key Facts of SŽ Passenger

KEY FIGURES		2016
Passengers	mio	14.0
Work performed	mio PKM	680
Total revenues	mio EUR	90.9
Wagons		99
Locomotives		12
EMU		38
DMU		69
Employees		590

KEY MARKETS

- Domestic market 13.2 mio passengers
 - commuters 7.5 mio passengers
- Croatia 131,102 passengers
- Austria 72,013 passengers
- Germany 38,976 passengers

Strategic projects/investments

- Introduction of integrated public transport in Slovenia (IJPP) and the associated single travel pass, selection of IJPP Manager
- Modernisation of passenger rolling stock: 25 new passenger units in 2020–2021 (investment value app. 190 mio EUR), modernisation of the entire rolling stock over the next years (passenger units and coaches)
- Modernisation of sales channels: replacement of ticket office machines and ticket POS terminals, online sales, mobile ticketing, NFC technology, expansion of the sales network, ticket vending machines
- Provision of Wi-Fi at stations and on trains (32 trains – at least 8 until the end of 2018, others in 2019)
- Design of new sales products and offers at major tourist sites, introduction of new bus services and shorter journey times in international transport

Approach of Railway Improvement and Development

„BIICE“ approach:

- **Business** => high quality transport services and infrastructure maintenance
- **Investments** => investments in infrastructure and rolling stock
- **Innovations** => following the newest innovation/technology trends for ensuring competitiveness
- **Cooperation** => close cooperation with stakeholder and partners
- **Environment** => ensuring the sustainability and environmental protection

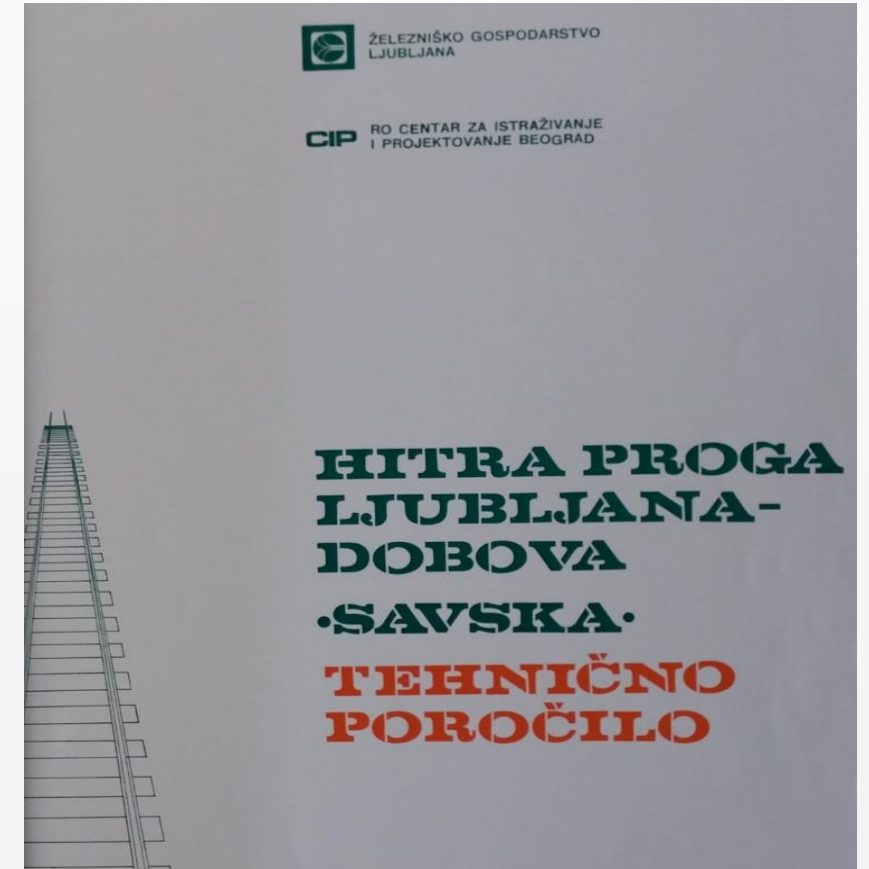
Past Railway Network Development Proposals (1)



High-speed lines
UIC Proposal 1974

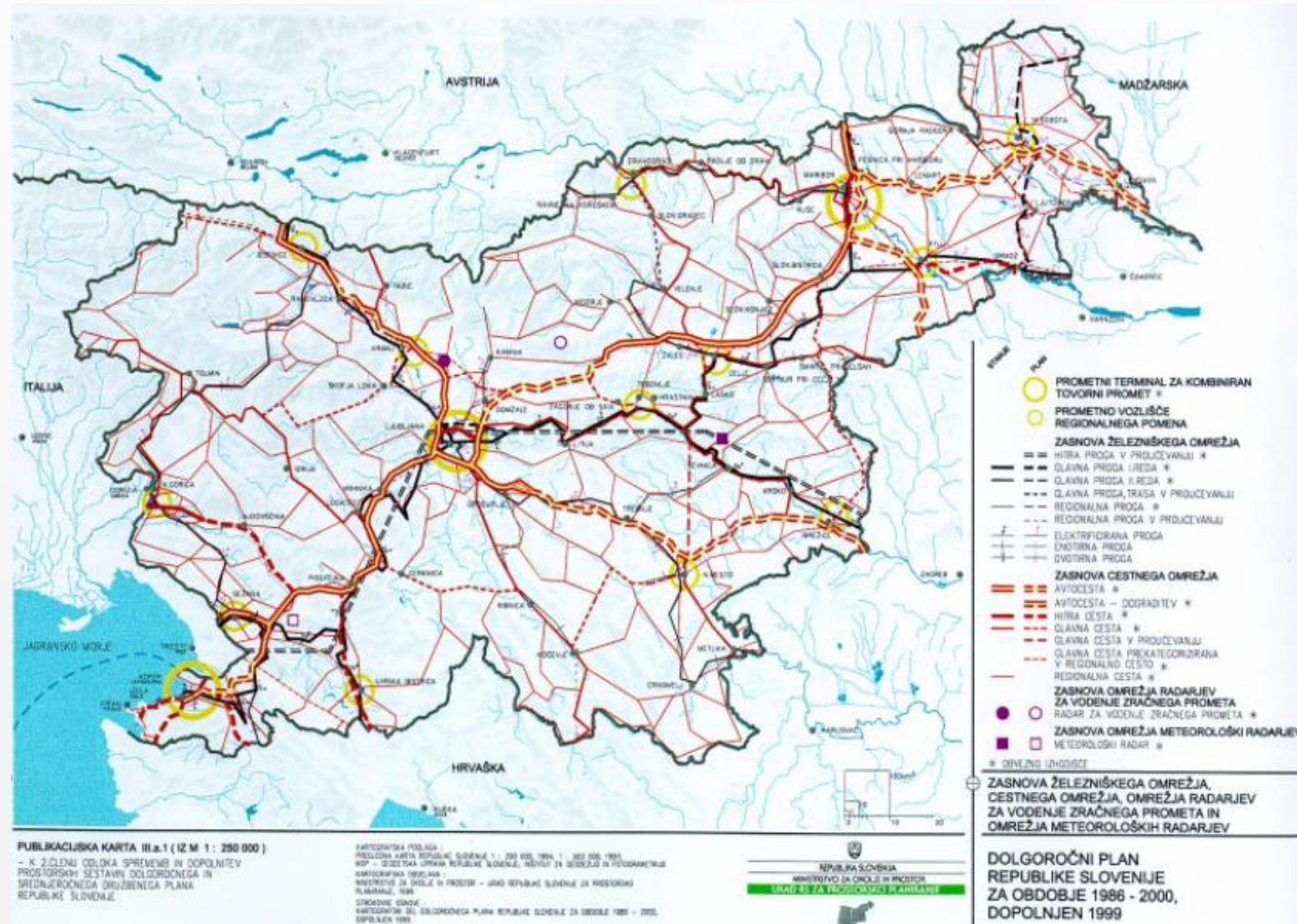
Past Railway Network Development Proposals (2)

High speed line Ljubljana-Dobova (towards Zagreb)



Past Railway Network Development Proposals (3)

Long term Spatial Plan of the Republic of Slovenia for the period 1986–2000



Past Railway Network Development Proposals (4)

Railway network of Western Balkans: revitalization of (regional) railway lines and services



SEESARI - South East Europe Strategic Alliance for Rail Innovation

Vision and objectives of SEESARI:

- to be an important player of railway system development in South East Europe
- establish a wide network of interested stakeholders for identifying innovative ideas/solutions/projects for railway and transport development
- bringing new ideas and solutions into reality (concrete projects)
- contribute to advanced railway transport development in South East Europe and wider European railway transport system and contribution to more sustainable transport in Europe

Partnership => supported by International Union of Railways (UIC):

- currently more than 50 members from 12 countries (railway transport operators and infrastructure managers, manufacturers and suppliers of technical equipment, financial institutions, research institutions, associations and interest groups connected with (rail) transport, national and regional authorities, ...)

SEESARI – MAIN PRIORITIES

HIGH SPEED RAIL
NETWORK

INTEGRATION OF
PASSENGER TRANSPORT

REGIONAL RAILWAY
NETWORK

RAILWAY ROLLING STOCK

INTEROPERABILITY AND
TECHNICAL STANDARDS

SOCIAL COMPONENT/
HUMAN RESOURCES

COOPERATION IN
FREIGHT TRANSPORT

EU TRANSPORT POLICY

TRANSPORT WHITE PAPER (2011) - SUMMARY OF RAIL-RELATED GOALS

For Passenger Rail

- **Triple the length of the existing high-speed rail network by 2030** so that, by 2050, the majority of medium-distance passenger transport should go by rail and high-speed rail, should outpace the increase in aviation for journeys up to 1000 km
- By 2050, **connect all core network airports to the rail network**, preferably high-speed
- By 2020, establish the framework for a European multimodal transport information, management, and payment system

For Freight

- 30% of road freight over 300 km should shift to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050
- **Rail freight should be almost doubled** adding 360 billion tonne km (+87%) compared to 2005
- Deployment of **ERTMS on the European Core Network by 2030**
- By 2050, connect all seaports to the rail freight system
- **Rail freight corridors as the backbone of the EU freight transport system**

For Urban Mobility

- Halve the use of 'conventionally-fuelled' cars in urban transport by 2030; phase them out in cities by 2050
- Achieve essentially CO₂-free city logistics in major urban centres by 2030
- By 2020, establish the framework for a European multimodal transport information, management and payment system

Source: S2R MULTI-ANNUAL ACTION PLAN

European cofinancing programmes

EU initiatives and programmes for Central and South East Europe:

- Danube programme
- ADRION (Adriatic-Ionian programme)
- Central Europe programme
- Cross-border regional programmes (e.g. Slovenia/Austria, Croatia/Slovenia)
- Horizon 2020/SHIFT2RAIL
- Connecting Europe Facility - CEF
- European Fund for Strategic Investment - EFSI (EIB)
- Other ...

Regional/cross-border cooperation

Regional cross-border cooperation:

- new freight/logistics connections
- new passenger connections
- new ticketing solutions and other improvements of services

Examples of cross-border cooperation (proposals under discussions or preparation)

- Slovenian - Austrian cooperation (Slovenian and Austrian Carinthia) => connections to new infrastructure: new railway line in Austria, new motorway in Slovenia (new freight/logistics and passenger connections, new ticketing solutions)
- Cooperation with Croatia => new passenger connections to Karlovac/Zagreb, new ticketing solutions
- High speed line/belt Vienna-Ljubljana-Zagreb-Belgrade-Budapest-Bratislava-Vienna (ÖBB/G4 proposal)

SEESARI – project proposals

Some SEESARI project proposals (confirmed also at strategic meeting with UIC in Paris in 2017):

- Rail and track diagnostics based maintenance and standardization (initiated by: Hungarian Railways)
- Education centre for young professionals and railway staff and re-organization of human resources (initiated by: Serbian Railways)
- ReVitaRail – Harmonization of regional railway lines and services (initiated by: Slovenian Railways)
- Integrated cross border E-ticketing (initiated by: Croatian Railways)
- Development of the High Speed Rail in South East Europe

Thank you for your attention.

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Director

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