# INFRASTRUCTURE OF SERBIAN RAILWAYS JSC

# NETWORK STATEMENT 2025

Adopted by the Shareholders' Meeting of "Infrastructure of Serbian Railways" JSC

No: 5/2023-525-204 dated December 12<sup>th</sup>, 2023

Effective as of December 15th, 2024

Applicable to 2024/2025 Timetable

На основу члана 20. став 6. Закона о железници ("Службени гласник РС", бр. 41/18 и 62/23) и члана 17. став 1. и члана 43. став 2. Закона о Влади ("Службени гласник РС", бр. 55/05, 71/05 - исправка, 101/07, 65/08, 16/11, 68/12 - УС, 72/12, 7/14 - УС, 44/14 и 30/18 - др. закон),

Влада доноси

#### РЕШЕЊЕ О ДАВАЊУ САГЛАСНОСТИ НА ОДЛУКУ О ВИСИНИ ЦЕНА ПРИСТУПА И ЦЕНА ПРИСТУПА ДЕЛУ ЈАВНЕ ЖЕЛЕЗНИЧКЕ ИНФРАСТРУКТУРЕ КОЈИ ПОВЕЗУЈЕ СА УСЛУЖНИМ ОБЈЕКТИМА ЗА РЕД ВОЖЊЕ 2024/2025

I

Даје се сагласност на Одлуку о висини цена приступа и цена приступа делу јавне железничке инфраструктуре који повезује са услужним објектима за Ред вожње 2024/2025, коју је донела Скупштина Акционарског друштва за управљање јавном железничком инфраструктуром "Инфраструктура железнице Србије", Београд, на седници од 21. септембра 2023. године.

II

Ово решење објавити у "Службеном гласнику Републике Србије".

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У Београду, 20. новембра 2023. године

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Тачност преписа оверава

ГЕНЕРАЛНИ СЕКРЕТАР

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# Amendments, corrections, and interpretations

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2	1.1; 4.2; Appendices 1, 3.10 and 4.1.b	Infrastructure of Serbian Railways JSC Shareholders' Meeting Decision 5/2024-542- 215 dated May 29 <sup>th</sup> 2024	May 29 <sup>th</sup> , 2024
3	1.1; 2.2; 2.3.1; 2.3.13; 7.3.3; Appendices 1, 3.6a and 3.10	Infrastructure of Serbian Railways JSC Shareholders' Meeting Decision No 5/2024- 554-221 dated September 26 <sup>th</sup> 2024	September 26 <sup>th</sup> , 2024
4.	2.3.10; 2.3.11; 2.3.12; 2.3.13; 2.4.7; 2.4.8; Appendices 3.5, 3.11, 4.2, 6, 8 and 10	Infrastructure of Serbian Railways JSC Shareholders' Meeting Decision No 5/2024- 557-222 dated October 23 <sup>th</sup> , 2024	October 23 <sup>th</sup> , 2024



# TABLE OF CONTENTS

TERMS AND ABBREVIATIONS	
1. GENERAL INFORMATION	
1.1 Introduction	
1.2 Purpose of the Network Statement	
1.3 Legal Aspects	
1.3.1 Legal Framework	
1.3.2 Legal Status and Liability	
1.3.3 Appeals Procedure	
1.4 Structure of the Network Statement	
1.5 Validity Period, Updating and Publishing	
1.5.1 Validity Period of the Network Statement	
1.5.2 Updating Process	
1.5.3 Publishing, Distribution and Availability of the Network Statement	18
1.6 Contacts	
1.7 Cooperation Between European IMs/ABs	18
1.7.1 Rail Freight Corridors	18
1.7.2 RailNetEurope	18
2. INFRASTRUCTURE	21
2.1 Introduction	21
2.2 Extent of Network	21
2.2.1 Limits	21
2.2.2 Connecting Railway Networks	21
2.3 Network Description	23
2.3.1 Geographic data and types of railway lines	
2.3.2 Track Gauges	
2.3.3 Stations and Nodes	
2.3.4 Loading Gauge	25
2.3.5 Weight Limits	
2.3.6 Line Gradients	
2.3.7 Maximum Line Speeds	27
2.3.8 Maximum Train Lengths	
2.3.9 Power Supply	
2.3.10 Signalling Systems	
2.3.11 Traffic Control Systems.	
2.3.12 Communication Systems	30
2.3.13 Train Control Systems	31
2.4 Traffic Restrictions	32
2.4.1 Specialised Infrastructure	
2.4.2 Environmental Restrictions	
2.4.3 Dangerous Goods	32
2.4.4 Tunnel Restrictions.	
2.4.5 Bridge Restrictions	33
2.5 Availability of the Infrastructure	
2.6 Infrastructure Development	
3. ACCESS CONDITIONS	
3.1 Introduction	
3.2 General Access Requirements	
3.2.1 Conditions for Applying for Capacity	
3.2.2 Conditions for Access to the Railway Infrastructure	
3.2.3 Licenses	
3.2.4 Safety Certificate	
3.2.5 Coverage for Civil Liability (Insurance)	
3.3 Contractual Arrangements	
3.3.1 Framework Agreement	
	0



3.3.2 Contracts with RUs	38
3.4 Specific Access Requirements	39
3.4.1 Rolling Stock Acceptance	39
3.4.2 Staff Acceptance	39
3.4.3 Exceptional Transport	
3.4.4 Transport of Dangerous Goods	40
4. CAPACITY ALLOCATION	41
4.1 Introduction	41
4.2. Description of infrastructure capacity allocation procedure	41
4.3 Allocation of capacity for maintenance, including the allocation process	
4.4. Impact of Framework Agreements	
4.5 Schedule for Path Requests and Allocation Process	43
4.5.1 Schedule of requests submission for new annual timetabling process	
4.5.3 Allocation of capacities during annual Timetable validity period on ad hoc request	
4.5.4 Path Allocation and Coordination Process	
4.5.5 Dispute Resolution Process	45
4.6 Congested Infrastructure	
4.7. Exceptional Transports and Dangerous Goods	
4.8 Rules After Path Allocation	
4.8.1 Non-usage of allocated train path	
4.8.2. Rules of Cancellation.	
4.9. International Timetabling Process Redesign (TTR)	
4.9.1. Objectives of TTR	
5. SERVICES AND CHARGES	
5.1 Introduction	
5.2 Charging Principles	
5.2 Minimum Access Package and Charges	
5.4 Additional Services and Charges	
5.5 Ancillary Services and Charges	
5.6 Discounts	
5.7 Performance Scheme	
5.8 Changes to Charges	
5.9 Billing Arrangements	
5.10 Tariff system	
6. OPERATIONS	
6.1 Introduction	
6.2 Operational Rules	
6.3 Operational Measures	
6.3.1. Principles	
6.3.2. Operation regulation	
6.3.3. Foreseen and Unforeseen problems	66
7. SERVICE FACILITIES	
7.1. Introduction	
7.2. Service Facility Overview	
7.3. Service Facilities Managed by IŽS	
7.3.1. Common Provisions	
7.3.2 Use of station buildings in the function of passenger traffic	
7.3.3 Freight Terminals	
7.3.4 Marshalling Yards and Train Formation Facilities, including Shunting Facilities	
7.3.5 Storage Sidings	
7.3.6 Maintenance facilities	
7.3.7 Other Technical Facilities, including Cleaning and Washing Facilities	
7.3.8 Maritime and Inland Port Facilities	
7.3.9 Relief Facilities.	
7.3.10 Refuelling Facilities	
APPENDICES	
Appendix 1: Organizational chart of "Infrastructure of Serbian Railways" JSC	
j	

5



Appendix 2: Internal regulations (documents) and technological procedures	84
Appendix 3.1. Loading Gauge ŽS I	
Appendix 3.2. Loading Gauge UIC-GA	86
Appendix 3.3. Loading Gauge UIC-GB	87
Appendix 3.3a Loading Gauge UIC-GC	88
Appendix 3.4. Electrified lines	89
Appendix 3.5 Power supply facilities	91
Appendix 3.6 Overview of signaling & safety devices equipping level	94
Appendix 3.6a Request for issuance of encryption keys for communication in the ETCS system	98
Appendix 3.7 Overview of telecommunication devices equipping level	99
Appendix 3.8. List of service points where it is possible to perform the transshipment of dangerous go	ods 106
Appendix 3.9. Alternative transport routes	
Appendix 3.10. Facilities for rolling stock maintenance	112
Appendix 3.10a. Information on the service facility managed by Nelt Co	125
Appendix 3.11. Railway infrastructure development projects	127
Appendix 4.1. Request for train path allocation (form)	128
Appendix 4.1a. Request for train path allocation (e-papir)	129
Appendix 4.1b Template for submission of traction vehicle technical data	132
Appendix 4.2. Instruction for completion of the Request for train path allocation	
Appendix 4.3. Deadlines for annual 2024/2025 timetable preparation	135
Appendix 4.4. Deadlines for amendments to annual 2024/2025 Timetable	136
Appendix 5.1. Overview of railway lines on which train running is possible when they are manned on	ly with
engine driver	137
Appendix 5.2. Overview of the lines fulfilling the conditions for train running with an engine driver or	
Appendix 5.3. Geometry of pantograph (current collector) TIP POS - 254/III used on IŽS network	139
Appendix 6. Register of infrastructure data	140
Appendix 7. Overview of primary train delay causes	
Appendix 8 Overview of platforms and arranged surfaces in service points	
Appendix 9 Method for calculation of electricity consumption for train traction	180
Appendix 10 Railway node boundaries	181



#### TERMS AND ABBREVIATIONS

Terms:

Public railway infrastructure

means the entire railway infrastructure constituting a network operated by the infrastructure manager, but not including the railway lines and secondary tracks (industrial railway lines and industrial tracks) connected to the network;

Infrastructure Manager is a public enterprise or a company responsible for construction, exploitation, maintenance, and rehabilitation of railway infrastructure on the network, as well as for participation in its development within the general policy of infrastructure development and financing;

Railway Undertaking

is a company or other legal entity, registered for the prevailing activity of provision of freight and/or passenger railway transport services, to whom the license was issued, with an obligation to provide train traction or that provides train traction only. In terms of access to railway infrastructure, service facilities and services in connection to performing of railway transport, a railway undertaking is also a company or other legal entity that performs railway transport for its own purposes and to whom the license for transport for its own purposes was issued;

Freight Terminal

is a facility along the railway lines with freight transport, specifically arranged in order to enable loading of goods onto the freight trains and/or unloading of goods from such trains, as well as integration of services of railway freight transport with the services of road, maritime, inland waterway and air transport, i.e. forming or changing the composition of freight trains, and, if necessary, it is used to implement the border procedures at the borders with other countries;

Transport License

is a document by which a relevant licensing authority confirms the capacity of a company or other legal entity, registered for provision of the activity of public transport of goods and/or passengers, to provide railway transport services as a railway undertaking, which can be limited to the provision of certain types of services or the provision of railway transport for own purposes;

Applicant

means a railway undertaking or an international grouping of railway undertakings, or other persons or legal entities, such as competent authorities, consignors, forwarding agents or combined transport operators, having the commercial interest for provision of public service or commercial interest for allocation of railway infrastructure capacity;

Ad hoc request

is a request for individual train paths submitted during the validity of the established timetable;

Network

is a network of railway lines, including the connecting lines and secondary tracks, with elements of railway infrastructure, operated by the Infrastructure Manager; intended for railway transport of goods and/or passengers, as well as for transport for own purposes, which can be performed by railway undertakings according to the principle of transparent and non-discriminatory



access to the network;

Path

is the capacity of railway infrastructure necessary for train movement between two service points, within the envisaged period of time and under the precisely determined technical and technological conditions on the public railway infrastructure:

during a certain period of time;

Timetable

is a formal document of the public railway infrastructure manager setting out the schedule of operation for passenger and freight trains as well as for trains operated for own purposes on the public railway infrastructure of the infrastructure manager;

Infrastructure capacity

is a possible number of train paths for timetabling on the particular part of public railway infrastructure over a given period of time;

Congested infrastructure

is a section of railway infrastructure for which infrastructure capacity demand cannot be completely satisfied during certain time periods, even after different infrastructure capacity requests have been coordinated;

Path allocation

is the allocation of public railway infrastructure capacities by the infrastructure manager;

Access right

is the right of a railway undertaking to use the railway infrastructure;

Coordination

is a process whereby the infrastructure manager and applicants make an adjustment of individual requests for path allocation;

Safety Certificate

means evidence that a railway undertaking has established the safety management system and that it meets the requirements set out in the technical specifications of interoperability, national safety regulations and other relevant regulations in order to control the risks and perform safe railway traffic operations on the network;

Competent institution, Relevant authority (body)

is an authority entitled to adopt various decisions relating to particular fields;

Relevant Railway Authority is an authority authorised to act regarding the administrative issues in the railway sector of the Republic of Serbia (Directorate for Railways or the Ministry of Construction, Transport and Infrastructure, as the case may be).

Service Facility
Operator

is an entity responsible for operating one or more service facilities or for providing one or more services to railway undertakings (basic, additional and/or accompanying), including operating of railway infrastructure which



forms a part of a service facility.

Information about service facility

is a document containing detailed information necessary for access to a service facility and services (basic, additional and accompanying) with reference to performing of railway transport provided by the operator in that service facility.



The abbreviations used in the Network Statement have the following meanings:

ATC Automatic Train Control

AGC European Agreement on Main International Railway Lines

AGTC European Agreement on Important International Combined Transport Lines and Related

Installations

EU European Union FTE Forum Train Europe IM Infrastructure Manager

MCTI Ministry of Construction, Transport and Infrastructure of the Republic of Serbia

MF Ministry of Finance of the Republic of Serbia

NS Network Statement
DG Dangerous goods
OSS One-Stop-Shop

RID (2017) Regulations concerning the international carriage of dangerous goods by rail

RNE RailNetEurope (European Infrastructure Managers Association)

UIC International Union of Railways

DR Directorate for Railways – Regulatory Body in the Republic of Serbia

IŽS "Infrastructure of Serbian Railways" JSC

EMU Electric multiple-unit set DMU Diesel multiple-unit set

TOR Top of rail

RS Republic of Serbia

LTDG Law on Transport of Dangerous Goods ("Official Gazette of the RS" no. 106/2016,

83/2018, 95/2018 (other law), 10/2019 (other law))

GSM-R Global System for Mobile Communications – Railway

ERTMS European Rail Traffic Management System

ETCS European Train Control System



# 1. GENERAL INFORMATION

#### 1.1 Introduction

"Infrastructure of Serbian Railways" JSC (hereinafter IŽS) is a joint stock company for the management of public railway infrastructure (hereinafter: railway infrastructure), founded by the Republic of Serbia.

Railway infrastructure represents goods in general use, owned by the Republic of Serbia, that can be used by railway undertakings, on equal terms, in accordance with the Law on Railways.

Management of railway infrastructure is an activity of general interest.

Railway infrastructure includes permanent way and substructure, tunnels, bridges and other track structures, station tracks, level crossings including devices for securing of level crossings; safety, signaling and telecommunication installations on open lines, in stations and marshalling yards, including the plants for generating, transforming and distribution of electric energy for signaling and telecommunications; buildings for such installations or plants; track brakes; plants for transformation and transmission of electric energy for train traction: 110 kV two-phase transmission lines, sub-stations except for 110 kV distribution switchgear in such substation, supply cables between substations and contact wire, catenary and girders, third rail with beams, lighting installation for traffic and safety needs, service points' buildings and other facilities on trackside land used for regulation of railway traffic including the part of the equipment for calculation and charging of transport charges and buildings for railway infrastructure maintenance, accesses for passengers and goods, including road access and access to passengers for arrival and departure of pedestrians, track-side land and the airspace above the track, 12 m high, i.e. 14m high at over 220kV overhead power lines, measured from the top of rail.

The Network Statement is a document that contains all the information in accordance with the Law on Railways of the Republic of Serbia ("Official Gazette of the RS" No. 41/18 and 62/23).

The document is compliant to all the norms set forth under the guidelines provided by the association RailNetEurope (hereinafter RNE) and shall be used as informative material for the interested railway undertakings. Moreover, the Network Statement has been harmonized with relevant EU Directives.

Network Statement provides general information on railway network, terms and conditions for access to railway infrastructure, principles and criteria for allocation of capacities, principles for charge calculation and their amounts, procedures for dispute resolution and other important details for usage of services provided to railway undertakings.

#### **Infrastructure Manager Basic Information**

Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade (hereinafter: Company) was founded with the Decision on founding of Joint Stock Company for Public Railway Infrastructure Management ("Official Gazette of the RS", no.60/15 and 73/15) and registered in the registry of Serbian Business Registers Agency, under the number BD 69692/2015 from August 10, 2015.

The founder of the Company is the Republic of Serbia, as the sole stakeholder of the Company, of behalf of which the founder's right is enforced by the Government of the Republic of Serbia, Belgrade, Nemanjina 11, company number 07020171. The Company is under the jurisdiction of the Ministry of Construction, Transport and Infrastructure.

Business company name: Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade

Abbreviated Company Name: "Infrastructure of Serbian Railways" JSC



Company Headquarters is in Belgrade, and the address of company's headquarters is 6 Nemanjina, Belgrade.

The main activity of company is "Service activities in land transport", activity code is 5221.

Company Reg. No is 21127094, TIN 109108420.

Company Business Accounts are 205-222959-26 and 160-438771-53.

The main activity of the Company includes: Service activities in land transport. The activity includes the management of public railway infrastructure in the segment of maintenance of public railway infrastructure, organization and control of railway traffic, provision of access and use of public railway infrastructure to all interested railway undertakings and protection of public railway infrastructure. The company performs the activity of general interest in accordance with the law. The company may also perform other activities in accordance with the law. The company performs the activities and services in domestic and international trade in accordance with the law.

Responsible persons: Acting General Manager Jelena Tanasković Tel.: +381 11 3618 330 kabinet.infrastruktura@srbrail.rs

# **Infrastructure Manager Organisational Chart**

The organizational structure of Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade is based on the Rulebook on organization and systematization of operations of Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade.

Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade, (hereinafter: the Company), in order to perform the activities of management of public railway infrastructure, is organized according to the groups of operations, as follows:

- organization and control of railway traffic,
- maintenance of railway infrastructure,
- economic affairs,
- investments,
- human resources and common affairs, and
- operations that are organizationally related to the General Manager's Office.

The Company operations are performed within its departments, divisions, sections, units, technical-technological divisions, stations and operational sections and other lower organizational forms.

The management of public railway infrastructure includes the maintenance of public railway infrastructure, the organization and control of railway traffic, the provision of access and use of public railway infrastructure to all interested railway undertakings, the protection of public railway infrastructure, as well as the performing of investor function in construction and reconstruction of public railway infrastructure.

The following operations are also performed within the Company: traffic engineering, civil engineering and electrical engineering operations, development, investment and project management operations, as well as common affairs: financial, planning and analysis operations, restructuring and cooperation with international financial institutions, accounting, public procurement and warehousing operations, human resources management, occupational health and safety, operations related to property and inventory-taking, information technologies implementation and development operations, internal safety, international affairs and ethic's operations. Furthermore, in order to implement the operative, professional and administrative functions within the Company, the operations which are organizationally related to the General Manager's Office are also performed.



The operations referred to in the previous paragraph are performed within:

- 1. Traffic Department,
- 2. Railway Infrastructure Access Department,
- 3. Centre for Relief Train Operations,
- 4. Centre for Infrastructure Technical Monitoring,
- 5. Civil Engineering Department,
- 6. Electrical Engineering Department,
- 7. Finance Department,
- 8. Accounting Department,
- 9. Centre for Planning, Analysis and Restructuring,
- 10. Procurement and Central Warehousing Department,
- 11. Development Department,
- 12. Investment Department,
- 13. Department for Management of EU-Funded Projects (PIU).
- 14. Human Resources and General Affairs Department,
- 15. IT Department,
- 16. Centre for Security,
- 17. Real Estate Department,
- 18. Inventory-Taking Department,
- 19. Centre for International Affairs,
- 20. Ethic's Office,
- 21. Company's Management Secretariat,
- 22. Legal Department,
- 23. Centre for Internal Audit,
- 24. Centre for Internal Control,
- 25. Centre for Safety Management System,
- 26. Media Centre,
- 27. Centre for Railway Infrastructure Testing and Diagnostics,
- 28. Centre for Infrastructure Rail Vehicles Maintenance System Management.

The Organizational Chart of "Infrastructure of Serbian Railways" JSC is provided in Appendix 1.

# **Contact details**

"Infrastructure of Serbian Railways" JSC contact details are the following:

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# 1.2 Purpose of the Network Statement

The purpose of this Network Statement is provision of single source basic information to the users of services provided to railway undertakings on the railway infrastructure operated by IŽS.

The Network Statement is a document which sets out the detailed general rules, deadlines, procedures and criteria related to the manner of calculation of charges and allocation of infrastructure capacities, including other relevant information necessary for submitting the request for infrastructure capacity allocation.

The Network Statement will be published on the web site of "Infrastructure of Serbian Railways" JSC, <a href="https://www.infrazs.rs">www.infrazs.rs</a>, and the decision on its adoption will be published in the "Official Gazette of ŽS".

## 1.3 Legal Aspects

The functioning of infrastructure and traffic on the network operated by "Infrastructure of Serbian Railways" JSC is regulated by:

- legislation of the Republic of Serbia,
- formal documents of the Infrastructure Manager "Infrastructure of Serbian Railways" JSC,



 formal documents and technological procedures of the railway undertakings falling within the scope indicated in the above legislation.

# 1.3.1 Legal Framework

## Regulations of the Republic of Serbia

Regulations of the Republic of Serbia of particular importance to this Network Statement include the following documents:

- Law on Railways ("Official Gazette of the RS", No. 41/18 and 62/23);
- Law on Interoperability of Railway System ("Official Gazette of the RS", No. 62/23);
- Law on Safety in Railway Traffic ("Official Gazette of the RS", No. 41/18")
- Regulation on Categorization of Railway Lines that belong to Public Railway Infrastructure ("Official Gazette of the RS", No. 92/20, 6/21, 33/22 and 63/23);
- Rules on Railway Infrastructure Elements ("Official Gazette of the RS", No.30/19);
- Rules on the Timetable ("Official Gazette of the RS", No. 58/19 and 1/2020);
- Regulation on Methodology for Valuation of the Elements for Determining the Level of Charge for the Use of Railway Infrastructure ("Official Gazette of the RS", No. 122/14);
- Rules on the Manner of Transport and Mandatory Operational Monitoring of Dangerous Goods Carried by Rail, as well as on the Obligations of the Participants in the Transport of Dangerous Goods by Rail and Emergencies ("Official Gazette of the RS", No. 81/15);
- Rules on training programme and method of knowledge checking of employees and of participants of dangerous goods transport in the railway transport, as well the manner in which the documentation is processed and their training ("Official Gazette of the RS", No. 81/15);
- Law on Transport of Dangerous Goods, passed by the National Assembly of the Republic of Serbia ("Official Gazette of the RS", No. 104/2016-34, 83/2018-57, 95/2018-389 (other law), 10/2019-13 (other law));
- Rules on Mandatory Elements of the Contract on the Use of Railway Infrastructure ("Official Gazette of the RS", No. 8/2019);
- Rules on Special Loads Transport ("Official Gazette of the RS", No. 74/19);
- Regulation on the Manner of Conclusion and Content of Framework Agreements for Allocation of Railway Infrastructure Capacity ("Official Gazette of the RS" No. 74/19);
- Regulation on Particularities of Procedures and Criteria Applicable to Access to the Services Provided in Service Facilities ("Official Gazette of the RS" No. 57/19 and 13/20);
- Rules on the Elements of Service Facility Information ("Official Gazette of the RS" No. 66/19).

# **International Regulations**

When using the allocated train path, the railway undertaking must abide by all legal norms contained in the sources of international law (Convention concerning International Carriage by Rail (COTIF), its annexes, agreements and protocols governing the cross-border railway traffic and border control, UIC standards and any other relevant international regulations) as well as in the national laws and bylaws.

#### Formal documents of the Infrastructure Manager

Internal regulations (formal documents) and technological procedures of the Infrastructure Manager are listed in Appendix 2.



## 1.3.2 Legal Status and Liability

The Network Statement is based on the legal framework defined in section 1.3.1. In case of any ambiguities or legal proceedings, the relevant provisions of the legislation of the Republic of Serbia will apply.

The present Network Statement has been developed on the basis of the information available at the moment of drafting thereof. IŽS is liable for accuracy of the information given in the present Network Statement. All regulations and technical documentation which become effective upon publishing of this Network Statement shall apply and shall be taken into consideration on the occasion of construing this Network Statement.

IŽS is not liable for the accuracy of data published herein, which are submitted by the service facility operators.

# 1.3.3 Appeals Procedure

Appeals procedure in respect of the Network Statement, and in respect of other formal documents of the Infrastructure Manager relating to the path allocation procedure and use of railway infrastructure, is governed by the Law on Railways.

The function of the regulatory body for the railway sector is performed by the Directorate for Railways (hereinafter: the Directorate), as a separate organization which runs the railway-specific state administration affairs as set forth in the Law on Railways.

The scope of the Directorate for Railways has been set out in Articles 118-129 of the Law on Railways ("Official Gazette of the RS" No. 41/2018 and 62/23) and by the provisions of the Law on Safety of Railway Transport ("Official Gazette of the RS" No.41/2018).

Article 120 of the Law on Railways provides that the Directorate is in charge of the following:

- regulation of railway services market;
- licensing of railway undertakings;
- passenger rights;
- safety in railway traffic and interoperability of railway system;
- cableway;
- realization of international cooperation within its scope of competence;
- other tasks in accordance with this law and other laws governing the area of safety in railway transport, interoperability of railway system and cableways for transport.

The applicant for train path allocation may lodge a complaint with the Directorate for Railways against the decision made by the Infrastructure Manager to reject its application for path allocation or against the established conditions for supply of infrastructure capacity, and also when it is not satisfied with the train path allocation procedure and its outcome, subject to payment of a fee in the amount of administrative fee charged for the appeals to the authority.

As a regulatory body, the Directorate deliberates, in the segment of regulation of railway services market, on the complaints lodged by applicants for train path allocation, especially taking into account any potential unfair treatment or discrimination by the Infrastructure Manager or railway undertakings, in connection with:

- (1) the Network Statement,
- (2) the criteria set out in the Network Statement,
- (3) the train path allocation procedure and its outcome,
- (4) the method for determining the charge for the use of train path;
- (5) the level or structure of charges for the use of train path which it is or may be obliged to pay,
- (6) information about service facilities;



(7) the application of provisions of article 13 of the Law on Railways and particularly of access and charges.

The decision of the Directorate is final. The appeal against it may be lodged with the Administrative Court within 30 days of its receipt.

#### 1.4 Structure of the Network Statement

The structure of 2025 Network Statement is in accordance with the general structure for network statements of the European Railway Association (RailNetEurope association) which is applied by most infrastructure managers in Europe in the process of network statement preparation.

The general structure of Network Statement is reviewed as necessary and the latest version is available on the RNE's web-site. The objective of general structure is that all applicants and interested parties may find the same information at the same place in the Network Statement.

The Network Statement consists of 7 chapters that make up the basic document and a series of attachments that contain additional information.

Table No 1. Network Statement Structure

No	Chapter	Description
1.	General information	Contains the general information about Network Statement and contacts
2.	Infrastructure	Contains the description of the network operated by JSC "Infrastructure of Serbian Railways" (IŽS)
3.	Access conditions	Provides a specification of conditions, which will be met by the railway undertaking, prior to gaining the track access
4.	Capacity allocation	Provides the principles and criteria for infrastructure capacities allocation
5.	Services and charges	Provides an overview of services provided by "Infrastructure of Serbian Railways" JSC and charges
6.	Operations	Contains operational rules
7.	Service facilities	Provides an overview of service facilities connected to rail network operated by IŽS

# 1.5 Validity Period, Updating and Publishing

#### 1.5.1 Validity Period of the Network Statement

This Network Statement shall be valid during the timetable validity period, from December 15<sup>th</sup>, 2024 to December 13<sup>th</sup>, 2025.

The Network Statement shall be published not later than two months prior to the commencement of the final deadline for submission of applications for path allocation and shall remain valid during the entire timetable validity period.

# 1.5.2 Updating Process

The Network Statement will be updated in case of change of important pieces of information published in the Network Statement. Any amendment to the Network Statement will be published separately in the "Official



Gazette of Serbian Railways", whereas the updated (amended) Network Statement will be published on the "Infrastructure of Serbian Railways" JSC website.

# 1.5.3 Publishing, Distribution and Availability of the Network Statement

The Network Statement will be published on the "Infrastructure of Serbian Railways" JSC website (www.infrazs.rs), both in Serbian and English languages.

If so requested by a railway undertaking, "Infrastructure of Serbian Railways" JSC may provide the Network Statement or a part of it, free of charge, in electronic format.

#### 1.6 Contacts

Contacts relevant for information contained in the Network Statement:

"Infrastructure of Serbian Railways" JSC Railway Infrastructure Access Department 6, Nemanjina St. 11000 Belgrade Serbia Tel.: +381 11 3618 214

Fax: +381 11 3616 814 sektor.pzi@srbrail.rs

# 1.7 Cooperation Between European IMs/ABs

# 1.7.1 Rail Freight Corridors

The Pan-European Corridor X from Salzburg in Austria to Thessaloniki in Greece stretches via the infrastructure network of "Infrastructure of Serbian Railways" JSC. On the territory of the Republic of Serbia, on the network of "Infrastructure of Serbian Railways" JSC, Corridor X includes the following railway lines from Šid to Preševo:

- Belgrade Šid State border,
- Belgrade Mladenovac Niš,
- (Belgrade) Rakovica Jajinci Mala Krsna Velika Plana,
- Niš Preševo State border.

The following branches connect to the primary route of the Corridor:

- Xb, (Budapest) Novi Sad Belgrade (railway line (Belgrade) Stara Pazova Subotica), and
- Xc, Niš Dimitrovgrad (Sofia Istanbul) (railway line Niš Dimitrovgrad State border).

Infrastructure of Serbian Railways is a member of Railway Freight Corridor Alpine-Western Balkans (RFC 10). The corridor connects five countries: Austria, Slovenia, Croatia, Serbia and Bulgaria. The corridor route goes from Svilengrad in Bulgaria, via Sofia, Belgrade, Zagreb to Zidani Most in Slovenia, where the route branches off to two routes via Maribor, Gratz to Wels and via Ljubljana, Villach to Salzburg. The corridor covers 2,114 km of main lines and 31 km of connecting lines. There are 21 intermodal terminals and 12 marshalling yards on the corridor.

More details on the corridor are available on its website https://www.rfc-awb.eu/.

#### 1.7.2 RailNetEurope

RailNetEurope association (hereinafter RNE) was established in January 2004 by virtue of an agreement between 12 Infrastructure Managers from the entire Europe, and their number is constantly rising.



Through its members, RNE operates over 230,000 km long railway lines, including the important ferry lines, and cooperates with more than 120 railway undertakings in international traffic and with more than 300 railway undertakings that, for the time being, operate only in the domestic traffic of the members.

The main efforts are put towards enhancing the access conditions and performance of international railway transport, particularly with respect to operability. To achieve this, RNE is focused on the overall process of international transport operations. It starts with harmonization of mid-term and long-term planning of particular members, joint marketing and sales approach, appropriate planning and operation, and ends with provision of services after transport has been performed, such as monitoring, control and assessment of performed transport.

One of the first steps towards progressive harmonization was creation of a structure model for the preparation of Network Statement, applied by all RNE members.

One of the most important RNE steps was creation of an international network of One Stop Shop offices.

The list of all RNE members and further information on this association may be found at <a href="https://www.railneteurope.com">www.railneteurope.com</a>.

"Infrastructure of Serbian Railways" JSC is a full member of the association from April 21, 2016.

#### **One Stop Shop - OSS**

Infrastructure Managers have opened national One Stop Shop (OSS) offices that jointly make up a network of contact points for the users within the RNE. As regards the international path allocation applications, the users only need to contact one of these OSSs that will initiate the entire process of international path allocation.

In close cooperation with other IMs, the contacted OSS will:

- offer support and information to undertakings on the entire range of Infrastructure Managers' products and services along the whole route;
- provide all information on the conditions for access to the infrastructure of any Infrastructure Manager within the RNE;
- process the applications for international path allocation within the RNE;
- make sure that all the applications for the next year's Timetable are timely taken into account during preparation of the annual Timetable;
- provide offers for railway paths on the entire route in international traffic.

In accordance with its motto "one face to the customer", the OSS provides professional and efficient assistance via all border crossings, underpinned by transparent procedures based on trust and non-discrimination. The list of contacts by member countries is available at www.railneteurope.com.

"Infrastructure of Serbian Railways" JSC, as a RNE member, conducts intensive activities on defining the procedures so as to implement the OSS in the near future in the railway sector of the Republic of Serbia.

#### **RNE** tools

Since 2005, the RNE has taken over the full responsibility for preparation of the international timetable and the support to its activities; it operates the following information systems: for path coordination - PCS (Path Coordination System), for charging - CIS (Charging Information System) and for train information - TIS (Train Information System).

## **PCS**



PCS (Path Coordination System) – is an international path request coordination system for path applicants i.e. railway undertakings, infrastructure managers and allocation bodies. This web-based application optimises international path coordination by ensuring that path requests and offers are harmonised by all involved parties. The input for international path requests needs to be entered only once into the system – either via the domestic application or directly into the PCS. More information is available on: <a href="http://pcs.RNE.eu/">http://pcs.RNE.eu/</a>.

#### CIS

CIS (Charging Information System) – is an infrastructure charging information system for railway undertakings, infrastructure managers and allocation bodies. This web-based application provides fast information on charges related to the use of the European rail infrastructure and estimates the charge for the use of international train paths within minutes. This is an umbrella application for various national rail infrastructure charging systems. More information is available on: <a href="http://cis.RNE.eu/">http://cis.RNE.eu/</a>.

#### TIS

TIS (Train Information System) – is a web-based application which manages the operation of international trains by delivering information on movements of international passenger and freight trains in real time. These data are obtained directly from the system. More information is available on: http://tis.RNE.eu/.



# 2. INFRASTRUCTURE

#### 2.1 Introduction

The purpose of this section is to provide the information on the railway infrastructure owned by the Republic of Serbia and managed by IŽS, to provide the description and overview of the characteristics of the railway lines and appertaining facilities and equipment that can be used by all those to whom the access to and use of infrastructure have been granted in accordance with the provisions of the Law on Railways. Other information on the IŽS network can be found on the website www.infrazs.rs.

Information on the railway infrastructure published in this document is based on the facts that were familiar at the time of its preparation. All changes occurring after publishing of this document will be updated on the website www.infrazs.rs.

#### 2.2 Extent of Network

The total structural length of standard-gauge lines on the territory of "Infrastructure of Serbian Railways" JSC network amounts to 3 357.341 km, out of which 3 012.201 km of single-track and 345.140 km of double-track lines. The above-mentioned line length includes 1 758.971 km of main lines and 1 598.37 km of other lines. The total of 1 313.257 km of open tracks have been electrified, together with main running tracks (968.117 km of single-track and 345.140 km of double-track lines).

The total length of electrified lines - open tracks and main running tracks is 1 659.525 km. All the above data relate to standard-gauge 1435 mm tracks. More detailed information is available in Appendix 6.

In addition, "Infrastructure of Serbian Railways" JSC also operates the museum-tourist railway line - "Shargan Eight" - which is 22.471 km long and whereof track gauge is 760 mm.

#### **2.2.1 Limits**

In terms of ownership and management of public railway infrastructure, there is only one railway network in the Republic of Serbia and this is a state-owned network, managed by IŽS. Therefore, the term "limit" also means state borders which at the same time represent borders with the neighbouring railway networks.

The IŽS railway network borders with the neighbouring railway networks are the following border stations: Subotica, Horgoš, Kikinda, Vršac, Bogojevo, Šid, Brasina, Preševo, Đeneral Janković, Vrbnica and Dimitrovgrad.

Upon crossing of state borders, the track gauge remains unchanged.

The type of traction is changed only at the border crossing with the Republic of Bulgaria, at Dimitrovgrad station on the railway line Niš-Dimitrovgrad-State Border.

# 2.2.2 Connecting Railway Networks

The railway network of the Republic of Serbia is connected with the railway networks of the following seven countries: Croatia, Hungary, Romania, Bulgaria, North Macedonia, Montenegro and Bosnia and Herzegovina. Traffic can be organized via ten border crossings, while one border-crossing is under the control of UNMIK.

For more detailed information please refer to Table No 2. The names of neighbouring countries' stations in the table are given in authentic form, as registered in the official timetables.

The term joint border station means a border station in which border control is jointly performed by the competent state authorities, as well as traffic handover between the railway undertakings. Joint border stations are governed by bilateral state agreements. Performing of traffic handover in other border stations is within decision —making domain and agreement between the railway undertakings.



Table No 2. Border crossings, border railway lines and border stations

	Neighbouring country	Border railway lines	Border stations	Neighbouring infrastructure managers	Note
	Croatia	Šid-State Border -Tovarnik	Šid Tovarnik	HŽI	
1		Bogojevo-State Border- Erdut	Bogojevo Erdut	HŽI	
2	Hungany	Subotica-State Border- Kelebija	Subotica Kelebia	MAV Zrt	
	Hungary	Horgoš-State Border- Roszke	Horgoš Roszke	MAV Zrt	
3	Romania	Vršac- State Border - Stamora Moravita Vr Stamora Moravita		CFR SA	
		Kikinda-State Border- Jimbolia	Kikinda Jimbolia	CFR SA	
4	Bulgaria	Dimitrovgrad-State Border Dragoman	Dimitrovgrad Dragoman	NKŽI	Joint border station Dimitrovgrad
	North Macedonia	Preševo- State Border Tabanovci	Preševo/ Ristovac Tabanovci	IŽRSM	Joint border station Tabanovci
5		Đeneral Janković - State Border -Volkovo	Đeneral Janković	IŽRSM	Temporary under the supervision of UNMIK Railways
6	Montenegro	Vrbnica - State Border – Bijelo Polje	Vrbnica / Prijepolje freight Bijelo Polje	ŽICG	Joint border station Bijelo Polje
7	Bosnia and Herzegovina	Brasina - State Border – Zvornik Novi	Brasina Zvornik Novi	ŽRS	

Within the national network, the public railway infrastructure operated by IŽS is connected with other railway infrastructures in the Republic of Serbia. The sidings of Elektroprivreda Srbije and HBIS Group Serbia Iron & Steel" d.o.o. are connected to IŽS national railway network.

These sidings are used for transport of goods for own needs (industrial railways) and they do not belong to the national railway network.

Railway infrastructure operated by IŽS is also connected with a number of railway industrial sidings owned by the business entities.

For other information on railway infrastructure operated by IŽS, which are not contained and presented herein, please contact IŽS at the following address:

"Infrastructure of Serbian Railways" JSC Railway Infrastructure Access Department 6 Nemanjina St., 11000 Belgrade, Serbia

Phone.: +381 11 3618 214 Fax: +381 11 3616 814 sektor.pzi@srbrail.rs



## 2.3 Network Description

#### 2.3.1 Geographic data and types of railway lines

General network information is given in Table No. 3.

Table No 3. Structural length of the lines within the network

Total network length	3 357.341 km
Single-track lines	3 012.201 km
Double track lines	345.140 km
Narrow-gauge lines	22.471 km*
Non-electrified lines	2 044.084 km
Electrified lines	1 313.257 km

<sup>\*</sup> Narrow-gauge line Šargan Vitasi – Mokra Gora – State Border (Višegrad)

# Types of railway lines

Pursuant to the Regulation on categorization of railway lines that belong to public railway infrastructure ("Official Gazette of the RS", No. 92/20, 6/21, 33/22 and 63/23) applied by the "Infrastructure of Serbian Railways" JCS, railway lines are classified as main lines, regional lines, local lines, shunting lines and museum-tourist lines.

Pursuant to the law governing the railways, railway lines are classified as follows:

- 1. main lines- of importance to international and domestic service;
- 2. regional lines of importance to regional and local service;
- 3. local lines of importance to local service;
- 4. shunting lines of importance to business entities,
- 5. museum-tourist railway lines.

#### Main lines with associated line number are:

- 101 Belgrade Centre-S. Pazova-Šid-State border-(Tovarnik);
- 102 Belgrade Centre Junction "G"- Rakovica-Mladenovac-Lapovo-Niš-Preševo-State border-(Tabanovce);
- 103 (Belgrade Centre )- Rakovica-Jajinci-M.Krsna-V.Plana;
- 104 (Jagodina) Ćuprija Junction Ćuprija-Paraćin;
- 105 (Belgrade Centre)-S.Pazova-N.Sad-Subotica-State border-(Kelebia);
- 106 Niš-Dimitrovgrad-State border-(Dragoman);
- 107 Belgrade Centre-Pančevo Main St.-Vršac- State border-(Stamora Moravita);
- 108 (Belgrade Centre)-Resnik-Požega-Vrbnica- State border-(Bijelo Polje);
- 109 Lapovo-Kraljevo-Lešak-Kosovo Polje-Djeneral Janković- State border-(Volkovo);
- 110 Subotica-Bogojevo-State border-(Erdut);
- 111 Belgrade Marshalling Yard "A"-Ostružnica-Batajnica;
- 112 Belgrade Marshalling Yard "B"-Ostružnica;
- 113 Belgrade Marshalling Yard "A"-Junction, B"- Junction "K/K1"-Resnik;
- 114 Ostružnica-Junction "B"-(Junction "K/K1");
- 115 Belgrade Marshalling Yard "B"-Junction "R"- Junction "A"-(Resnik);
- 116 (Belgrade Marshalling Yard "B")-Junction "R"-Rakovica;
- 117 Belgrade Marshalling Yard "A"-Junction "T"-Rakovica;
- 118 Belgrade Marshalling Yard "B"-Junction "T"-(Rakovica);
- 119 Connecting track in the area of Junction "K/K1": (Junction "B")--Points "K"-Points "K1"-(Jajinci);
- 120 (Junction Pančevo Most)-Junction Karadjordjev park-Junction Dedinje-(Junction "G");
- 121 Indjija-Golubinci;
- 122 Novi Sad-Novi Sad Marshalling Yard-Junction Sajlovo;
- 123 By-pass track at the station Mala Krsna: (Kolari)-Junction points 1-Junction points 28-(Osipaonica);
- 124 Junction Lapovo Varoš-Lapovo Marshalling Yard-Lapovo;



- 125 Trupale-Niš Marshalling Yard-Medjurovo;
- 126 Crveni Krst-Niš Marshalling Yard;
- 127 Niš-Junction Most-(Niš Marshalling Yard);
- 128 Connecting track at the station Niš: (Crveni Krst)-Junction points 3-Junction points 4-(Ćele Kula).

# Regional lines with associated line number are:

- 201 Subotica-Horgos-State border-(Roszke);
- 202 Pančevo Main St.-Zrenjanin-Kikinda-State Border-(Jimbolia);
- 203 Belgrade Donji Grad (km 7 + 041) Belgrade Danube Junction Pančevo most<sup>1</sup>;
- 204 Topčider Passenger Station (km 4 + 195) Junction "G" (Rakovica)<sup>2</sup>;
- 205 Banatsko Miloševo-Senta-Subotica;
- 206 Pančevo Varoš-Junction "2a"-(Jabuka);
- 207 Novi Sad-Odžaci-Bogojevo;
- 208 (Novi Sad)-Junction Sajlovo-Rimski Šančevi-Orlovat stop;
- 209 Novi Sad Marshalling Yard Junction points 7-Novi Sad Lokoteretna-Sajlovo Junction;
- 210 Orlovat- Junction "1a"-(Lukićevo);
- 211 Ruma-Šabac-Junction Donja Borina-State border-(Zvornik Novi);
- 212 (Platičevo)-Junction "1"-Junction "3"-(Štitar);
- 213 Stalać-Kraljevo-Požega;
- 214 Connecting track at the station Kraljevo: (Mataruška Banja)-Junction points 72-Junction points 73-(Adrani)
- 215 Connecting track at the station Požega: (Uzići)-Junction points 53-Junction points 54-(Dragačevo);
- 216 Smederevo Junction Jezava Radinac Mala Krsna;
- 217 Junction Jezava Smederevo Port;
- 218 Mala Krsna-Bor-Junction "2"-(Vražogrnac);
- 219 (Nis) Crveni krst-Zaječar-Prahovo Port;
- 220 (Rgotina)-Junction "3"-Junction "1"-(Trnavac);
- 221 (Barlovo)-Junction "1"-Kuršumlija;
- 222 Kuršumlija-Kastrat;
- 223 Doljevac-Kastrat-Merdare Kosovo Polje;
- 224 Kosovo Polje-Metohija-Peć;
- 225 Kosovo Polje Freight St.-Junc. "1"-(Drenica);
- 226 Vrbas Sombor.

#### Local lines with associated line number are:

- 301 Subotica-Subotica Factory;
- 302 Subotica-Subotica Hospital;
- 303 Novi Sad (km 1+042)-Novi Sad Ložionica;
- 304 (Podbara)-Junction "3"-Junction "2"-(Kać);
- 305 (Rimski Šančevi)-Junction "1"-Junction "3"-(Podbara);
- 306 Rimski Šančevi-Žabalj;
- 308 (Brasina)-Junction Donja Borina-Zvornik Grad;
- 309 Pančevo Varoš-Pančevo Vojlovica;
- 310 Connecting track at the station Senta: (Čoka)-Junction points 22-Junction points 23-(Orom);
- 311 Markovac-Svilajnac-Despotovac- (Resavica);
- 312 Metohija-Prizren;

<sup>1</sup> By virtue of the Conclusion adopted by the Government of the Republic of Serbia No 340-2986/2022 dated April 7<sup>th</sup>, 2022, the Decision of the Shareholders' Meeting of Infrastructure of Serbian Railways JSC on termination of railway line Belgrade Donji Grad (km 7+041) – Belgrade Danube – Junction Pančevo Most has been approved.

<sup>&</sup>lt;sup>2</sup> By virtue of the Conclusion adopted by the Government of the Republic of Serbia No 340-2989/2022 dated April 7<sup>th</sup>, 2022, the Decision of the Shareholders' Meeting of Infrastructure of Serbian Railways JSC on termination of public railway service, dismounting and reconstruction of infrastructure capacities on railway line Topčider Putnička (km 4 + 195 – Junction "G" – (Rakovica) has been approved.



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313 Vršac – Bela Crkva.

#### Shunting lines with associated line number are:

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401 Vršac-Vršac Vašarište:
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402 Kikinda-Metanolsko sirćetni kompleks(km 6+413);

403 Bogojevo-Dunavska Obala;

404 Paraćin-Stari Popovac;

405 Surčin-Jakovo-Bečmen;

406 Šid-Sr.Rača Nova-State Border-(Bijeljina);

407 Ovča-Padinska Skela;

408 Sonta – Apatin factory;

409 Bačka Palanka - Gajdobra

#### Museum-tourist line with its associated number is:

501 Šargan Vitasi – Mokra Gora – State Border (Višegrad).

Due to the technical condition of particular local and shunting lines, traffic is no longer possible on such lines and is currently completely or partially suspended. More details can be found in Appendix 6.

The following IŽS lines belong to main international railway lines according to AGC (European Agreement on Main International Railway Lines):

#### <u>Direction North – South</u>

E 771 Subotica-Bogojevo

E 79 Belgrade - Vrbnica

E 85 Subotica-Belgrade-Niš-Preševo

-Kraljevo-Djeneral Janković

#### Direction West - East

E 66 Belgrade-Vršac

E 70 Šid-Belgrade-Niš-Dimitrovgrad

#### 2.3.2 Track Gauges

Track gauge along the network is 1435 mm, except for the museum-tourist line the "Shargan Eight", whose gauge is 760 mm.

#### 2.3.3 Stations and Nodes

Names, km-points and distances in km between particular service points and railway nodes are given in Appendix 6 and Appendix 10.

# 2.3.4 Loading Gauge

Loading gauge is a limited space viewed as a cross section vertical to the track axis that may not be exceeded by any part of the rail vehicle, whether loaded or empty. The loading gauge registered for all IŽS lines for international traffic is UIC GB, except for parts of the railway lines Valjevo – Kalenić and Grlica - Djeneral Janković, where the registered loading gauge is UIC GA. These loading gauges are in line with the UIC Leaflet 506.

The loading gauge that applies to domestic traffic on IŽS lines is ŽS I. The ŽS I gauge is slightly larger than the UIC GA loading gauge and slightly smaller than UIC GB. The summary of loading gauges is presented in Appendices 3.1.-3.3.

IŽS lines have not been coded for the combined transport gauges in accordance with UIC Leaflet 596-6. However, the measurements that were performed have shown that movements of wagons carrying combined transport load units - such as high cube containers (HCC), semi-trailers and entire road vehicles - are



possible. Movements of such consignments are possible under special safety conditions in the exceptional transport regime.

For further information, please contact IŽS:

"Infrastructure of Serbian Railways" JSC Traffic Department 6 Nemanjina St. 11000 Belgrade Serbia

Tel.: +381 11 3618 214 Fax: +381 11 3616 814 E-mail: sp@infrazs.rs

# 2.3.5 Weight Limits

In accordance with UIC Leaflet 700, depending on track capacity to bear loads by vehicles on the railway network, various weight limits are applicable and expressed in tonnes per axle and tonnes per linear metre.

The load by a railway vehicle per linear metre is the load of an unloaded or loaded railway vehicle divided by the length of the railway vehicle expressed in metres and measured between tops of uncompressed buffers.

Axle load of a railway vehicle is the load of an unloaded or loaded railway vehicle divided by the number of axles of the railway vehicle.

Based on the above-stated, railway lines were classified into categories (Regulations on classification of railway lines No. 325, published in the Official Gazette of the Community of Yugoslav Railways (ZJŽ) Nos. 7/89 and 9/90). The classification of IŽS railway lines is shown in Table No. 4.

Table No 4: Categories of admissible loads on IŽS network

A dmissible	loods nor	Admissible loads per axle			
Admissible		A	В	C	D
linear metre		16 t	18 t	20 t	22,5 t
1	5.0 t/m	A	B1		
2	6.4 t/m		B2	C2	D2
3	7.2 t/m			C3	D3
4	8.0 t/m				D4

The overview of admissible loads in tonnes per axle and in tonnes per linear metre is presented in Appendix 6

# 2.3.6 Line Gradients

In order to determine required train braked weight, the ruling gradients for braking must be determined for each line or track section. The ruling line gradient for braking means the value of its longitudinal gradient, on the basis of which braked weight percentages are determined, i.e. the required train braked weight on a certain line or track section. The longest longitudinal gradient (rising or falling) on a specific line (or section), over the length of 1000 metres or more, is considered to be the ruling gradient of that specific line or section. In determining the ruling gradient for braking, the curve and tunnel related resistances are not taken into consideration.

The ruling resistance of a line or one of its sections means the value of its specific resistance due to gradient, curve and tunnel, on the basis of which train weight i.e. locomotive hauled load is determined.



The overview of ruling gradients and ruling resistances of particular lines is presented in Appendix 6.

# 2.3.7 Maximum Line Speeds

The maximum permissible speed with respect to line capacity is the maximum speed permitted on a line or line section with respect to the railway line superstructure and its structures (carrying capacity of the track, its lining and levelling, curve radius, points design, etc.), fixed electric traction installations and signalling and interlocking devices on the line, and it may not exceed the lowest one of such speeds.

Restricted speeds are permanently prescribed speeds that are lower than the maximum permissible speed on the railway line and that are applied on a certain section of the railway line due to its technical condition or that are applied while running in the points area.

For further information on maximum permissible speeds and restricted speeds with respect to line capacity, please refer to Appendix 6.

# 2.3.8 Maximum Train Lengths

The length of each train is determined during the capacity allocation procedure and it is expressed in rounded metres. The maximum permissible length of a train operating on a line, for the purposes of its smooth acceptance and forming in railway stations, at passing points and other service points, is determined on the basis of the maximum permissible train length in certain stations, passing points and other service points along the given line and with respect to usable length of main lines.

Maximum permissible length of a train for station tracks is obtained by subtracting the length of 25 m to be taken up by the locomotive and spare 10 m to be taken up by the train, from the usable track length expressed in metres and determined under the Instructions (Instructions on the technical standards and data for the preparation of timetable implementation, "Official Gazette of ZJŽ Nos. 9/89, 6/91, 8-9/91, 4/92, and 9/92).

Actual length of a train is obtained by totalling the lengths over uncompressed buffers of all vehicles included in the train, except for the locomotive hauling the train, whose length has been taken into account during determination of maximum permissible train length at a station. If a train has double heading, banking locomotive or intermediate-haul locomotive, their lengths must be taken into account when determining the train length.

The overview of distances between the service points and maximum permissible train lengths relative to usable track lengths is presented in Appendix 6.

The provisions of paragraph 2 of this article shall also apply to the length of the passenger train. The passenger train may be longer than the length of the platforms and arranged areas in service points, and if the railway undertaking requires their dwelling in such service points, it must set and ensure the necessary safety measures for passengers in accordance with local and/or other specific circumstances. The overview of platforms and arranged areas in service points is given in Appendix 8 and for further details, please contact IŽS:

"Infrastructure of Serbian Railways" JSC Railway Infrastructure Access Department 6 Nemanjina St. 11000 Belgrade Serbia

Tel.: +381 11 3618 214 Fax: +381 11 3616 814 sektor.pzi@srbrail.rs



# 2.3.9 Power Supply

IŽS ensures the transmission of required electric energy from the public power supply network of the Republic of Serbia via the fixed electric traction installations (substations) and the catenary for electric train traction. All electrified railway lines have the basic power supply system, which is single-phase AC 25 kV 50 Hz system. The overview of electrified railway lines is presented in Appendix 3.4. The overview of power supply installations is presented in Appendix 3.5.

The power supply system voltage is U=25 kV, and its frequency is f=50Hz. The height of the contact wire are Hkpmin=5000 mm, Hkpnom=5500 mm and Hkpmax=6000 mm. The staggering of the OCL is p=±200 mm along the straight track, and p=300 mm in curves.

In the 25kV, 50 Hz power supply system, the use of pantograph (current collector) for electric motive power is permitted according to the General Contact Line Catalogue (type POS-III/E). The design of pantograph is shown in Figure No 1.

The basic parameters for the asymmetric pantograph used on IŽS network, with double contact strip and pneumatic actuator, are in accordance with the provisions of UIC Leaflet 608 and are shown in Table No 5.

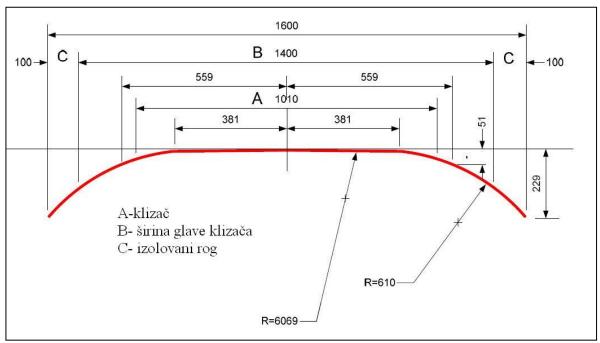


Figure No 1. – Dimensions of pantograph

Table No. 5: Pantograph parameters

Permissible width of horned slipper holder (mm)	Width of metal horns (mm)	Rated current (A)	Height of contact line (mm)	Minimum length of contact strip (mm)	Static force Fa (N	Maximum aerodynamic force Fa (N)	Maximum speed (km/h)	Type of contact strip
1600	1400	400	6200 5500 5000	800	60-90	70	160	graphite

## 2.3.10 Signalling Systems

Railway signals provide signals by means of which railway staff can mutually communicate in a fast and reliable way about train operation, shunting, permitted and forbidden runnings via a certain location, the



track condition, the need for speed restriction, etc. Some signals are used for preserving of personal safety of railway staff and other persons.

Regulations on types of signals, signal markings and track markings ("Official Gazette of the RS" No.50/20) are applicable to the use of signals and signal markings.

There are eleven types of station track interlocking on the network of "Infrastructure of Serbian Railways" JSC, and they are presented in Appendix 6.

On IŽS network, the main arterial routes are equipped with fully centralized electrical relay signalling & interlocking equipment, as follows:

- Belgrade Center-Niš-Preševo: Siemens SpDrS-64/JZ track circuit system,
- (Belgrade Center) Resnik-Vrbnica: Siemens SpDrS-64/JZ axle counter system,
- Stara Pazova Golubinci: Siemens SpDrS-64/JZ track circuit system,
- Golubinci-Ruma: Siemens SpDrS-64/JZ axle counter system,
- Ruma-Šid: Siemens SpDrS-64/JZ track circuit system,

In all stations on Belgrade Center – Stara Pazova – Novi Sad – Subotica line section, new electronic signalling and interlocking devices type "DS6-60" with "MMI" electronic control and monitoring system have been installed. Within the upgrade performed on trackside and station electronic signalling and interlocking devices, all service points on Belgrade Center – Stara Pazova – Novi Sad – Subotica line section have been included in the central traffic control and command system – remote control type "FZt – CTC".

The main arterial routes Šid- Golubinci – (Stara Pazova) – (Belgrade Center)-Niš-Preševo and Belgrade Center- Vrbnica are included in the system of remote traffic control and command – remote control centre (manufactured by Westinghouse). There are three remote control centres - in Belgrade, Požega and Niš. Based on this device, 3 remote control centres were set-up in Belgrade, Niš and Požega with the total of 133 controlled stations.

Dimitrovgrad Station (railway line Niš-Dimitrovgrad-State Border) is equipped with electronic signalling & interlocking device Simis-W with Iltis control & supervision system manufactured by Siemens.

In addition to the above-mentioned, Pančevo Main St. and Ćuprija stations are equipped with electronic signalling & interlocking devices.

Other railway lines are equipped with other above stated interlocking types, but there is no continuity as regards to one system of interlocking.

The overview of signalling and interlocking devices is presented in Appendix 3.6.

# 2.3.11 Traffic Control Systems

The movement of trains running in opposite directions and consecutive train movements are controlled by requesting and giving the permission i.e. announcement of arrival and departure.

Consecutive trains can follow one another only in particular space intervals. For the control of trains following one another in particular space intervals, railway lines can be divided into:

- Block sections between stations when two neighbouring stations control the sequence of trains in the station interspace,
- Train-recording sections when two neighbouring train-recording points or a station and a neighbouring train-recording point control the sequence of trains in announcement intervals,
- Block sections when the traffic of consecutive trains is controlled by automatic positioning of automatic block signals in the position of permitted or forbidden train ride.



In addition to space distance, in case of consecutive trains in train reporting and block intervals, there should be a time interval so as to avoid train stopping before automatic block signals due to different train journey times over block sections (time spacing).

On the railway lines of "Infrastructure of Serbian Railways" JSC there are also interstation interlocking devices (MZ) which regulate train traffic at distances between stations, where an interstation track occupation is reported by means of axle counters.

There can only be one train in one block section on the same track and at the same time.

Train operation is regulated by movements inspectors who uses the station signal boxes and along railway lines through remote control – by the remote control dispatcher from the central signal box, except at the stations that are not included in the remote control system. The traffic of trains running in opposite directions and consecutive trains is regulated by movements inspectors at manned stations and along the railway lines included in the remote control system it is regulated by remote control dispatchers.

"Infrastructure of Serbian Railways" JSC uses "Flexi code 560" remote control system on its territory, manufactured by Westinghouse. It uses semiconductor technology and a code system, and controls instruction completeness at the stages of forwarding and acceptance. It was developed as a standard format and it consists of a remote control centre, which can control 32 stations on one railway line and of one or more lines for data transfer, as well as the remote control equipment at stations (satellites).

Based on this device, 3 remote control centres were constructed in Belgrade, Nis and Pozega, with 140 controlled stations.

On Belgrade Center – Stara Pazova – Novi Sad – Subotica line section , all service points are included in the central traffic control and management system – remote control center type FZt-CTC.

The train control system is governed by the Traffic Regulations ("Official Gazette of RS" No 34/22 and 107/22) and Instructions on particular procedures in performing of traffic service on the territory of Infrastructure of Serbian Railways ("Official Gazette of Serbian Railways" No 43/22).

The train control methodology is presented in Appendix 6.

# 2.3.12 Communication Systems

In the course of traffic operations, communication is carried out via telecommunication devices – telephone and ground-train radio links. Communication via means that provide reliable and continuous registration of notifications (teleprinter, telephone or radio link with registration devices) is considered to be verifiable communication. The notifications related to the control of train movements (permissions and instructions given to train crew via telephone or ground-train radio links) are furnished exclusively via devices for verifiable communication.

The communication between movements inspectors, remote control centre dispatchers and drivers is carried out in Serbian language.

All notifications are given in the format and manner set forth in the Traffic Regulations ("Official Gazette of RS" No 34/22 and 107/22), Instructions on particular procedures in performing of traffic service on the territory of Infrastructure of Serbian Railways ("Official Gazette of Serbian Railways" No 43/22) and Regulation on records kept by the railway undertaking and the railway infrastructure manager ("Official Gazette of the RS" no.56/19, 154/20 and 159/20).

The overview of telecommunication links and installations is presented in Appendix 3.7.

IŽS network uses analogue ground-train radio system (RDV) for transmission of specially coded voice information in the frequency range of 460 MHz and by using frequencies belonging to quadrifrequency



groups according to UIC Leaflet 751-3. The system operates in full duplex (modes A and B), with selective calling option including automatic identification and making special calls (group, intervention).

There is a possibility of integrating into local radio networks (mode C) and automatic telephone exchange. The devices were manufactured by AEG (now EADS telecom) in the '70s and the '90s.

On the lines with a dispatcher control system, the train operating staff is connected with the remote control centre dispatchers via mobile RDV units, which represent mandatory driver's cab equipment.

The GSM-R system enables voice communication and transmission of text messages within the ERTMS, i.e. for ETCS L2 and ETCS L3. The GSM-R system is installed on line section Belgrade Center – Stara Pazova–Novi Sad – Subotica.

# 2.3.13 Train Control Systems

For the time being, there is no automatic train control system on the railway lines of "Infrastructure of Serbian Railways" JSC.

Intermittent transmission AS device (automatic train control) with resonant frequencies of 1000Hz and 2000Hz, type Indusi (I 60), is used for the control of train movements. It is comprised of:

- track magnet (stationary trackside part of the device)
- transmission system (inductive link between the track magnet and locomotive auto-stop device), and
- locomotive part installed on the traction unit.

Track magnets are installed on the right-hand side of the track, in the direction of train movement.

Functioning and operating of AS devices have been stipulated under the Operator's Manual for inductive I-60 AS devices (Instructions No 425), Instructions for installation, testing and putting into operation and maintenance of the locomotive part of I-60 AS device (Instructions No 426), and Instructions for use, installation, testing and maintenance of trackside AS devices on the lines of Yugoslav Railways (Instructions No 427).

The overview of the lines equipped with AS device is presented in Appendix 3.6.

The ERTMS is the European Rail Traffic Management System. The ETCS is a part of ERTMS. On Belgrade Center – Stara Pazova – Novi Sad – Subotica line section the ETCS L2 is installed.

Functioning of the KMC (Key Management Center) system for the ETCS key management, enabling the railway carriers to use the GSM-R and ETCS, is prescribed in the *Instructions for creating the KMC keys for registering the new devices on the ETCS-2 system*. The instructions, in the format of Infrastructure Manager's act, is provided in Appendix 2.

In accordance with the instructions and aimed at using the GSM-R and ETCS, it is necessary for the railway carrier to submit a Request for issuance of encryption keys for communication in the ETCS system via the Railway Infrastructure Access Department. The request is submitted in a prescribed format, in line with Appendix 3.6a.



#### 2.4 Traffic Restrictions

#### 2.4.1 Specialised Infrastructure

According to Article 40 of the Law on Railways ("Official Gazette of RS" No 41/18 and 62/23), if there are appropriate alternative routes, the Infrastructure Manager may, upon consulting interested parties, designate the specialised infrastructure for particular types of traffic.

In case that a specialized infrastructure is designated, the Infrastructure Manager may, when allocating the infrastructure capacity, give priority to such type of traffic, however prioritizing may not be in collision with the competition protection rules. Designating of specialized infrastructure will not exclude the use of such infrastructure for other types of traffic when capacities are available.

There is no specialised infrastructure on the network operated by IŽS in the above sense.

#### 2.4.2 Environmental Restrictions

Environmental restrictions, such as noise levels, are not currently applied on the network managed by IŽS.

# 2.4.3 Dangerous Goods

The transport of dangerous goods on the railway infrastructure operated by IŽS is regulated by international and national regulations in the field of transport of dangerous goods in accordance with 3.4.4 - Dangerous Goods.

On the Niš – Dimitrovgrad – State Border – (Dragoman) railway line, the transport of tank wagons carrying ammonia is prohibited.

Locations for loading, unloading, transshipment of dangerous goods may be performed only in places that meet prescribed requirements. The stations (service points open to the acceptance and forwarding of goods) within the rail infrastructure do not meet this requirement, wherefore handling of dangerous goods in the station areas (service points) is not allowed.

Handling of certain types of dangerous goods () can be performed on special tracks under special conditions, i.e. on particular parts of the tracks in particular stations. The list of service points in which transshipment of dangerous goods can be performed is given in Appendix 3.8.

For further details, please contact IŽS:

"Infrastructure of Serbian Railways"
Traffic Department
Central Operational Department
Main Dispatcher for Transport of Dangerous Goods
6 Nemanjina St
11000 Belgrade
Serbia

Tel.: +381 11 3619 288 e-mail: <u>rid1@srbrail.rs</u>.

# 2.4.4 Tunnel Restrictions

On the railway line Belgrade Centre –Pančevo Main St. - Vršac- State border, through the "Vračar" tunnel i.e. on the section junction Karađorđev park – junction and Pančevo Most stop and through the "connecting" ("vezni") tunnel i.e. on the route Karađorđev park junction - Dedinje junction, the trains with diesel traction



vehicles, DMUs, diesel motor track vehicles, as well as vehicles with their own diesel generator set (power supply wagon, reefers with generator set station) cannot be regularly dispatched. Exceptions to this are DMUs series 711 and relief (auxiliary) trains with diesel traction of the infrastructure manager which are urgently dispatched to the accident/incident locations and diesel motor track vehicles used for urgent elimination of obstacles disrupting the traffic, while respecting the limitations that interval of sequence and the time between meeting of any two vehicles with diesel drive cannot be shorter than 30 minutes.

In other cases, the diesel motor vehicles of the infrastructure manager can run on the specified sections when the transport of trains for transport of passengers is not organized in the service point Vukov spomenik.

Along with the obligation to respect the restrictions regarding the vehicle drive, for the transport of freight trains containing wagons with a RID marking (loaded or empty vehicles for transport of dangerous goods), the following conditions apply:

- on the part of railway line Pančevo Most-Rakovica and Pančevo Most Belgrade Centre, trains can operate only in the period when traffic of passenger trains is not organized i.e. when the station is closed for passenger transport,
- on the part of railway line Pančevo Most –Rakovica and Pančevo Most Belgrade Centre, there can be only one train with RID marked wagons i.e. meeting of two freight trains if at least one is composed of RID marked wagons is not permitted;
- during the operation of trains composed of RID marked wagons, an additional technical inspection must be carried out, which includes checking of bearing temperature and enhanced visual control of loads (valve, clamps etc.)for the train which operaters in direction Pančevo Most Rakovica and Pančevo Most Belgrade Centre in Pančevo Main St., and for the trains operating in direction Rakovica –Pančevo Most either in Rakovica station or in Belgrade Marshalling Yard (if it is performed in Belgrade Marshalling Yard, there is no need for the inspection to be performed in Rakovica station);
- obligation of railway undertaking upon performed additional technical inspection of a train in stations Pančevo Main St., Rakovica and Belgrade Marshalling Yard, is to register a clause in the telegraph-telephone log "The additional technical inspection of train No \_\_\_\_\_ was performed on date \_\_at\_\_ hours (signature of authorized representative of railway undertaking)", thereby to inform the train dispatcher in a proved way that technical inspection of train was completed before dispatching it on the part of railway line Pančevo Most-Rakovica. In the event that railway undertaking does not have an organized inspection service in stations Pančevo Main St., Rakovica and Belgrade Marshalling Yard, and that technical inspection of trains composed of loaded or empty RID marked wagons has not been performed, such train cannot operate on the part of railway line Pančevo Most -Rakovica.

Freight trains, which have loaded or empty RID marked wagons, must in no case operate in the direction Belgrade Center - Pančevo Most.

# 2.4.5 Bridge Restrictions

There are no bridge restrictions in terms of specifically defined requirements apart from those arising from the bridge structural parameters. Exceptionally, until the construction of the fifth longitudinal bridge girder into the construction of "Pančevo Most" across Danube river, on the railway line Belgrade Centre – Pančevo Main St. – Vršac – State Border, between location on junction Pančevo Most—Krnjača Most all assemblies of two freight trains are prohibited on "Pančevo Most".

#### 2.4.6 Maximum Train Weight Restrictions

The maximum train weight for the trains running on the Niš – Dimitrovgrad – State Border – (Dragoman) is restricted to 1200 tonnes.



#### 2.4.7 Train Traction Restrictions

On the Stara Pazova – Novi Sad – Subotica line section, trains with diesel traction must not be dispatched. The exception from this rule are the trains of railway undertakings performing construction, reconstruction or maintenance of railway infrastructure. In case of trains that, in addition to the train locomotive, also contain the additional work locomotives, i.e. double heading locomotives, such locomotives must run within the train composition along the entire Batajnica – Novi Sad – Subotica line section.

#### 2.4.8 Train Speed Restrictions

On the Batajnica – Stara Pazova – Novi Sad – Subotica line section, the speed of freight trains is 90 km/h. The exception from this rule are the trains of railway undertakings performing construction, reconstruction or maintenance of railway infrastructure.

# 2.5 Availability of the Infrastructure

All railway lines operated by IŽS are open to railway traffic from 0.00 h to 24.00, except for the lines on which the traffic due to technical condition is temporary impossible/ or with the Decision of the Government of the Republic of Serbia the consent for the suspension of public transport of passengers and goods on the part on the railway infrastructure was given ("Official Gazette of the RS"no.80/2016), and they are listed in Appendix 6. Service points are open for railway traffic permanently, as some of them may have limited operating hours envisaged for the effective staff of the traffic service, as stated in Appendix 6. Details about mentioned working time are published in the timetable material, and for more datils please contact:

"Infrastructure of Serbian Railways" JSC Traffic Department 6 Nemanjina Street, 11 000 Belgrade, Serbia Tel/Fax: +381 11 3618 214

E mail: sektor.sp@infrazs.

Exceptionally, on the railway lines with limited hours of operation where mentioned staff is working in limited operating hours, train operations can take place outside the mentioned hours when trains have to operate via auxiliary routes due to the occurrence of an accident or incident. Appendix 3.9 contains an overview of auxiliary routes that may be used as alternative to regular ones. Certain lines that may be used as auxiliary routes can be of different class from the line class along the regular routes with respect to permitted loads per axle or m'.

A railway operator may also submit a request for train path allocation outside the operating hours of the line or railway service points, in which case such railway operator has to bear all the costs of entire traffic organization for longer operating hours of the line, i.e. service points.

If several railway operators are using longer operating hours, they will jointly bear the costs.

Infrastructure Manager is responsible for maintenance, overhaul and modernization of the infrastructure in order to provide appropriate service and safe performance of transport operations. In this respect, IŽS plans regular maintenance of the lines that affect the availability of infrastructure, in the sense of closure of specific line sections for a specific time period or introduction of temporary train speed restrictions.

The infrastructure use restrictions required for regular infrastructure maintenance are part of the capacity allocation process and are published within the timetable documents, in the timetable booklets (KRVs).

IŽS will issue for all railway operators a 3-months' prior notice of any planned longer works to be performed on the railway infrastructure and which could affect the transport operations and the timetable due to the speed restrictions, route changes, use of buses instead of trains for the carriage of passengers, etc.

For all freight trains running in the South-North and transit the part of railway infrastructure between station Velika Plana and node Belgrade, regular routing is across the railway line (Belgrade)-Rakovica-Jajinci-M.



Krsna-V. Plana and the compiling of paths in done in this way. Exceptionally this rule cannot be applied during the planned works on reconstruction of above-mentioned railway line.

For all freight trains running in the south-north and transit the part of railway infrastructure between node Belgrade and station Velika Plana, regularly routing is across the railway line (Belgrade)-Resnik-Mladenovac-V. Plana and the compiling of paths in done in this way.

The railway lines on the territory of Kosovo and Metohija are under interim supervision of UNMIK, according to the Temporary Agreement between ZTP Beograd and UNMIK Railways of 31/05/2002 (ref. number 300/2002 - 153 of 31/05/2002), wherefore the path allocation requests for this territory will not be taken into consideration.

# 2.6 Infrastructure Development

Railway infrastructure, which is managed by IŽS, is constantly being renewed and modernized, in order to enable to the users the best possible service quality.

Development projects of the infrastructure are defined within Strategic plan of IŽS (Decision of the Assembly of Joint stock company for public railway infrastructure management "Infrastructure of Serbian Railways" JSC, Belgrade no. 5/2017-116-49 from June 29, 2017)", which is prepared on the base of the National program of the infrastructure ("The Official Gazette of RS", no. 53/17). Development of the railway infrastructure is directed towards the modernization of the lines which are part of the Pan-European corridor.

Possibility of the realization of the planned works depend upon the amount of the financial means, which are provided from the state budget of the Republic of Serbia and from the amount provided from the other sources of financing.

Appendix 3.11. contains a list of development projects.



# 3. ACCESS CONDITIONS

#### 3.1 Introduction

This chapter of the Network Statement describes the conditions associated with access to the railway infrastructure managed by the IŽS. These conditions also apply to the part of freight corridors passing through the railway infrastructure managed by the IŽS.

# 3.2 General Access Requirements

A railway undertaking can provide transport services on IŽS railway infrastructure based on:

- valid license for carriage in railway transport over the infrastructure, issued by Directorate for Railways (hereinafter: DR),
- valid certificate on safety for carriage in railway transport,
- allocated capacity path and contract on provision of access to and use of public railway infrastructure concluded with the infrastructure manager.

Requirements for the submission of application for license, safety certificate and thereof contents are stipulated in the Law on Railways ("Official Gazette of RS" No 41/18 and 62/23), Law on Safety in Railway Traffic ("Official Gazette of RS" No 41/18), Rules on transport licenses in railway traffic ("Official Gazette of RS" No 53/19), Rules on joint safety methods for evaluation of compliance with the requirements for obtaining of safety certificates and safety management system elements ("Official Gazette of RS" No 32/21) and Rules on transport safety certificate forms ("Official Gazette of RS" No 63/19).

# 3.2.1 Conditions for Applying for Capacity

Request for train path allocation can be submitted by a railway undertaking or an international group of railway undertakings or other persons or legal entities, such as competent authorities, consignors and forwarding agents and operators in combined transport, having interest in provision of public service or having commercial interest in the allocation of railway infrastructure capacity.

Where a train path is allocated to an applicant other than a railway undertaking, the contract on the use of railway infrastructure shall be concluded between the infrastructure manager and the railway undertaking hired by such applicant.

If a request has been submitted after a specified deadline, train path in accordance with remaining capacities will be offered to the applicant, and if there are no capacity constraints, a new path will be subsequently created.

#### 3.2.2 Conditions for Access to the Railway Infrastructure

Services of carriage in railway transport may be provided by a company, other legal entity or entrepreneur registered for provision of public transport services or transport for own purposes, incorporated in the Republic of Serbia, subject to the submission of evidence of fulfilment of the conditions related to good reputation, financial capability, and competence, and the cover for civil liability.

The license for carriage in railway transport and the certificate on safety is issued by DR or a competent authority of another country, based on reciprocity, with which country Serbia has signed an intergovernmental agreement on mutual recognition of certification.

Transport on railway infrastructure may be performed by railway undertakings meeting the requirements referred to in paragraph 1 hereof, who signed the Contract for use of public railway infrastructure. The Contract for use of public railway infrastructure regulates the mutual rights and obligations between the infrastructure manager and railway undertakings and they are concluded in line with article 19 of the Law on Railways.



#### 3.2.3 Licenses

Directorate for railways issue transport license: for transport of goods/passengers and for transport for own purposes.

Transport License is issued to applicant, company, other legal entity whose main registered activity is for provision of railway transport of good and/or passengers, or to a company or other legal entity who performs or will perform transport for own purposes, incorporated in the Republic of Serbia, subject to the submission of evidence of fulfilment of the conditions related to:

- a) good reputation,
- b) financial capability,
- c) proficiency and
- d) cover for civil liability in line with the Law on Railways.

Details related to licensing of railway undertakings are set from article 81.to article 85. of the Law on Railways.

Contact of competent institution for issuance of license is:

Directorate for Railways 6 Nemanina St., 11000 Belgrade The Republic of Serbia Manager's Office tel. (011) 361 68 66 fax (011) 361 83 46 e-mail: kontakt@raildir.gov.rs

web page: www.raildir.gov.rs

# 3.2.4 Safety Certificate

The railway undertaking must have safety certificate for transport to be allowed to access infrastructure. The type and scope of operations of railway undertaking related to certificate are specified in the safety certificate.

The safety certificate may include the entire network or certain part thereof.

Safety certificate is consisting of:

- 1) part A confirming the acceptance of railway security management system of railway undertaking;
- 2) part B confirming the acceptance of provisions adopted by railway undertaking in order to meet the specific requirement set for transport safety on appropriate network; these requirement may include the application of technical specification, the national safety regulation and internal regulation of railway undertaking, the acceptance of employee's certificates and permissions for usage of rolling stock used by that railway undertaking.

Directorate for Railways is responsible for issuance of safety certificate for transport in set form and in the form of decision. The decision to issue or to refuse to issue safety certificate for transport is ultimately in the administrative procedure and a dispute can be brought against it at Administrative Court.

The validity period of the safety certificate for transport is five years and can be renewed at the request of the holder.

Directorate for Railways determine in more detail forms of safety certificate for transport, numbering of forms of safety certificate for transport in line with European identification number, the application form for



issuance of safety certificate for transport and instructions for its completion, as well as necessary documentation enclosed with the request for issuance of safety certificate for transport.

Provisions regarding safety certificate for transport are set in Law on Railway Transport Safety.

Contact of competent institution for issuing safety certificate is:

Directorate for Railways 6 Nemanjina St., 11000 Belgrade The Republic of Serbian Manager's Office tel. (011) 361 68 66 fax (011) 361 83 46 e-mail: kontakt@raildir.gov.rs

web page: www.raildir.gov.rs

#### 3.2.5 Coverage for Civil Liability (Insurance)

One of the conditions for issuing a transport license is the fulfillment of the requirements related to civil liability coverage (Insurance).

The requirement relating to civil liability coverage for a company or other legal entity that is registered for the public transport of goods and / or passengers, or performs or will carry out transport for its own purposes, is fulfilled if it is adequately insured or has adequate guarantees under market conditions for coverage, in accordance with legal requirements and confirmed international treaties, for their liability in the event of an accident.

Civil liability coverage may not be required to take effect before the railway undertaking starts operating the service.

## 3.3 Contractual Arrangements

#### 3.3.1 Framework Agreement

The Infrastructure Manager and an applicant may, by way of exception, draw up a framework agreement on the use of capacity on the relevant railway infrastructure for a period longer than the period of validity of the timetable.

The Framework Agreement between the infrastructure manager and the applicant shall contain the characteristics of the infrastructure capacity for which the applicant applied and which he was offered for a time period exceeding the period of validity of one timetable.

The Regulation on the Manner of Conclusion and Content of Framework Agreements for Allocation of Railway Infrastructure Capacity lays down the procedures, content and criteria relating to the framework agreements for the allocation of railway infrastructure capacity, as well as the obligations of the infrastructure manager regarding information regarding the framework capacity.

At present, the infrastructure manager does not offer the possibility of concluding a framework agreement with the applicant. However, it intensively conducts the activities aimed at defining the procedures so as to have this option open in the near future.

#### 3.3.2 Contracts with RUs

The Law on Railway of the Republic of Serbia stipulates the obligation of concluding a contract on the use of infrastructure that allows railway undertakings to use railway infrastructure. Contracts for use of public



railway infrastructure regulate in more detail the mutual rights and obligations of infrastructure managers and railway undertakings related to guaranteeing the technical and other conditions for safe transport operation, the application of regulations governing the transport of dangerous goods, as well as payment of access charges and charges of services. Contracts for use of public railway infrastructure are concluded under non-discriminatory and transparent conditions.

Contracts on the use of infrastructure are concluded no later than 1 (one) month prior new timetable enter into force or immediately after the allocation of ad hoc train path.

If during the validity period of Contract for use of public railway infrastructure, the railway undertaking through an authorized person submit ad hoc request in approved way for allocation of train path, it is considered that addendum of that contract is concluded at the moment of allocation of requested train path by infrastructure manager.

For other services (basic, additional and accompanying) provided by infrastructure manager special contracts are concluded.

#### 3.4 Specific Access Requirements

## 3.4.1 Rolling Stock Acceptance

Railway undertaking may use only the rolling stock that complies with the technical regulations and standards. Rolling stock shall, by virtue of their structure and technical condition, ensure safety of transport on the infrastructure, safety of transported persons and goods, safety of staff, and shall meet the health and environment protection requirements.

All requirements relating to rolling stock and thereof use on the railway infrastructure of IŽS are set forth in the Law on Railway Safety and Interoperability ("Official Gazette of the RS", no. 41/18) and Law on Railway Traffic Safety ("Official Gazette of the RS",no.41/18). Railway undertaking shall be responsible for the technical condition, maintenance and operation of the rolling stock.

## 3.4.2 Staff Acceptance

Railway undertaking shall be responsible for ensuring that his staff meets the requirements stipulated by the Law on Railway Safety ("Official Gazette of the RS", No. 41/8) and applicable by-laws.

The railway undertaking's train manning shall be familiar with the official language in the Republic of Serbia.

Railway undertaking shall be responsible for staff training, validity of periodical knowledge tests, knowledge of track condition and local conditions at stations/stops. Railway undertaking is obliged in that respect to abide by the applicable legislation of the Republic of Serbia.

## 3.4.3 Exceptional Transport

A load shall be considered special if due to its external dimensions, weight or properties, and with respect to the station installations or wagons in transport by one of the railways participating in transport, it causes particular difficulties, wherefore it is received for transport only under special technical or operating conditions. Carriage of special loads in domestic and international railway transport, as well as the conditions under which such carriage may take place, shall be approved by the Infrastructure Manager whose railway infrastructure will be used for transport. IŽS provides the special loads service (for vehicles or goods) in accordance with the provisions on transport of special loads set forth in the Rules on Transport of Special Loads ("Official Gazette of the RS", no. 6/17).

IŽS shall be responsible for the allocation of capacity and defining the conditions for transport of special loads.



In addition to what was stated above, the railway undertaking in international transport shall comply with the provisions of UIC 502.1 and 502.2, governing the process of approval of requests for transport of special loads. The railway undertaking shall submit a request for transport of loads to the relevant department of IŽS. Special loads will be accepted for transport only if special operating and technical conditions are met. For more details on transport of special loads please refer to Chapters 4 and 5 of this Network Statement.

For more details on transport of special loads please contact:

Infrastructure of Serbian Railways"JSC Traffic Department 6 Nemanjina Street 11000 Belgrade Serbia

Tel.: +381 11 3618 214 Fax: +381 11 36<u>16 814</u> <u>sektor.sp@</u>srbrail.rs

## 3.4.4 Transport of Dangerous Goods

Transport of dangerous goods by rail in the Republic of Serbia shall be performed in accordance with: Annex C to Convention concerning international carriage by rail (-COTIF) - Regulations governing the international carriage of dangerous goods by rail (RID); the Law on the Transport of Dangerous Goods; the by-laws based on LTDG and other regulations in the Republic of Serbia.

The Ministry of Construction, Transport and Infrastructure is responsible for performance of administrative, inspection, technical and other expert activities in the field of transport of dangerous goods in the Republic of Serbia(www.utot.gov.rs).



## 4. CAPACITY ALLOCATION

#### 4.1 Introduction

Pursuant to the Law on Railways and Decision of the Government of the Republic of Serbia on incorporation of Joint Stock Company for Public Railway Infrastructure Management and the Company's Articles of Incorporation, "Infrastructure of Serbian Railways" JSC performs the activities of public railway infrastructure management and is responsible for allocation of infrastructure capacities for the purposes of international and domestic transport in a transparent and non-discriminatory manner, provided that all legal provisions on the conditions for access and use of railway infrastructure set out in Chapter 3 of this Network Statement have been previously fulfilled.

## 4.2. Description of infrastructure capacity allocation procedure

The Infrastructure Manager normally allocates the train paths once a year, upon reconciling the train path allocation requests in the timetabling process, not exceeding the Timetable validity period.

Allocation of infrastructure capacities in the form of a train path is carried out in accordance with the procedures specified in this document for:

- infrastructure capacities allocation procedure for the new Timetable,
- infrastructure capacities allocation procedure during Timetable validity period (including train path allocation on ad hoc request).

A Railway Undertaking may not assign the allocated train path to another Railway Undertaking. Train path trading is prohibited. Train path user will pay a charge for the use of railway infrastructure and for railway traffic organization and control.

The Government of the Republic of Serbia sets out the Methodology for valuation of elements for determining the charges for the use of railway infrastructure. The Decree on methodology for valuation of elements for determining the charges for the use of railway infrastructure is published in the "Official Gazette" of RS" No 122/14. For additional services, a train path user will pay a charge in accordance with the Infrastructure Manager's formal decision.

#### How to apply?

Request for infrastructure capacity allocation can be submitted by railway undertakings using the train path request form, which is available in Appendix 4.1, and published on IŽS we<u>bsite: www.</u>infrazs.rs.

When submitting the request, the RU is obliged to submit the following technical data for each traction vehicle series: series, description (axle layout), length (mm), weight (t), maximum speed (Vmax), inertia factor, resistance formula (coefficients a, b and c), traction diagram and braking diagram (tabular and graph presentation), traction type (diesel or electric), as per template provided in Appendix 4.1.b. The requested data are input data for capacity allocation, i.e. for software based timetabling. The data are submitted once for each traction vehicle as well as in case of change of data. If within the same series there are traction vehicles with different technical properties ("subseries") the data need to be provided for each "subseries".

Requests are submitted according to procedures defined under section 4.5.

The request should contain the following data:

- Full registered name of the Railway Undertaking (TIN, company identification number),
- Train type (for passenger transport, freight, empty, locomotive, and similar),
- The desired time of train departure from the departure station and the time of train arrival to the terminal station,
- Traffic route and transport route,



- Necessary stops with minimum lengths of delays,
- Traffic period and days (traffic calendar),
- Series and number of wagons/series and number of train units,
- Train length and mass (length in meters, mass in tons),
- Type and serial number of the traction vehicle (traction passport),
- Additional locomotives (type and serial number) and on which section,
- Maximum train speed,
- Braking type,
- Special notes, such as vehicle shunting, change in train composition, implementation of connections, crew change, type of intermodal transport unit, type of dangerous goods (UN number, number for marking of danger or, for Class 1 dangerous goods, the subclass and compatibility group for substances and items, NHM code with minimum 6 digits and the name of dangerous goods based on RID), exceptional consignments, handover procedures on border crossings, technical hold ups (inspection, water supply, removing of waste and similar) and the required time period, the need for additional track capacities (storing, preheating/cooling, train formation and similar), the need for access to other facilities for provision of additional services and similar.

Upon the request of IŽS, a Railway Undertaking will be required to provide all the missing data within five working days, otherwise the request for capacity allocation will not be considered as submitted.

A request for capacity allocation submitted to IŽS on time and containing all the necessary elements makes a basis for timetabling and train path allocation. If a Railway Undertaking changes the request completely or partially after the determined deadlines for request submission it assumes the risk of not having the request granted.

After the annual timetable drafting process has been completed, the remaining available capacities will be allocated according to the deadlines defined in Appendix 4.3 according to the sequence of request submission.

## Manner of capacity allocation

IŽS decides on capacity allocation taking into account all legally valid requests and legal provisions in force. In accordance with the Law on Railways, the procedures and deadlines in capacity allocation have been determined under point 4.5 of the present Network Statement.

Defining of procedures and deadlines in capacity allocation is harmonized with Directive 2012/34/EU and its appendices, as well as the RNE recommendations from "Procedures for International Path Requests".

## Relevant bodies involved in the capacity allocation process and their responsibility

Bodies participating in capacity allocation process:

- IŽS "Infrastructure of Serbian Railways" JSC as Infrastructure Manager and capacity allocation body
- Railway Undertakings railway undertakings submitting capacity allocation requests
- RNE RailNetEurope body coordinating the allocation of international train paths and determining processes and deadlines for submission of international train path requests
- FTE ForumTrainEurope European organization of railway undertakings representing the European Forum for technical planning of international passenger and freight transport.

IŽS, as Infrastructure Manager and capacity allocation body, is a member of RNE and is actively involved in the activities of FTE.



## 4.3 Allocation of capacity for maintenance, including the allocation process

Allocation of infrastructure capacities for maintenance, renewal and modernization of railway infrastructure is an integral part of capacity allocation process. Aiming at maintaining a certain level of quality, safety and reliability of railway infrastructure, IŽS — Department for access to railway infrastructure will, during the timetabling process, reserve a part of infrastructure capacities for scheduled railway infrastructure maintenance, for specific time periods and specific line sections.

Periods reserved for scheduled railway infrastructure maintenance are published in the Timetable Booklet.

## 4.4. Impact of Framework Agreements

"Infrastructure of Serbian Railways" is currently not concluding framework agreements with interested applicants for allocation of infrastructure capacities.

## 4.5 Schedule for Path Requests and Allocation Process

Each year IŽS prepares a schedule for path request submission and capacity allocation which is applied in the annual timetabling process and in the capacity allocation process outside the annual timetabling process published in the Network Statement.

Railway Undertakings allocation requests for the new Timetable and during Timetable validity period should be submitted in the form defined in Appendix 4.1, to the following address:

By mail, to the following address:
"Infrastructure of Serbian Railways" JSC
Department for access to railway infrastructure
6, Nemanjina St
11000 Belgrade, Serbia
By e-mail: sektor.pzi@srbrail.rs

#### 4.5.1 Schedule of requests submission for new annual timetabling process

The Applicant submits a request for capacity allocation not earlier than 12 months and not later than 10 months before the new Timetable enters into force. Deadlines for requests submission regarding Timetable 2024/2025 which enters into force on December 15<sup>th</sup>,2024 with validity until December 13<sup>th</sup> 2025 are presented in Appendix 4.3.

For the needs of Railway Undertakings wishing to use additional capacities or to change parametres of already allocated train paths, the new capacity allocation during Timetable validity period is enabled by:

- Regular amendments of and supplements to the Timetable
- Special amendments of and supplements to the Timetable
- Train path allocation on ad hoc request

In the form defined by Articles 4.5.2 and 4.5.3 in this Network Statement.

# 4.5.2 Schedule of requests submission for train path allocation during annual Timetable validity period through regular and special amendments of and supplements to the Timetable

During the Timetable validity period, there are regular amendments of and supplements to the Timetable 5 times a year, in accordance with internationally determined terms which are presented in Appendix 4.4. Deadlines for submission of requests for capacity allocation are presented in the column 1, Appendix 4.4.

Requests for regular amendments of and supplements to the Timetable that are submitted after deadlines specified in the column 1, Appendix 4.4, will be considered as special requests and shall be included in



regular amendments of and supplements to only in case of existence of available infrastructure capacities and technical possibilities for their processing.

After the  $5^{th}$  regular amendments of and supplements to the 2024/2025 Timetable enter into force it will be only possible to submit ad hoc requests for capacity allocation.

Besides regular amendments of and supplements to the Timetable in accordance to the terms specified in the column 3, Appendix 4.4, Railway Undertakings may submit special request for infrastructure capacity allocation outside specified terms. If there is possibility for allocation of the requested capacities, consequent changes in the Timetable shall be considered as special amendments of and supplements to the Timetable.

## 4.5.3 Allocation of capacities during annual Timetable validity period on ad hoc request

Ad hoc requests for infrastructure capacity allocation are requests for allocation of single train path, which are submitted during annual Timetable validity period.

Infrastructure Manager is obliged to respond to ad hoc requests as soon as possible and not later than five working days upon receiving the request.

#### 4.5.4 Path Allocation and Coordination Process

IŽS will allocate the infrastructure capacity if the applicant fulfils the conditions for capacity allocation set out in the Network Statement and if the infrastructure capacity allows such allocation. IŽS will act in such a manner so as not to favour any applicant.

The following criteria will be applied in the path allocation process:

- Volume of service;
- Utilization of railway infrastructure;
- Volume of additional services provided by the IM in connection with the transport provided on the path;
- Business reputation;
- Public service obligation; and
- Quality of performed transport service in the previous period.

After the final deadline for submission of requests for the annual timetabling has expired, IŽS will initiate the capacity allocation process in a transparent and non-discriminatory manner.

Requests for capacity allocation received after the annual timetable drafting cannot affect draft alteration, except with the consent of the Railway Undertaking to whom the capacity has been originally allocated.

Allocated capacity can be used upon conclusion of Access Contract between IŽS and the Railway Undertaking submitting a request for capacity allocation.

Allocated capacity cannot be transferred onto another Railway Undertaking in accordance with the Law on Railways.

#### **Coordination process**

Every year at the beginning of the new annual timetabling process, IŽS will conduct consultations with railway undertakings on their plans for the timetable which will come into force in not less than 11 months (x-11). In the course of these consultations, IŽS will inform railway undertakings on major maintenance works, overhaul and modernization of railway infrastructure.

The coordination process is run by IŽS – Department for access to railway infrastructure, which is preparing and publishing the annual Timetable and preparing of all required working materials.



Upon the expiry of the final deadline for submission of requests for capacity allocation for the annual Timetable, IŽS – Department for access to railway infrastructure will start the coordination process, together with railway undertakings for the purposes of solving conflicting requests and their better harmonization, aiming to fulfil the needs of users as much as possible in a non-discriminatory and transparent way.

Timetable planning includes reviewing all received requests, including all restrictions imposed by IŽS and the scheduled infrastructure maintenance plans.

If the number of requests for allocation of the same infrastructure capacity exceeds the permitted capacity of the particular railway line, IŽS apply priority rules from 4.6.

Following the completion of the coordination procedure, IŽS will deliver the draft timetable to railway undertakings. Together with railway undertakings IŽS will perform the final consultations concerning the draft timetable. Railway undertakings must state, in written form, whether they accept, partially or completely, that is, do not accept, the Timetable.

Deadline for making the statement is one month from the day of the draft submission, at the latest.

After the expiry of the deadline for making the statement, IŽS will define the Timetable according to the requests submitted on time and it will be deemed that the train paths have been allocated.

IŽS will subsequently allocate the remaining available capacities according to requests received after the final deadline, in the order of their receipt.

## **4.5.5 Dispute Resolution Process**

IŽS will initiate the dispute resolution process upon delivery of written complaints by railway undertakings, relating to complete or partial acceptance/non-acceptance of the proposed Timetable.

Complaints are to be addressed to IŽS:

- By mail, to the following address:
"Infrastructure of Serbian Railways" JSC
Department for access to railway infrastructure
6, Nemanjina St
11000 Belgrade, Serbia

- By e-mail: sektor.pzi@srbrail.rs

IŽS will evaluate all complaints and objections and conduct consultations with railway undertakings aiming to fulfil their requests.

If a mutual solution is not found, IŽS will determine the capacity and inform the railway undertakings of this. If after the request coordination it is still not possible to satisfy all the requests for capacity allocation, IŽS will be obliged to announce that the said line section is congested.

Railway undertakings can appeal to the Directorate for Railways with respect to IŽS decision.

A potential appeal of a Railway Undertaking cannot be the reason to delay the process of Timetable adoption and coming into force.

#### 4.6 Congested Infrastructure

If in the coordination process IŽS is unable to adequately satisfy all railway undertaking requests due to capacity limitations, IŽS will declare the requested infrastructure capacity to be "congested".



In cases when IŽS declares infrastructure "congested", it will conduct an analysis of capacities on congested infrastructure and define limitations due to which it was not possible to satisfy capacity allocation requests as well as propose a plan to enhance the particular capacity.

Infrastructure capacity will not be considered congested if the infrastructure capacity cannot be allocated due to the execution of works on the infrastructure maintenance, modernization, construction and reconstruction.

If the number of requests for allocation of the same infrastructure capacity exceeds the permitted capacity of a specific railway line, and if congested infrastructure is declared regarding that line, i.e. the part of that line, IŽS will, in an effort to allocate the train paths, apply priority rules according to the following order:

- 1) BG: VOZ
- 2) passenger trains in international traffic
- 3) passenger trains in domestic traffic
- 4) international freight trains
- 5) other freight trains

Considering the above mentioned priorities, the train path allocation process will be carried out according to the following rules:

- Requests for train paths of regular trains have the priority over the requests for train paths of special trains and trains transporting exceptional consignments;
- Requests for train paths according to framework agreements have the priority over new requests;
- Requests for train paths for a longer time period of service have the priority over requests for train paths for a shorter time period;
- Requests for train paths for a longer route have the priority over train paths for a shorter route.

If a Railway Undertaking considers that its rights were withheld, it can appeal to the Directorate for Railways.

#### 4.7. Exceptional Transports and Dangerous Goods

#### **Exceptional Transports**

Transport of exceptional consignments is transport in the course of which there is a deviation from at least one technical standard applied on the given infrastructure, such as for example, axle load, railway vehicle gauge, loading gauge and similar. Taking into account all the elements required for the transport of an exceptional consignment, IŽS will decide whether the requested infrastructure capacity will be allocated and under what conditions.

Deadline for submission of request for transport of exceptional consignments is not later than 20 days in domestic and 30 days in international traffic prior to service provision. Decision on the request for transport of exceptional consignments shall be made as soon as possible and not later than 15 days upon submission of the request.

Detailed information can be obtained at the below address. Deadline for capacity allocation will be as soon as possible. IŽS will decide whether it is possible to accept a certain transport and under which conditions.

Requests are submitted to:

"Infrastructure of Serbian Railways" JSC Traffic Department 6, Nemanjina St 11000 Belgrade, Serbia Tel.: +381 11 3618 214

Fax: +381 11 3618 214 Fax: +381 11 3616 814 E-mail: sektor.sp@srbrail.rs



In their request for capacity allocation, railway undertakings are required to list all the necessary information on the exceptional consignment which is being transported, regardless of whether it is a capacity allocation process for the annual Timetable or an ad hoc capacity allocation.

## **Dangerous Goods Transport**

Dangerous goods transport on railway infrastructure operated by IŽS is regulated by international and national regulations in the field of dangerous goods transport, in accordance with point 3.4.4 of the Network Statement.

Based on clauses 1.4.2.2.5 and 1.4.3.6 of *RID* and Article 23, para 4, item 2) and Article 29 para 2 of the Law on Transport of Dangerous Goods, a Railway Undertaking is obliged to report every consignment of dangerous goods to railway Infrastructure Manager.

Reporting of dangerous goods transport can be done by phone: +381 11 3618 288 and in writing to the below address. The below address can be also used for more detailed information:

"Infrastructure of Serbian Railways" JSC 6, Nemanjina St, 11000 Belgrade Central Operations Unit Main dispatcher for dangerous goods transport Tel.: +381 11 3618 288

E-mail: <a href="mailto:rid1@srbrail.rs">rid1@srbrail.rs</a>; <a href="mailto:glavni.riddisp@srbrail.rs">glavni.riddisp@srbrail.rs</a>;

For the purposes of safe transport of dangerous goods on IŽS network, a Railway Undertaking is obliged to:

- Report each transport of dangerous goods consignment in real time i.e. immediately before the commencement of transport or at acceptance from the successive carrier.
- Report completion of transport of dangerous goods consignment in real time i.e. at the moment of
  completion of transport after the completed handover of consignment to the consignee at the
  destination station or upon handover of consignment to successive carrier.

Railway Undertakings are responsible for obtaining appropriate consents regarding the safety of dangerous goods transport.

Pursuant to clauses 1.4.2.3.1 of *RID* and Article 24 para 2 item 1) of the Law on Transport of Dangerous Goods, the consignee of dangerous goods in railway transport is obliged not to postpone the acceptance of dangerous goods consignment which is resulting in the railway undertaking's obligation not to postpone the handover of dangerous goods consignment after having performed the transport service.

Railway Undertaking is obliged to, after having accepted the dangerous goods consignment for transport at the forwarding station, immediately start the process of transporting the said consignment without any additional delays at the station, except for traffic reasons, accident or incident etc. Phased collecting of wagons loaded with dangerous goods (and non-cleaned empty wagons which were previously loaded with dangerous goods) in the forwarding station for the purposes of subsequent dispatching is prohibited due to the safety in transport of dangerous goods. The process of transport of dangerous goods (acceptance of consignment for transport from the consignor, dispatching, transport and handover of consignment to the consignee) must be performed in accordance with the technologically specified time in order to avoid the potential safety risks in transport.

After the customs clearing of consignment, it is exceptionally permitted for the consignment to remain on station sidings but only for a time period which is necessary to organize the dispatching and continuing of planned transport route, or handover to the consignee in accordance with the specified technological process for station operation i.e. Station Regulations, Part II.

## Obligation to announce the transport of dangerous goods Class 1 and Class 7



Exceptionally in transport of dangerous goods Class 1 and Class 7, a Railway Undertaking is obliged to submit to the Infrastructure Manager, in writing (Central Operational Unit – Main dispatcher for transport of dangerous goods) an announcement for the said transport in the time period which is not less than 24 hours prior to the moment of acceptance for transport (entry onto IŽS network). Railway Undertaking may send the announcement of transport also in the form of an email with scanned documents to the following address: rid1@srbrail.rs.

The announcement should contain the following data and attachments:

- 1. Consignor
- 2. Forwarding station and country
- 3. Consignee
- 4. Destination station and country
- 5. Entry border station
- 6. Exit border station
- 7. Net quantity of dangerous goods and wagon number in the train loaded with dangerous goods
- 8. Name of goods (official name of the goods)
- 9. UN number, number for marking of danger (all, if there are several)
- 10. Data on persons hired according to the Decision of the Ministry of the Interior of the Republic of Serbia in the capacity of armed company (first and last name, ID document number, etc., from the Decision issued by the Ministry of the Interior of RS)
- 11. Buffer wagon
- 12. Number of the decision on transport and name of issuing state authority.

The announcement should also contain two appendices:

- Photocopy of the Decision on transport issued by a relevant state authority, and
- For Class 1 dangerous goods: Instructions on special safety measures (MSDS lists) from the manufacturer of Class 1 dangerous goods;
- For Class 7: instructions on measures that the Railway Undertaking should take in transport, restrictions and required data on planned transport route as well as measures in case of danger that are adequate in relation to the consignment in accordance with RID 5.4.1.2.5.2.

Permit for transport of Class 1 dangerous goods is issued by the ministry responsible for the interior affairs, and permit for transport of Class 7 dangerous goods is issued by the authority responsible for protection against ionizing radiation and nuclear safety in the Republic of Serbia (Article 7 of the Law on Transport of Dangerous Goods). The announcement of transport should also contain the basic data on the Railway Undertaking and the transport organizer if case of irregularities or emergency events in transport of dangerous goods. In terms of data it is mandatory to specify the first name, last name and mobile phone number of the person (employed with the Railway Undertaking and/or transport organizer) who is always available during the transport.

#### 4.8 Rules After Path Allocation

#### 4.8.1 Non-usage of allocated train path

In cases when a Railway Undertaking is not using the allocated train path envisaged by the Timetable, IŽS will, depending upon the non-usage percentage, charge the reservation of train path, that is, IŽS will cancel the allocated train path.

IŽS is monitoring the realization of allocated train paths, in such a way that IŽS is calculating the train path utilization degree for all the allocated train paths.

The utilization degree is calculated by dividing the realized train path number of one train with the allocated train path number of the same train, and the result is shown in percentages.

The degree of utilization of allocated train paths is calculated monthly, for the calendar month.



IŽS reserves the right to cancel the allocated train path if a train path is utilized less than 25% of the monthly quota, that is, less than 50% of the monthly quota in case of congested infrastructure.

For the allocated train paths where the degree of utilization is less than the borderline degree of utilization, IŽS will charge the non-usage of the capacity.

The borderline degree of utilization, according to the type of the trains, is given in the below table 6.

Table No 6. Borderline degree of utilization

Train type	Borderline degree of utilization [%]
Passenger trains	80
Freight trains	40
Facultative trains	10

Facultative train is a train which has set timetable but operates with special announcement (if needed).

Requests for train paths for all other trains will have priority over the request for train paths for facultative trains.

Infrastructure Manager will not grant facultative train paths on congested infrastructure.

In cases when the degree of utilization of the train path is below the borderline degree of utilization, the Infrastructure Manger will charge the full price of the train path for the used train paths, and for the non-used train paths, which represent the difference between the borderline degree of utilization and the degree of utilization of one train path, IM will charge for the reservation of the train path.

The charge for the reservation is 20% of the agreed train path price.

If the train path is not used in its entirety, as agreed in contract, the full price of the train path will be charged, according to the required elements.

#### 4.8.2. Rules of Cancellation

A Railway Undertaking may cancel the allocated train path as part of changes and amendments of the Timetable. If a Railway Undertaking cancels the allocated route or requires modifications of parameters for the already allocated train paths outside the deadlines set forth in Appendix 4.4 and if they are such that their implementation will result in freeing of infrastructure capacities, such as:

- Cancellation of a part of already allocated train path i.e. shortening of the train path while all other parameters of the allocated train path remain the same,
- Change in traffic regularity, such that the train is transferred from the regular train status into the facultative train status, or the prescribed number of train operating days is reduced,
- Reduction of train length,

IŽS will not charge the costs prescribed under the tariff system under item 5.10.

Cancellation of allocated train path is done in writing, to the following address:

- By mail:

"Infrastructure of Serbian Railways" JSC Railway Infrastructure Access Department



6, Nemanjina St 11000 Belgrade, Serbia - By e-mail: sektor.pzi@srbrail.rs

Cancelled train paths can be allocated to other railway undertakings by IŽS.

## 4.9. International Timetabling Process Redesign (TTR)

## 4.9.1. Objectives of TTR

RailNetEurope (RNE) and Forum Train Europe (FTE), supported by the European Rail Freight Association (ERFA) are currently working on a Redesign of the International Timetabling Process (TTR). The objective of TTR is to harmonise and improve the European rail timetabling system to significantly increase the competitiveness of railway transports.

TTR consists of different components, including in particular an improved planning of the distribution of infrastructure capacity (including temporary capacity restrictions) and the introduction of new capacity allocation processes.

The purpose is to better serve all market needs and achieve an optimised use of existing infrastructure capacity. In particular for passenger traffic it will mean earlier availability of the final timetable allowing earlier and more reliable ticket purchasing for passengers. For the majority of freight traffic, it will mean more possibilities for short-term path requests and thus more flexibility to better meet customers' needs.

Detailed information can be found on ttr.rne.eu and <a href="http://www.forumtraineurope.eu/services/ttr/">http://www.forumtraineurope.eu/services/ttr/</a>.

TTR is planned to be fully implemented for the timetable 2025 provided that it is supported by the European and national legal framework.



## 5. SERVICES AND CHARGES

#### 5.1 Introduction

Serbian legislation defined four types of services which railway undertakings can use with the aim of performing of transport operations on the allocated infrastructure capacity.

Categories of services offered by "Infrastructure of Serbian Railways" JSC to railway undertakings on the network are in line with the provisions of the Law on Railways and defined by the following documents:

- Decision on establishing of Joint Stock Company for Public Railway Infrastructure Management ("Official Gazette of RS" No 60/2015);
- Rulebook on organization and systematization of jobs at Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways";
- Methodology for valuation of elements for determining the charges for the use of railway infrastructure ("Official Gazette of RS" No 122/14).

The services that can be provided to railway undertakings are the following ones:

- 1. Minimum access package of services (hereinafter: the minimum package of services);
- 2. Basic services in services facilities including the access tracks to such facilities;
- 3. Additional services; and
- 4. Ancillary services.

Until the Government determines the Methodology for determining the price for access and the price for services and, based on it, the specific rules for calculation of the price for access and the price for services provided by the Infrastructure Manager, "Infrastructure of Serbian Railways" will apply the valid Methodology for valuation of elements for determining the charges for the use of railway infrastructure ("Official Gazette of RS" No 122/14), and according to this Methodology, where necessary, classification to the following service categories:

- category I: minimum package of services
- category IIa: package for track access to service facilities
- category IIb: package for provision of services in service facilities
- category III: package for additional services
- category IV: package for ancillary services

IM – "Infrastructure of Serbian Railways" JSC will enable all interested railway undertakings to use the minimum access package of services and track access to services facilities, in a non-discriminatory manner, provided that railway undertakings have fulfilled the requirements for rail transport service in accordance with the provisions of the Law on Railways and the signed Contract for the use of railway infrastructure. Railway Undertaking's requests for the use of facilities and services provided in such facilities may be rejected only if there are feasible alternatives enabling the railway undertakings to perform the transport of goods and passengers on the same or alternative transport routes under the economically acceptable conditions. According to the nature of distinction and type of activity, the former notion of service facility can be aligned with the notion of services facility in the entire text.

The use of all services facilities, additional and ancillary services provided by the IM – "Infrastructure of Serbian Railway—" JSC - will be enabled to all railway undertakings in a non-discriminatory manner and upon their request, and will be defined in a separate contract.

The use of services facilities not owned by the IM – "Infrastructure of Serbian Railways" JSC, as well as additional and ancillary services not provided by the IM – "Infrastructure of Serbian Railways" JSC, is subject to separate contracts with managers of the said facilities and service providers.



Based on the volume of services provided, as defined in items 5.2 to 5.10, Railway Undertaking pays a price for access and a price for the provided service to:

- "Infrastructure of Serbian Railways" JSC based on the Contract for the use of railway infrastructure and separate contracts;
- Other service providers based on separate contracts.

#### **5.2** Charging Principles

The basic principles underpinning the charging regime for the use of infrastructure are set forth in the Methodology for valuation of elements for determining the charges for the use of railway infrastructure ("Official Gazette of RS" No 122/14, dated November 11, 2014). The Methodology is defining, in more detail, valuation of elements for determining the level of charge for minimum package of services and package for track access to service facilities and provision of services in service facilities.

The methodology is based on the principle that railway undertakings should only bear the justified cost of IM operations and the costs arising from the efficient provision of services requested by the users.

This methodology is based on the economic principle of valuation of elements for determining of charge level known as marginal cost plus (MC+). It is a charge setting principle based on marginal costs increased by the mark-up. The selected principle enables covering of justified costs arising in provision of requested services and is favourable for the so called "network systems" (systems that require major capital investments such as telecommunications, energy, natural gas transportation, road transport and other means of transport).

Marginal costs are estimated based on the variable costs which, within the Methodology, includeshort-term marginal costs: track wearing, train movement control and signalling, consumption of energy sources and overheads.

The charge is set based on the following elements: line category (main, regional or local) used by train, use of railway nodes, train category (passenger or freight) and traction type (electrical or diesel).

The components of the total charge include charge for the minimum package of services (category I), charge for track access to service facilities (category IIa), charge for providing the services in service facilities (category IIb), charge for providing the additional services in service facilities (category III) and charge for providing the ancillary services in service facilities (category IV).

## 5.2 Minimum Access Package and Charges

## Minimum access package

Within the minimum package of services for the use of railway infrastructure, IŽS provides the following services:

- Handling of requests for capacity allocation;
- Right to use the allocated capacity:
- Use of infrastructure on the main running track (turnouts, tracks, railway nodes and lines),
- Train control including signalling, regulation of train movements, acceptance and dispatching of trains and communication regarding the train operations and provision of information on train movements;
- Use of electrical supply equipment, where available;
- Provision of all other information to implement or operate the service for which the capacity has been granted.

The access price includes the minimum access package of services. Railway Undertaking will pay the access price to "Infrastructure of Serbian Railways" JSC based on the Contract for the use of public railway infrastructure.



- Handling of requests for infrastructure capacity

Handling of requests for infrastructure capacity allocation is a part of the capacity allocation process described in Chapter 4. Principles, priorities and criteria for allocation of infrastructure capacity. Requests for infrastructure capacity allocation which have been submitted by railway undertakings are processed in mutual cooperation with railway undertakings, implementation possibilities are examined, contradictions resolved and the train path offer is prepared, which ultimately results in a Timetable.

- Right to use the allocated capacity

Provided that all necessary prerequisites for the train operation are in line with valid legal provisions on conditions for access to and use of railway infrastructure specified in Chapter 3 of the present Network Statement, the applicable legislation and the signed Contract for the use of railway infrastructure, Railway Undertaking is entitled to use the allocated capacity in the form of a train path.

- Use of infrastructure on main running track (turnouts, tracks, railway nodes and lines)

Use of infrastructure on main running track (turnouts, tracks, railway nodes and lines) on the allocated capacity enables the Railway Undertaking to perform train operations.

- Train control including signalling, regulation of train movements, acceptance and dispatching of trains and communication regarding the train operations and provision of information on train movements

Overall train traffic management, including signalling, train movement regulation, acceptance and dispatching of trains, communication regarding the train operations and provision of information on train movements using the telecommunication devices enables railway undertakings to perform train operations on the allocated train path.

- Use of electrical supply equipment

On its electrified railway lines IŽS enables a Railway Undertaking to use the electrical supply equipment for traction (without electricity).

- All other information to implement or operate the service for which the capacity has been granted

After the Timetable has been adopted and published, railway undertakings will be provided with all additional information required for the train operations within the minimum access package of services.

#### Charge for the minimum package of services (category I)

Charges for the minimum package of services for infrastructure access are defined based on the costs of railway traffic management and infrastructure capacities maintenance.

The level of unit charges is determined in relation to line category (main, regional, local), train category (passenger trains, freight trains) and traction type (diesel, electrical).

The charging units are:

- 1) Train km;
- 2) Gross tonne km.

Charge for minimum package of services (NKI) is determined according to the following formula:

$$NKI = (\sum VKM_{ijk} \cdot C_{VKM_{ijk}}) + F \cdot (\sum BRTKM_{ij} \cdot C_{BRTKM_{ij}})$$

Key:

i – Line category (main, regional, local)



j – Train category (passenger trains, freight trains)

k – Traction type (diesel, electrical)

 $(\sum VKM_{ijk} \cdot C_{VKM_{ijk}})$  - charge for the use of infrastructure capacities for the minimum package of services in relation to line category (i), train category (j) and traction type (k)

 $VKM_{ijk}$  - number of train km on the network in relation to line category (i), train category (j) and traction type (k)

 $C_{VKM}$  - charge per one train km in relation to line category (i), train category (j) and traction type (k)

F - factor depending on the train category (factor level depends on the train category impact on the level of infrastructure maintenance costs or the applied strategy for development of a particular segment of railway market)

 $(\sum BRTKM_{ij} \cdot C_{BRTKM_{ij}})$  - charge for wearing out of line and tracks during train passing in relation to line category (i) and train category (j)

 $^{BRTKM_{ij}}$  - number of gross-tonne km on the network in relation to line category (i) and category of the train (j)

 $C_{\it BRTKM}_{\it y}$  - charge per one gross-tone km in the function from the line category (i) and train category (j)

The level of charge for the path of one train depends on the train gross mass. Gross-tonne km, in the sense of the calculation of the level of charge for the path of one train, is defined as a product of train km and train gross mass, which implies the total mass of all working locomotives and the total mass of all hauled stock.

#### Freight trains with electrical traction

Line category	Charge per one train km [RSD/TKM]	Charge per one gross-tonne km [RSD/GTKM]
Main line	93,50	0,0858
Regional line	63,77	0,0781
Local line	10,53	0,0361

#### Freight trains with diesel traction

Line category	Charge per one train km [RSD/TKM]	Charge per one gross-tone km [RSD/GTKM]
Main line	79,04	0,0858
Regional line	51,24	0,0781
Local line	10,07	0,0361



#### Passenger trains with electrical traction

Line category	Charge per one train km [RSD/TKM]	Charge per one gross-tone km [RSD/GTKM]
Main line	62,33	0,0686
Regional line	42,51	0,0625
Local line	7,02	0,0289

#### Passenger trains with diesel traction

Line category	Charge per one train km [RSD/TKM]	Charge per one gross-tone km [RSD/GTKM]
Main line	52,69	0,0686
Regional line	34,16	0,0625
Local line	6,71	0,0289

Factor depending on the train category [F] – applied to all types of freight trains and passenger trains and it amounts to 1.0.

#### Charge for track access and use of service facilities (categories Ia and IIb)

Charges for track access and use of service facilities are defined based on the costs of railway traffic regulation and infrastructure capacities maintenance.

The level of unit charges is determined in relation to railway node (Subotica, Novi Sad, Beograd, Lapovo, Niš, Pančevo), train category (passenger trains, freight trains) and traction type (diesel, electrical).

The charging units are:

- 1) Number of trains;
- 2) Gross tonne km:
- 3) Number of serviced trains.

The charge is levied for the trains starting and finishing their running in the railway node, that is, transiting the railway nodes, as well as for the trains in railway nodes.

Serviced train is a train to which a service of using the service facilities in a railway node has been provided aiming to use the services of technical-wagon unit in train inspection, maintenance of wagons, railway vehicles and machinery.

## Access and use of service facilities (categories IIa and IIb)

Charge for use of infrastructure when the trains are starting and finishing their running in the node, that is, when they are transiting railway nodes (NKIIa), as well as for servicing of the trains in the railway nodes (NKIIb) is determined as follows:

$$NKII = NKIIa + NKIIb$$

$$Key:-NKIIa = (\sum Va_{lmn} \cdot C_{Va_{lmn}}) + (\sum BRTKM_{lm} \cdot C_{BRTKM_{lm}})$$



$$NKIIb = \sum Vb_{lm} \cdot C_{Vb_{lm}}$$

1 - Node (Subotica (1), Novi Sad (2), Beograd (3), Lapovo (4), Niš (5), Pančevo (6))

m – Train category (passenger trains, freight trains)

n – Traction type (diesel, electrical)

 $(\sum Va_{lmn} \cdot C_{Va_{lmn}})$  - charge for the use of infrastructure capacities in the node for the package of services IIa in relation to node (l), train category (m) and traction type (n)

 $Va_{lmn}$  - number of trains in the node in relation to node (1), train category (m) and traction type (n)

 $C_{Valmn}$  - charge per one train of used infrastructure capacities in the node, in relation to node (l), train category (m) and traction type (n)

 $(\sum BRTKM_{lm} \cdot C_{BRTKM_{lm}})$  - charge for wearing out of railway line and railway track when using the infrastructure capacities in the node, for package of the services IIa in relation to node (l) and train category (m)

 $\mathit{BRTKM}_{\mathit{lm}}$  - number of gross-tonne km in the node, in relation to node (l) and train category (m)

 $C_{BRTKM_{Im}}$  - charge per one gross-tonne km in the node in relation to node (l) and train category (m)

 $\sum_{l}^{Vb_{lm}} \cdot C_{Vb_{lm}}$  - charge for providing the services of train "servicing" in the node, for package of services IIb, in relation to node (l) and train category (m)

 $Vb_{lm}$  - the number of trains which were provided the service (which were "serviced") in the node, in relation to node (1) and train category (m)

 $C_{Vb_{lm}}$  - charge per one train, "serviced" in the node, in relation to node (l) and train category (m)

#### Freight trains with electrical traction

Node	Charge for the use of infrastructure capacities in the node per one train [RSD/train]	Charge per one gross-tonne km in the node [RSD/GTKM]
Novi Sad	3.658,76	0,0801
Beograd	4.302,04	0,0894
Lapovo	4.987,87	0,0744
Niš	5.422,50	0,1171
Pančevo	3.257,01	0,0911
Subotica	4.097,11	0,0497

#### Freight trains with diesel traction

Node	Charge for the use of infrastructure capacities in the node per one train [RSD/train]	Charge per one gross-tonne km in the node [RSD/GTKM]
Novi Sad	3.607,21	0,0801
Beograd	4.145,57	0,0894
Lapovo	4.935,40	0,0744
Niš	5.293,94	0,1171
Pančevo	3.196,24	0,0911
Subotica	3.944,07	0,0497



#### Passenger trains with electrical traction

Node	Charge for the use of infrastructure capacities in the node per one train [RSD/train]	Charge per one gross-tone km in the node [RSD/GTKM]
Novi Sad	2.439,17	0,0534
Beograd	2.868,03	0,0596
Lapovo	3.325,25	0,0496
Niš	3.615,00	0,0781
Pančevo	2.171,34	0,0607
Subotica	2.731,41	0,0332

#### Passenger trains with diesel traction

Node	Charge for the use of infrastructure capacities in the node per one train [RSD/train]	Charge per one gross-tone km in the node [RSD/GTKM]
Novi Sad	2.404,81	0,0534
Beograd	2.763,71	0,0596
Lapovo	3.290,27	0,0496
Niš	3.529,29	0,0781
Pančevo	2.130,82	0,0607
Subotica	2.629,38	0,0332

## 5.4 Additional Services and Charges

Additional services include:

- Supply of electricity for train traction;
- Preheating of the passenger trains, water supply, etc.;
- Modified contracts for the service:
  - (1) control of transport of dangerous goods,
  - (2) assistance in transport of special trains (exceptional consignments).

Use of the above mentioned services provided by IŽS will be enabled to all railway undertakings that have been allocated a minimum access package of services, in a non-discriminatory manner and upon their request.

Railway undertakings must present the request for the use of additional services in the capacity allocation process, please refer to Chapter 4.

In order to be able to use the above services a Railway Undertaking is obliged to conclude a separate contract with IŽS or with another service provider and pay the charge for provided service in accordance with the provisions of such contract.

More detailed information on provision of additional services can be obtained from IŽS.

"Infrastructure of Serbian Railways" JSC Railway Infrastructure Access Department 6 Nemanjina St



11000 Belgrade, Serbia Tel: +381 11 3618 214 Fax: +381 11 36<u>16 814</u> <u>sektor.pzi@</u>srbrail.rs

The level of charges for additional services provided by Infrastructure Manager is determined based on the costs incurred during the provision of these services.

Charges for using the additional services are applied in a non-discriminatory manner for all the railway undertakings, that is, service users.

When determining the level of prices the time norms for performing of tasks were used in accordance with the Methodology for determining the required number of workers for performing the planned scope of work ("Official Gazette of ŽTP Beograd" 10/85) and the price for hiring of staff according to the Methodology for calculation of labour sales price per effective hour for the employees of "Infrastructure of Serbian Railways" (Decision of the Board of Directors 4/2015-53-17 dated 29.12.2015) and other valid railway regulations and documents.

The prices of additional services are determined in accordance with the Methodology for valuation of elements for determining the charges for the use of railway infrastructure. The levels of prices for additional services are determined as a product of standardized period for service performing and price of effective working hour of staff hired to provide the service, and they are solely based on the actual cost of work incurred during the provision of the particular service or directly determined by means of the Infrastructure Manager's separate decision.

Additional services are provided upon the Railway Undertaking's request, and the prices are applied in a non-discriminatory manner for all railway undertakings. Railway Undertakings will pay such prices according to the actual level of use.

- Supply of electricity for traction and charges

For the service of supply of electricity for traction please refer to: Electrical Engineering Department 6, Nemanjina St 11000 Belgrade, Serbia

Tel: +381 11 3618 241 Fax: +381 11 3618 130 direktor.etp@infrazs.rs

The prices of traction electricity depend on the prices of electricity determined by the supplier (currently JP Elektroprivreda Srbije), actual consumption costs, gross tonne km and train type. The calculation method is provided in Appendix 9.

- Preheating of the passenger trains

On IŽS network there is a device for preheating of passenger trains installed in Subotica station. "Infrastructure of Serbian Railways" JSC is not providing services of preheating of passenger trains, water supply etc.

More information regarding the preheating of passenger trains are available at"

"Srbija Voz" a.d. 6, Nemanjina St. 11 000 Belgrade, Serbia Tel: +381 11 3614 811 Fax: +381 11 3614 811

Email: putnik.info@srbvoz.rs



- Services for transport of exceptional consignments and dangerous goods

#### a) Services for transport of exceptional consignments

IŽS provides the service of transport of exceptional consignments (vehicles or items) according to the provisions for transport of exceptional consignments prescribed under the Regulations on transport of exceptional consignments.

The service involves processing of railway undertaking's request to examine the possibilities for transport in terms of technical aspect and setting of other technical requirements and protective measures for transport of consignments that are not fulfilling the general technical standards for transport on the particular line section, e.g. loading gauge, axle loading etc. Any deviation from the standards is considered to be an exceptional consignment and a special procedure is required. The service involves additional engagement of IŽS's employees in preparation and carrying out of transport of exceptional consignments such as: defining of transport conditions, possible engagement of additional staff for monitoring of transport and inspection of tracks after the transport, possible temporary re-location of trackside facilities and equipment etc.

IŽS is deciding whether it is possible to accept certain transport and under which conditions. It is necessary that for, every individual transport, IŽS and the Railway Undertaking define the scope and specification of needed services.

### b) Services for dangerous goods transport

IŽS provides additional services to railway undertakings related to transport of dangerous goods. Control of dangerous goods transport for every individual transport is defined between IŽS and the Railway Undertaking, depending upon the specification of needed services. The availability and method of providing this service on IŽS network will be determined based on the decisions and procedures which will be subsequently prescribed by IŽS.

## Charges for services of transport of exceptional consignments and dangerous goods

The unit price of additional services regarding the transport of exceptional consignments and dangerous goods is determined based on the actual costs incurred in provision of such service and unit prices of staff hired from the public railway infrastructure manager and is applied in a non-discriminatory manner to all railway undertakings.

Issuing of approvals for transport of exceptional consignments

Operation	Measuring unit	Price in RSD VAT exclusive
Processing of request, issuing of conditions and informing by means of telegramme for the purposes transport of exceptional consignments	Request for transport of exceptional consignment	12.976,00

Accompanying the consignments by professional railway staff, as necessary, according to type and complexity of exceptional consignment transport as set out in the Regulations on transport of exceptional consignments.

Unit price for this service is determined according to effective working hours of hiring of the employee and number of persons accompanying the exceptional consignment.

Operation - operators	Measuring unit	Price in RSD VAT exclusive
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Accompanying performed by an employee from traffic department	Effective hour of accompanying	1.844,00
Accompanying performed by an employee from civil engineering department	Effective hour of accompanying	1.339,00
Accompanying performed by an employee from electrical engineering department	Effective hour of accompanying	1.453,00

If the employee accompanying the consignment is entitled to daily allowance for the business trip in the country, the service price should also include the cost of realized daily allowances. The amount of daily allowances is determined in the Collective Agreement of the public railway Infrastructure Manger.

Transport of exceptional consignments with exceeded axle-loading

The unit price for approving the transport of exceptional consignment with exceeded axle-loading is 59,00 RSD/net tonnes VAT exclusive.

## 5.5 Ancillary Services and Charges

Ancillary services include the following:

- 1) access to telecommunications network
- 2) provision of additional information
- 3) technical inspection of rolling stock
- 4) ticketing services in passenger stations
- 5) maintenance services provided in maintenance facilities dedicated to high speed trains or other types of rolling stock requiring specific facilities where the works performed are not a routine daily maintenance and require the vehicle to be withdrawn from service
- **6)** other ancillary services

IŽS reserves the right to decide which of the available ancillary services will be provided and under what conditions. If IŽS is providing a particular service, it will provide it to all railway undertakings under equal conditions in a non-discriminatory manner and upon their particular request.

The charges for ancillary services provided by "Infrastructure of Serbian Railways" JSC will be determined based on the actual costs incurred during the provision of the said service and will be a subject to a separate contract concluded between the interested parties.

#### - Access to telecommunications network

IŽS provides railway undertakings with the service of access to the telecommunications network in accordance with the market conditions. Railway Undertaking should define, together with IŽS, the scope and specification of required services.

#### - Provision of supplementary information

IŽS provides, if available, the following supplementary information on the use of railway infrastructure to the railway undertakings:

- Provision of Timetable material (timetable graphs, timetable booklets) prepared and published by IŽS;
- Submission of excerpts from the local regulations of importance for railway transport or other documents.

For any further information the Railway Undertaking should define, together with IŽS, the scope and specification of required services.



#### - Technical inspection of rolling stock

Technical inspection of rolling stock is performed upon obtaining of license for their use and prior to putting the vehicles into service.

Directorate for Railways prescribes the conditions to be fulfilled by the entities performing the technical inspection of vehicles and the manner for performing of technical inspection.

Only the rolling stock fulfilling the requirements prescribed by the Law on Safety can be included in the train and this is determined by means of a rolling stock inspection.

Railway Undertaking is responsible for proper composition of the train and it is obliged to check whether the train rolling stock is in a proper technical condition. Train composition and distribution of rolling stock in the train must ensure safe train movement and braking.

"Infrastructure of Serbian Railways" JSC is not providing the services of technical inspection of wagons and rolling stock.

- Ticketing services in passenger stations

"Infrastructure of Serbian Railways" JSC is providing the ticketing services in passenger stations according to the special request of interested Railway Undertaking and according to its own capacities and assessment of impact on its staff's basic work process.

- Maintenance services provided in maintenance facilities dedicated to high-speed trains or other types of rolling stock requiring specific facilities

The network operated by "Infrastructure of Serbian Railways" JSC currently does not have any maintenance facilities dedicated to high speed trains or other types of rolling stock requiring specific facilities providing the respective ancillary services.

- Other ancillary services

IŽS provides other ancillary services:

Staff training and/or testing in line with the internal documents and technological procedures of IŽS.

#### Staff training and testing

The service of training and testing of public railway infrastructure user's staff is provided by the Infrastructure Manager in accordance with articles 60 to 64 of the Law on Safety in Railway Traffic ("Official Gazette of RS" No 41/2018) .The price for training and testing of interested users is determined as follows:

$$Cpp = Tpo + Tto + Tpz + Tos$$

This price includes:

- cost of practical training Tpo performed by minimum one expert from the Infrastructure Manager (familiarizing the candidates with the local conditions and technical capacities);
- cost of theoretical training Tto performed by minimum two lecturers (familiarizing with signalling and traffic regulations, special measures for occupational safety and protection as well as all important normative acts provisions of station regulations, technological work process etc., and if necessary provisions in connection to the transport of dangerous goods);
- cost of testing Tpz taking of expert exam regarding the familiarity with railway infrastructure performed by minimum four members of expert committee (president, 2 examiners from the expert field and 1 examiner on the provisions of measures for occupational safety and protection);



- cost of staff Tos hired for the provision of respective service according to the actual level of realization (daily allowances, travelling expenses, submission of required materials etc.)

The price for this service is determined in accordance with the separate Contract between IŽS and the interested party and specification of costs is provided in a descriptive manner and expressed according to the number of candidates and hired experts from the Infrastructure Manager involved in provision of this service.

#### 5.6 Discounts

"Infrastructure of Serbian Railways" JSC does not approve quantity discounts.

#### **5.7** Performance Scheme

One of the most important indicators of efficient network operations, both for Railway Undertaking and Infrastructure Manager, is train delay.

Train delays are monitored related to the causes of delays. Accordingly, the delays can be primary and secondary.

Primary delays are all train delays caused by interference or disturbance which led to the delay and that were not caused by delay or cancellation of other train.

Secondary delays are train delays caused by already existing earlier delay.

Overview of primary and secondary causes of train delays is presented in Appendix 7 of the Network Statement.

IŽS keeps a record of movements of all trains on its network and determines the causes of delay.

Delays can be caused by the following:

- Infrastructure Manager,
- Railway Undertaking,
- external factor.

Number of minutes of train delay is determined on the basis of deviation of train actual running time compared to the train running time envisaged by the Timetable.

The compensation for all primary train delays is calculated on the basis of the number of minutes of train delay and charged between IŽS and RU, if agreed under the Contract for the use of railway infrastructure. The reason for this is to motivate the Railway Undertaking and the Infrastructure Manager to minimize the Timetable deviations on the network and to increase the quality of transport service offered to the end users.

The compensation for delay is 0.1% of the charge for the entire train path, for every minute of delay. The total amount of the delay compensation for every individual train can be maximally up to 5% of the charge for the entire train path, for each party responsible.

For the delays of passenger trains less than 10 min per 100 km of allocated train path, that is, for the delays of freight trains of less than 40 min per 100 km of allocated train path, the charging between IŽS and RU is not performed. Calculation is performed solely for the entire train path, not for the particular parts of the path.

For the train paths shorter than 100 km the permitted delay is determined proportionally to the actual path length.

If the Railway Undertaking does not start the train 300 minutes after the prescribed departure according to the Timetable, it will be deemed that the train path of that train has been automatically cancelled for that day.



Train delays, caused by accidents or incidents, in respect of which the responsibility for the delay cannot be determined with certainty without the investigation procedure, will be calculated subsequently.

Delays caused by the external factor arise from the circumstances which are not under influence of the Infrastructure Manager or the Railway Undertaking. Delays caused by the external factor are the delays caused by the force majeure, or the delays caused by the third parties.

## **5.8** Changes to Charges

Charges for the minimum package of services and track access to service facilities, as well as charges for additional and ancillary services, can be modified depending on the conditions on the market of the railway services, in which case it must be published at least six months in advance.

## 5.9 Billing Arrangements

Method and time schedule for calculation and payment of charges, will be determined in detail in the contract between the Infrastructure Manager and the Railway Undertaking.

Charges are collected through:

Finance Department 6 Nemanjina Str. 11 000 Belgrade, Serbia Phone: +381 11 3618 465 Fax: +381 11 3618 465

finansijeizs@srbrail.rs

The Finance Department defines the payment security instrument for the use of public railway infrastructure.

For the use of public railway infrastructure during the validity period of 2024/2025 Timetable, the payment security instrument is defined according to the following:

The RU undertakes to submit to "Infrastructure of Serbian Railways" JSC (Finance department) with respect to the timely settlement of due obligations under the contract on the use of public railway infrastructure, 5 (five) blank solo bills of exchange registered with the National Bank of Serbia, bill of exchange authorization and a copy of the card of specimen signatures. Blank solo bills of exchange must be submitted within 15 days from the date of signing the contract on the use of public railway infrastructure, otherwise, the contract will have no legal effect. The term of validity of the bill of exchange authorization must be at least 30 days longer than the date of final settlement of the contractual obligation and is not related to the termination of legal effect under the Contract. The RU is obliged to submit to "Infrastructure of Serbian Railways" JSC, Finance department, new instruments for securing the regular settlement of financial obligations in case the previously submitted ones are implemented, i.e. when other circumstances arise due to which the previously submitted instruments cannot be implemented, no later than 15 days from the new circumstance's occurrence.

The Finance Department monitors the realization of the payment of due obligations under the contract on the use of public railway infrastructure, and in case the RU does not settle the due obligations within the deadline, it has the right to activate bills of exchange, which were submitted in order to secure payment.

If during the duration of the Contract on the use of public railway infrastructure, due to a delay in the settlement of obligations, a security instrument is activated, the RU will be obliged to provide a bank guarantee as an instrument for securing the payment in the following contract.

#### 5.10 Tariff system

IŽS charges fee for the train path allocation procedure costs as follows:



- for the allocation of annual train paths for the 2024/2025 Timetable nor for the allocation of train paths under the requests for amendment of annual 2024/2025 Timetable performed within the deadlines prescribed in Appendix 4.4, IŽS will not charge procedure costs.
- for allocation of train path under the extraordinary request for amendment of the annual timetable amount to 17.137,00 RSD per train path.
- for allocation of ad-hoc train path amount to 12.213,00 RSD per train path.



## 6. OPERATIONS

#### 6.1 Introduction

The transport operation on the railway infrastructure shall be such manner to ensure the protection of life, property and environment. The railway undertaking operating on the railway infrastructure will be obligated to comply with the regulations and provisions applicable to transport operations on the particular railway infrastructure.

## **6.2** Operational Rules

The list of applicable regulations and instructions related to operational rules is given in a separate Appendix 2

At some locations on the infrastructure and in some cases, there are deviations from the applicable regulations (approved by the Directorate for Railways upon IŽS's proposal). The information about this is published by IŽS. The relevant address for these regulations, instructions and modifications is:

"Infrastructure of Serbian Railways" JSC Traffic Department 6 Nemanjina Street 11000 Belgrade Serbia

Tel.: +381 11 3618 214 Fax: +381 11 3616 814 sektor.sp@srbrail.rs

## **6.3** Operational Measures

In case of traffic disturbances, IŽS, together with Railway Undertakings, will undertake all necessary measures to restore normal operating conditions as soon as possible.

Traffic disturbance will mean congesting of some parts of the network or stations that may occur as a consequence of disturbances occurring in traffic due to any reason.

#### **6.3.1. Principles**

In order to solve the traffic disturbances, IŽS will undertake appropriate measures to restore the planned Timetable, while taking into consideration the needs of passengers and users of freight traffic, as well as traffic safety. Aiming to solve the traffic disturbances, IŽS may apply operation rules under 6.3.2., cancel some trains or assign another train path in agreement with a Railway Undertaking, depending on the type of disturbance and expected duration.

In case a longer traffic disruption is expected, IŽS will, in agreement with railway undertakings, prepare an interim timetable for the period until regular operation is restored. IŽS may seek railway undertakings' assistance with the aim of normalizing the traffic operating conditions, even when such railway undertakings are not directly causing the disturbances, which may include using their rolling stock and personnel in order to normalize the traffic.

#### **6.3.2. Operation regulation**

For the purposes of restoring the normal traffic flow, the operational rules for railway traffic management will apply as set out in the Law on Safety in Railway Traffic, Traffic Regulations ("Official Gazette of RS" No 34/22 and 107/22), the Instructions on particular procedures in performing of traffic service on the territory of Infrastructure of Serbian Railways ("Official Gazette of Serbian Railways" No 43/22), the Instructions on organization and work procedures of operational service in the area covered by



"Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 21/17, 21/18 and 37/18) and other internal documents of IŽS.

In cases when traffic is interrupted on some part of the line due to a defect in the traction means of the RU in order to normalize traffic as soon as possible the IŽS operational service takes operational measures prescribed by article 34 of the internal act Instructions on organization and work procedures of operational service in the area covered by "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 21/17, 21/18 and 37/18).

In case of delays and premature train dispatches, the rule applies that lower-ranking trains may not interfere with movements of higher-ranking trains. A lower-ranking train can be given the priority only if in such a way increase in delays is avoided and the higher-ranking train can make up for the delay on its further route. With same rank trains, priority is given to that train whereof delay might cause it to lose connections in connecting stations. If the connections are not in question, priority is given to that train which has a longer route to its destination station, i.e. which is running on time. Necessary measures to be taken in case of accidents and incidents are defined in the Law on Safety in Railway Traffic, by the Rules on reporting, investigating, recording, statistical monitoring and publishing of data on accidents and incidents ("Official Gazette of RS" No 32/21), Instructions on procedures in case of accidents and incidents ("Official Gazette of Serbian Railways" 44/21). Trains which are taking part in rectifying the disturbances caused as a result of accidents and incidents have the priority (ranking) over all other trains.

#### 6.3.3. Foreseen and Unforeseen problems

#### Foreseen problems

Necessary measures to be undertaken in cases of foreseen problems such as: technical disturbances of signalling & safety and telecommunication devices, strong wind, natural disasters, snow etc., are governed by Traffic Regulations ("Official Gazette of Serbian Railways" No 34/22 and 107/22) and other regulations governing the above mentioned.

#### **Unforeseen problems**

In very urgent cases, when railway infrastructure is temporarily rendered unavailable for use, IŽS may, without prior notice, cancel train paths for the time period necessary to put the system back in working order. IŽS will notify all interested parties of the resulting situation.



#### 7. SERVICE FACILITIES

#### 7.1. Introduction

Services facility means a facility, including land, buildings and equipment, arranged in a particular manner, as a whole or partially, including the sidings connecting the network with the service facility, in order to enable provision and use of basic services provided in such facilities under the non-discriminatory and transparent conditions.

### 7.2. Service Facility Overview

Services facilities are:

- 1) station buildings, i.e. a part of station buildings, in passenger stations, intended for railway passengers, and other facilities used in passenger traffic, including the travelling information displays and the appropriate ticketing points;
- 2) freight terminals;
- 3) marshalling yards and train formation tracks, including the shunting tracks;
- 4) tracks for storing intended for railway undertakings' vehicles using the allocated infrastructure capacity;
- 5) maintenance facilities, with the exception of maintenance facilities for high speed trains or other types of rolling stock requiring specific facilities where the works performed are not routine works performed as a part of daily activities and require withdrawal of vehicle from service;
- 6) other technical facilities, including the cleaning and washing facilities;
- 7) inland waterways port facilities connected to railway activities;
- 8) facilities for provision of assistance;
- 9) facilities for fuel storing and supplying for which the prices are presented separately.

## 7.3. Service Facilities Managed by IŽS

IŽS will enable all railway undertakings, which have been granted the minimum access package of services for the use of infrastructure, to use all the services facilities managed by it in a non-discriminatory manner and upon their request.

#### 7.3.1. Common Provisions

IŽS will enable all the railway undertakings with minimum access package of services to have track access to all the above mentioned services facilities in a non-discriminatory manner and upon their request, provided that railway undertakings have previously entered into a contract on the use of these facilities with facility managers and service providers.

Railway undertakings have to state the need to have track access to service facilities and to use them during the capacity allocation procedure, please refer to Chapter 4.

For the service of track access to service facilities, Railway Undertaking will be obliged to pay a charge to the IŽS based on the Contract for the use of infrastructure.

## 7.3.2 Use of station buildings in the function of passenger traffic

Appendix 6 contains an overview of locations where passengers may board/get off the train.

The stations along the narrow gauge lines are used for passenger service only.



"Infrastructure of Serbian Railways" will enable the use of station buildings, i.e. the part of station buildings, in passenger stations in the areas intended for railway passengers and of other facilities used for passenger traffic, including the travel information display and adequate location for ticketing services to all railway undertakings in a non-discriminatory manner and upon their request.

The use of parts of service points (station buildings, stops) and other facilities required for acceptance and dispatching of passengers also includes use of platforms and other surfaces required for access of passengers in them, as well as other areas enabling passenger movements between public road surfaces and the train.

The use of travel information displays includes the use of all existing visual information facilities already installed in individual stations.

Upon request of a Railway Undertaking IŽS will, where possible, provide a suitable area for the ticketing services.

## 7.3.3 Freight Terminals

The term "freight terminals" on the railway network operated by Infrastructure of Serbian Railways (IŽS), means all the railway service points used for freight operations where loading and unloading as transshipment operations are carried out.

The following types of terminals are distinguished: stations and transport forwarding, terminals for intermodal freight transport, port terminals.

Overview of services facilities for freight operations is presented in Appendix 6.

Combined transport on railway network can be performed at terminals for combined transport and at port terminals.

Table No 7: Stations connected to freight terminals

No	Railway station connected to the terminal	Freight terminal for combined transport	Address of freight terminal for combined transport	Terminal operator
1.	Beograd Marshalling yard (Belgrade Marshalling Yard)	ŽIT Beograd	Beograd Marshalling yard, Železnik, Lole Ribara 2.	"ŽIT Beograd" d.o.o., Beograd, Železnik, Lole Ribara 2
2.	Surčin	Nelt	Beograd, Dobanovci, Maršala Tita 206.	"Nelt Co" d.o.o., Beograd
3.	Novi Sad Marshalling yard (Novi Sad Marshalling Yard)	Luka (Port) Novi Sad	Novi Sad, Carinska 1.	"Luka Novi Sad" a.d., Novi Sad, Carinska 1
4.	Pančevo Varoš	Luka (Port) Dunav	Pančevo, Luka Dunav 1.	"Luka Dunav Pančevo" a.d., Pančevo, Luka Dunav 1
5.	Smederevo	Luka (Port) Smederevo	Smederevo, Radinac b.b.	"Luka Dunav – Železara Smederevo" d.o.o., Smederevo, Radinac b.b.
6.	Prahovo Pristanište	Luka (Port) Prahovo	Prahovo, Radujevački put b.b.	"Luka Prahovo IHP Prahovo– Krajina" d.o.o., Prahovo, Radujevački put b.b.
7.	Senta	Luka (Port) Senta	Senta, Pristanišna 1.	"Luka Senta" a.d., Senta,



				Pristanišna 1
8.	Sremska Mitrovica	II iika (Port) Leget	Sremska Mitrovica, Jarački put 10.	"RTC Luka Leget" a.d., Sremska Mitrovica, Jarački put 10
9.	l Sanac	Luka (Port) Zorka Šabac	Šabac, Narodnih heroja 1.	"Zorka transporti" d.o.o., Šabac, Narodnih heroja 1
10.	0	MBOX Terminals d.o.o	Freight-transport terminal in Niš Vojlovački zaseok 4 St. 18560 Popovac (Niš)	MBOX Terminals d.o.o
11	Batajnica	C	Batajnica, Ulica Mladih gorana 136	"Logistički centri Srbije" doo

IŽS does not operate nor provide basic services in any freight terminal within the meaning of its definition of an arranged and organized area where the receiving, storage, preparation, transshipmenthipment and dispatching of various types of goods is carried out.

For more detailed information on the services provided by the freight terminal operator or the service provider, the following entities should be contacted:

## 1) Železnički integralni transport Beograd - ŽIT BEOGRAD d.o.o.

Addresses: Beograd Marshalling Yard (Belgrade Marshalling Yard), Lole Ribara 2 Železnik, Belgrade and Hajduk Veljkov Venac 4/1

11000 Belgrade, Serbia

Contact details: +381 (0)11 361-6844, +381 (0)-1 361 - 6842, +381 (0)64 81040.

#### 2) "Nelt Co." d.o.o. Beograd

Address: Maršala Tita 2016, 11272 Dobanovci, Belgrade

Contact details: +381 (0)11 3779-143, office@nelt.com, www.neltlsp.com

Information on the service facility operated by Nelt Co, i.e. on the industrial siding which is a part of Nelt terminal is provided in Appendix 3.10a.

#### 3) DRY PORT TERMINALS DOO

Addresses: Luka Dunav 1, 26000 Pančevo and Uzun Mirkova 3/3, 11000 Belgrade Contact details: + 381 69 32 55 012, office@dpterminal , http://dpterminals.rs/

#### 4) "MBOX Terminals" d.o.o

**Address:** Freight-transport terminal in Niš, Vojlovački zaseok St 4, 18560 Popovac (Niš) Contact details: +381603593499 e-mail: <a href="mailto:operations@mboxt.com">operations@mboxt.com</a>

Information on the service facility are available on <a href="https://mboxt.com">https://mboxt.com</a>

#### 5) "Logistički centri Srbije" doo

Address: Ulica Mladih gorana 136, Batajnica

e-mail office@lcs.rs

Information on the service facility are available on www.lcs.rs



IŽS however provides the use of service points open for freight traffic, in accordance with Appendix 6 of this document, for loading, unloading and transshipmenthipment to all railway undertakings in a non-discriminatory manner and upon their request.

#### 7.3.4 Marshalling Yards and Train Formation Facilities, including Shunting Facilities

## Freight train formation yards

Freight trains may be split-up and formed at the marshalling, distribution and intermediate stations/yards, according to the user needs and requirements, and taking into account the particular technical and organizational restrictions.

For all trains not entering the Belgrade Marshalling Yard, certain distribution station operations will be taken over by Ostružnica and Resnik stations.

For all trains not entering the Lapovo Marshalling Yard, certain distribution station operations will be taken over by Lapovo station.

Tomaševac station will take over certain distribution station operations.

Overview of distribution stations-sections for freight trains operation

<b>Distribution Station</b>	Distribution Section	Comments 3	
1	2		
BELGRADE MARSHALLING YARD	Belgrade Marshalling Yard- Pančevo Main St. Belgrade Marshalling— Yard - Ruma Belgrade Marshalling Yard- Lapovo Marshalling Yard Belgrade Marshalling— Yard— (Mala Krsna) <sup>1)</sup> — Lapovo Marshalling Yard Belgrade Marshalling— Yard— Mala Krsna Belgrade Marshalling—Yard—Požega Belgrade Marshalling Yard—Novi Sad Marshalling Yard	For the trains not entering the Mala Krsna station	
BOGOJEVO	Bogojevo - Sombor Bogojevo - Novi Sad Marshalling Yard Bogojevo - Erdut (HŽI)		
BOR FREIGHT STATION	Bor Freight St Požarevac Bor Freight St Zaječar Bor Freight St Prahovo pristanište		
BIJELO POLJE	Bijelo Polje –(ŽICG) - Vrbnica -		
(ŽICG)	Prijepolje Freight St.		
BRASINA	Brasina - Ruma Brasina - Zvornik <sup>1)</sup> Brasina - Zvornik Novi (ŽRS)	1) in both directions	
VRŠACVršac - Pančevo st. Vršac - Stamora Moravita (CFR SA)			
DIMITROVGRAD	Dimitrovgrad – Niš Marshalling Yard Dimitrovgrad –Kalotina Zapad		



ERDUT (HŽI)	Erdut–(HŽI) - Bogojevo	
JIMBOLIA (CFR)	· / · · / · · · · · · · · · · · · · · ·	
	Zaječar - Niš Marshalling Yard	
ZAJEČAR	Zaječar - Prahovo Pristanište	
	Zaječar - Bor Freight St.	
ZVORNIK NOVI (ŽRS)	Zvornik Novi (ŽRS) - Brasina	
ZVORUK NOVI (ZRS)	Zrenjanin - Kikinda	
	Zrenjanin - Novi Sad Marshalling	
	Yard	
ZRENJANIN	Zrenjanin - Pančevo Main St.	1) for the trains not entering
ZKENJAMIN	Zrenjanin – Senta	the Senta station
	Zrenjanin – Senta Zrenjanin – (Senta) <sup>1</sup> – Subotica Freight	
	St.	
	Kikinda – Jimbolia (CFR SA)	
KIKINDA	Kikinda – Zrenjanin Kikinda – Senta	1) for the trains not entering the
KIKINDA		Senta station
	Kikinda – (Senta) <sup>1</sup> – Subotica Freight	
	St. Traffic is temporarily regulated by	
KOSOVO POLJE	UNMIK railways	
	Kraljevo - K. Mitrovica Sever <sup>1)</sup>	1) in both directions
	Kraljevo - K. Wildovica Sever Kraljevo - Lapovo Marshalling Yard	2) in both directions
	Kraljevo - Požega  Kraljevo - Požega	3) for the trains not entering the
KRALJEVO	Kraljevo - Tozega Kraljevo – Stalać <sup>2)</sup>	Požega station
	Kraljevo – Stalac Kraljevo – (Požega) <sup>3)</sup> – Prijepolje	1 ozega station
	Freight St.	
	Lapovo Marshalling Yard – Mala	1) in both directions
	Krsna	2) for the trains not entering the
	Lapovo Marshalling Yard – Resavica <sup>1)</sup>	Mala Krsna station
	Lapovo Marshalling Yard - Niš	
	Marshalling Yard	
LAPOVO	Lapovo Marshalling Yard - Kraljevo	
MARSHALLING YARD	Lapovo Marshalling Yard – Resnik -	
	Pančevo Main St.	
	Lapovo Marshalling Yard (Mala	
	Krsna) <sup>2) -</sup> Belgrade Marshalling Yard	
	Lapovo Marshalling Yard – Belgrade	
	Marshalling Yard  Mala Krsna – Požarevac	1) in both directions
	Mala Krsna – Lapovo Marshalling	1) in both directions
	Yard	
MALA KRSNA	Mala Krsna – Belgrade Marshalling	
	Yard	
	Mala Krsna – Smederevo <sup>1)</sup>	
	Mala Krsna – Pančevo Main St.	
	Niš Marshalling Yard - Lapovo	1) in both directions
	Marshalling Yard	1, m com anochons
NIŠ MARSHALLING	Niš Marshalling Yard - Preševo	
YARD	Niš Marshalling Yard - Dimitrovgrad	
	Niš Marshalling Yard - Zaječar	
	Niš Marshalling Yard – Kuršumlija <sup>1)</sup>	



	N 'C 1N 1 11' N 1 D 1 1	1) 1 1 1 1 2
	Novi Sad Marshalling Yard - Belgrade	1) in both directions
	Marshalling Yard	
	Novi Sad Marshalling Yard- Subotica	
	ter.	
	Novi Sad Marshalling Yard- Bogojevo	
NOVI SAD	Novi Sad Marshalling Yard –Pančevo	
MARSHALLING YARD	Main St.	
WARSHALLING TARE	Novi Sad Marshalling Yard- Zrenjanin	
	Novi Sad Marshalling Yard - Ruma	
	Novi Sad Marshalling Yard –	
	Temerin <sup>1)</sup>	
	Novi Sad Marshalling Yard –	
	Podbara <sup>1)</sup>	
	Pančevo Main St. – Zrenjanin	
	Pančevo Main St Vršac	1) in both directions
	Pančevo Main St Belgrade	2) for the trains not entering the
	Marshalling Yard	Mala Krsna station
	Pančevo Main St. –Novi Sad	
<b>.</b>	Marshalling Yard	
PANČEVO MAIN	Pančevo Main St. –Lapovo	
STATION	Marshalling Yard	
	Pančevo Main St. – Pančevo Vojlovica	
	Pančevo Main St. – Mala Krsna	
	Pančevo Main St. – (Mala Krsna) <sup>2)</sup> – Lapovo Marshalling Yard	
	Pančevo Main St. –Požega	
,	Traffic is temporarily regulated by	
PEĆ	UNMIK railways	
- 0 × 1 1 - 0	Požarevac – Bor Freight St.	
POŽAREVAC	Požarevac – Mala Krsna	
	Požega - Belgrade Marshalling Yard	
POŽEGA	Požega - Kraljevo	
POZEGA	Požega - Prijepolje Freight St.	
	Požega - Pančevo Main St.	
PRAHOVO	Prahovo pristanište - Zaječar	
PRISTANIŠTE	Prahovo pristanište - Bor Freight St.	
	Preševo - Niš Marshalling Yard	
PREŠEVO	Preševo - Tabanovce (IŽRSM)	
	Prijepolje Freight St Vrbnica -	1) for the trains not entering the
	Bijelo Polje (ŽICG)	Požega station
PRIJEPOLJE FREIGHT	Prijepolje Freight St. – Požega	5
STATION	Prijepolje Freight St. – (Požega) <sup>1)</sup> -	
	Kraljevo	
PDIZDEN	Traffic is temporarily regulated by	
PRIZREN	UNMIK railways	
	Ruma - Novi Sad Marshalling Yard	
RUMA	Ruma - Belgrade Marshalling Yard	
	Ruma - Šabac	
	Ruma – Brasina	
DOCATE OFFICE	Ruma – Šid	
ROSZKE (MAV ZRT)	Roszke (MAV ZRT) - Horgoš -	



	Subotica	
	Senta – Subotica Freight St.	
SENTA	Senta - Zrenjanin	
	Senta - Kikinda	
	Sombor - Subotica Freight St.	
SOMBOR	Sombor - Bogojevo	
	Sombor – Vrbas <sup>1)</sup>	1) in both directions
STAMORA MORAVITA	Stamora Moravita (CFR SA) – Vršac	
(CFR SA)		
	Subotica Freight St Novi Sad	
	Marshalling Yard	1) For the trains not entering the
	Subotica Freight St Senta	Senta station
	Subotica Freight St Sombor	
SUBOTICA FREIGHT	Subotica Freight St. – Horgoš -	
STATION	Roszke (MAV ZRT)	
	Subotica Freight St (Senta) -	
	Kikinda <sup>1)</sup>	
	Subotica Freight St. – (Senta) –	
	Zrenjanin <sup>2)</sup>	
TABANOVCE (IŽRSM)	Tabanovce (IŽRSM) - Preševo	
TOVARNIK (HŽI)	Tovarnik (HŽI) - Šid	
ĐENERAL JANKOVIĆ	Traffic is temporarily regulated by	
	UNMIK railways	
ŠABAC	Šabac - Ruma	
ŠID	Šid - Ruma	
	Šid - Tovarnik (HŽI)	

There are four marshalling yards on the network where most of the freight trains are formed and split-up, and these stations are at the same time the distribution stations: Belgrade Marshalling Yard, Lapovo Marshalling Yard, Niš Marshalling Yard and Novi Sad Marshalling Yard.

Due to the limited track capacities and the work organization, the train formation and splitting-up is **not permitted** at the following distribution stations: **Bogojevo**, **Dimitrovgrad**, **Preševo**, **Brasina**, **Šid**, **Mala Krsna and Zrenjanin**. The exception is Šid station where the formation of international freight trains and domestic feeder trains can be performed on the designated industrial sidings. The formation of trains at distribution stations Šabac and Požarevac can be performed only if these stations are loading/unloading stations for such trains.

Splitting up and formation of trains are also permitted at particular intermediate stations having the required track capacities: Velika Plana, Zrenjanin fabrika, Kragujevac, Kruševac, Radinac, Smederevo, Sremska Mitrovica, Crveni Krst and Čačak.

The following intermediate stations may also be the departure/terminal stations provided that they are at the same time the loading/unloading stations for such train: Adrovac, Aleksinac, Aleksandrovo predgrađe, Batočina, Brvenik, Valjevo, Vreoci, Grljan, Despotovac, Doljevac, Dragačevo, Elemir, Zvornik, Inđija, Jagodina, Kaona, Lazarevac, Leskovac, Majdanpek, Mataruška Banja, Odžaci, Pančevo Varoš, Pančevo Vojlovica, Paraćin, Petrovac Gložan, Pirot, Podbara, Prahovo, Prokuplje, Raška, Ristovac, Svilajnac, Svrljig, Stara Pazova, Stalać, Surčin, Ćuprija, Čoka, Užice freight station, Futog. The restriction relating to these stations also prescribes that it is not permitted to leave and gather wagons for the purposes of forming other trains.



If the RU requests that the departure/terminal station is the intermediate station that has not been listed, such requests will be considered separately and decisions will be made on such requests depending on the available infrastructure capacities and organization possibilities at the moment of the request submission.

#### **Passenger train formation yards**

Dispatching of passenger trains with classical units formed in the technical-passenger station Zemun is possible in Belgrade Center and Zemun stations. In Zemun station track No 11 is equipped with the ramp for loading and unloading of accompanied cars.

The dispatching stations for the EMU and DMU trains can be all stations for passenger traffic, depending on the available capacities and the traffic service hours.

Overview of distribution stations-sections for passenger trains operation

Distribution station	Distribution section	Comments
1	2	3
BEOGRAD CENTAR	Beograd Centar – Novi Sad	
	Beograd Centar – Ruma	
	Beograd Centar – Pančevo Main St.	
	Beograd Centar - Požega	
	Beograd Centar - Lapovo	
BIJELO POLJE (ŽICG)	Bijelo Polje (ŽICG) - Vrbnica - Prijepolje freight station	
	Bogojevo - Sombor	
BOGOJEVO	Bogojevo - Novi Sad	
	Bogojevo - Erdut (HŽI)	
VRŠAC	Vršac - Pančevo Main St.	
VKSAC	Vršac - Stamora Moravita (CFR SA)	
ERDUT (HŽI)	Erdut (HŽI) – Bogojevo	
DIMITROVGRAD	Dimitrovgrad – Niš	
JIMBOLIA (CFR)	Jimbolia (CFR SA) - Kikinda	
ZAJEČAR	Zaječar – Niš Zaječar - Prahovo Pristanište Zaječar – Požarevac	
ZVORNIK	Zvornik – Šabac - Ruma	
ZRENJANIN	Zrenjanin - Kikinda Zrenjanin - Novi Sad Zrenjanin - Pančevo Main St. Zrenjanin - Senta	
KIKINDA	Kikinda - Jimbolia (CFR SA) Kikinda - Zrenjanin Kikinda - Senta	
KRALJEVO	Kraljevo – Kosovska Mitrovica Sever <sup>1)</sup> Kraljevo - Lapovo Kraljevo - Požega Kraljevo – Stalać <sup>1)</sup>	1) in both directions
LAPOVO	Lapovo – Belgrade Center Lapovo - Kraljevo Lapovo - Niš Lapovo - Smederevo	
NIŠ	Niš - Lapovo Niš - Preševo	



	Niš - Dimitrovgrad	1) in both directions
	Niš – Zaječar	-,
	Niš - Kuršumlija <sup>1)</sup>	
	Novi Sad – Beograd Centar	
	Novi Sad – Subotica	
	Novi Sad – Bogojevo	
NOVI CAD	Novi Sad – Vrbas <sup>1)</sup>	
NOVI SAD	Novi Sad - Pančevo Main St.	
	Novi Sad – Zrenjanin	
<u> </u>	Novi Sad - Ruma	
PANČEVO MAIN	Pančevo Main St Zrenjanin	
STATION	Pančevo Main St Vršac	1) in both directions
	Pančevo Main St. – Beograd Centar	
	Pančevo Main St Pančevo Vojlov. <sup>1)</sup>	
	Pančevo Main St. – Novi Sad <sup>2)</sup>	
	Požarevac - Lapovo	
POŽAREVAC	Požarevac - Smederevo	
1 02.11.	Požarevac - Zaječar	
	Požarevac – Beograd Centar	
	Požega - Beograd Centar	
POŽEGA	Požega - Kraljevo	
	Požega - Prijepolje freight station	
PRAHOVO	Prahovo pristanište - Zaječar	
PRISTANIŠTE	, ,	
PRIJEPOLJE FREIGHT	Prijepolje freight station - Vrbnica -	
STATION	Bijelo Polje (ŽICG)	
2	Prijepolje freight station - Požega	
PREŠEVO	Preševo - Niš	
	Preševo – Tabanovce (IŽRSM)	
DITA	Ruma - Šabac - Zvornik Ruma - Šid	
RUMA	Ruma - Sid Ruma - Beograd Centar	
	Ruma – Novi Sad	
ROSZKE (MAV ZRT)	Roszke (MAV ZRT)-Horgoš- Subotica	
ROSZKE (WAY ZKI)	Senta – Subotica	
SENTA	Senta – Zrenjanin	
	Senta – Kikinda	
G CONTROL OF	Smederevo - Lapovo	
SMEDEREVO	Smederevo - Požarevac	
COMPOR	Sombor - Subotica	
SOMBOR	Sombor - Bogojevo	
STAMOR MORAVITA	Stamora Moravita (CFR SA) - Vršac	
(CFR SA)		
	Subotica - Novi Sad	
SUBOTICA	Subotica – Sombor	
SODOTICA	Subotica - Senta	
	Subotica - Horgoš - Roszke (MAV)	
TABANOVCE (IŽRSM)	Tabanovce (IŽRSM) - Preševo	
TOVARNIK (HŽI)	Tovarnik(HŽI) - Šid	
<b>ŠABAC</b> Šabac - Ruma		
ŠID	Šid – Ruma	
5115	Šid – Tovarnik (HŽI)	



#### 7.3.5 Storage Sidings

IŽS network has the capacities for storing of rolling stock. Rolling stock storing services are provided by the IŽS.

Storing of standard passenger train sets, DMUs, EMUs and locomotives is carried out at all depots for accommodation and storing of rolling stock of "Srbija Kargo" JSC and "Srbija Voz" JSC.

Storing of freight wagons is carried out on special storage sidings for surplus freight wagons at marshalling yards Belgrade Marshalling Yard, Novi Sad Marshalling Yard, Niš Marshalling Yard, Lapovo Marshaling Yard, Subotica, Zaječar, Kikinda, Kraljevo, Pančevo Main St., Požega, Ruma and Sombor.

IŽS is not responsible for any damage which can occur on the rolling stock, that is, on the goods which is located in the stored wagons.

"Infrastructure of Serbian Railways" provides the service of storing of rolling stock to all interested railway undertakings which require storing of rolling stock, in a non-discriminatory manner and upon their request, and to the extent permitted by the infrastructure capacities.

#### 7.3.6 Maintenance facilities

There are rolling stock maintenance facilities on IŽS network, but the maintenance services are not provided by "Infrastructure of Serbian Railways" JSC. Appendix 3.10. contains the details on the rolling stock maintenance facilities.

#### 7.3.7 Other Technical Facilities, including Cleaning and Washing Facilities

"Infrastructure of Serbian Railways" provides the following basic services at technical facilities to railway undertakings in a non-discriminatory manner and upon their request:

Use of wagon scales in stations, where available, according to table 8 of this document;

- Fixed facilities for test braking in station Beograd Ranžirna (Belgrade Marshalling Yard);
- Use of freight loading/unloading ramp;
- Use of ramp for loading and unloading of accompanied cars;
- Use of loading clearance;
- Use of portal crane in Aleksinac station;

The need for using the basic services listed in bullets 1, 3, 4 and 5 must be presented by railway undertakings in the capacity allocation process, whereas the need for other services can be presented in a separate request.

More detailed information on provision of the above stated basic services can be obtained at:

"Infrastructure of Serbian Railways" JSC Traffic Department 6, Nemanjina St 11000 Belgrade, Serbia

Tel.: +381 11 3618 214 Fax: +381 11 3616 814 E<u>-mail: sektor.sp@</u>srbrail.rs

"Infrastructure of Serbian Railways" does not have the special facilities and does not provide the services of rolling stock cleaning and washing.



#### Wagon scales

The list of stations in which are located wagon scales is given in the Table 8.

Table No. 8: Wagon scales

No.	Station	Carrying Capacity (t)	Length of weigh bridge (m)	NOTE:
1	Šid	100	20	Wagon scale is electronic.
2	Novi Sad Marshalling Yard	100	20	Wagon scale is electronic.
3	Pančevo main st.	100	20	Wagon scale is electronic.
4	Vršac	100	20	Wagon scale is electronic.
5	Zrenjanin Factory	100	20	Wagon scale is mechanic.
6	Subotica Freight St.	100	20	Wagon scale is electronic.
7	Sombor	100	20	Wagon scale is mechanic.
8	Niš Marshalling Yard	100	20	Wagon scale is electronic.
9	Požega	100	20	Wagon scale is electronic.
10	Čačak	80	15.5	Wagon scale is electronic.
11	Lapovo Marshalling St.	100	20	Wagon scale is electronic.
12	Belgrade Marshalling Yard	100	18	Wagon scale is electronic.
13	Dimitrovgrad	100	20	Wagon scale is electronic.

#### Fixed installations for brake control

Fixed installations for brake control are located at Beograd Marshalling Yard.

#### Cleaning and washing facilities

IŽS does not have special facilities for cleaning and washing of railway vehicles. The type, volume and place of cleaning of railway vehicles for passenger service are determined by the railway undertaking.

#### Other technical facilities

#### - Ramps for loading and unloading of the load

"Infrastructure of Serbian Railways" JSC will enable usage of the ramps for loading and unloading of the load to all railway undertakings on the non-discriminatory way and upon their request. The need for usage of the ramps for loading and unloading of the load must be shown by the railway undertakings' in the capacity allocation procedure.

#### - Ramps for loading and unloading of the accompanied vehicles

Loading/unloading ramps for transport of accompanied vehicles are located in stations Zemun, Novi Sad, Subotica and Niš. The need for usage of the ramps for loading and unloading of the accompanied vehicles must be indicated by the railway undertakings in the capacity allocation procedure.

#### - Loading gauge

Loading gauges that are in function are present at the following stations: Novi Sad Marshalling Yard, Vršac, Čačak, Požega, Dimitrovgrad, Jošanička Banja and Kragujevac.

On IŽS network there are more stations with loading gauges which are not in function currently. The correction of the list of loading gauges will be done upon putting malfunction loading gauges into the functional condition.

#### - Crane portal in Aleksinac station

Transfer station on the territory of IŽS is Aleksinac. Mobile portable crane PD 86 with capacity up to 32 t is used for transshipmenthipment.

#### Service for using of wagon scales



"Infrastructure of Serbian Railways" JSC provides the wagon scales services. The price for using the wagon scale amounts to 3,309.00 RSD/wagon without VAT.

#### Service of loading and unloading using the portal crane in Aleksinac station

The service of loading and unloading using the portal crane together with the staff of public railway Infrastructure Manager is defined by means of a separate contract concluded between the public railway Infrastructure Manager and the Railway Undertaking, i.e. the user of the said service.

Unit price for the use of portal crane for loading and unloading amounts to 150,00 RSD/net tonne of goods VAT exclusive.

IŽS is providing other basic services if required by the railway undertaking and subject to a special contract. Other basic services that can be provided are:

• manning of facilities

#### Manning of unmanned service points

Structure of manning of non-manned service points, upon the railway undertaking's request, consists of:

- manning of service points of public railway infrastructure manager upon the railway undertaking's request in function of traffic management or shunting movements in such service points outside the working hours for such service point, and
- manning of service points of the railway undertaking upon its request in function of traffic management or shunting movements in such service points because the railway undertaking does not possess adequate traffic staff.

Charge for manning of service points by traffic staff amounts to:

Work place	Train dispatcher	Switch operator
Price in RSD/hour VAT exclusive	1.236,00	955,00

Calculation for periods of manning of non-manned service points starts from the moment of takeover of service at the service point until the moment of handover of service for the purposes of train operation i.e. shunting movement of railway undertaking's train set, and in case of temporarily manned stations (station working hours with interruption) not taking into account the period when the station is manned during the working hours according to the timetable booklet.

In the stations where it is necessary to perform manning with the train dispatcher and the switch operator, the manning period is the same for both employees given the responsibility of both worker during the setting up of a train route.

#### 7.3.8 Maritime and Inland Port Facilities

The following ports are connected to public railway network:

- Port area Novi Sad

Operator: DP World AD Novi Sad, www.lukanovisad.rs

Information on the service facility are available at <a href="https://www.dpworld.com/en/serbian/general-terms-and-conditions">https://www.dpworld.com/en/serbian/general-terms-and-conditions</a>

- Port area Smederevo

Operator: HBIS GROUP Serbia Iron & Steel d.o.o. Beograd, www.hbisserbia.rs

- Port area Pančevo

Operator: Port "Dunav" AD Pančevo



Granexport d.o.o.<u>www.granexport.rs</u> Specijalna luka d.o.o.

Information on the service facility are available at www.specijalnaluka.rs

- Port area Prahovo

Operator: PD Elixir Prahovo, https://www.elixirprahovo.rs

Information on the service facility are available at <a href="www.elixirprahovo.rs/logistika">www.elixirprahovo.rs/logistika</a> and <a href="www.elixirgroup.rs/usluge/logistika/luka-prahovo/">www.elixirgroup.rs/usluge/logistika/luka-prahovo/</a>

- Port area Senta

Operator: Port Senta A.D.,

Information on the service facility are available at <a href="www.luka-senta.rs">www.luka-senta.rs</a>

- Port area Sremska Mitrovica

Operator: RTC Luka Leget AD, <a href="https://www.leget.rs">https://www.leget.rs</a>

- Port area Šabac

Operator: PD Elixir Zorka

Information on the service facility are available at <a href="https://www.elixirzorka.rs">https://www.elixirzorka.rs</a> and www.elixirgroup.rs/usluge/logistika/luka-sabac/

#### 7.3.9 Relief Facilities

IŽS has on its disposal a mobile relief facility – relief (auxiliary) train. The services of relief train in cases of remedying the consequences of accidents or incidents are provided by IŽS, using its relief trains and staff, located in Belgrade, Niš and Kraljevo. In order to use the relief train services, a Railway Undertaking must address IŽS in writing:

Center for relief train operations

6, Nemanjina St

11 000 Belgrade, Serbia Tel: +381 11 3620 899 Fax: +381 11 3620 899 Email: direktor.tkp@infrazs.rs

#### Price of services regarding the provision of relief assistance

The price for providing the basic service regarding the provision of relief assistance is determined based on the actual costs incurred during the provision of such service and it is applied in a non-discriminatory manner for all railway undertakings.

## The price of transporting the relief train from the domicile station to the place of work and return to the domicile

No	Means of transport	Measuring unit	Price in RSD, VAT exclusive
1	Traction vehicle - locomotive of the operator – in operation, maneuver or expectation of operation		According to the operators bill
2	Vehicle of the working unit (ZOP, ETP, SP,) within "IŽS" – trolley, truck, etc.		According to the account of the working unit "IŽS" which performed transport
3	GEISMAR road-rail vehicle type V2R-730-S – road driving	hour	15.156,00
4	GEISMAR road-rail vehicle type V2R-730-S – railway driving	hour	18.156,00



5	Traction vehicle – locomotive "IŽS" or locomotive leased (locomotive operation + staff operation + energy) -in operation	hour	41.000,00
	-in expectation of operation	hour	15.000,00

#### Price for equipment and tools for the operation of relief (auxiliary) train

No	Asset description	Type of work	Measu ring unit	Price in RSD, VAT exclusive
1	Relief train	Expecting of work	hour	2.000,00
2	Relief train	Work on preparation and retrieval of intervention equipment	hour	4.000,00
3	GEISMAR road-rail vehicle type V2R-730- S	Work during intervention	hour	15.156,00
4	Jack EDK 1000 (99 72 9 471 001-4)	Expecting of work	hour	5.000,00
5	Jack EDK 300 (99 72 9 471 101-2)	Expecting of work	hour	5.000,00
6	Jack DHPD 65 (99 72 9 571 001-3)	Expecting of work	hour	5.000,00
7	Jack EDK 1000 (99 72 9 471 001-4)	Preparation, Work, Retrieval	hour	56.970,00
8	Jack EDK 300 (99 72 9 471 101-2)	Preparation, Work, Retrieval	hour	27.248,00
9	Jack DHPD 65 (99 72 9 571 001-3)	Preparation, Work, Retrieval	hour	30.146,00
10	LUKAS equipment	Preparation, Work, Retrieval	hour	7.066,00
11	WALTER trolley	Installation and removal	hour	6.000,00
12	WALTER trolley	Transport	hour	3.320,00
13	WALTER trolley	Remaining of trolley under the rolling stock – lump sum	hour	600,00
14	Stable power generation unit	Work	hour	2.400,00

Note: operating time is calculated in full hours - each started working hour of equipment and assets is counted as a full working hour.

#### Labour costs for relief train's staff

No	Type of work	Measur ing unit	Price in RSD VAT exclusive
1	Assistant on relief train	hour	704,00
2	Electromechanic	hour	981,00
3	Driver and operator of a two-way motor vehicle	hour	1.016,00
4	Rail crane operator	hour	1.027,00
5	Hydraulic equipment operator	hour	1.027,00
6	Locksmith on the relief train	hour	1.027,00
7	Rail vehicle mechanic	hour	1.027,00



8	Relief train manager	hour	1.126,00
9	Expert associate for circuit inspection	hour	1.175,00
10	Assistant relief train chief	hour	1.282,00
11	Relief train chief	hour	1.605,00
12	Employees participating in the work of relief train	pcs	1.800,00

Note: operating time is calculated in full hours – each started working hour is counted as a full working hour.

#### **7.3.10 Refuelling Facilities**

"Infrastructure of Serbian Railways" JSC is providing the services of fuel storing and issuing for refuelling of traction vehicles of all railway undertakings.

This relates to refuelling facilities at service points – stations and depots:

Pančevo main St., Lapovo, Kraljevo, Požarevac, Požega, Sombor, Kikinda, Belgrade Marshalling Yard, Crveni Krst, Ruma, Zaječar, Zrenjanin, Vršac and Subotica.

Detailed information on the services of fuel storing and issuing for refuelling of traction vehicles are available at:

Department for Procurement and Central Warehousing 6, Nemanjina St 11 000 Belgrade, Serbia

Tel: +381 11 3620 094

Email: nabavke.infra@srbrail.rs

#### Price for the service of storing and refuelling

The price for the service of fuel storing and issuing for the purposes of refuelling of traction vehicles of all railway undertakings is determined based on the actual costs incurred during the provision of this service and is applied in a non-discriminatory manner for all railway undertakings.

The service of fuel storing and issuing for the purposes of refuelling of traction vehicles amounts to 5.43 RSD per stored litre of diesel fuel VAT exclusive.

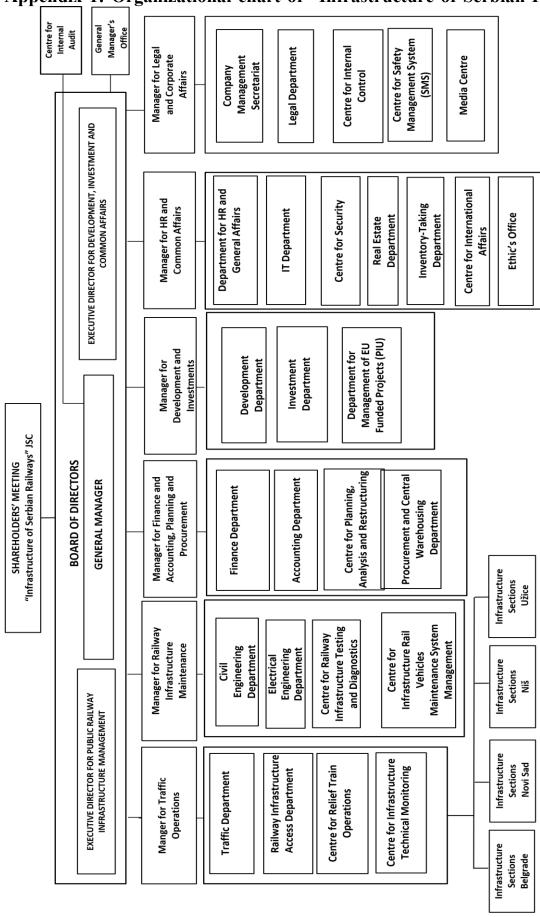


#### **APPENDICES**

- 1. Organizational chart of "Infrastructure of Serbian Railways" JSC
- 2. Internal regulations (documents) and technological procedures
- 3.1 Loading gauge JŽ I
- 3.2 Loading gauge UIC-GA
- 3.3 Loading gauge UIC-GB
- 3.3a Loading gauge UIC-GC
- 3.4 Electrified lines
- 3.5 Power supply facilities
- 3.6 Overview of signalling & safety devices equipping level
- 3.7 Overview of telecommunication devices equipping level
- 3.8 List of stations with industrial sidings on which it is possible to handle dangerous goods (RID goods)
- 3.8 b List of service points where it is possible to perform transshipment of dangerous goods
- 3.9 Alternative transport routes
- 3.10 Facilities for rolling stock maintenance
- 3.11 Railway infrastructure development projects
- 4.1 Request for train path allocation (form)
- 4.1.b Template for submission of traction vehicle technical data
- 4.2 Instructions for completion of Request for train path allocation (form)
- 4.3 Deadlines for annual 2024/2025 Timetable preparation
- 4.4 Deadlines for amendment of annual 2024/2025 Timetable
- 5.1. Overview of railway lines on which train running is possible when they are manned only with engine driver
- 5.2. Overview of the lines fulfilling the conditions for train running with an engine driver only
- 5.3. Geometry of pantograph (current collector) TYPE POS 254/III used on IŽS network
- 6. Register of infrastructure data
- 7. Overview of primary train delay causes
- 8. Overview of platforms and arranged surfaces in service points
- 9. Method for calculation of electricity consumption for train traction
- 10. Railway node boundaries



#### Appendix 1: Organizational chart of "Infrastructure of Serbian Railways" JSC





#### **Appendix 2: Internal regulations (documents) and technological procedures**

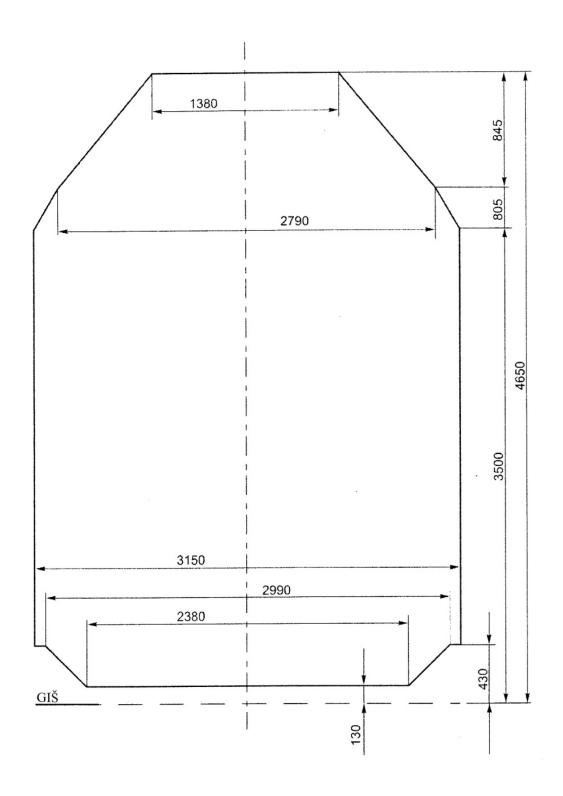
The internal regulations (documents) and the technological procedures applied by IŽS are listed in the Registry of regulations of importance for traffic safety i.e. in item 1.3 Internal general regulations of "Infrastructure of Serbian Railways" JSC.

The registry of regulations of importance for traffic safety is published on the web site of "Infrastructure of Serbian Railways" JSC in section About us/Library/Regulations/Safety Management System/Appendices to the Safety Management System Rules of Operation/Appendix 12.1 Library- Registry of regulations (О нама/Библиотека/Правиници/Систем управљања безбедношћу/Прилози Пословника система управљања безбедношћу/ Прилог 12.1 Библиотека-Регистар прописа).

Available on link <a href="https://infrazs.rs/izs-osnovni-podaci/biblioteka">https://infrazs.rs/izs-osnovni-podaci/biblioteka</a>

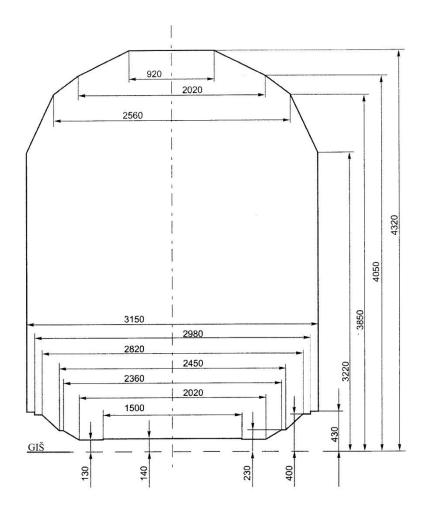


## Appendix 3.1. Loading Gauge ŽS I



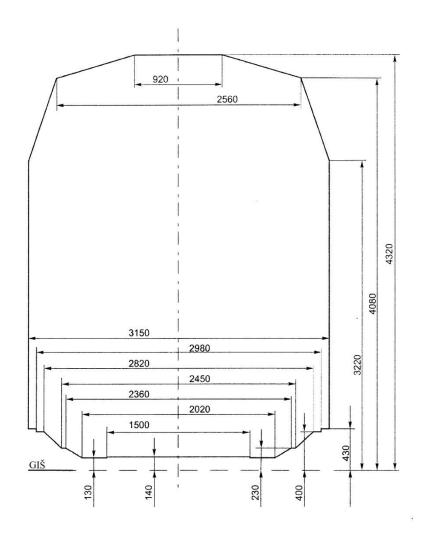


## Appendix 3.2. Loading Gauge UIC-GA



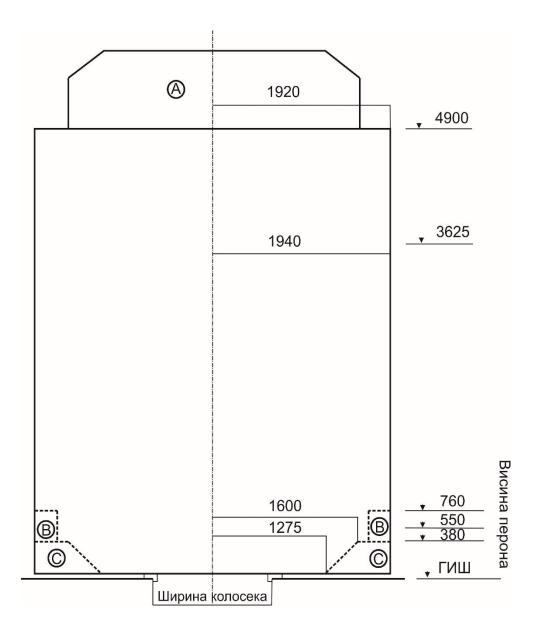


## Appendix 3.3. Loading Gauge UIC-GB





#### Appendix 3.3a Loading Gauge UIC-GC



A – Pantograph movement space



B-Area for positioning of platforms according to leaflet UIC 505-4, for the speeds of up to 200 km/h

C – Possibility of reserving the space for low platforms and specific installations

#### Appendix 3.4. Electrified lines

#### **Main lines:**

- 1. Beograd Centar Stara Pazova Šid State Border (Tovarnik)
- 2. Beograd Centar Rasputnica G Rakovica Mladenovac Lapovo Niš Preševo State Border (Tabanovce)
- 3. (Beograd Centar) Rakovica Jajinci Mala Krsna Velika Plana
- 4. (Jagodina) Rasputnica Ćuprija Ćuprija Paraćin
- 5. (Beograd Centar) Stara Pazova Novi Sad Subotica State Border (Kelebia)
- 6. Niš Dimitrovgrad State Border (Dragoman):
  - electrified on section Dimitrovgrad State Border
- 7. Beograd Centar Pančevo Main St. Vršac State Border (Stamora Moravita):
  - > electrified on section Beograd Centar Pančevo varoš
- 8. (Beograd Centar) Resnik Požega Vrbnica State Border (Bijelo Polje)
- 9. Beograd Marshalling vard "A" Ostružnica Batajnica
- 10. Beograd Marshalling yard "B" Ostružnica
- 11. Beograd Marshalling yard "A" Rasputnica "B" Rasputnica "K/K1" Resnik
- 12. Ostružnica Rasputnica "B" (Rasputnica "K/K1")
- 13. Beograd Marshalling yard "B" Rasputnica "R" Rasputnica "A" (Resnik)
- 14. (Beograd Marshalling yard "B") Rasputnica "R" Rakovica
- 15. Beograd Marshalling yard "A" Rasputnica "T" Rakovica
- 16. Beograd Marshalling yard "B" Rasputnica "T" (Rakovica)
- 17. connecting track in the area of Rasputnica "K/K1": (Rasputnica "B") skretica "K" skretnica "K1" (Jajinci)
- 18. (Rasputnica Pančevački most) Rasputnica Karađorđev park Rasputnica Dedinje (Rasputnica G)
- 19. Inđija Golubinci
- 20. Novi Sad Novi Sad Marshalling yard Rasputnica Sajlovo
- 21. bypass track of station Mala Krsna: (Kolari) branching turnout 1 branching turnout 28 (Osipaonica)
- 22. Rasputnica Lapovo Varoš Lapovo Marshalling yard Lapovo
- 23. Trupale Niš Marshalling vard Međurovo
- 24. Crveni krst Niš Marshalling yard
- 25. Niš Rasputnica most (Niš Marshalling yard)

#### **Regional lines:**

- 1. Topčider Putnička (4+195) Rasputnica G Rakovica<sup>3</sup>
- 2. Novi Sad Odžaci Bogojevo:
  - electrified on section Novi Sad Sajlovo
- 3. Stalać Kraljevo Požega:
  - electrified on section Kraljevo Požega
- 4. connecting track to station Požega: (Uzići) branching turnout No 53 branching turnout No 54 (Dragačevo)
- 5. Smederevo Rasputnica Jezava Radinac Mala Krsna
- 6. Mala Krsna Bor Rasputnica 2 (Vražogrnac):
  - ➢ electrified on section Mala Krsna − Požarevac
- 7. Subotica Horgoš State Border (Röszke)

<sup>&</sup>lt;sup>3</sup> By virtue of the Conclusion of the Government of the Republic of Serbia No 340-2989/2022 dated April 7<sup>th</sup>, 2022, the Decision of Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways" Belgrade on termination of railway traffic, dismounting and reconstruction of infrastructure capacities on Topčider Putnička (km 4+195 – Junction "G" – (Rakovica), has been approved.



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#### **Local lines:**

- 1. Novi Sad Novi Sad ložionica:
  - > electrified on section Novi Sad Blok 3 Novi Sad
- 2. Pančevo Varoš Pančevo Vojlovica



## **Appendix 3.5 Power supply facilities**

No	Facilities	Chainage
	ne 101 Beograd Centar – Stara Pazova – Šid – State Border– (Tovarnik)	Chamage
1.	PS Beograd Centar  PS Beograd Centar	000+000
2.	EVP Zemun	008+052
3.	PSN Batajnica	021+970
4.	PS Stara Pazova	034+794
5.	PS Putinci	053+600
6.	PSN Ruma	066+245
7.	PS Sremska Mitrovica	081+700
8.	EVP Martinci	094+200
9.	PS Kukujevci	105+000
10.	PS Šid	116+400
	ine 102 Beograd Centar – Mladenovac – Lapovo – Niš – Preševo	
(Tabanc		b State Border
11.	PSN Košutnjak	007+726
12.	PS Rakovica	008+656
13.	PS Kijevo	010+128
14.	EVP Resnik	014+020
15.	PS Klenje	024+800
16.	PSN Ralja	032+340
17.	PS Sopot Kosmajski	041+565
18.	EVP Mladenovac	053+100
19.	PS Glibovac	074+000
20.	PSN Mala Plana	084+350
21.	PS Plana	089+700
22.	EVP Markovac	099+345
23.	PS Lapovo Varoš	106+309
24.	PS Lapovo Putnička	109+207
25.	PSN Bagrdan	119+122
26.	EVP Jagodina	136+262
27.	PS Ćuprija	148+200
28.	PS Paraćin	154+971
29.	PSN Sikirica	165+025
30.	PS Stalać	176+154
31.	PS Braljina	186+600
32.	EVP Đunis	195+130
33.	PS Korman	205+540
34.	PS Aleksinac	214+077
35.	PSN Grejač	223+479
36.	PS Trupale	234+104
37.	PS Niš	243+287
38.	EVP Niš	248+755
39.	PS Doljevac	261+410
40.	PSN Pečenjevce	276+752
41.	PS Leskovac	287+910
42.	EVP Grdelica	300+580
43.	PS Džep	319+561
	PSN Suva Morava	
44.		332+860
45.	PS Vranjska Banja	347+765
46.	EVP Ristovac	365+370
47.	PS Bukarevac	386+617



48.	PSN Tabanovci	400+060	
Main L	ine 103 (Beograd Centar) – Rakovica – Jajinci – Mala Krsna – Velika Pla	ana	
49.	PS Beli Potok	017+800	
50.	PSN Vrčin	026+400	
51.	PS Mali Požarevac	042+800	
52.	EVP Vodanj	056+700	
53.	PS Mala Krsna	070+600	
54.	PSN Lozovik	086+000	
Main L	ine 105 (Beograd Centar) – Stara Pazova – Novi Sad – Subotica – State I	Border– (Kelebia)	
55.	EVP Indija	041+984	
56.	PSN Beška	053+905	
57.	PS Sremski Karlovci	065+685	
58.	EVP Novi Sad	079+985	
59.	PS Kisač	090+600	
60.	PSN Zmajevo	102+600	
61.	EVP Vrbas	119+480	
62.	PS Lovćenac	129+637	
63.	PSN Bačka Topola	143+850	
64.	PS Žednik	157+620	
65.	EVP Subotica	167+920	
66.	PS Subotica	177+180	
67.	PSN Subotica	184+450	
Main L	ine 107 Beograd Centar – Pančevo Main St. – Vršac – State Border– (Sta	mora Moravita)	
69.	PS Beograd Centar	000+000	
70.	PS Pančevački Most	004+687	
	ine 108 (Beograd Centar) – Resnik – Požega – Vrbnica – State Border – (		
71.	PS Barajevo	015+420	
72.	PSN Stepojevac	029+610	
73.	PS Lazarevac	045+310	
74.	EVP Slovac	059+248	
75.	PS Valjevo	077+905	
76.	PSN Lastra	093+056	
77.	PS Ražana	111+239	
78.	EVP Kosjerić	118+229	
79.	PS Požega	140+420	
80.	PSN Uzići	150+295	
81.	PS Užice – teretna	162+319	
82.	EVP Sušica	178+379	
83.	PS Zlatibor	193+407	
84.	PSN Jablanica	206+350	
85.	PS Priboj	225+338	
86.	EVP Pribojska Banja	232+750	
87.	PS Bistrica	241+248	
88.	PSN Prijepolje	257+226	
89.	PS Lučica	264+695	
90.	EVP Brodarevo	273+360	
91.	PS Vrbnica	285+096	
Main Line 111 Beograd Marshalling yard "A" – Ostružnica – Batajnica			
92.	PS Železnik – ulaz	001+290	
93.	PS Železnik – izlaz	002+615	
94.	PSN Surčin	013+485	
<i>_</i>		010   100	



Regiona	l Line 213 Stalać – Kraljevo – Požega	
95.	EVP Kraljevo	080+565
96.	PSN Ovčar Banja	120+900
	Regional railway line 201 Subotica – Horgoš – State Border –	
	(Röszke)	
97.	PS Bački Vinogradi	15+717

Remote	control centers	
98.	Centar DU Beograd	M2: 005+145
99.	Centar DU Niš	M2: 243+560
100.	Centar DU Novi Sad	M4: 078+038

#### **Abbreviations:**

**EVP - Electric traction substation** 

 $\ensuremath{\mathbf{PSN}}$  - Track sectioning post with neutral line

**PS** - Track sectioning post

**CDU - Remote control center** 



## Appendix 3.6 Overview of signaling & safety devices equipping level

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	Marshalling yards with automatic marshalling	20	0.7																																300							
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ī	Central control desk and interlocking by means of electrical positioning devices	×	341	000	639	151	171		116	306		9I	19		32	ą			-	3	132	3				4			44		+		7	16	0				*	22		
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	Incomplete relay interlocking	4															1																	1								I
10	Complete interlocking with relay electronic devices		15		55	15	17	2	5	34		2	-		5		٠			-	-	1							2		-		1	-	-				1	∞		
	RAILWAY LINES		Beograd - Stara Pazova - Šid - State Border - (Toxamik)		Tabanovcc)	Beograd) - Rakovica - Jajinci - Mala Krsna - Velika Plana	Beograd) - Stara Pazova - Novi Sad - Subotica - State Border - Kelekia)	Niš - Dimitrovgrad - State Border - (Dragoman)	Beograd Centar - Pančevo glavna stanica - Vršac - State Border -	(Bielo Police) - Resnik - Požega - Vrbnica - State Border - (Bijelo Polic)	anovo - Kralievo - Lešak - Kosovo Polie - Đeneral Tanković - State	Border - (Volkovo)	Subotica - Bogojevo - State Border - (Erdut) Beograd Centar - Novi Beograd	Beograd Centar - Rasputnica G - (Rakovica)	Beograd Ranžirna "A" - Ostružnica - Batajnica Reograd Ranžirna "B" - Ostružnica	December of the Property of th	Octubratica - Daematrica   R.   - (Daematrica   K.   K.   III)	December - Nashutuka D - (Nashutuka NAN )	cograd Kanzima - B Kaspunica - K Kaspunica - A (Kesnik)	Beograd Ranžirna "B") - Rasputmea "R" - Rakovica Seograd Ranžirna "A" - Rasputmica "T" - Rakovica	Beograd Ranžirna "B" - Rasputnica "T" - (Rakovica)	vezni kolosek na području Rasputnice "K/K1": (Rasputnica "B") - skretnica "K" - skretnica "K1" - (Jajinci)	Fopčider - Rasputnica Savski most - (Novi Beograd)	Topčider - Beograd spoljna - Beograd Dunav - Rasputnica Pančevački most	obilazni kolosek stanice Beograd Spoljna: (Topčider) - Blok 1 "Obala" - Blok 2 "Prelaz" - (Beograd domi grad)	(Rasputnica Pančevački most) - Rasputnica Karadordev park - Rasputnica Dedinje - (Rasputnica G)	Indija - Golubinci Novi Sad - Novi Sad Ranžirna - Rasmunica Sailovo	obilazni kolosek stanice Mala Krsus: (Kolari) - odvojna skretnica I - odvojna skretnica 28 - (Osinaonica)	Rasputnica Lapovo Varoš - Lapovo ranžirna - Lapovo Trnnale - Niš ranžirna - Modurovo	Cveni krst - Niš ranžima	Nis - Kasputinca most - (Nis ranžuria) Spojii kolosek stanice Niš; (Crveni krst) - odvojna skretnica 2 - odvojna	Skretinca 4 - (Cele kula). Subotica - Horgoš - State Border - (Roszke)	Pančevo Glavna stanica - Zrenjanin - Kikinda - State Border - (Jimbolia)	Banatsko Miloševo - Senta - Subotica	Pančevo Varoš - Rasputnica 2a - (Jabuka) Novi Sad - Odžaci - Bonojevo	(Novi Sad) - Rasmutnica Sailovo - Rimski šančevi - Orlovat staialište	Novi Sad Ranžirna - Sajlovo Raspunica	rlovat - Rasputnica 1a - (Lukiĉevo)		(Platičevo) - Rasputnica 1 - Rasputnica 3 - (Stitar) Stalać - Kraljevo - Požega	spojni kolosek stanice Kraljevo: (Mataruška Banja) - odvojna skretnica broi 72 - odvojna skretnica broi 73 - (Adrani)	or or other and an or of the or of the or of the or
	Railway Line No	0		_	102 (T)	03 (B	104 (B	105 Ni	106 Be	107 (B	_	_	109 Su 07 Be	П	13 Bc	-	$\overline{}$	$\overline{}$		117 (B	19 Bc	120 ve.	121 To	122 To	28 ob	31 (Ra	125 Inc	$\overline{}$	128 Ra	1	132 Sp	S	202 Pa		204 Pa	-	_	20	$\overline{}$	210 (P	212 spe	+
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		Manual positioning of turnouts qrund off no		24																																														•	n
	g yards	Ccentral positioning of turnout	Number of turnouts	23																																														c	0
	Devices in marshalling yards	Automatic positioning of qrnuf aft no luorini		22									11 - 2									4 82																											Ī	1	22
	Devices II	Marshalling yards without automatic marshalling	stations	21								= 3.						1																															Ť	+	7
	3	Marshalling yards with automatic marshalling	per of	20														1	1			3 23	2 1		1										S - 50														ı		0
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Sional equipped	with AS	lsngie Mgid	No of b	18	3																		0.0								Ī														A						1212
	ıer	Mechanical signal	S	17	14	22		51	3	3						-	Ι			4	2					12			2	T	T		-	12									П	П			П			27.3	263
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Sional type	in		ы.	15	13	34		36	3	3						-				4	2		90 - 30			15	1		2		Ī		1	12	3 5							П	П	П		-	П		T	900	338 1217
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eatino	Г	Cas	of turnouts	13															1											l	1													П					T	T	0
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ľ	ρλ	On-site control and interlocking means of turnout lock		=	156	127		59	10	3			7	2		-	4		84	46	26	19	10	10		52	91	8	41	=	1		9	64	17		14			20	9			П		-	7	4	4	Tues	2574
ckino	9	On-site control and interlocking by means of electrical controller	turnouts	10				9					0 - 6 57 - 5				1	1				2 22	3 - 6												2 83 6 30										0.0				T	;	31
Turnout interlocking			101	6	1	∞												1													1																		T		103
1		Central control desk and interlocking by means of electric positioning devices		8	09	15		66												4					1						1		l																T	97.5	2349
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L		Incomplete relay interlocking		4	4	2	_	-									4	4	4						4	1				1	1							_	4					Ц			Ц		$\downarrow$	+	×
	10 Á	Complete interlocking with relay electronic devices		3	10	2		4												7			24 - 23																											10,	187
		RAILWAY LINES		2	Mala Krsna - Bor - Rasputnica 2 - (Vražogrnac)	Crveni krst - Zaječar - Prahovo pristanište	(Rgotina) - Rasputnica 3 - Rasputnica I - (Trnavac)	Doljevac - Kastrat - Kosovo Polje	Kuršumlija - Kastrat	(Barlovo) - Rasputnica 1 - Kuršumlija	Kosovo Polje - Metohija - Peć	Kosovo Polje Teretna - Rasputnica 1 - (Drenica).	Subotica - Subotica fabrika	Subotica - Subotica bolnica	Kanjiža - Horgoš	Novi Sad - Novi Sad Iožionica	Podbara) - Rasputnica 3 - Rasputnica 2 - (Kać)	(Rimski šančevi) - Rasputnica 1 - Rasputnica 3 - (Podbara)	Rimski šančevi - Bečej	Vrbas - Sombor	Petrovaradin - Beočin	Apatin Fabrika - Strilić - Sombor	Bač - Karavukovo	Bačka Palanka - Gajdobra	(Brasina) - Rasputnica Donja Borina - Zvornik Grad	Šid - Sremska Rača Nova - State Border - (Bijeljina)	Kikinda - Banatsko Arandelovo	Sečanj - Jaša Tomić	Zrenjanin Fabrika - Vršac - Bela Crkva	Pančevo Varoš - Pančevo Vojlovica	Utima) - Kaspumica A - Kaspumica B - (Jasenovo)	spojni kolosek stanice Senta: (Coka) - odvojna skretnica 22 - odvojna skretnica 23 - (Orom)	Požarevac) - Rasputnica Sopot Požarevački - Kostolac	Markovac - Resavica	Ovča - Padinska Skela	Metohija - Prizren.	Bečej - Vrbas	Vršac - Vršac Vašarište	Alibunar - Seleuš	Vladimirovac - Kovin	Čoka - Novi Kneževac	Kikinda - Metanolsko sircetni kompleks (km 6+413)	Bogojevo - Dunavska obala	Sombor) - Rasputnica Strilić - Bački breg	Sombor - Ridica	Višnjićevo) - Rasputnica Rača - Sremska Rača	Paracin - Stari Popovac	Surčin - Jakovo Bečmen	(Beograd spoljna) - km 2+290 odvojna skretnica - Fabrika šećera	Sarganska osmica	Total:
		Railway Line No	1	$\neg$	215 N	$\neg$	$\neg$	-		220 (	_	222 F	301	-	-		~	$\neg$	_	$\neg$	309 F		311 E	312 E	$\neg$	_	-	7.	-	-	319	320	321 (	Н	323 (			+	-1	404	$\overline{}$		$\overline{}$	۲	0,	ľ	411 F	$\overline{}$		201	1
		oN		-	47	-	46	20	51	52	53	54	55	99	57	28	59	09	19	62	63	64	65	99	29	89	+	$\dashv$	71	+	/3	74	75	92	77	78	79	08	81	82	83	84	85	98	87	88	68	$\vdash$	+	92	1
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											INTER	LOCKI	NG FAC	TLITIE	S								
				- W									West started and	crossing	333	devices							
			Interstal	tion deper device	ndence		Autor	natic b	oloc		Auton	natic posi	itioning o	of level	Man	ual positi cross		f level	Traf	fic remote	contro	l devi	ces
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		RAILWAY LINE	rack lin	track lin	ses betw	rack lin	track lin	points		s equipp	logit	uumai							rack lin	track lir	contro	contro	ely cont
	ine No		ength of single track line	ength of double track line	Number of distances between stations	ength of signle track line	ength of double track line	Number of block points	Number of signals	Number of signals equipped with auto-stop devices	uc	<u> </u>	uc	W.	ис	٧.	ис	<u> </u>	cngth of signle track line	Length of double track line	Number of remote control centers	Number of remote control stations	Number of remotely controlled stations
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°Z 1	la	2	kr 3	n 4	kom 5	6 k	m 7	8	9	10	- 11	12	pcs 13	14	15	16	17	18	19 k	m 20	21	pcs 22	23
	101	Beograd - Stara Pazova - Šid - državna granica -	-	1				61	120	120	14	12	1.7	14	15	10	17	10	17	97+918	1	5	6
1	102	(Tovarnik) Beograd - Mladenovac - Lapovo - Niš - Preševo -	6+000		1		14+150	195	443	289	37	53	1	I	2		8	4		971916	2	38	15
2	102	državna granica - (Tabanovce) (Beograd) - Rakovica - Jajinci - Mala Krsna - Velika	01000		1	93+143	14+130	41	81	81	11	3	1		2		1	-			1	12	4
3	103	Plana (Beograd) - Stara Pazova - Novi Sad - Subotica -	15+020		4	133+722		61	121	121	15	8			2	1	1	2				12	-
5	105	državna granica - (Kelebia) Niš - Dimitrovgrad - državna granica - (Dragoman				16+100		6	11		5	7			3	4	7	4					
6	106	Beograd Centar - Pančevo glavna stanica - Vršac - državna granica - (Stamora Moravita)	82+200	19+070	14		19+600	10	26	26	4	2					8	1					
7	107	(Beograd) - Resnik - Požega - Vrbnica - državna granica - (Bijelo Polje) Lapovo - Kraljevo - Lešak - Kosovo Polje - Đeneral	287+013		33						3	9	1	15	-				287+013		1	26	9
8	108	Lapovo - Kraljevo - Lesak - Kosovo Polje - Đeneral Janković - državna granica - (Volkovo Subotica - Bogojevo - državna granica - (Erdut	69+820		11						3	5	2		1		7	4					
10		Beograd Centar - Novi Beograd  Beograd Centar - Rasputnica G - (Rakovica	09+820		11		2+887 4+416	2	4 8	4 8	1	3	1				11	10					
12	112	Beograd Centar - Rasputinica G - (Rakovica Beograd Ranžirna "A" - Ostružnica - Batajnica Beograd Ranžirna "B" - Ostružnica				25+658 5+902	+++10	14	26	26	1	1									1		2
14	113	Beograd Ranžirna "A" - Rasputnica "B" - Rasputnica	h e			10+419		4	8	8	1						1		3			1	1
15	115	"K/K1" - Resnik Ostružnica - Rasputnica "B" - (Rasputnica "K/K1")				2+121		1	2	2													
16	116	Beograd Ranžirna "B" - Rasputnica "R" - Rasputnica "A" - (Resnik)				4+538		2	2	2													
17 18	117 118	(Beograd Ranžirna "B") - Rasputnica "R" - Rakovica Beograd Ranžirna "A" - Rasputnica "T" - Rakovica				1+149 0+709																	
19		Beograd Ranžirna "B" - Rasputnica "T" - (Rakovica) vezni kolosek na području Rasputnice "K/K1":				8+379		3	5	5													
20	120	(Rasputnica "B") - skretnica "K" - skretnica "K1" - (Jajinci)				0+463																	
21	121	Topčider - Rasputnica Savski most - (Novi Beograd Topčider - Beograd spoljna - Beograd Dunay - Rasputnica Pančevački mos				3+578 6+257	4+519	1	1							1	0	0					
23	123	obilazni kolosek stanice Beograd Spoljna: (Topčider) - Blok 1 "Obala" - Blok 2 "Prelaz" - (Beograd donji grad)	71			1+757											1						
24	124	(Rasputnica Pančevački most) - Rasputnica Karadordev park - Rasputnica Dedinje - (Rasputnica G)					1+591																
25 26		Indija - Golubinci Novi Sad - Novi Sad Ranžima - Rasputnica Sajlovo	4+020 3+749		1 2	4+020		2	4	4													
27	127	obilazni kolosek stanice Mala Krsna: (Kolari) - odvojna skretnica 1 - odvojna skretnica 28 - (Osipaonica)				2+387					1												
28		Rasputnica Lapovo Varoš - Lapovo ranžirna - Lapovo					3+788																
29 30	130	Trupale - Niš ranžirna - Međurovo Crveni krst - Niš ranžirna				1+220 17+100	1	1	2	1		2											
31	131 132	Niš - Rasputnica most - (Niš ranžirna) Spojni kolosek stanice Niš: (Crveni krst) - odvojna				4+990 0+500		4	7		1	1 2									$\exists$	$\dashv$	
32 33	201	skretnica 2 - odvojna skretnica 4 - (Ćele kula) Subotica - Horgoš - državna granica - (Roszke)	24+351		5	UT300					3	2					2	2					
34	202	Pančevo Glavna stanica - Zrenjanin - Kikinda - državna granica - (Jimbolia)	131+318		14					· ·	4	10			1		11	4					
35 36		Banatsko Miloševo - Senta - Subotica Pančevo Varoš - Rasputnica 2a - (Jabuka)	80+264 1+600		14							1					2	2					
37	205	Novi Sad - Odžaci - Bogojevc (Novi Sad) - Rasputnica Sajlovo - Rimski šančevi -	89+457		10							1			1		7	4					
38	206	(Novi Sad) - Rasputnica Sajiovo - Rimski sancevi - Orlovat stajalište Novi Sad Ranžirna - Sajlovo Rasputnica	65+405 2+502		11							1					4	3					
40	208	Orlovat - Rasputnica 1a - (Lukićevo) Ruma - Šabac - Rasputnica Donja Borina - državna	0+630		1										60		04						
41	209	granica - (Zvornik Novi) (Platičevo) - Rasputnica 1 - Rasputnica 3 - (Štitar)				101+951						3			4	3	3	6					
43	211	Stalać - Kraljevo - Požega				135+733						2	1		2		4	5					
44	212	spojni kolosek stanice Kraljevo: (Mataruška Banja) - odvojna skretnica broj 72 - odvojna skretnica broj 73 - (Adrani)																					
45	213	spojni kolosek stanice Požega: (Uzići) - odvojna skretnica broj 53 - odvojna skretnica broj 54 - (Dragačevo)																					
		Smederevo - Mala Krsna Mala Krsna - Bor - Rasputnica 2 - (Vražogrnac)				11+742					1	1	1		1		2	2					
48	216	Crveni krst - Zaječar - Prahovo pristanište	() ()									1			1		7	1					
50	218	(Rgotina) - Rasputnica 3 - Rasputnica 1 - (Trnavac) Doljevac - Kastrat - Kosovo Polje													1								
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				tion depe	ndence		Auto	matic b	oloc		Auton	atic pos	itioning			ual positi	ioning of	level	Trat	fic remote	e contro	l dev	ices
				device									sings			cross	sings						
		RAILWAY LINE	line	. line	etween	line	. line	22		ipped with	ba	rrier or rier idinal		colour	10,000	trical ices	150 / 100 / 100	anical ices	line	. line	trol centers	trol stations	ontrolled
	Railway Line No		Length of single track line	Length of double track line	Number of distances between stations	Length of signle track line	Length of double track line	Number of block points	Number of signals	Number of signals equipped with auto-stop devices	in station	on track	in station	on track	in station	on track	in station	on track	Length of signle track line	Length of double track line	Number of remote control centers	Number of remote control stations	Number of remotely controlled stations
<sup>o</sup> Z			kr		kom	kı							pcs							m	1	pcs	
1	la	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		(Barlovo) - Rasputnica 1 - Kuršumlija	<b>—</b>	_	-		<u> </u>	-		-			_				-	-		_	+-	$\vdash$	
	221	Kosovo Polje - Metohija - Peć Kosovo Polje Teretna - Rasputnica 1 - (Drenica)										0									+	$\vdash$	
	301	Subotica - Subotica fabrika	4+100	<b>—</b>	1			<b>—</b>					_	1				4			1	$\vdash$	
56	302	Subotica - Subotica Iabrika Subotica - Subotica bolnica	2+745		1			$\vdash$		$\vdash$				-1				+		$\vdash$	+		
57		Kanjiža - Horgoš	21/43		- 1:							o .									_		
$\rightarrow$		Novi Sad - Novi Sad ložionica	2+870		1							15			2			1			T		
$\rightarrow$	305	(Podbara) - Rasputnica 3 - Rasputnica 2 - (Kać)	3+659		2																		
60	306	(Rimski šančevi) - Rasputnica 1 - Rasputnica 3 - (Podbara)	0+910		1																		
	307	Rimski šančevi - Bečej										-			1		9				1		
$\rightarrow$	308	Vrbas - Sombor						-			1	1			2		1	1			$\overline{}$		
63		Petrovaradin - Beočir	17+035		3												2	2			T		
64	310	Apatin Fabrika - Strilić - Sombor	38+304		4							8					1	2					
65	311	Bač - Karavukovo	13+420		2							0			1		1						
66	312	Bačka Palanka - Gajdobra	14+422		2												2	4					
67	313	(Brasina) - Rasputnica Donja Borina - Zvornik Grac				6+818																	
08	314	Šid - Sremska Rača Nova - državna granica - (Bijeljina)				25+612												2					
		Kikinda - Banatsko Aranđelovc	12+916		4												2						
		Sečanj - Jaša Tomić	10+363		1																		
		Zrenjanin Fabrika - Vršac - Bela Crkva	65+3348		4							1					4						_
		Pančevo Varoš - Pančevo Vojlovica	2+907		2							1			1	3							
73	319	(Uljma) - Rasputnica A - Rasputnica B - (Jasenovo)	0+488		1							_									_		
74	320	spojni kolosek stanice Senta: (Čoka) - odvojna skretnica 22 - odvojna skretnica 23 - (Orom)										8											
13		(Požarevac) - Rasputnica Sopot Požarevački - Kostolac				9+900																	
		Markovac - Resavica				53+250						1		1	1		3	4					
		Ovča - Padinska Skela	18+580		1	18+580																	
		Metohija - Prizren.																					
		Bečej - Vrbas		_	-			-									1	-			1	$\vdash$	
	402	Vršac - Vršac Vašarište	0.200	-	-			-		-							-	-		<del></del>	1	$\vdash$	
		Alibunar - Seleuš	8+386		1		_	$\vdash$				8	_					_		-	-		- 5
$\rightarrow$		Vladimirovac - Kovir	43+030		2							g.					1	2		-	1	$\vdash$	
		Čoka - Novi Kneževac Kikinda - Metanolsko sirćetni kompleks (km 6+413	12+300 7+255		1								_				1	<u> </u>			+	$\vdash$	
		Bogojevo - Dunavska obala	2+733		1			<u> </u>										<u> </u>		<u> </u>	+		-
		(Sombor) - Rasputnica Strilić - Bački breg	28+090		1																1		
$\rightarrow$		Sombor - Ridica	32+741		1																	Н	
		(Višnjićevo) - Rasputnica Rača - Sremska Rača				3+830															1		
		Paraćin - Stari Popovac									1						1				T		
	412	Surčin - Jakovo Bečmer				4+400						2											
91	413	(Beograd spoljna) - km 2+290 odvojna skretnica - Fabrika šećera				0+600																	
	501	Šarganska osmica																					
$\overline{}$		Total			161			416	876	699	107	127	7	18	28	12	115	76			6	82	37



# Appendix 3.6a Request for issuance of encryption keys for communication in the ETCS system

1. Identific	cation data of the rai	lway carrier:				
Address:						
Contact pe	erson:					
E-mail:						
Phone/Mo	bile Phone					
2. Identific	eation data of vehicl ETCS-ID (NID_Engine) decimal form	es and equipment EVN (European Vehicle Number)	Home- KMC of the vehicle	Baseline	OBU- producer	Requested begin of validity
example	996823	91 83 9586 616-0	IZS	3.6.0	CRSC	2024/6/15
☐ the hom ☐ the men ☐ home K KMC ID .	nation of home KM ne KMC of the given ntioned OBUs do no number of the given KM number of the given KM	n OBU is KMC IZ t have any home I r than KMC IZS:		_		become the KMC IZS
Contact pe	erson:					
□ all lines	nest the allocation of equipped with ETC ain track sections (a	CS level 2 track se	for: ction and oper		,	



## Appendix 3.7 Overview of telecommunication devices equipping level

The state of the s	}			Dispatching exchanges	bcs pcs	31 32	+	+	2 26	0 0	2 37	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	8 0	0 0	0 0	0 0	0 0	0 0	0
Part	-	ud.		30 30 30 30 30 30 30 30 30 30 30 30 30 3		Н	- 2		_	0 0		0 0	0	0	0 0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0	0	0 0	0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0	
Part	Tolores	reigna		"Step by step" system	type	56	TW-39 tg-529	TW-39	TW-39		TW-39	TW-39					Ī				Ħ								TW.30					Ī					$\prod$	T	
Marity Holy Mari	ŀ	t			bcs	28	0 7	0	0	0 0	2	0 -	0	0	0 0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0	0	0 0	0	0	0	0	0	0 0	0	0 0	0	0	0	0 0	2
Martine   Mart				Electronic	type	27	T			dere	teate 100	omni e 2	Ce IIII 92		ı		Ī			T	Ħ													Ī					Ħ		
Part	NITS	ŀ			bcs	56	10		7	- 0	0 2	0 0	0	0	0 0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0	0	0 0	,
Part	HANGE			ESK	type	25	T	T			0	T			Ī		T			T	Ħ										Ī	Ī		Ť			I		Ħ	Ť	
Figure 1997	- 1.	one			bcs	24	0 0	0	0	0 0	2	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0 0	,
Figure 1997   Part	Tolonk	I elepne		EMD with electric motor dialler	type	23					Siemens																														
Figure 1974		ľ			bcs	22	- 2	0 0	0	- 0	-	- 0	-	0	0 0	0	0 -	0	0	0 0	0	0 0	0	0 0	0	0 -	0	0 0	0 -	0	0	- 0	0	0 0	-	0 0	0	0	0	0 0	
Figure 1985   Part				у у стана	type	21		07.1	097		0																													$\rfloor$	
					bcs	20	014		m I	0 0	2 6	- 0	0	0	0 0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0	0	0	0 -	0	0	0	0	0 0	_	0 -	-  -	0	0	٥	
Part				"Step by step" system	type	19	+	eb5	fb5	+	SKRA	+		H	+		+		H	+	H	+		+	$\parallel$	+	H	+	th.c		$\parallel$	+	$\parallel$	$\dagger$	H	+	$\forall$		$\forall$	+	
Figure   Part		1		Sound signalling devices		Н	8 4	Ŧ	$\dashv$	6	Ħ	12	-	0	0 0	0	0 0	0	0	0 0	0	0 0	0	0 -	0	1 0	0	0 0	2	0	0	0	0	0 0	0	12	0	0	0	0	,
Figure 1997	-	raph		Telefiaxes	bcs	17	2 0	0 0	0	0 0	0	0 0	0	0	0 0	0	0 -	0	0	0 -	0	0 0	0	0 0	0	0 0	0	0	0 9	0	0	0 0	0	0 0	0	0 -	0	0	0	00	
Part	+	leleg		Teleprinters	bcs	16	31	3	S	0	15	2	-	0	- 0	0	0	0	3	0	0	2 0	0	0 0	0	- 0	0	0		0	0	0	0	0 0	2	0	1 0	0	0	0 0	
Figure   Part				sradiO	bcs	15	0 0	0 2	25	0 51	70	2 0	0	0	0 0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 4	0	0	0 0	0	0	0	0	0 0	6	0 0	0	0	0	0 0	
RED RESIDE Courte Face   RED RESIDENCE   RED			ephones	At automatic block (APB)	bcs	14	170	4 ;	55	9	70	0	-	4	2 2	-	6 (		0	- 0	-	0 0	0	2 0	0	0 0	0	0 0	0 0	0	0	0	0	0 0	0	0 0	0	0	0	00	
Heat Designation   Part   Pa			ackside tel	At level crossings (PP)	-	Н	+	4 :	31	16	78	10	0	0	0 0	0	- 0	0	0	0 0	0	0 3	0	0 0	-	0 0	0 0	0	0 -	0	0	- 0	0	0 0	4	8 9	0	0 0	0	0 0	,
HOLD Side State Rodge   Principal State   Prin	CES		T	\$100 A 100 A	H	Н	+					4 0	0 0	S	0 0	0	0 "	0	0	0 0	0	0 0	0	0 0	4	0 0	0	0	0 0	0	0	- 0	0	0 0	2	4 0	, -	0	0	0 0	-
BIOD Sig-State Border   2	NAL DEVI	200	itrol			Н	+			-	Н	∞ -	2	9	9 0		2 4	0	0	- 4	ε,	- 0	0	2 6	0	4 0	- 0	0	- 0	-	0	7 0	0	0 0	91	4 "	2	0	0	0 0	
Heart   Hear	L TERMI	hone	T.remote con desks		H	Н	+	+	+		33	2 5	- 0	0	0 0	0	0 4	. 0	0	0 0		0 0	0 0	+	$\mathbb{H}$	21 4			+		Н		0 0		8	2 2		H	+	0 0	
BIO   Self-Site   Ending   E	FINA	Tele	T.	000 100000 00000 00 000		Н		+	+	+	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0	2 0	0	0 0	0	0 0	0 0	0 0	0 0	0	0	0 0	0	0 0	0	0 4	0	0 0	0	0 0	
BIOD Side State Brorder   2   25   25   25   25   25   25   25		ŀ				Н	2	0 0	5	= 4	0	91	0	0	0	0	0 0	0	0	0 0	_	2 0	0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0 0	_	0 00	91	0	0	0 0	
BGD Sid-State Barder   2   2   2   2   2   2   2   2   2		-		Secretary sets	bcs	9	9 04	7 ,	m	0 9	89	- 0	0	0	0 0	0	0 9	0	33	0 0	0	0 0	0	0 0	0	0 0	0	0 0	0 4	0	0	0 0	0	0 0	0	0 4	2	0 0	0	0 0	
BIOD Side State Breder   2   2   2   2   2   2   2   2   2		r		Automatic telephone devices	bcs	2	360	4 3	999	28	418	283	0	oc ·	0 0	-	0 8	0	891	0 %	0	0 0	0	0 8	0	21 %	0	0 0	0 916	9	0	0 %	01	0 84	80	9 124	200	e 0	0	0 0	
BIOD. Sid-Stare Border  12  BIOD. Sid-Stare Border  13  BIOD. Sid-Stare Border  14  BIOD. Sid-Stare Border  16  BIOD Canter-Parable Perice v. Stare Border.  16  BIOD Canter-Parable Perice v. Stare Border.  16  BIOD Canter-Parable Stare Border.  18  BIOD Readment "17  18  BIOD Readment "17  18  19  10  10  10  10  10  10  10  10  10		ľ		CB telephone devices	bcs	4	22 23	96	30	0 0	52	0	2	0	- 0	0	0 0	0	0	0 0	0	0 0	0	0 -	0	0 0	0 0	0	0 0	0	0	0	0	0 -	0	0 0	0	0 0	0	00	-
				LB telephone devices	bcs	3	284	31	59	2 46	68	19	9	×	0 0	3	2 9	1	3	3 2	-	1	2	0 5	0	7	0	0	13	2	0	9	0	15	21	14	12	7	0	0 0	
첫 및 다음 본 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등											$\overline{}$	-			112 BGD Ranžirna "A"-Ostružnica-Batajnica 113 BGD Ranžirna "B"-Ostružnica		-	-	-										$\neg$		-	-		$\neg$	Stalać-Kraljevo-Požega	214 Smederevo-Mala Krsna 215 M Krsna-Boe-Rasuntnien "2" J.Vražonmac)	Niè-Zaječar- Prahovo pris			$\neg$	7



			_	Station dispatching devices	bcs	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181
				Dispatching exchanges	bcs	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	hqu.				bcs	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	Telegraph			"Step by step" system	type	29														1		T												
			_		bcs	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	w
				Ејеспопіс	_	- 1	-		-					1				-	+	+	+					-	2		20 00	_				
	3				type	2.	-0		_							8.0				-		-												
E UNITS				ESK	bcs	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	17
EXCHANGE UNITS	20				type	25							1							4	1	1		L									1	
П	one			DUDING MANUSCRIPT WAS GIVEN	bcs	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	Telephone	i.		EMD with electric motor dialler	type	23																												
					bcs	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	12
				Ctoss-bar	type	21	-0		+	1		+	1	1	+				1	+	1	t					0-1					1	1	
	1,000					- 10												- 5		+				8			3 3					- 3	1	
				"Step by step" system	bcs	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
					type	61																												
				Sound signalling devices	bcs	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	156
	raph			Telefaxes	bcs	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	п
	Telegraph			Teleprinters	bcs	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88
			I	Others	bcs	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126
		1	eano	At automatic block (APB)	bcs	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	397
		Tencheida talanhonas	inc relebit	(99) sgnissoro ləvəl 1A	bcs	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	284
		Tenoles	TIGGE	Art exit signals	bcs	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	351
EVICES			ŀ	At entry signals	bcs	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	415
TERMINAL DEVICES	3	remote control	1	snoitets yewlier 1A	bcs	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	201
	Telephone	Traff.remote	neave	As operational dispatching centers	bcs	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
FINAL	Te	-	_	PA telephones	bcs	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	œ
				səuoqdəjəi ∀dd	bcs	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 -	0	0	0	0	0	0	0	0	0	0	0	0	96
	92			Secretary sets		9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	182
				Automatic telephone devices		5	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0 +		0	0	0	0	0	0	0	0	0	0	0	1598
			_	CB telephone devices		4	0		0	+	+	+	+	+	+	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0		0	262 4:
			_	FB relephone devices	bcs b	3	0		0	+	+	+	+	+	+	0	0	3	+	+	0 0	+	+	0	0	0	0	0	0	0	0	+	0	880 2
H					-								1							1	1	T										1	1	~
				RAILWAY LINE	rest.	2	306 (Rim. Šančevi)-Rasput "1"-Rasput. "3"-(Podb.)	308 Vrbas-Sombor	309 Petrovaradin-Beočin		311 Bač-Karavukovo					316 Sečanj-Jaša Tomić	317 (Zrenjanin)-Zrenjanin fabr.Vršac-Bela Crkva	318 Pančevo Varoš-Pančevo Vojlovica	319 (Uljma)-RaspA-RaspB-(Jasenovo)	320 Senta-Odvojna skr. 22 Senta	321 (Pożarevac)-Rasput Sopot PožKostolac	323 Owea-Padinska Skela	403 Alibunar-Seleuš	404 Vladimirovac-Kovin	405 Coka-Novi Kneževac	406 Kikinda-MKS (ind.kolosek)	407 Bogojevo-Dunavska obala	408 Sombor-Bački Breg	409 Sombor-Ridica	410 (Višnjićevo)-Rasput.Rača-Sremska Rača	411 Paračin-Stari Popovac	412 Surčin-Jakovo-Bečmen-(Boljevci)	413 (Bgd spoljna)-km 2+290-Fabrika šećera	Total:
					oN	H	45 30	$\vdash$	$\rightarrow$	-	-	-	+	-		71 31	81 31	67 31	$\rightarrow$	-	70 32	+	+	+	59 40	61 40	58 4(	72 40	73 40	79 41	Н	-	57 4	



												T NER T	OTHER TELECOMMUNICATION DEVICES	AUNICA	TION DEV	TCES									
		Device	s for recc	recording of tr statements	Devices for recording of transmitted statements		Devices dis	Devices displaying accurate time	zurate time		2007	PA devices	s		Int	Interphones		Pc	Power supply devices	devices		Passenger visual information display	risual infor	mation di	splays
o Zanii yawin	RAILWAY LINE	g cpsuucja	12 channels	16 channels	24 channels	Number of stations	Clock exchange units	Master clocks	Impulse regenerators								For outdoor installation	Acummulator batteries	Retifiers	Сопуетегя	Motor electric generator units	Zuniber of stations	Control desks	sysiqsib noitsamo'nl	Information kiosks
B.	3	pcs 33	pcs 34	pcs 35	pcs 36	pcs 37	pcs 38	36	pcs 40	pcs 41	pcs p	pcs pc	pcs pcs 44 45	s pcs	ss pcs	pcs 48	pcs 49	pcs 50	pcs	pcs 52	pcs 53	pcs 54	pcs 55	sze sze	pcs 57
	ler	1	-	0	0	3	2	1	13	Н	Н	H	Н	Н	Н	Н	0	16	16	0	0	10	0	0	0
	Nis-Presevo-State Border.	9	2	0	-	9	2	21	78	323	20	50 32	325 20	9 (	4	38	17	72	7.1	0	1	1	1	4	0
4 103 (BGD)-Rakovica-Ja 2 104 (BGD)-S Pazova-In	(BGD)-Rakovica-Jajinci-M.Krsna-V.Plana (BGD)-S Pazova-Indiia-Subotica-State Border		0 -	0 -	0	20	00	3	20	133	- 6	1 6	6 1	0	0 0	0 -	0 0	110	25	0 0	0	0 -	0 0	0 0	0 0
105	tate Border.		0	0	0	0	0	2	3	20	-			0	0	0	0	7	13	0	0	0	0	0	0
6 106 BGD Centar-Pancevo-Vrsac-S 1 107 (BGD)-Resnik-Podgonca-Bar	BGD Centar-Pancevo-Vršac-State Border. (BGD)-Resnik-Podgorica-Bar	1 2	0 0		0 0	34	0 8	e #	v ¥	212	7 2	7 7	72 6			3 20	0 -	3 62x12V 222x2V	47	0 0	0 0	0 0	e 0	0 93	0 0
20 108 Lapovo-Kraljevo-Đ.	Lapovo-Kraljevo-B-Janković-State Border.	- 0	0	0 0	0	6	0	6	0 0	81 0	60	3 2	24 0	0 0	0 0	0 0	0 0	16x6 v 28	26	- 0	0 0	0 0	0 0	0 0	0 0
110	i Beograd	0	0	0	0	0	0	1	1	2			7 6	0	0	0	0	0 4	n 00	0	0 0	0 0	0 0	0	0
	nica"G"-(Rakovica)	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
<ol> <li>112 BGD Ranzima "A"-Ostrużnica</li> <li>14 113 BGD Ranžima,"B"-Ostružnica</li> </ol>	Ostružnica Ostružnica	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	4 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0 0	0 0
13 114 BGD Ranžima "A"-	BGD Ranzima "A"-Rasp."B"-Rasp."K"-Resnik	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0 0	- 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0
116	Rasp."R"-Rasp."A"	0	0	0	2	0	0	1	0	20	0		20 1	0	0	0	0	-	3	0	0	0	0	0	0
11 117 (BGD Ranžima "B" 9 118 (BGD) BGD Panžir	(BGD Ranžima "B")-Rasp."R"-Rakovica	0	0 0	0 0	0	0	0	0 0	0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0	0
119	BGD Ranžima "B"-Rasputnica "T"-(Rakovica)	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0
	s.B)-Ras.K-Ras.K1-Jajinci	0	0	0	0	6	0	8	0	10	0	4 0	11 2	0 0	0	0	0	- 0	2	0	0	0	0	0	0
121	Topčider-Kasp. Savski Most-(Novi B.GD.)  TopčBlok 1Obala-Blok 2 prelRas.Pan.Most	0	0	0	0	0	0	0	0	3 0	0 0	1	5 1	0	0	0	0	7 0	0	0	0	0	0 0	0	0
123	-BGD Spoljna-Blok 2 prel	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
31 124 (Vukov Sp.)-Ras.K.)	(Vukov Sp.)-Ras.K.Park-Ras.Dedinje-(Rakov.)	0	0 0	0 0	0	0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0	0 0	0 0	0	0
126	rna-Sajlovo Rasp.	0	0	0	0	0	0	0	1	10	0		0 0	0	0	0	0	1	1	0	0	0	0	0	0
41 127 Obilazni kolosek Mala Krsna 21 128 I anovo Varoči anovo Banžii	Obilazni kolosek Mala Krsna	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0 0	0 0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0 0	0
129	na-Medurovo	0	0	0	0	0	0	1	0	56		6 3		0	0	0	0	2	3 0	0	0	0	0	0	0
17 130 Crveni Krst-Niš Ranžirna 23 131 Niš-Basandnica Most-Niš Banžirna)	užirna	0	0 0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0
18 132 (Cr.Krst-Skr.2)-Skr.	3-Skr.4-(Čele Kula)	0	0	0	0	0	0	0	0	0	0	0,	0	0	0	0	0	0 0	0	0	0	0	0 0	0	0
202	Subonea-Horgos-State Border. Pančevo Glavna-Zrenjanin-Kikinda-State Border.	1	0	0	0	0	0	0	0	0	2	2	7 2	0	0	0	0	2	9	0	0	0	0	0 0	0
203	Senta-Subotica	0	0	0	0	0	0	0	0	0	0		0 0	0	0	0	0	0	0	0	0	0	0	0	0
44 204 Pančevo Varoš-Rasputnica "2a"-(Jab 39 205 N.Sad-Sajlovo Rasputnica-Bogojevo	Pančevo Varoš-Kasputmca "2a"-(Jabuka) N.Sad-Sailovo Rasputnica-Bogojevo	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	00	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
206	(N.Sad)-Sajl.RaspR.ŠančOrl.staj(Tomaš)	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0
	N.Sad Kanzirna-Sąjlovo Kasputnica Orlovat-Rasputnica "1a"-(Lukićevo)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
47 209 Ruma-Sabac-Rasp.Don 50 211 Stalać-Kralievo-Požega	Oonja Borina-State Border.	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 -	0 14	0 %	0 0	0 0	0 0	0 0	0 0	0 0	0	0 00	0 0	0 0	0 0	0 0	0 0	0 0
214	sua	0	0	0	0	2	0	0		2	1	1 -	5 1	0	0	0	0	-	-	0	0	0	0	0	0
$\overline{}$	M.Krsna-Bor-Rasputnica "2"-(Vražogrnac)	0	0	0	0	∞ -	0	2	7	01	3	4 6	22 3	0 0	0	0	0 0	18	10	0	0	0 0	0 0	0	0
53 Z10 Aus-Zajccar- Francovo pristaniste 64 Z18 (Niŝ)-Doljevac-Kastrat-Kosovo Polje	rat-Kosovo Polje	0	0	0	0	0	0	0	0	0	0	7 0	0 (	0	0	0	0	0	0	0	0	0	0 0	0	0
219		0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
220	za "1"-Kuršumlija	0	0	0	0	0	0	0	0	0	0	0 0	0	0 0	0 0	0	0	0	0	0	0	0 0	0 0	0	0
302	olnica	0	0	0	0	0	0	0	0	0	0 0	00	0	0	0	0	0	0	0	0	0	0	0	0 0	0
303		0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
36 304 Novi Sad-Novi Sad 37 305 Podhara Paerut "3"	Novi Sad-Novi Sad Iožionica Podhara-Paenut "3", Paenut "3", Kači	0 0	0 0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	- 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0
306	ut "1"-Rasput, "3"-(Podb.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
308		0	0	0	0	0	0	0	0	0	0		0 6	0	0	0	0	0	0	0	0	0	0	0	0
69 309 Petrovaradin-Beočin 74 310 Senta Apolin Gheila Strilić (Sembor)	n Secilit / Cambori	0	0	0	0	0	0	0	0	0 0	0 0	0 0	0	0	0	0 0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0 0
311	a-sume-(somoor)	0	0	0	0	0	0	0	0	0				+	0	0	0	0	0	0	0	0 0	0 0	0	0
55 312 Bačka Palanka-Gajdobra	lobra	0	0	0	0	0	0	0	0	0	_	-	0 0	H	0	0	0	0	0	0	0	0	0	0	0



	S				_					_		_															
	n display:	sasoia noinsmonli	bcs	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	formatio	systqsib noitsmnolnl	bcs	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
	Passenger visual information displays	Control desks	bcs	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	Passenger	Number of stations	bcs	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	18	Motor electric generator units	bcs	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	levices	Сопуейегя	bcs	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Power supply devices	Retifiers	bcs	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	379
	Powe	Acummulator batteries	bcs	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	328
		For outdoor installation	bcs	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
S	iones	For indoor installation	bcs	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
DEVICE	Interphones	Ілістрһопс ехсһапде units	bcs	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
OTHER TELECOMMUNICATION DEVICES		Number of stations	bcs	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
OMMUN		Microphone console	bcs	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
R TELEC	vices	Speakers	bcs	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1886
ОТНЕ	PA devices	zıəflilqmA	bcs	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
		Number of statons	bcs	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	2	Auxiliary clocks	bcs	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	941
	curate tim	Impulse regenerators	bcs	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	178
	Devices displaying accurate time	Master clocks	bcs	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101
	evices disp	Clock exchange units	bcs	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	Ď	Number of stations	bcs	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
	smitted	24 channels	bcs	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	ing of trai	16 channels	bcs	35	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	s
	Devices for recording of transmitted statements	12 channels	bcs	34	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	s
	Devices	8 channels	bcs	33	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
		RAILWAY LINE RAILWAY LINE	Кэ	2	313 (Ruma)-Rasp.Donja Borina-Zvornik Grad	314 Šid-Sremska Rača Nova-State Border.	315 Kikinda-Banatsko Arandelovo	316 Sečanj-Jaša Tomić	317 (Zrenjanin)-Zrenjanin fabr. Vršac-Bela Crkva	318 Pančevo Varoš-Pančevo Vojlovica	319 (Uljma)-RaspA-RaspB-(Jasenovo)	320 Senta-Odvojna skr. 22 Senta	321 (Požarevac)-Rasput.Sopot PožKostolac	322 Markovac-Resavica	323 Ovča-Padinska Skela	403 Alibunar-Seleuš	404 Vladimirovac-Kovin	405 Čoka-Novi Kneževac	406 Kikinda-MKS (ind.kolosek)	407 Bogojevo-Dunavska obala	408 Sombor-Bački Breg	409 Sombor-Ridica	410 (Višnjićevo)-Rasput.Rača-Sremska Rača	411 Paraćin-Stari Popovac	412 Surčin-Jakovo-Bečmen-(Boljevci)	413 (Bgd spoljna)-km 2+290-Fabrika šećera	Total:
		0.0000000000000000000000000000000000000	No	1	46 31	52 31	60 31	71 31	81 31	67 31	78 31	48 32	70 32	63 32	66 32	53 40	80 40	59 40	61 40	58 40	72 40	73 40	79 41	68 41	77 41	57 41	
			- "		Ĺ		Ľ		Ľ	Ĺ		_		ட்	Ĺ	Ľ	Ľ		Ĺ	Ľ			Ĺ	لـّـا			



Mathematical Particle   Math		erofilifiers			Digit	l telephone	s	
No. 100   No.		srəfilqms bı					S	
14.1.   14.1	12	уроле втоип	udergələl	s\ridM 9	s\tidM 8	s/tidM SSI	bove ground amplifier	ersplifqms bnuorg-n
1   2   2   3   4   5   5   5   5   5   5   5   5   5	pcs type pcs	bcs bcs	type	type	type	П	bcs	bcs
Single Brodiety	11 12 13	15 16	18	20	22	24 25	26	27
The state brokeds:  1	73 0 212 0	0 4		siemens		IUX	0	0
The State Bucklet.  2 0 0 1 34,00 1 13,537 13,538 0 1,100 216 0 10,100	0 Z12 3	0 2				STM-1	0	0
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antification of a control of a		0				0	0	0
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Tringle Border. Cele Kula) 0 0 0 0 17.257 0 0 16.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0			1	0	0	0
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r. ikinda-State Border,         0	0	0				0	0	0
Netical Participant Deduct.  1		0	0			0	0	0
October Serious Seriou		0				0 0		
All	>	0						
Neighborhord Signature (Armide)		0 0				0	0	0
kickevs)         0<		0				0	0	0
kickevo)         0<		0	0			0	0	0
Tima-State Border.  0 0 0 14.6 0 0 70.40 72.95 277.093 Z3F 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0	0			0	0	0
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MULTI-CHANNEL DENCES    Maria   Maria	Г	П	In-ground amplificrs	bcs	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥
Control lines   Control line			1877 - 0.05	-	26 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control lines   Control line				-	Н	H	Н			Н	Н	_		Н	Н				H		Н	Н	Н	_	_	_		_	_	Н	0		Н	0	0
Configuration   Configuratio		I telephone	sylidM 221																																
Continue		Digita	s/tidM 8			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Complete					21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FALLWAY LINE   Trop wite overhead lines   CARLE SYNTIANS   CARLE SALLWAY LINE   CARLE STATE   CARLE SALLWAY LINE   CARLE SALLWAY LINE	EVICES		s\vidM 2	- 30	20																														
FALLWAY LINE   Trop wite overhead lines   CARLE SYNTIANS   CARLE SALLWAY LINE   CARLE STATE   CARLE SALLWAY LINE   CARLE SALLWAY LINE	EL DE			bcs	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Could lines	MULTI-CHANN		Теlеgraph	type	18																														
Comparison   Com			In-ground amplifiers	bcs	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Note   Particular Service			Above ground amplifiers	bcs	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
CABLE SYSTEMS    FAILWAY LINE   CABLE SYSTEMS    FAILWAY LINE   CONTRICT   CABLE SYSTEMS    FAILWAY LINE   CONTRICT   CABLE SYSTEMS    FAILWAY LINE   CABLE SYSTEMS    FAILWAY LINE SYSTEMS    FAILW		ıe	S12111111112 71 1210	bcs	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	∞
CABLE SYSTEMS    FAILWAY LINE   CABLE SYSTEMS    FAILWAY LINE   CONTRICT   CABLE SYSTEMS    FAILWAY LINE   CONTRICT   CABLE SYSTEMS    FAILWAY LINE   CABLE SYSTEMS    FAILWAY LINE SYSTEMS    FAILW		ephor	slameda 51 13vO	type	14																														
CABLE SYSTEMS    FAILWAY LINE   CABLE SYSTEMS    FAILWAY LINE   CONTRICT   CABLE SYSTEMS    FAILWAY LINE   CONTRICT   CABLE SYSTEMS    FAILWAY LINE   CABLE SYSTEMS    FAILWAY LINE SYSTEMS    FAILW		ue tel		bcs	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
CABLE SYSTEMS   Checked lines   Coerthead color   Coerthead lines   Coerthead lines   Coerthead lines   Coerthead lines   Coerthead lines   Coerthead lines   Coerthead color   Coerthead lines   Coerthead line		Analog	Up to 12 channels		12																														
Control lines   Cable lines   Cable lines   Cable lines			nb to 3 channels	-	Ξ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
CABLE SYSTEMS   Cable lines   CABLE SYSTEMS   Cable lines   CABLE SYSTEMS   Cable lines   Cable li				type	10																														Ш
Controlled   Con			Гося	km	6	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Н
CABLE SYSTEMS   Control of the con		lines	Fiber optic	km	œ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72,950
Souther-Respired House-Steinter Charles   Coverhead lines     Souther-Respired House-Respired House-Re	TEMS	Cable	ATS	km	7	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	507,024
South-Apatin fabrika-Strike-Sombory   13   South-Apatin fabrika-Strike-Sombory   14   Sidestandard-Rasput "3"-Rasput "3"-(Raci)   15   South-Apatin fabrika-Strike-Sombory   16   South-Apatin fabrika-Strike-Sombory   17   South-Apatin fabrika-Strike-Sombory   18   South-Apatin fabrika-Strike-Sombory   19   South-Apatin fabrika-Strike-Sombory   19   South-Apatin fabrika-Strike-Sombory   19   South-Apatin fabrika-Strike-Sombory   10   0   0   0   0   0   0   0   0			STKA	km	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1041,453
RAILWAY LINE   Rail Rail Rail Rail Rail Rail Rail Rail			Overhead cables	km	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	263,142
RAILWAY LINE		Overhead 1	Two wire overhead lines	km	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Н
13 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1			Two-wire overhead lines SiBr	km	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000
II					2	5 Podbara-Rasput, "3"-Rasput, "2"-(Kač)	6 (Rim.Šančevi)-Rasput "1"-Rasput. "3"-(Podb.)	8 Vrbas-Sombor		0 Sonta-Apatin fabrika-Strilić-(Sombor)		2 Bačka Palanka-Gajdobra			5 Kikinda-Banatsko Arandelovo			8 Pančevo Varoš-Pančevo Vojlovica			1 (Požarevac)-Rasput.Sopot PožKostolac	2 Markovac-Resavica		3 Alibunar-Seleuš	4 Vladimirovac-Kovin	5 Čoka-Novi Kneževac	6 Kikinda-MKS (ind.kolosek)				0 (Višnjićevo)-Rasput.Rača-Sremska Rača	1 Paraćin-Stari Popovac	2 Surčin-Jakovo-Bečmen-(Boljevci)	3 (Bgd spoljna)-km 2+290-Fabrika šećera	
33     42       43     43       43     43       43     43       43     43       44     43       45     43       47     43       43     43       44     43       45     43       47     43       47     43       48     43       49     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       40     43       41     43       42     43       43     44       44     44       45     44       46     44       47     44       48     44       49     44       40     44       40     44       40	L		oV sinc No	Rai	8 3	305	306	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	403	404	405	406	407	408	409	410	411	412	413	
				οN	_	37	45	33	69	74	54	55	46	52	09	71	81	29	78	48	20	63	99	53	80	65	61	28	72	73	62	89	17	57	



		RADIO DEVICE														
		Loc	omotive radio c		ching		Traffic	running	netwo	rks (2m	1)	Sta	tion rad	io netw	orks (0	7m)
No Railway line No	RAILWAY LINE	Exchange units (with railway line splitter)	ength of covered railway line	Frackside stations	Locomotive stations	Number of networks	Radio link	Repeaters	Fixed stations	Mobile stations	Movable stations	Number of networks	Repeaters	Fixed stations	Mobile stations	Movable stations
No Railwa		pcs	km	pcs	pcs	pcs	pcs pcs	pcs Soq	pcs	pcs	pcs	pcs	pcs pcs	pcs	pcs	pcs
1	2	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
5 10 3 10	01 BGD-Šid-State Border 02 BGD-Mladenovac-Niš-Preševo-State Border.	3	100 377	8 42	8	0	0	0	0	0	0	8 17	3	8	3	21 53
4 10		1	100	12	0	0	0	0	0	0	0	1	0	1	0	3
2 10 22 10		0	155	10	0	0	0	0	0	0	5	7	0	16 3	0	74 12
6 10 1 10		0	20 176	4 35	0	0	0	0	13	0	4	4 14	0	13	0	11 35
20 10	8 Lapovo-Kraljevo-Đ.Janković-State Border.	0	0	0	0	1	0	1	16	4	0	0	0	0	0	0
26 10 7 11	9 Subotica-Bogojevo-State Border. 0 Beograd Centar-Novi Beograd	0	0 10	0	0 164	0	0	0	0	0	0	0	0	0	10	0
8 11	1 BGD Centar-Rasputnica"G"-(Rakovica)	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0
15 11 14 11	3 BGD Ranžirna."B"-Ostružnica	0	20 0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 11 25 11		0	20	3	0	0	0	0	0	0	0	0	0	0	0	0
10 11	6 BGD Ranžirna "B"-Rasp."R"-Rasp."A"	0	8	4	0	0	0	0	0	0	0	6	1	3	0	19
11 11 9 11		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 11 16 12	9 BGD Ranžirna "B"-Rasputnica "T"-(Rakovica)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 12
29 12	21 Topčider-Rasp.Savski Most-(Novi BGD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 12 27 12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 12	24 (Vukov Sp.)-Ras.K.Park-Ras.Dedinje-(Rakov.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 12 24 12		0	0	0	0	0	0	0	0	0	0	0 4	0	0 4	0	0 11
41 12 21 12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 12	29 Trupale-Niš Ranžirna-Međurovo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17 13 23 13		0	0	0	0	0	0	0	0	0	0	5	0	8	0	19
18 13 51 20		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43 20	2 Pančevo Glavna-Zrenjanin-Kikinda-State Border.	0	0	0	0	1	0	2	11	0	2	0	0	0	0	0
32 20 44 20		0	0	0	0	0	0	0	8	0	6	0	0	0	0	0
39 20 40 20		0	0	0	0	0	0	0 2	0 18	0	0	0	0	0	0	2
38 20	N.Sad Ranžirna-Sajlovo Rasputnica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42 20 47 20		0	0	0	0	1	0	0	1 8	0	0	2	0	2	0	5
50 21 49 21		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 12
34 21	5 M.Krsna-Bor-Rasputnica "2"-(Vražogrnac)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 21 64 21		0	0	0	0	0	0	0	14 0	0	4	0	0	0	0	5
62 21	9 Kuršumlija-Kastrat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56 22 76 30	01 Subotica-Subotica fabrika	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75 30 65 30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 30	Novi Sad-Novi Sad ložionica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 30 45 30	06 (Rim.Šančevi)-Rasput "1"-Rasput. "3"-(Podb.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33 30 69 30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74 31	0 Sonta-Apatin fabrika-Strilić-(Sombor)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54 31 55 31	2 Bačka Palanka-Gajdobra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 31 52 31		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 31	5 Kikinda-Banatsko Aranđelovo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71 31 81 31	7 (Zrenjanin)-Zrenjanin fabr.Vršac-Bela Crkva	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0 4
67 31 78 31		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48 32	20 Senta-Odvojna skr. 22 Senta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 32 63 32		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66 32 53 40	23 Ovča-Padinska Skela	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80 40	04 Vladimirovac-Kovin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59 40 61 40		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58 40 72 40	7 Bogojevo-Dunavska obala	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73 40	99 Sombor-Riđica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79 41 68 41		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77 41	2 Surčin-Jakovo-Bečmen-(Boljevci)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57 41	.3 (Bgd spoljna)-km 2+290-Fabrika šećera  Total:	9	996	122	176	8	2	11	89	4	27	83	6	95	20	298
	10000000000000000000000000000000000000	-								5,83			-			



## Appendix 3.8. List of service points where it is possible to perform the transshipment of dangerous goods

The user or the authorized person is liable for safe transshipment and provision of required permits for transshipment issued by the competent authorities (ministry, local self-government, etc.) in case such permits are prescribed by law or by-laws. The Infrastructure Manager is not obliged to control permits and approvals issued by the competent authorities. In case of an accident during transshipment, the user or authorized person undertakes all necessary measures for making handling point functional.

Transshipment of the respective dangerous goods may be carried out on the handling point (handling area, ramp), i.e. the facility placed beside the track referred to in column 3, Table 1 of this Appendix. Transshipment shall be performed in compliance with the applicable regulations of the Republic of Serbia in the field of transport of dangerous goods, health and safety at work, environmental protection, waste treatment, fire protection, etc., complying with the essential safety measures which shall be provided as follows:

Keeping, disposal and storage of dangerous goods in the area of service point, including handling point is prohibited.

The handling point where transshipment is carried out must be enclosed or in any other way separated from passenger transport or from the handling point (loading, unloading, transshipment) with the goods not classified as dangerous (not RID). If a handling point is not enclosed, the client must mount movable fence which shall be removed upon handling (made of plastic orange material used in construction).

The handling point where transshipment is carried out shall have "RID – warning plate on the handling point". In case an IŽS' service point, within which there is the place of handling with dangerous goods, does not have "RID – warning plate on the handling point", the user of the handling point (consignee, consignor or authorized person) is obliged to provide the said plate at their own expense during the entire period of handling. The plate shall be made of sheet, with red colour base, on which the text with white letter is inscribed. The text shall read: RID WARNING – HANDLING WITH DANGEROUS GOODS. Minimum plate size is 600x500 mm. The plate shall look like as indicated:

RID
WARNING
HANDLING WITH DANGEROUS GOODS

Transshipment of the dangerous goods is carried out during the visible part of day, but it may be performed at night, with electrical lighting whereby the electrical devices that cannot cause fire or explosion may be used. In case an IŽS service point, within which there is the point of handling with dangerous goods does not have capacity for electrical lighting, the user of the handling point shall be obliged to provide necessary lighting at their own expense during the entire period of handling.

In case that said track is under OCL, during transshipment the voltage must be turned off and the track shall be secured in a duly manner.

Road vehicle engine shall be turned off during transshipment.



The disposal of the flammable and material which may cause or intensify fire is prohibited. Furthermore, it is forbidden to dirty the handling area with oil or oil derivatives (out of road freight vehicle).

Fire lighting or work with any open flame, use of tools which sparks and the devices with burner as well as smoking are forbidden during transshipment.

The user of the handling point (consignee, consignor or the authorized person) is obliged to perform cleaning and remove waste, which has been generated during the process of handling with dangerous goods, to the dumpsite, upon the completion of handling activities, in accordance with the Law on Waste Management, Law on Environmental Protection and other legislation and bylaws in the field of environmental protection. In case the user of authorized person does not clean the area after transshipment and does not take waste to the respective dumpsite outside the station, the railway undertaking shall perform cleaning.

The user of the handling point is obliged that, in the process of handling with dangerous goods, comply with the Law on Transport of Dangerous Goods and Law on Protection at Work (to take care on safety and health at work of their employees on the handling point), and particularly to get them acquainted, in a proven manner, with the hazards of stay in railway area (general safety of movement in IŽS's service points, way of conduct in service points, restrictions in movement, hazards from high voltage and other hazards).

Simultaneous transshipment at the same place of handling with dangerous goods of different classes is forbidden.

The service points where transshipment of certain dangerous goods from railway wagons into road vehicle and vice versa is performed are given in the Table of this Appendix.

Upon the request of the interested parties, Infrastructure of Serbian Railways JSC may approve transshipment of other dangerous goods, as well as in service points not given in the Table of this Appendix, in case there are conditions met for handling in the service point, and if the approval of the competent authority is provided for the goods that are being transshipped if it is prescribed by the law (ministries, local self-government units, , i.e. the Ministry of Interior's services).

For more information please contact:

"Infrastructure of Serbian Railways" JSC Traffic Department 6 Nemanjina St., 11000 Belgrade, Serbia Phone/Fax:+381 11 36 18 214 E-mail:sektor.sp@srbrail.rs

The table consists of 7 columns, with the following content:

- column No 1 ,,ordinal No";
- column No 2 ,,Name of a service point";
- column No 3 "Track", contains ordinal number or name of track in accordance with Station regulations (transport dispatching point or loading point);
- columns 4, 5 and 6 "Dangerous goods", contain NHM code, UN item/number for indication of hazards and class of dangerous goods, whose transshipment may be carried out;
- column No 7 "Notes", contains specific information relating to specific boxes.



Table: List of service points open for transshipment of dangerous goods

1401	e: List of service points op I	en for transsinpine	Dangerous goo			
			Dangerous goo			
	Name of service point	Track		number hazards ation		Notes
	Traine of service point	Track	NHM	/ nu ha :atic	~	Notes
No				UN / num for haza indication	Class	
1	2	3	4	5	6	7
1	A duarra a	1	3105 20	2067/50	5.1	
1.	Adrovac	1	3102 30	1942/50	5.1	
2.	Aleksinac	1	3105 20	2067/50	5.1	
	11011011111	-	3102 30	1942/50	5.1	
3.	Bagrdan	6	3105 20	2067/50	5.1	
			3102 30 3105 20	1942/50 2067/50	5.1 5.1	
4.	Bačka Topola	1, 5, 7	3102 30	1942/50	5.1	
	D. D. L.L.		3105 20	2067/50	5.1	
5.	Bor Freight	1	3102 30	1942/50	5.1	
6.	Valjevo	II line	3105 20	2067/50	5.1	
0.	valjevo	II lille	3102 30	1942/50	5.1	
7.	Velika Plana	1	3105 20	2067/50	5.1	
<i>'</i> ·	V CHKa T Iana	1	3102 30	1942/50	5.1	
8.	Vranje	1	3105 20	2067/50	5.1	
	, 141.130		3102 30	1942/50	5.1	
9.	Vršac	11, 19	3105 20	2067/50	5.1	
		<u> </u>	3102 30 3105 20	1942/50 2067/50	5.1 5.1	
10.	Grejač	1	3103 20	1942/50	5.1	
	·		3105 20	2067/50	5.1	
11.	Žednik	1, 6a	3102 30	1942/50	5.1	
10	Zmajevo	5	3105 20	2067/50	5.1	
12.			3102 30	1942/50	5.1	
13.	Zrenjanin	1, 10	3105 20	2067/50	5.1	
13.	Zienjanni	1, 10	3102 30	1942/50	5.1	
14.	Zrenjanin Factory	1	3105 20	2067/50	5.1	
	2101134111111111111111111111111111111111		3102 30	1942/50	5.1	
15.	Jagodina	1, 8	3105 20	2067/50	5.1	
			3102 30 3105 20	1942/50 2067/50	5.1 5.1	
16.	Kikinda	20, 21	3102 30	1942/50	5.1	
1.5	~ .		3105 20	2067/50	5.1	
17.	Kula	1	3102 30	1942/50	5.1	
10	I amazua	1	3105 20	2067/50	5.1	
18.	Lapovo	1	3102 30	1942/50	5.1	
19.	Lapovo marshalling yard	Station for	3105 20	2067/50	5.1	
17.	Lapovo maismaining yaru	disinfecting	3102 30	1942/50	5.1	
20.	Leskovac	New track	3105 20	2067/50	5.1	
			3102 30	1942/50	5.1	
21.	Lešak	1 short	3105 20 3102 30	2067/50	5.1 5.1	
			3102 30	1942/50 2067/50	5.1	
22.	Mala Krsna	1	3102 30	1942/50	5.1	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1.7	3105 20	2067/50	5.1	
23.	Mladenovac	1, 7	3102 30	1942/50	5.1	



				1		
			3105 20	2067/50	5.1	
			3102 30	1942/50	5.1	
			2807 00	1830/80	8	
	NI C-4 M1-11:	2, 3, 4, 7	2806 10	1789/80	8	
24.	Novi Sad Marshalling	Locomotive and	2815 12	1824/80	8	
	Yard	freight stations	2808 00	2031/80	8	
		C	2809 20	1805/80	8	
			2815 11	1823/80	8	
			2828 90	1791/80	8	
2.7	G		3105 20	2067/50	5.1	
25.	Ostružnica	1	3102 30	1942/50	5.1	
2.5	- · ·		3105 20	2067/50	5.1	
26.	Palanka	1	3102 30	1942/50	5.1	
2=	<b>.</b>		3105 20	2067/50	5.1	
27.	Pančevo varoš	1	3102 30	1942/50	5.1	
			3105 20	2067/50	5.1	
28.	Pančevo Main St.	20, 21	3102 30	1942/50	5.1	
	_ ,,		3105 20	2067/50	5.1	
29.	Paraćin	1	3102 30	1942/50	5.1	
			3105 20	2067/50	5.1	
30.	Pirot	1	3102 30	1942/50	5.1	
			3105 20	2067/50	5.1	
31.	Požarevac	1	3102 30	1942/50	5.1	
			3102 30	1942/30		
32.	Dožaga	19	3102 30	2067/50	5.1	
32.	32. Požega	19	3102 30	1942/50	5.1	
			3102 30	2067/50	5.1	
33.	Prijepolje Freight	13	3103 20	1942/50	5.1	
	-		3102 30		5.1	
34.	Prokuplje	1		2067/50	5.1	
		Diaht dard 1	3102 30	1942/50	5.1	
35.	Resavica	Right dead-end	3105 20	2067/50		
		track	3102 30	1942/50	5.1	
36.	Ruma	1, 2	3105 20	2067/50	5.1	
			3102 30	1942/50	5.1	
37.	Svilajnac	1	3105 20	2067/50	5.1	
-	, , , , , , , , , , , , , , , , , , ,		3102 30	1942/50	5.1	
38.	Senta	1, 10,11	3105 20	2067/50	5.1	
		. ,	3102 30	1942/50	5.1	
39.	Sombor	20, 21	3105 20	2067/50	5.1	
<u> </u>		,	3102 30	1942/50	5.1	
40.	Sremska Mitrovica	1,9	3105 20	2067/50	5.1	
		7-	3102 30	1942/50	5.1	
41.	Stalać	1 short track	3105 20	2067/50	5.1	
L			3102 30	1942/50	5.1	
42.	Subotica	1, 33, 34 and 36	3105 20	2067/50	5.1	
<u></u>	_ 30044	freight station	3102 30	1942/50	5.1	
43.	Ćićevac	1	3105 20	2067/50	5.1	
	2.00,00	-	3102 30	1942/50	5.1	
44.	Ćuprija	1	3105 20	2067/50	5.1	
<del></del>	Сартіја	1	3102 30	1942/50	5.1	
45.	Užice Freight	1	3105 20	2067/50	5.1	
45.	Ozice Preight	1	3102 30	1942/50	5.1	
46.	Čačak	1 dood and two al-	3105 20	2067/50	5.1	
40.	Cacak	1-dead-end track	3102 30	1942/50	5.1	
47	Čahaa	1 7	3105 20	2067/50	5.1	
47.	Šabac	1,7	3102 30	1942/50	5.1	
-						



48.	Stara Pazova	7	3102 30	1942/50	5.1	
49.	Vaničavja	1	3105 20	2067/50	5.1	
49.	Kruševac	/ac 1		1942/50	5.1	
50.	Vrbas	10,11	3105 20	2067/50	5.1	
51.	Daimal	1	3105 20	2067/50	5.1	Only for goods
31.	Bajmok	1	3102 30	1942/50	5.1	in sacks
52.	Eutoa	1	3105 20 2067/50 5.1		5.1	
32.	Futog	1	3102 30	2067/50	5.1	



# **Appendix 3.9. Alternative transport routes**

No	Regular route	Distance (km)	Alternative route	Distance (km)
1	Subotica-Novi Sad	98.5	Subotica-Sombor-Vrbas-Novi Sad	150.5
2	Subotica-Novi Sad	98.5	Subotica-Sombor-Bogojevo-Novi Sad	165.4
3	Subotica-Novi Sad	98.5	Subotica-Zrenjanin-N.Sad	230.6
4	Subotica-Belgrade	175.6	Subotica-Zrenjanin-Pančevo- Belgrade	234.6
5	Novi Sad-Belgrade	77.1	Novi sad-Orlovat-Pančevo-Belgrade	148
6	Kikinda-Subotica	96.4	Kikinda-Orlovat-N.Sad-Subotica	271
7	Belgrade-Lapovo	109.6	Belgrade-Požega-Kraljevo-Lapovo	306.1
8	Belgrade-Lapovo-Kraljevo	194.3	Belgrade-Požega-Kraljevo	221.4
9	Belgrade-Niš	243.5	Belgrade-Požarevac-Zaječar-Niš	372.9
10	Belgrade-Požega	154.9	Belgrade-Lapovo-Kraljevo-Požega	260.8
11	Belgrade-Požega-Vrbnica(ŽCG)	299.3	Belgrade-Lapovo-Kraljevo-Požega- Vrbnica(ŽCG)	405.2
12	Belgrade-Smederevo	83.1	Belgrade-Mladenovac-V.Plana- Smederevo	132.8

Note: For departure/terminal station the names of the nodes are given, and various service points may be comprised within the respective node.



### **Appendix 3.10. Facilities for rolling stock maintenance**

Maintenance of railway vehicles is performed in accordance with the Rulebook on Railway Vehicle Maintenance ("Official Gazette of RS", No 144/20).

Service facilities for provision of the basic services- where the works on the maintenance of vehicles are executed, and which are not carried out regularly as the part of daily activities requiring the vehicle to be detached from traffic are the organizational units of the other companies and Infrastructure of Serbian Railways JSC does not provide this type of services.

In accordance with the available data, service facilities and basic maintenance services provided by the Joint Stock Company for Passenger Railway Transport "Srbija Voz", Belgrade are as follows:

Location	Address	Facility	Primary Purpose	Basic Information			
Zemun	Milana	Depot Zemun	Maintenance of electric rolling stock and passenger coaches	Area: 10.200 m2 6 tracks of unit length 220 m			
Zemun	Rešetara bb	Depot for underfloor wheel lathe	Wheel processing of rolling stock	Area: 350 m2 It has underfloor wheel lathe without dismantling of wheel-sets			
		Workshop	Regular maintenance of electric and diesel locomotives	Area: 85 m2 Disposes of service canal of 36m and platform but without a canopy			
Lapovo	Lava Tolstoja 10	Maintenance depot	Maintenance of electric and diesel locomotives and motor trains	Area: 1.part 1088 m2 and second part 625 m2 It has two running lines 2 out of which there are two canals on one line in the length of 50m and 20m. It disposes of single-axle weighbridge for measuring and adjusting the axle load of the rolling stock.			
Sombor	Braće Miladinom 1	Hangar  Depot for	Maintenance of DMUs, and may be used for maintenance of freight wagons and diesel locomotives	Area:1337,5 m2 It has two tracks of the length 78 m and 24 m; it disposes of underfloor wheel lathe for wheel processing on rolling stock without dismantling.  Area: 687 m2 has 1 track in the length			
		railbuses	Maintananaa of railbusas and	of 78 m			
Zrenjanin	Dr Vase	Depot for railbuses Maintenance of railbuses and replacement of wheel-sets of 711 DMUs Area: 277 m2 1 canal in the ler					
Zienjaiiii	Stajica 2	Depot for DMUs	Maintenance of DMUs	Area: 432 m2 1 track in the length of 34 m			
Vršac	Pavliški put bb	Depot for maintenance of rolling	Inspections and extraordinary repairs of smaller scope on diesel traction units and	Area: 787 m2 Two tracks in the length of 40 m			



		stock	DMUs, as well as the overhauls of freight wagons	
Zaječar	Železnička bb	Workshop for repair of locomotives	Maintenance of diesel traction units and freight wagons	Area: 1250 m2 4 track out of which two are, unit length- 50 m

For more information on the provision of basic services in the above facilities responsible is their user in "Srbija Voz", Belgrade, Department for Rolling Stock Maintenance.

Contact point: Director of Department for Rolling Stock Maintenance - Mr. Vladan Petrović

Address: 6 Nemanjina St. 11000 Belgrade, Serbia

E-mail: vladan.petrovic@srbrail.rs

Phone: +381 64 845 22 64

Information on the service facilities and services provided by the Joint Stock Company for Freight Railway Transport "Srbija Kargo", are available on the web-site: <a href="http://www.srbcargo.rs/rs/usluzni-objekti">http://www.srbcargo.rs/rs/usluzni-objekti</a>. Information on the service facility and services provided by Šinvoz is available on the website <a href="http://www.sinvoz.rs">www.sinvoz.rs</a>.



#### SR PNEUMATIK

23000 ZRENJANIN, MANASTIRSKA BR. 13A PIB:101165889 MBR:54681496 TEL: 062/268-128, pneumatik.zrenjanin@gmail.com

### INFORMACIJA O USLUŽNOM OBJEKTU SR PNEUMATIK ZRENJANIN

ZRENJANIN, april 2024

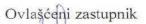


		. Opšte informacije
1.1.	Uvod	SR Pneumatik Zrenjanin je uradio Informaciju o uslužnom objektu na osnovu odredbi Pravilnika o elementima informacije o uslužnom objektu (Sl.glasnik RS broj 66/2019) Naziv uslužnog objekta je objekat za održavanje I spade u kategoriju 5, shodno članu 15. St. 2 Zakona o železnici (Sl.glasnik RS broj 41/18) Ova informacija je dostavljena upravljaču infrastrukture radi objavljivanja u Izjavi o mreži.
1.2.	Operator uslužnog objekta	Uslužnim objektom upravlja operator SR Pneumatik Zrenjanin, Manastirska 13a, kontakt Adamov Milivoj +38162268128
1.3	Period važenja I postupak ažuriranja	Ovaj dokumenat se ažurira po potrebi I nema definisan period važenja.
		2. Usluge
2.1.	Naziv usluge	Sertifikovana radionica za održavanje železničkih vozila obavlja usluge:  - pregledi P1, P3,P6,P12 lokotraktora, drezina, lokomotiva;  - tekuće održavanje (opravke manjeg I srednjeg obima) lokotraktora, drezina, lokomotiva;  - kontrolni pregledi I tekuće održavanje obavlja se u depou vlasnika, osim kada je potrebno vozilo dovesti u pogon SR Pneumatik Zrenjanin.  - specijalizovana radionica za održavanje kočnice železničkih vozila.
		Opis uslužnog objekta
3.1	Spisak svih postrojenja	Uslužni objekat SR Pneumatik Zrenjanin, sastoji se od sledećih postrojenja na lokaciji Zrenjanin Takovska 104: -radionica za popravku lokotraktora,



		-specijalizovana radionica za održavanje kočnice železničkih vozila. Hala površine 500m2 ( zatvorena I grejana), priključak na javnu drumsku mrežu. Radionica raspolaže svom potrebnom opremom, mašinama I alatima neophodnim za popravke I održavanje železničkih vozila u radionici I na terenu.  Uslužni objekat SR Pneumatik Zrenjanin na lokaciji "Tatravagonka Bratstvo" doo Subotica, Bikovački put 2 Subotica:  - Hala sa kolosekom I svim pratećim alatima I uređajima koji se koriste u procesu održavanja železničkih vozila se koristi na osnovu Ugovora o poslovnotehničkoj saradnji od 29.12.2023. godine.
		<ul> <li>Hala ima priključak na javnu železničku mrežu.</li> </ul>
3.2.	Mesto	Zrenjanin, Takovska 104 Subotica, Bikovački put 2
3.3.	Radno vreme	Radno vreme uslužnog objekta je 7-15 časova ponedeljak-petak, osim za vreme verskih I državnih praznika
3.4.	Planirane izmene tehničkih karakteristika	Ne planiraju se izmene tehničkih karakteristika
2000	<b>通过发展</b>	4. Naknade
4.1.	Informacije o naknadama	Metodologija: norma sat Naknada za pristup uslužnim objektima se ne naplaćuje. Cena za pojedine usluge po norma satu, u zavisnosti od složenosti posla po ponudi,
		nakon izvršene defektaže.

5.1.	Pravni zahtevi	Za pristup je potrebno sklapanje ugovora ili narudžbenica.
5.2.	Tehnički uslovi	Železnička vozila namenjena za rad na koloseku širine 1435 mm I maksimalnog osovinskog opterećenja 22 t.
5.3.	Samopružanje usluga	Uslužni objekat ne dozvoljava mogućnost samopružanja usluga.
5.4.	IT sistemi	Uslužni objekat ne nudi korištenje IT sistema
		6. Dodela kapaciteta
6.1.	Zahtevi za pristup uslužnom objektu ili uslugama koje se pružaju u objektu	Podnosilac zahteva je dužan poslati zahtev za ponudom za uslugu na e-mail :pneumatik.zrenjanin@gmail.com , ili usmeno na telefon +38162268128 Rok za obradu zahteva je 3 radna dana Prihvatom ponude, usluga se pruža na osnovu ugovora i narudžbenice. Po završetku usluge sačinjava se zapisnik o izvršenim uslugama.
6.2.	Odgovor na zahtev	Rok za obradu zahteva je 3 radna dana Usluga se temelji na osnovu ugovora, narudžbenice I zapisnika o izvršenoj usluzi.
6.3.	Informacije o promenama tehničkih karakteristika I privremenim ograničenjima kapaciteta	Uslužni objekat nema privremenih ograničenja kapaciteta koji mogu uticati na rad. U slučaju privremenih ograničenja, obaveštava se upravljač infrastrukture.



Milivo Adamov



## Information on the service facility MIN Lokomotiva doo



# INFORMACIJE O USLUŽNOM OBJEKTU MIN LOKOMOTIVA DOO

MIN Lokomotiva doo

Šumadijska 1, 18000 Niš

+381 18 415 1131

E-mail: min.lokomotiva.kabinet@gmail.com

Internet adresa: https://www.minlokomotiva.rs/

April 2024. godine

118





### SADRŽAJ

1.1 UVOD	3
1.2 OPERATOR USLUŽNOG CENTRA	3
1.3 PERIOD VAŽENJA I POSTUPAK AŽURIRANJA	3
2.1 OPIS USLUGE	3
3.1 SPISAK SVIH POSTROJENJA	4
3.1.1 PROIZVODNI POGON ZA REDOVNO ODRŽAVANJE	4
3.1.2 PROIZVODNI POGON ZA VANREDNO ODRŽAVANJE	4
3.1.3 MAGACINI	5
3.1.4 ŽELEZNIČKA INFRASTRUKTURA	5
3.2 MESTO USLUŽNOG OBJEKTA	5
3.3 RADNO VREME USLUŽNOH OBJEKTA	5
3.4 PLANIRANE IZMENE TEHNIČKIH KARAKTERISTIKA	6
4.1 INFORMACIJE O NADOKNADAMA	6
4.2 INFORMACIJE O POPUSTIMA	6
5.1 PRAVNI ZAHTEVI	6
5.2 TEHNIČKI USLOVI	6
5.3 ZAKUP KOLOSEKA U USLUŽNOM OBJEKTU	
5.4 IT USLUGE	
6.1 ZAHTEV ZA KORIŠĆENJEM USLUŽNOG OBJEKTA ILI USLUGAMA KOJE SE	
PRUŽAJU U USLUŽNO OBJEKTU	6
6.2 ODGOVOR NA ZAHTEV ZA PONUDOM	7
6.3 INFORMACIJE O DOSTUPNOM KAPACITETU I PRIVREMENIM	
OGRANIČENJIMA	7
7.1 PROSTORNI PLAN USLUŽNOG OBJEKTA	





#### 1.1 UVOD

Informaciju o uslužnom objektu MIN Lokomotiva je izradila u skladu sa odredbama Pravilnika o elementima informacije o uslužnom objektu ("Službeni glasnik RS", broj 66/19). MIN Lokomotiva doo spada u kategoriju 5), po članu 15, stav 2 Zakona o železnici (" Službeni glasnik RS" broj 4/218), odnosno spada u kategoriju Objekata za održavanje.

Fabrika za proizvodnju i remont šinskih vozila MIN Lokomotiva osnovana je 1884-te godine kao glavna radionica srpskih državnih železnica za popravak i pregled parnih lokomotiva.

Nad MIN Lokomotivom proglašen je stečaj 201S.godine. Maja 2018.godine. MIN Lokomotiva je kao pravno lice kupljena je od strane sadašnjih vlasnika (fizičkih lica).

Osnovna delatnost MIN Lokomotive doo je remont i održavanje železničkih vozila, projektovanje i proizvodnja novih železničkih vozila i pružanje raznih usluga vezano za železničku industriju.

#### 1.2 OPERATOR USLUŽNOG OBJEKTA

- Naziv uslužnog objekta: MIN Lokomotiva doo
- Adresa: Šumadijska 1, 18000 Niš
- Kontakt osoba za uslužni objekat: Dejan Avramović
- Broj telefona: +381 18 415 1131
- E-mail: min.lokomotiva.kabinet@gmail.com
- Internet adresa: https://www.minlokomotiva.rs/
- Radno vreme: 7.00-15.00, osim vikendom i praznicima

#### 1.3 PERIOD VAŽENJA I POSTUPAK AŽURIRANJA

Ovaj dokument se ažurira u vreme objave inforamcije, osim ako su zbog izmena u sadržaju nužne vanredne izmene

#### 2. 1 OPIS USLUGE

Osnovne usluge koje pruža uslužni objekat:

- Redovno održavanje, koje se obavlja periodično i unapred planira
- Vanredno održavanje koje se obavlja radi otklanjanja kvarova, nedostataka, istrošenja i zagađenja u toku eksploatacije

Redovno održavanje obuhvata:

- Kontrola železničkih vozila u toku eksploatacije
- Pranje i čišćenje





- Servisni pregled
- Kontrolni pregled
- Redovnu opravku

Vanredno održavanje obuhvata:

- Vanredne opravke manjeg ili većeg obima
- Vanredno pranje i čišćenje

#### 3.1 SPISAK SVIH POSTROJENJA

Uslužni centar MIN Lokomotiva doo sastoji se od sledećih celina

- Proizvodni pogon za redovno održavanje
- Proizvodni pogon za vanredno održavanje
- Radionica za ispitivanje lokomotiva na promenljivom naponu
- Radionica za ispitivanje brzinomera
- Radionica za održavanje elemenata vešanja i ogibljenja
- Magacin u zatvorenom prostoru
- Magacin na otvorenom prostoru
- Železnička infrastruktura

#### 3.1.1 PROIZVODNI POGON ZA REDOVNO ODRŽAVANJE

- Ukupna površina pogona za redovno održavanje je : 1100m2, podeljena u dva objekta
- Proizvodni prostor je opremljen kolosecima i mosnim dizalicama od 5t
- Proizvodni pogon je tehnološki opremljen za redovno održavanje dizel i elektro lokomotiva
- Ulaz/izlaz vozila u pogon je omogućen je preko 5 ulazno/izlaznih koloseka povezanih preko preko prenosnice nosivosti 150t sa glavnim kolosekom ka stanici Niš

#### 3.1.2 PROIZVODNI POGON ZA VANREDNO ODRŽAVANJE

- Ukupna površina pogona za vanredno održavanje je: 2500m2
- Proizvodni pogon za vanredno održavanje opremljen je kolosecima i mosnim dizalicama od 45 t (3 komada) i 5t (2 komada)
- Proizvodni pogon za vanredno održavanje opremljen je tehnološki za održavanje železničkih vozila
- Ulaz/izlaz vozila u pogon omogućen je preko 4 ulazno/izlaznih koloseka povezanih preko preko prenosnice nosivosti 150t sa glavnim kolosekom ka stanici Niš

121





- Proizvodni pogon za vanredno održavanje je opremljen viljuškarima i transportnim kolicima za unutrašnji transport
- Radionica za ispitivanje brzinomera tipa Hasler je opremljena atestiranom probnicom, nalazi se u sklopu pogona za redovno održavanje
- Radionica za održavanje elemenata vešanja i ogibljenja se nalazi u delu pogona za vanredno održavanje železničkih vozila i tehnološki je opremljena za održavanje elementa vešanja i ogibljena železničkih vozila

#### 3.1.3 MAGACINI

- Površina zatvorenog magacina je oko 200m2. Magacin je opremljeno stalažama za smeštaj rezervnih delova i opreme.
- Otvoreni magacin ima površinu od 500m2 i koristi se smeštaj crne i obojene metalurgije, tehničkih gasova i ulja i maziva
- Zatvoreni i otvoreni magacini su povezana preko prenosnice sa glavnim kolosekom ka stanici Niš
- Zatvoreni i otvoreni magacini imaju putnu vezu sa glavnom saobraćajnicom

#### 3.1.4 ŽELEZNIČKA INFRASTRUKTURA

- Ukupna dužina koloseka na lokoaciji (spoljašnji i unutrašnji) je oko 2000m
- Uslužni objekat je povezan sa železničkom stanicom Niš sa jednim matičnim kolosekom, koji se preko skretnice usmerava na koloseke prema pogonu.
- Dozvoljeno opterećenje koloseka je 22t po osovini, dozvoljena brzina na koloseku je 5km/h
- Železnička vozila se sa glavnog koloseka prebacuju na koloseke u okviru proizvodnih kapaciteta preko specijalnog transportera-prenosnice nosivosti 150t

122

#### 3.2 MESTO USLUŽNOG OBJEKTA

- Šumadijska 1, 18000 Niš
- Geografska širina 43°19'07"
- Geografska dužina 21°52'39"
- Priključak na javnu putnu mrežu
- Priključak na javnu železničku mrežu preko železničke stanice Niš

#### 3.3 RADNO VREME USLUŽNOG OBJEKTA

- Ponedeljak-petak od 7.00-15.00h
- -Vikendom i praznicima su neradni dani





#### 3.4 PLANIRANE IZMENE TEHNIČKIH KARAKTERISTIKA

- Ne planiramo izmene tehničkih karakteristika

#### 4.1 INFORMACIJE O NADOKNADAMA

- Metodologija izračunavanja nadoknade je norma čas (NČ)
- Nadoknada za pristup uslužnom objektu se ne naplaćuje
- Cene usluga su definisane zvaničnim cenovnikom

#### 4.2 INFORMACIJE O POPUSTIMA

- Operator uslužnog objekta može u specijalnim okolnostima nuditi popust na usluge koje se nude korisnicima prema međusobnom dogovoru uz poštovanje zahteva operatera o čuvanju poslovne tajne

#### 5.1 PRAVNI ZAHTEVI

- Za pristup uslužnom objektu potrebno je sklapanje ugovora ili narudžbenica

#### 5.2 TEHNIČKI USLOVI

- Uslužnom objektu mogu pristupiti železnička vozila standardne širine 1435mm
- Uslužnom objektu mogu pristupiti vozila sa maksimalnim dozvoljenim osovinskim opterećenjem od 22t po osovini

#### 5.3 ZAKUP KOLOSEKA U USLUŽNOM OBJEKTU

- Zakup koloseka u uslužnom objektu je definisan posebnim cenovnikom

#### 5.4 IT USLUGE

- Uslužni objekat ne nudi IT usluge

#### 6.1 ZAHTEV ZA KORIŠĆENJE USLUŽNOG OBJEKTAILI ZA USLUGAMA KOJE SE PRUŽAJU U USLUŽNOM OBJEKTU

- Podnosilac zahteva dužan je poslati Zahtev za ponudom na e-mail adresu min.lokomotiva.kabinet@gmail.com. Ili preko telefona na broj + 381 018 415 1131
- Usluga se pruža na osnovu potpisanog ugovora ili narudžbenice
- Za izvršenje usluga potrebno je da se najavi odgovornom licu u uslužnom objektu 2 dana unapred

123

- Podnosilac zahteva dužan je u zahtevu za ponudu navesti:
  - 1. Vrsta usluge koja se traži
  - 2. Osnovne podatke o železničkom vozilu
  - 3. Vremenski period za korišćenje usluga





- 4. Potrebu za magacinskim prostorom ukoliko takva potreba postoji
- 5. Posebni zahtevi

#### 6.2 ODGOVOR NA ZAHTEV ZA PONUDOM

- Rok za obradu zahteva i davanje ponude je do tri radna dana u zavisnosti od složenosti zahteva
- Osnovni kriterijum za određivanje rasporeda i kapaciteta uslužnog objekta jeste da prednost kod raspoređivanja ima podnosilac zahteva koji ima potpisan ugovor ili je ispostavio narudžbenicu ili je u završnim pregovorima sa vlasnikom uslužnog objekta o pružanju usluge
- U slučaju da dođe do kolizije u zahtevima, a koji se odnose na kapacitete uslužnog objekta prednost ima onaj podnosilac zahteva koji ima dugoročni ugovorni odnos sa vlasnikom uslužnog centra ili je po redu podnošenja zahtev bio ispred ostalih podnosilaca zahteva za uslugom. Ako i pored navedenih kriterijuma dođe do problema u korišćenju kapaciteta uslužnog centra odgovorno lice uslužnog centra će nastojati da razgovorom i koordinacijom sa korisnicima izvrši preraspodelu kapaciteta i po potrebi uvede drugu smenu kako bi svi korisnici bili adekvatno usluženi.

#### 6.3 INFORMACIJE O DOSTUPNOM KAPACITETU I PRIVREMENIM OGRANIČENJIMA

- U slučaju vanrednih događaja koji mogu privremeno ograničiti kapacitet uslužnog objekta ili obavljanje planiranih radova odgovorno lice uslužnog centra će o tome obavestiti sve korisnike o nastalom događaju i o ograničenjima, kao i odgovrajuće službe koje upravljaju infrastrukturom.

124

#### 7.1 PROSTORNI PLAN USLUŽNOG OBJEKTA

- Prostorni plan fabrike MIN Lokomotiva



### Appendix 3.10a. Information on the service facility managed by Nelt Co



Nelt Co d.a.a. Maršala Tita 206 P. fah 530 11272 Dobanovci Srbija t +381 11 3779 100 f +381 11 3779 140 office@nelt.com www.nelt.com www.neltlsprs PIB 100037645 MB 17304712

Sektor za pristup železničkoj infrastrukturi Nemanjina 6, Srbija Datum: 21.12.2020.

PREDMET: INFORMACIJE O USLUŽNOM OBJEKTU – Industrijski kolosek "NELT Co", koji je deo Nelt Terminala

U stanici Surčin na pruzi Beograd Ranžirna, Park B - Ostružnica - Batajnica za javnu železiničku infrastrukturu kojom upravlja "Infrastruktura Železnice Strbije" ad priključen je industrijski kolosek čiji je vlasnik "Nelt.Co." d.o.o. Beograd.

Industrijski kolosek je namenjen samo za prijem i otpremu kolskih pošiljaka i isti se ne koristi za potrebe prevoza opasnih materija.

Industrijski kolosek počinje u nastavku četvrtog koloseka stanice Surčin odvojnom skretnicom br:2, u km. 14+166,57 pruge Beograd Ranžirna A– Ostružnica – Batajnica. Industrijski kolosek "NELT Co" doo Beograd, odvaja se od javne železničke infrastrukture, kojom upravlja "Infrastruktura Železnice Srbije" ad, u stanici Surčin koja je nalazi u km 14+635,60 (*sredina stanične zgrade*) jednolosečne elektrificirane pruge Beograd Ranžirna, Park B - Ostružnica - Batajnica.

Skretnica br. 1c industrijskog koloseka "NELT Co" doo Beograd , matični kolosek razdvaja na dva kraka odnosno na dva koloseka

Industrijski kolosek je ukupne građevinske dužine 1293,31m i sastoji se od tri dela i to:

- matičnog koloseke građevinske dužine 616,00 m
- Kolosek I građevinske dužine 348,00 m
- Kolosek II građevinske dužine 343,31 m

Koloseci I i II imaju korisnu dužinu svaki po 300 m tako da je ukupna korisna dužina na industrijskom koloseku 600 m.

Industrijski kolosek oposobljen je za kategoriju pruge C2 odnosno za:

- najveću dozvoljenu masu po osovini do 20 t/os (200 kN/os) i
- najveću dozvoljenu masu dužnom metru do 6,4 t/m (64 kN/m)

Koloseci I i II su na industrijskom koloseku vezani samo sa jedne strane tako da se na drugom kraju završavaju grudobranima,.

Manevru od stanice Surcin do Industrijski kolosek "NELT Co", za sada obavlja železnički operater "Srbija Cargo" ad.

Posedujemo 1 reach stacker kojim vršimo manipulacije kontejnera sa voza koji pristigne na Industrijski kolosek "NELT Co",

Cena za manipulacije punih kontejnera naplacuju se EUR 25 a praznih kontejnera EUR 20, obracunata u dinarskoj protivvrednosti





Nelt Co d.o.a. Marŝala Tita 206 P. fah 530 11272 Dobanovci Srbija

t +381 11 3779 100 f +381 11 3779 140 office@nelt.com www.nelt.com www.neltlsp.rs PIB 100037645 MB 17304712

Radno vreme Nelt terminala je radnim danima od 08h – 21h, subotom od 08h-16h, nedelja je neradni dan. Praznicima ne radimo

Nelt terminala Ul. Maršala Tita 206, 11272, Dobanovci +381 60 8318595 +381 11 3779 33 www.nelt.com

S poštovanjem,

Interpredatni termina Nelt

elema Tovan

### Appendix 3.11. Railway infrastructure development projects

The National Assembly, upon the proposal of the Government, passes the National Program for the railway infrastructure, which contains:

- 1. the existing characteristics and condition of the railway infrastructure of the Republic of Serbia;
- 2. strategy for construction, reconstruction and maintenance of the railway infrastructure;
- 3. development components in the construction of the new infrastructure capacities of special significance for the Republic of Serbia;
- 4. defining of the structure, time schedule for realization of priorities, level and sources of the financial assets needed for completion of the National Program activities.

National Program is passed for a five-year period.

Based on the National Program, the Infrastructure Manager prepares the annual program for construction, reconstruction and maintenance of the railway infrastructure, organization and regulation of the railway traffic.

No	Project	Estmated commencement of works (date or quarter)	Duration of works	Works' execution method
1	Modernization (construction and reconstruction) of railway line Belgrade –Subotica –state border (Kelebia) section  Novi Sad - Subotica	December 2021	Q4 2024	As of April 7, 2022 complete traffic interruption is valid between the service points Novi Sad (excl.)- Subotica (excl.)
2	Civil engineering reconstruction of Niš – Dimitrovgrad railway line, section Sićevo - Dimitrovgrad	November 11 <sup>th</sup> , 2023	April 2026	Execution of the works and traffic performance according to the schedule: 36/36/36/60. Total line closure in the duration of 91 days starting from April 1, 2025 until July 1, 2025.
3	Electrification of Niš – Dimitrovgrad railway line, section Sićevo - Dimitrovgrad	March 2024	April 2026	Execution of the works and traffic performance will be realized alternately in intervals agreed with the Contractor.
4	Construction of northern bypass around city of Niš:  1. Crveni Krst – Pantelej – Matejevac  2. Trupale – Crveni Krst  3. Trupale – Niš Marshalling Yard	Q4 2023	Q3 2025	Execution of the works and traffic performance will be realized alternately in intervals agreed with the Contractor.



# **Appendix 4.1. Request for train path allocation (form)**

Application form for train path allocation

	ertaking - ope	rator:					
Address:							
Contact person	on:					·1	
Геl.		Fax.			e-ma	ıl:	
Place and dat	te:						
1 D 4 GIG 1			OLIEGEED	TD A DAD	A COLY		
1. BASIC	INFORMATIO	ON ON THE RE	Desired tir		Route		
Train type		Train No in the previous	Desired til	ne 	Route	1	
		timetable	departure	arrival	from	to	via
		timetable					
NOTES							
NOILS							
:-		n.mo=:-:-					
2. TRAIN	TIMETABLE	INFORMATIO	N	I			
a.		Staying time	in service				
Stops in se	rvice points	points [min]		Running	calendar		
3. TRAIN	INFORMATI	ON					
	Additional				Brakin	g	
Type of	traction				,		
traction,	units, serial						
serial No	No of	Series and No	Train	Train			Maximum
of	traction	of the wagon	mass	length	Type	Percentage	train speed
traction unit,	unit, function in	/motor unit	[t]	[m]	JI	[%]	[km/h]
route	the train,						
10410	route						
4. OTHER	REQUIREM	ENTS					
						L.S. SI	GNATURE
						L.S. S1	GIMIOKE



# Appendix 4.1a. Request for train path allocation (e-papir)

Republic of Serbia

JSC "Infrastructure of Serbian Railways"

Rail Infrastructure Access Department

www.infrazs.rs

### **REQUEST**

#### FOR TRAIN PATH ALLOCATION

Basic information about the applicant

Business name / title																			
Head office																			
Contact phone																			
Name and surname of the representative																			
Identification number								P	PIB										
Email address																			
	Bas	ic data	a o	n the	e re	quii	ed tr	air	n path										
	Numbe			De	sire	ed ti	me					R	Route						
Train type	train previous		d	eparti	ure	8	ırrival		from			to			via				
				N	Vote	e		·		1									
		Т	'rai	n tin	neta	able	data												
Stops in service points	Staying po	time i ints [n			e	Running calendar													



	Additional				В	raking	
Type of traction, serial No of traction unit, route	traction units, serial No of traction unit, function in the train, route	Series and No of the wagon /motor unit	Train mass [t]	Train length [m]	Туре	Percentage [%]	Maximum train speed [km/h]
			Special	note			

I am aware that, if I do not submit the stated data, necessary for the decision-making of the body within 8 days, the request for initiating the procedure will be considered irregular.

The request can also be submitted on <a href="mailto:sektor.pzi@srbrail.rs">sektor.pzi@srbrail.rs</a>

In	, on	 _	
			Applicant's signature



### INFORMATION FOR THE APPLICANT

Deadline for resolving the submitted request	30 days before the start of the timetable
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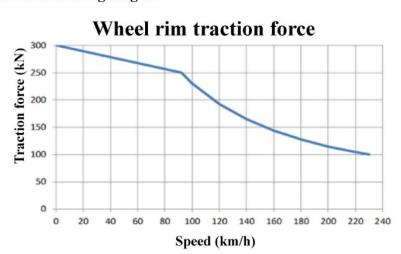


## Appendix 4.1b Template for submission of traction vehicle technical data

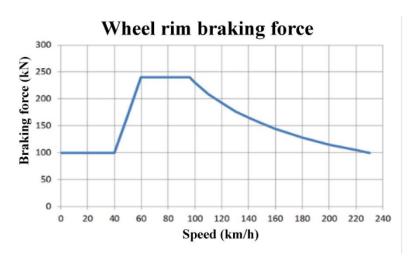
Series
 Description
 Length
 Weight
 Maximum speed
 Inertia factor
 Resistance formula

#### 8. Traction diagram and braking diagram

V	Fv
[km/h]	[kN]
0	300
92	250
100	230
120	192
140	165
160	144
180	128
200	115
220	105
230	100



V	Fk
[km/h]	[kN]
0	100
40	100
50	170
60	240
96	240
100	230
110	209
120	192
130	177
140	165
150	154
160	144
180	128
200	115
220	105
230	100



9. Traction type

electric



# Appendix 4.2. Instruction for completion of the Request for train path allocation

	Column name	Data type	Explanation
	Train type	М	Specify train type:  - Passenger train (pursuant to Articles 32 and 34 of Traffic Rulebook, Official Gazette of RS No 34/22 and 107/22)  - Freight train (pursuant to Articles 33 and 34 of Traffic Rulebook, Official Gazette of RS No 34/22 and 107/22)
	Train No in the previous Timetable	С	Specify the number of the train from the previous Timetable, whose path elements match applicant's request (e.g. 541, 40760,)
1.	Desired time	M/N*	Specify the desired time of the train departure from the origin station or the time of arrival to the destination station
	Route	M	Specify the origin and destination station of the train route and characteristic service point between those two stations which defines the train route
	Note	M	Specify request type: - annual request (for the new Timetable) - request for regular or extraordinary amendments to the valid Timetable while specifying the number of regular amendment (I, II, III, IV or V amendment) - ad hoc request
	Stops in service points	M	Specify all service points where the train needs to stop
2.	Staying time in service points	M	Specify the needed staying time in each service point (in minutes) where train staying is necessary
	Running calendar	М	Specify running calendar for regular trains. If a path is requested for the optional train, enter the indication "optional", and for trains under the ad hoc request specify the train running date
2	Type of traction, serial No of traction unit, route	M	Specify traction type (electric or diesel), serial number of traction (operating) locomotive and route of each particular locomotive if there is change of traction type on the required route
3.	Additional traction units, serial No of traction unit,	M	Specify number of additional traction units, traction units type (electric or diesel), serial number, position on the train (double heading, banking,) additional traction unit running route



	function in the train, route		
	Series and No of the coach/multiple-unit set	М	For passenger trains, specify coach series (letter designation of coach series) and number of coaches on the train i.e. series, number and serial number of multiple-unit sets (DMU/EMU)
	Train mass	М	Specify total train weight in the format of a sum of weight of hauled vehicles and the weight of all operating locomotives (Q+L)
	Train length	M	Specify train length in metres without the length of operating locomotives in service
		M	Braking type: specify braking type (G, P, R, Mg,)
	Braking	M/N**	Braking percentage: specify braking percentage which has to be considered during timetabling
	Maximum train speed	M	Specify maximum train speed considering characteristics of vehicles on the train
4.	Other requirements	С	Specify other requirements of the train such as: shunting of vehicles, change of train composition, connection, staff shift, type of intermodal transport unit, dangerous goods type, special consignments, train stays at border-crossing, technical stops (inspection, water supply, waste handling and similar) and time period required, need for additional track capacities (side tracking, pre-heating/cooling, forming of trains and similar), need for access to other additional service facilities and similar.

#### Legend:

 $M-data\ is\ mandatory$ 

C – data is conditional (mandatory, if the condition is fulfilled)

 $M/N^*$  - data is mandatory for passenger trains/data data is non-mandatory for freight trains

 $M/N^{**}$  - data is mandatory for international trains/data is non-mandatory for domestic trains

Note: Upon receipt of the request for path allocation, IŽS will provide the RU with the infrastructure data based on which the RU will calculate the train running times and submit them to IŽS.



# Appendix 4.3. Deadlines for annual 2024/2025 timetable preparation

Phase	Authority	Deadline
Submission of requests for path allocation for international passenger trains	RU	12.02.2024
Regular deadline for submitting allocation requests for annual timetable	IM	15.12.2023-18.04.2024
Coordination and harmonization of requests	IM/RU	09.04.2024-01.07.2024
Presentation of the First Draft timetable to RU	IM	01.07.2024
Draft review – remarks, suggestions, proposals and opinions	IM/RU	02.07.2024-02.08.2024
Draft timetable 2024/2025	IM	30.08.2024
Solving of problems and questions	IM	02.09.202409.09.2024
Extraordinary requests (remaining capacities)	RU	04.10.2024
Final deadline for capacity allocation according to extraordinary requests (remaining capacities)	IM	25.10.2024.
Timetable coming into effect	IM	15.12.2024



# Appendix 4.4. Deadlines for amendments to annual 2024/2025 Timetable

Amendment No	Submission date of requests for amendments to annual timetable	Deadline for capacity allocation	Application date for amendments to annual timetable
I	16.12.2024.	17.01.2025.	03.02.2025.
II	10.02.2025.	20.03.2025.	07.04.2025.
III	21.04.2025.	23.05.2025.	15.06.2025.
IV	07.07.2025.	15.08.2025.	01.09.2025.
V	11.08.2025.	19.09.2025.	06.10.2025.



# Appendix 5.1. Overview of railway lines on which train running is possible when they are manned only with engine driver

Train running with engine driver only in a traction unit, without train crew (engine driver – without train crew), can be performed on the following lines:

- Belgrade Center-Stara Pazova Šid state border (Tovarnik);
- (Belgrade Center) Stara Pazova -Novi Sad Subotica state border (Kelebia);
- Belgrade Center Junction G Mladenovac-Lapovo-Niš-Preševo state border (Tabanovci);
- (Belgrade Center) Rakovica Jajinci Mala Krsna Velika Plana;
- Belgrade Center Pančevo Varoš (Vršac);
- Belgrade Center Resnik Požega Vrbnica state border (Bijelo Polje)
  - Section Resnik-Požega-Užice;
- Inđija Golubinci;
- Novi Sad Novi Sad Marshalling Yard Open line junction Sajlovo;
- Belgrade Center Novi Beograd;
- Belgrade Center Open line junction G (Rakovica);
- Belgrade Marshalling Yard "A" Ostružnica Batajnica;
- Belgrade Marshalling Yard "B"- Ostružnica;
- Belgrade Marshalling Yard "A"-Open line junction "B"-Open line junction "K/K1"- Resnik;
- Ostružnica Open line junction "B" (Open line junction"K/K1");
- Belgrade Marshalling Yard "B" Open line junction "R"-Open line junction "A"-( Resnik);
- (Belgrade Marshalling Yard ,,B") Open line junction ,,R" –Rakovica;
- Belgrade Marshalling Yard "A" Open line junction "T" Rakovica;
- Belgrade Marshalling Yard "B" Open line junction "T" (Rakovica);
- Connecting line in the area of Open line junction "K/K1": (Open line junction "B") switch "K" switch "K1" (Jajinci);
- Topčider Putnička (km 4+195) Open line junction G (Rakovica)<sup>4</sup>;
- (Open line junction Pančevački most) Open line junction Karađorđev park Open line junction Dedinje – (Open line junction G);
- By-pass line of Mala Krsna station: (Kolari) junction points 1 junction points 28 (Osipaonica);
- Open line junction Lapovo Varoš Lapovo Marshalling Yard Lapovo;
- Trupale Niš Marshalling Yard Međurovo;
- Crveni krst Niš Marshalling Yard;
- Niš Open line junction Most (Niš Marshalling Yard);
- Mala Krsna Požarevac (Bor);
- Pančevo Varoš Pančevo Vojlovica;
- Smederevo Open line junction Jezava Radinac Mala Krsna;
- Novi Sad Marshalling yard Open line junction Sajlovo.
- Subotica Horgos State Border (Röszke).

On the other lines, in particular cases, train running can be performed with engine driver – without train crew in compliance with terms stipulated in the Traffic Rulebook ("Official Gazette of the Republic of Serbia", No 34/22 and 107/22).

<sup>&</sup>lt;sup>4</sup> By virtue of the Conclusion of the Government of the Republic of Serbia No 340-2989/2022 dated April 7, 2022, the Decision of the Shareholders' Meeting of Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways" Belgrade concerning the termination of public railway traffic, dismounting and reconstruction of infrastructure capacities on railway line Topčider Putnička (km 4+ 195) – Open line junction "G" – (Rakovica) , has been approved.



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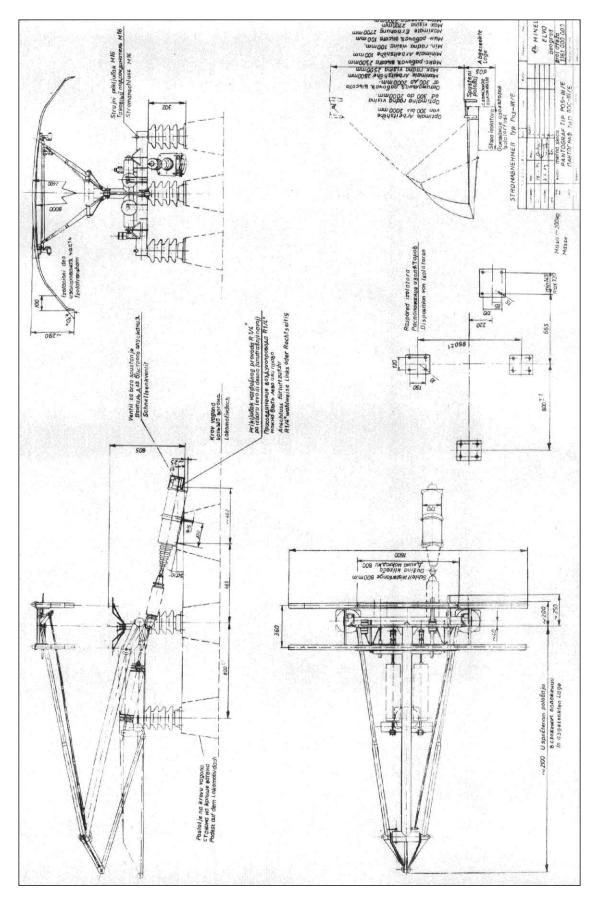
# Appendix 5.2. Overview of the lines fulfilling the conditions for train running with an engine driver only

List of Infrastructure of Serbian Railways lines that do not meet the conditions for operation of traction units with an engine driver only (other lines meet the conditions):

- (Belgrade Center) Resnik Požega- Vrbnica- state border (Bijelo Polje)
  - ➤ Užice Vrbnica section.



Appendix 5.3. Geometry of pantograph (current collector) TIP POS - 254/III used on IŽS network





# Appendix 6. Register of infrastructure data

	Altitude	30		97.6	82.1	92		97.6		84.3	79.11	84,96		79.11	84.96	101,57	96,94	100,96	7,16	84,77	81,77	04,00	87,29	83,79	06.7	84.93		Τ					T		П		Т	T		225,5	П
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Ruling gradient	hickine				0	4	Н	0	+	0	-	3 (		9/0	3		_	9	0	0	Ŧ,	_	7	+	,	+	H		-	H	$\vdash$	2	+	╁	$\vdash$	9	-	0, 00		-	0 1
100	Gradient of the statio	1000		0,0	20	2.0		1.9		6.0	0.3	1	2.5	0.3 9	4.1		0,0	-			0,0	0,0	0,0	0,0	0,0		11		0.0	,	$\perp$	1,5	t		$\vdash$	5,5		9,0	12.0 1		
sn	Minimum curve radi	23			200	769		700	000	2500	7000	5000		700	4993	2500	3000	3000	10000	10000	10000	10000	10000	1500	15000	15000				300	700	300			400	300	000	300	300	300	400
	Open for the acceptanging of passer dispatching of passer operations	22		Ь	Ы	P/F <sup>1)</sup>	Ь	Ъ	Ы	Ч	P/F	P/F	Ŧ	P/F	P/F	P/F	4 4	P/F		P/F	þ	4	P/F		D/E	T			Ь			Ь	Ч	Ь	P/F		Ъ	P/F P	ч	P/F	Ъ
	Occupancy of service	-		ы	ь	Ы	Ħ	D	1	٦,	þ	Ъ	Ъ	Þ	Ъ	Ъ	5	д	Þ	ы	þ		Þ	7	٥	4	11		Д	T	Ħ	Ы	T	T	Ы	Þ	+	5 =	o b	Ы	D
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public fransport	Left track Distance in km			.486	SI 10	1.01	*2,6	Ц	2881	1		7.8		*6,	7.	13 01300. 9.		81.2	Ш	Н	4, 1		81.0	1		9 8	service points	purposes of a	П	138	Н	4	31.6	<u> </u>	Ц	3.8	. 7	1	1884.	8	Ĺ



	Abtitude	30		T		D. 28	S V.F.	x - y - 4					103.9	102.6		105.4	T	107.4	107.4		115.3			126.3		1346	0.151	136.4	141.1	144,6			148.5	0.07		164	101	173.4	1,57.7	///01			164.0	104.5			190.5
	Loading gauge	59	ŽS-I	1.53	ŽS-I	ŽS-I	I-S	ŢS-I	ZS-I	ZS-I	1.03	1-5	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	7.S-1	¥6.1	1-SZ	ŽS-I	ŽS-I	I-S	ŽS-I	ZS-I	78.1	ŽS-1	ŻS-I	I-S	ŽS-I	ZS-I	I-S	1.52-1	1-0	1-03	7c.1	1 2	1.07	1-07	1-0	1 0	1.57	1-62	1.07 78.1	ŽS-I	ŻS-I	ŽS-I
[Vsb] enil edt	←	150000	+	0 4	1 100	4	Z	4	1 2	+	0	PIC	9		Z	9	IN PL	7 70	+	1 12	3	ZZ	Z	3	IN PE	4 12	1 12/2	3	5	2		3	+	4 50	A PC	1 10	╫	1	+	0	N Pat	N PE	1 20	1 12	PIN	ZZ	N.
Ruling resistance of	$\rightarrow$	27		+	-	3		+	4	71	7	t	S			4	t	7	1	e Common	4			S		4	+	3	9	4	+	4	+			r	,	1	+	2	ı		4	-		Çi edi	Ī
gradient	Slope	26	4 4	n v	,	4	6 8 8	4	-	١,	0		9	9		9	1	,	0		3			3		P	-	3	3	7		7	7	3 0		ć	1	7	, 4	n			y	>			
Ruling	ənibal	25	(		1	3		_			٥	L	5			4	1	-			4			5		4		3		3	_	6				v			,	_			٧		L		L
[0%] u	Gradient of the statio			C, 4	Ś	1,3			_	7,0			4.0	3,0		0,0		0			1.5			0,0		4.4			5,0				1,0			0.0		5.0	, 0	0,0			C				0.0
sn	Minimum curve radi	23	800	520	070	500		800	500	950	007	1000	700	700	800	500	1000	006	800	800	800	480	400	350	1000	1150	1000	1000	300	299	350	350	900	200	500	2000	700	1000	700	1000	10000	1200	1200	700	700	1500	
	Open for the accepta dispatching of passer operations	22	P P	F/F	۰ ۵	P/F	Ъ	Ъ	P/F	П	I/I	۵	P/F	Ь	Ь	Д	A 6	P m/d	L/L	цД	P/F	Ь		P/F	ы	P/4	٦	P/F		Ъ	Ы	а ;	444	74 E	J, D	T D/G	D	D/E	1/1	F/F	4 6	A, D	7 D/G	P P	Ь	Ь	P/F
7	Occupancy of service		Þ	+		D			-	+	4	L	Ы	-		Ы	4	٩	4	$\perp$	Ь		$\vdash$	д	4	F	+	д	Þ	Þ	4	_	1			F	+	F	+	4	-	-	٩	+	1	Ц	д
шода	Side-\end-loading pl	Н	C	2		S			S		2	Ļ	S				4		1	╀	S	Ц	Ц	Ω		V	2	S	Ц		-		2			V	2	V	2 6	2	-	-	V	2	$\perp$	Ц	S
	Freight car scales	19		+	+	L			_	+	+	L				_	+	_	+	+	L		Н	_		+		<u> </u>		_	_				+	+	+	+	-	+	+		+	$\pm$	$\perp$	H	L
	Service point code -	2.7	15407	13701	13702	13703	13704	13705	13706	13707	13407	13403	13404	13405	13406	13450	13301	13302	13304	13305	13350	13307		13310	13311	13313	13314	13352	12501	12502	12517	12503	12504	20271	12510	12507	12508	12500	10510	17570	10501	17511	17513	12514	12515	12518	12516
he service point	Manner of securing t	17		1-	1	1	_	-	-		1	╀	Н	1		П	4	-	1	╀	-	Ц	1	1		-	+	П	1	1	4	-	4	+	4	-	1	-	1 -	-	+	+	-	1	╀	H	_
noitslu	Manner of traffic reg	16	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC WILLIAD	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC WILL AB	BC with TWT	DC with TWT	PC with TWT	DC with TWT	DC with TUT	DC with Trum	BC with TWT	DC with Trans	RC with TWT	DC with TWT	RC with TWT	RC with TWT	RC with TWT	RC with TWT
A→A	Tracks for acceptance of the longest trains	15	4 ,	۳ ر	,	2	- 210	3	3	ε.	4		5			4 and 5	Ì	4 and 5	C niip +		4 and 5			3 and 4	Ì	4 and 5	and .	2	1	2		- 3	5 and 5			2 and 3	Comma	3 and 4	ann 4	c and 3		T	2 and d	duiu 1			4
Direction	train length	4	656	838		969		797	642	742	00	t	812			657	1	909	+	t	715	П	П	629		620		25	799	612	1	-	066			808	_	501	-	496	t	t	399	+	T	Г	738
	longest trains Maximum permitted	_	9	Š &	-	9		7	ő	2 0	-	╀	80		Н	$\dashv$	+	+	+	+	$\vdash$	Н	$\vdash$	$\rightarrow$		+	+	-	Н	$\rightarrow$	+	+	+	+	+	+	+	+	+	+	+	-	+	+	Ł	H	7
Direction A→B	Tracks for		4 0	۳ ر	,	2		3	3	e (	2		4			2 and 3		2 and 3	7 mm 7		2 and 3			5 and 6		2 and 3	7 mrg	3 and 4	2	3 and 4		7	4 and 5			1 and 5	· ·	1 and 2	A and	4 and 5			2 and 2	7 dila.			3
	Maximum permitted train length	12	799	838	200	693		262	647	746	(0)		855			530		710	/10		788			702		615	CTO	559	799	648		677	900			47.4	1	753	543	243			571	110			744
pəəds	Left track	1	- 10	200								30	3		100		ç	20		70	5		120	-33	9	20	-8	30												100	001						
Maximum permitted	Right track	10	100	100		20			100				1	70					30			_	120		000	2	2,000	001	30	8	1	20	-							9						_	_
K	Railway line categor	6	D4	100	7 7	D4	D4	D4	D4	D4	7 2	100	D4	D4	D4	D4	D4	4 5	1 2	7 7	D4	D4	D4	D4	D4	7 7	2 2	D4	D4	D4	D4	D4	4 5	4 5	7 2	2 2	2	1 2	1 2	7 6	1 2	47	7 7	1 7	D4	D4	D4
	Class of railway line	00	Z Z	₹ ≥	Z	M	M	Z	Z	Z ;	Z Z	Z	Z	M	M	M	Z ;	Z Z	Z 2	Z	Z	Н			200	Z Z	Z	Z	M	M	×	≱ ;	Z Z	Z 2	IN N	Z Z	N N	2	2 2	Z Z	2 2	M	Z Z	₹ ≥	×	M	9530
əui	Single/double-track	7	52 5	2 0	2 02	ď	σ	S	S	S C	2 6		A	Д	D	А	Д	2 6	9 6	A	А	Д	Д	Д	Д	9 6		Д	S	σ	Ω	02	2 6	1	٦ F	9 6	4 6	9 6	9 6	7 6	9 6	חר	7 6	9 6	А	D	0
1	Type of service poin	9			3	1	3	7	-	_ ,	- ("	, ,	,	7	3	_	6	n -	- "	2 60	-	3	9	-	. 3	n -	1 60	-	2	-	3	7		2 6	2 6	· -	, ,	2 -			,	2 4	n -	- (	2 60	3	-
									1			П																									ı										
	Chainage Name of service point	4	240 47+748 VLAŠKO POLJE		62+925 RABROVA				78+564	85+570	504 SUT434 VELINA FLANA 566 04+000 STAPO STI		100+302				114+100	375 116+975 MILOSEVO	9-100		135+237	Ш	30.0		163+670	171 HGOOD CATCENOVAC	1000		590 181+900 STEVANAC		190+400		7.23 194+9.39 DUNIS	201+400	100 2024500 GODNIT ITEES	205-500	000+806			214+19/	210 705	317 218+785 LUZANE 385 332+070 TEŠTCA		050+277		232+590	349 234+939 TRUPALE
		4	6.240 47+748 VLAŠKO POLJE		62+925 RABROVA				78+564	85+570	3.566 907434 VELINA FLAINA 3.566 904-000 STABO SELO			_	1.688 108+001 LAPOVO MARSHALLING YARD	1.599 109+600 LAPOVO	114+100			131+395	135+237	Ш				5.000 171+600 CYEVAC	1000		5.590 181+900 STEVANAC		190+400	192+216	2.7.23 194+939 EDUNIS	201+400	2 100 2017400 DOMIT LITERS	205-502	000+806	2.362 200.000 INA/PAN	2011710	3.71/ 214+19/ ALEKSINAC	210 705	3.285 2324040 TEŠTCA	0/04777			232+590	_
on public public fransport	Chainage	3 4			62+925 RABROVA	4.625			78+564	85+570	901404				1.688 108+001	1.599	114+100	3.375 116+975	9-100	131+395	135+237	Ш		6.664		5 000 171+600	2.000		ш	4.586	190+400	1.816 192+216		4.234 1997193	2 100 203+500	205-500	7 383 208+000	2 480	2011710	214+19/	210 705	3365	3.263 22240/0	5 245		3.281 232+590	



	əbutitlA	30	188.8		183.3	183	194.1		194			201.6		2.11.5		0.110	220.0	248 2	255		282.6	297.2	306.9	0.00	333 3			346.7	367.5	371.9	383.0	397.7		427.2	459.2				1 20 0	148.8	200	124.6	13.4	10	178.6
	Loading gauge	53		ŽS-I	ZS-I			I-SZ	1-87 ŽS-I	ŽS-I		1	+	_	1-87	7.07		7.S-1		I-S	ŽS-I		ŽS-I	-	1-S2-1	+	ŽS-I	ŽS-I	ŽS-I	7s-1		ŽS-I	ŽS-I		ŽS-I	S-I	ŀ	70%		H	1	S-I	ŽS-I	+	7.S-1 ZS-1
the line [daN]	←	28	Н	Н	+	7		N	2 2	╆	Ž	- 7	N ×	7 1	7 12	1 1/2	1 1		2 Ž	╆	- Ž	Ž -	· N	N	7 1	, X	Ň	4 Ž	+	3 × 2	3 2	1 Ž	Ž	1 Ž	$\rightarrow$	15 Ž	ŀ	×	, c	+	+	10 Ž	- Ž	-	· 6
Ruling resistance of	$\rightarrow$		5		+	0	7	- K	4	-		73	,	n	t	,	1 4		+	+	7	9	00	1	1		F	7		9	42	3		80	13	-	ŀ	,	C1 12	+	-	i.	00		11 5
gradient	Slope	26	2	7	4	9	٥,	,	7	0	0	0	٦,	٦ ،	0	0	0	<b>-</b>	-	1	3	1	0	4 (	) r	. 0	0	S	Э.	4 4	3	0	2	1	0	13	Į	¢	ς		9	6	0	_	0 0
RulinA	ənibnl	25	5	$\mathbf{H}$			71 .		4 4	-	2	-		0 0	7 0	1 0	_	_	_	_	8	9 9	7	_	2 C	'n	9	ш	_	v 4		3	8	8 0	1 14	-	Ļ	_	11 0			0 1			2 6
[%] u	Gradient of the statio	24	200	Ц			1,58		0.71	_	-	0,91	30	7,44	1	-	_	2.8	'	-	4,04	5,65	3,	_	0,45	_	L	2,69		0,92	7.5	2,09		11,0	1,	╛	Ĺ	4,9		8.0		0,1			2,3
sn	Minimum curve radio	23	950	550	295	300	8	2000	700	0	4000	20000	1900	0001	1600		2000	2500	327	300	290	300	300	300	300	950	400	1000	400	450	350	350	450	909	400	300	Į	-	300	298		300	300		350
nce and ngers/freight	Open for the acceptar dispatching of passen operations	22	P/F		P/F	P/F	4	<u>а</u> ,	P/F	Ь	Ы	P/F	ч	ч г	J, C	4 6	D/F	ь	P/F	Ь	P/F	Ь	Ъ	į	P/F	. П	Ъ	Ъ	P/F	P/F	P/F	P/F	Ь		P/F		ŀ	Ы	Д	ц Д		Ь	Ь	ы	ᆈᄱ
taioq a	Occupancy of service	21	Ь	$\rightarrow$	_	Ы.	1		Д			Þ	;	)	1	1	ρ Δ	4 =	Þ		D	D	Þ	-	- =			Þ	Þ	Ч	Д	Ы		Ū	Ъ		Ī	P	) A	4 12		D	Þ	1	Þ
шоди	side-\end-loading pla	-	ß		S/E	9	2		S			Ω	(	2	1	1	V	2	S	2	S/E			3	22		L		4	Ω	S	Ø			S	Ц	ļ			ļ			Ш	_	$\perp$
	Freight car scales	19	Н	Н			+	+		L		$\perp$		+	1		+	+						$\perp$		_	L		4		_	L				_	ŀ			+			Н	+	+
onc	Service point code - 1	18	12550		12551	12301	12302	12304	11001	11002	11003	11004	11005	90011	11000	11000	11050	11010	11011	11012	11013	11014	11015	11029	11017	11018	11030	11019	11020	11021	11023	11024	11025	11026	11027	11028		16103	15602	15603	15615	15604	15605	15606	15608
he service point	Manner of securing th	17	1	Т	-	-	-	-	-			-		1	1	-	-	-	-	4	1	1	н	ŀ		1	L	Н	-	4		1		Т	-	4	ŀ		-	#	1	-	-		1-
ոօնեև	Manner of traffic reg	16	AB	AB with TWT	AB with TWT	AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	DC mith AD	PC with AB	RC with AB	RC with AB	RC with AB		RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	station distance	- Mala Krsna - Velika Plana	Ę	AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB
	acceptance of the ongest trains	1.5	3		3		1		3			2 and 3	,	7	T		7 6	4 -	4		3	3	2	,	s -		T	2	2	and 3	3	H		1	3		ia - Veli	S	4	3 1	,	and 2	3	,	7 7
Direction B→A	rain length Tracks for	4	662		488	543	646	+	601			623 2		037	t	750	2 2	069	526	-	648	632	80	- 5	865	+	H	653	4	650 2 :	623	603		684	60	۱	la Krst	702	9(	573		1	714	- !	603
	longest frains Maximum permitted		99	H	4	Ş,	Õ	+	)9	H	Н	+	3	ó	+	ř	. 9	ق ا	5,	+	79	.9	7	- 8	ŏ×	1	H	9	9	9	9	9		9	)9			7	7	150	1	8	7.	+	ق د
H→B A→B	Tracks for acceptance of the	13	3		e .		1		4			2 and 3	,	7		-	1 7	-	4		3	3	2	,	e -	1		2	2	7	3	-		1	3		÷.	4	4	1 ε	,	-	3	١	7
Direction	Maximum permitted Train length	12	989		490	580	929		009			809	000	639		733	509	686	537		889	969	700		7/5	3		651	648	648	618	643		289	610		Rakovica	702	710	643	3	815	711	100	596
permitted speed	Left track	11	50	09					50				30		0			100	65		50			₹.			50		ĺ	9	,	50	90	0	40			80	90				65		
mumizsM	Right track	10	170400	30					ν,				m			,		=	9		'n			n.			٠,				`	5		Λ	7		grad centar)	∞	V				9	_	
K	Railway line category	6	D4	D4	D4	D4	4	7 2	D 0	D4	D4	D4	7 5	7 5	D 5	2 5	2 5	2 5	D4	D4	D4	D4	D4	D 2	D 5	7	D4	D4	D4	7 2	7 7	D4	D4	D4	D4	D <sub>4</sub>	Beogr	7 2	7 6	7 7	7 4	D4	D4	D 2	D D
8	Class of railway line	∞	M	M	Z.	≱ ;	+	Z	ZΖ	Z	Z	Z	₹ ;	≅ ;	Z Z	2	2	₹ ≥	Z	Z	M	M	Z :	≅ ;	ΣZ	Z	Z	M	Z.	Σ	Z	M	M	M	M	Z	103	2	₹ ≥	Z	Z	M	×	≥ :	ZΖ
əui	Single/double-track l	۲	ß	Ω	Ω	<b>Ω</b>	2	Ω ū	2 02	Ś	Ω	ß	20 0	2	20 0	2 0	2 0	2 00	σ <sub>2</sub>	Ω.	ß	ß	S	SO O	20	2 02	Ω	Ω	S	Ω 0	2 02	Ø	S	Ø	S	Ω		so c	Q V	2 5/2	2 52	S	ďΩ	so c	N N
1	Type of service point	9	1	12	1		7	m r	o	6	3	-	ε,	- (	n c	0 0	4 -	2 6	1	6	1	2	7 (	. 3		· 60	ъ	2	-	- "	,	1	3	2	1	13	ŀ	\	0 -	+		2	1	m .	7 1
	Chainage Name of service point	4	6.066 241+005 CRVENI KRST				253+946	1.495 255+441 CAPLINAC		263+261	265+854		_	2/5+564	3.267 2.78+831 ZIVKOVO		_	211 295+779 DORDEVO	+		312+725	319+671	_	326+338	3.253 329+591 VLADICIN HAN 4.475 334+066 STIVA MORAVA			2.382 341+437 PRIBOJ VRANjSKI	348+015	6.191 354+206 VRANJE 7.200 241+415 NED ADOMAC	365+725	-	380+712	386+550		8.143 400+452 STATE BORDER		9 003 31700 CAROVICA	002 37/08 OPEN LINE JUNCTION KI 10+016 TATINCE	16+277					3.425 31+202 LLPE 5.629 36+894 MALA IVANČA
(Apprilied ♥ internation	Distance in km	3	6.0	1.7	0.842	5.8	4.4	1.4	4.441	1.8	2.5	2.0	2.8	4.7	3.267	-	7.4	8.211	6.0	6.74	4.1	6.9	3.21	3.452	3.253	2.0	2.9	2.3	6.5	6.1	4.3	7.96	7.0	5.8	5.7	8.1	ļ			*5,419	4.0	0.8	3.6	2.5	5.6
handover to public transport	Left track		120	.6	,																1888.																	1000	20.10. 1986.						
Date of	Right track	L	03.09.	0.6																	40																	0	70.7	$\perp$					



	Altifude	30		135,4	123.4	1	108,5	6'86		83.0			83,1			83,6		92,6	111.4			119,8	126,3	2010	111	142,2	81,2	79,3		1,70		82,6				84,73	83,43	83,63	83,83	87,58	109,86	110,35	109,93	109,9			
(e)	Loading gauge	29	ŽS-I	7.S-1	7.S-1	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	7.S-I	78.1	ŽS-I	ŽS-I	ZS-I	ZS-I	7.S-1			ZS-I	ZS-I	Ī	ŽS-I	ŽS-I	ŻS-I	ŽS-I	ZS-I	Ko. I	7.S-I	ŽS-I	Zs-I	ZS-I	ZS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	I-SZ	1-S7	75.1	T 207
the line [daV]	<b>←</b>	28	$\dashv$	6	v	+	7	4		S	П	1	7	+		1	7	+	4 4	-	100	,		t	•	6	13	3	+	5	T	7				1	7	1	1	4	9	9	7	7		1	1
Ruling resistance of	$\rightarrow$	27			,		,	,		,		T	c	0		1		n o	0 0			6			10	00	1	,	,	7		9				5	1	1	1	4	9	3	2	7			
Ruling gradient	Slope	26		00	4		6	4		4			c	0	L	1		1	4 4	-		0			0	_	$\vdash$	3	(	-		7				7	2	1	1	4	9	5	7	2		I	]
office and	Incline	25	-	0	0	1	0 0	0 0	+	0	Н	4	,		╀	1	4	_	0 00	-	Н	∞	4	-	10		-	0		7	+	9 0	-			0 5	0 1	0 1	1 9	5	0 5	0 5	_	2	+	+	4
[0%] 1	Gradient of the station	24		8,0	,		2,0	0,0		0.7	Ц		-	_		9'0	┙		2,/				╛	-	5.5		Ш	3,0	_	4,0		0,0			L	0.0	0,0	0,0	9,0	0,	1,	1,	$\perp$	1,0			
s	Minimum curve radiu			350	700	3	700	1000		280			700	2007		1000		008	700						4500	3500	3500	1500	0001	1700		500				390	5000	5000	0009	5000	2000	2000	20000	20000			
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	Side-/end-loading pla	-	+	4	=	+	U	Ь	+	S2	Н	+	1	+	ł	S	+		ν Σ	1	Н	+	S	$\vdash$	ν η μ	D	U	D	+	+	+	C		-	-	1	U	U	n	P	-	S	7	Þ	+	+	
umoj,	Freight car scales	+	+	+	+	╁		Н	+	-	Н	+		8	+	V2	+	+	+	-	Н	-	-	F	-	+	Н	+	+	216	+				H		H	H		Н	_	Zes ,	-	+	+	+	1
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JIC JIC	Service point code - U	18	15616	15610	15611	15612	15613	15614	13509	13551	$\ $	13502	13501	13508	13510	13504	13505	13506	13401			13351	13310	1000	16801	16802	16805	16806	90,	1000/		16808					23302	23303	23304			23404	2340	23409			
taioq soivise s	Manner of securing th	17	T	-	-	1	1	-	-		-	1	-	-	t	-	1			1	9	9	-	1	==	Ξ	11	=	;	=	t	11			T	11	11	11	11	11	11	11	-	11	Ť	t	-
noitsl	Маппет от та бъе геди	16	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	AB	AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	íćin		station distance	station distance	border - (Kelebia)	RC with TWT	RC with TWT	RC with TWT	RC with TWT	with	KC WILL I WI	RC with TWT	RC with TWT	RC with TWT	RC with TWT	RC with TWT	RC with TWT		RC with TWT	RC with TWT	RC with TWT		RC with TWT		RC with TWT	RC with I WI	RC with TWT	TAN SERVER T SE T
	acceptance of the longest trains	15		2		,	3	2		4		1	·	1		3		e .	7 7	rija - Paraćin	Π	2	4	- state bor	and 2	and 2		and 2	0	c aug 7		4 and 5				and 2	and 2	and 4	and 4	and 5	3 and 4	and 2	and 4	1 and 2			
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	Maximum permitted			619	617		628	586		633	Ц	_	272	4	L	610		476	389	Ćuprija - Ćuprija	Ц	167	892	- Subot	644	694	Ц	247	100	3	L	493			L	746	738	311	670	532	739	841	683	876		1	
Direction A→B	Tracks for acceptance of the longest trains	13	1500	m	۳	,	3	2		4			·	1		3	3	e .	4 E	- Open line junction C		3 and 4	S	Novi Sad	3 and 4	3 and 4		3 and 4	5	c pure 5		4 and 5			15	3 and 4	3 and 4	1 and 2	1 and 2	2 and 3	1 and 2	3 and 4	1 and 2	3 and 4		15	
	Maximum permitted train length	12		624	612		630	602		629			245	5		809		581	785	line j		240	847	Pazova -	566	694		247	200	020		492				650	738	311	099	531	739	904	735	206			
peeds bettimined	Left track	Н																		- Oper	ľ			2		200		160		120		8	95	120	180					200					4	100	201
mumixsM	Right track	10	80				100			1	20				,	100				104 (Jagodina)	50		100	tar) - Sta		200		160	+	120	+	100	95	_	180					200					-	100	4
	Railway line category	6	D4	7 0	1 2	D4	D4	D4	D 2	7 7	D4	D4	5 0	1 2	D4	D4	D4	D 2	4 5	4 (Ja		D4	D4	eograd Cen	D4	P 4	D4	D4	D4	3 2	4 4	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	1
	Class of railway line	8		ZZ	-		M	$\vdash$	M		$\vdash$	$\rightarrow$	Z Z	+	+	$\vdash$	M		Z >			_	M	g -	Z	+	$\vdash$	-		+	Z Z	_		M		M	M	M	M	M	M	M	+	+	+	N	-
эu	Single/double-track li	7	S	20 0	2 00	2 02	S	Ω	02 0	2 02	Ø	S	20 0	2 0	S	ď	S	02 0	2 0			S	1	<u>a</u>	Q	A	О	Д	Д			А	D	D	D	D	D	D	D	D	D	D	Д	A	n	9 6	1
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											IA.																AČKI VINOGRA																				
	Name of service point	5	BRESTOVI	MALI POZAREVAC DD AŻANI/ŠEDŚTN	UKAZANJOSEFSKIN	ŽIVKOVAC	VODANj	KOLARI	RALJA SMEDEREVSKA	MALA KRSNA	JUNCTION POINT 28 MALA KRSNA	SKOBALj	OSIPAONICA	USERCINICA	SARAORCI	LOZOVIK/SARAORCI	MILOŠEVAC	JEVO/TRNOVCE	94+639 VELINO ORASJE 99+706 VELIKA PLANA		0+000 OPEN LINE JUNCTION CUPRIJA	PRIJA	ACIN	DA HARODA	34+944 CIAPA IIA3OBA 42+862 INDIIA	IKA	OPEN LINE JUNCTION KARLOVAČKI VINOGRA	SREMSKI KARLOVCI	KM 70+212 SC	PEIKOVAKADIN	IUNCTION POINT 6 NOVI SAD	NOVI SAD	79+123 SC	KM 80+684 SC	KM 82+304 SC	RUMENKA	AČ	STEPANOVIĆEVO	ZMAJEVO	TRBAS NOVA	OVĆENAC - MALI IBOŠ	BAČKA TOPOLA	NIK	NAUMOVICEVO	KM 168+401 SC	1/2+282 RM 1/2+282 SC 175+305 RLOK 1 SUBOTICA	ALL I DOMESTICAN
		Ц	BRE	MA	_						_								VE		OPE	COL	PAR	Y LE	INDIA	BEŠKA	OPE		_				KM			-	-	_	1.4	2	1	-			N.M.	RIC	1
	Chainage.	4		41+300	47+771	52+315	55+219	1,000	66+570			71+995	74+765	77+817									7+420 PARACIN	24.1044							76+513	77+010	79+123	80+684	82+304	84+044	90+407	97+300	102+514	113+610	129+523	143+536					
	Distance in km	3	2,706	1,700	4 604	4,544	2,904	5,390	5,961	1,268	1,196	1,731	2,770	1,43/	3,600	1,350	4,950	2,509	*5.586			0,500	6,920		7.918	11,170	8,026	3,754	4,400	0,038	4.132	*0,210	2,113	1,561	1,620	1,740	6,363	6,893	5,214	11,096	15,913	14,013	13,609	9,374	1,882	3,881	July her
public transport	Left track	2	5.	+			•				Γ		_		.2.	. I	_	_									· ·				_					_	_		•	961.		_	_			•	۷
Date of handover to	Right track		01.06.	1924.											10.12.	188										5	1883													23.10.1961.							
to ete (																																															



1		sbutitlA.	30	0,000	113,62		188,3			199	2072		219.5	235,3			265	720	/07	286,9		314			341,6	4.000	368,5		416.5			445,8					T	T		T	T	77,0	77,1
1		Loading gauge	59	I-SZ	1-S7	I-SZ	×	ZS-I	ŽS-I	ŽS-I	1.0%	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	1-32-1	ŽS-I	ŽS-I	ŽS-I	1.52	ŽS-I	ŽS-I	ŽS-I	ZS-I	1.57	ŽS-I	ŽS-I	ZS-I	ŽS-I	ŽS-I		-	ŽS-I	ZS-I	ZS-I	ZS-1	ZS-1	70.1	Ž.S.I	ŽS-I
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	[0%] t	Gradient of the station	24				Ц				,				_						_																	4	_	1	+		1~
	S		23	1000	300	300		300	500	2000	1000	310	300	300	300	300	200	450	200	49	35(	300	404	900	49.	300	500	100	3000	700	200	500	300		_	300	909	4	500	801	_	_	009
A		dispatching of passen,	22	H	Ь		P/F	۵	ı)	ы	Д	ы	Ы	Ь		ы	a r	д г	4 4	Ы	Ь	ы	4 4	ь	Ы		P/F	٦ ۵	Д	Ъ	Ы	P/F			Ь	Ь	Ы	ы	ы	A G	거요	P/F	D/F
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17.   17.		Wast.		E	E		-	t	П	Ħ		T	Ī	T	Н	$\dagger$	†			T	П	T	t	F	П		Ω.	t	+	+	t	_	П		Ħ	T	†	†	T	T	T	+	┿
1985   1985	-	Freight car scales	19	Yes	†			t	Ħ			T	Ī	F	П	$\dagger$	†	T	t	t		T	t	T	Ħ		t	t			T	Yes			Ħ	T	†	†	T	t	T	Yes	t
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Chaining	noitsli	Manner of traffic regu						AB	AB	AB	AB	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	Stamora Moravita)		AB with TWT	AB with TWT	AB with TWT	AB	AB	AB	AB	station distance						
Chaining			5	nd 2	7 pu	oman)	<u></u>	t	H		4	T	Ī	2	Н	7	od 3		C DI	2		nd 3	t		rd 3	0.000	od 3	t	nd 3		r	2		der - (\$	~	Ħ	$\dagger$	†	+	7	+	nd 5	2 and 3
Chaining	Direction B→A		1	1 ar	1 ar	Drage		1	Ц		,	L	L		Ц	$\perp$	2 at	,	7	,,,		2 ar	1	L	2 ar	-	2 ar	1	2 ar		L		Ц	e bore			┙	╛		2		4 ar	2 ar
Chaining		Maximum permitted train length	14	815	405	der - (	488			009	900			524		1	603	2	014	791		713			624		624		626			711		c - stat	400				100	697	504	800	471
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Chaining	Direction A→B	Tracks for	Н		-	rad - st	-	+	H		-	ŀ				+	+	+	1			-	+	H		$\vdash$		+	+	+	L			stanica	$\neg$	_	+	$\downarrow$			-	+	1
Chaining			12	800	404	trovg	490			009	400		8	524			603	2	017	791		713			624	1	624		626			710		avna :	364			╛	3	69	677	810	471
Chaining		Гец цвск	11	100	000	200 3 - Dim											0													0			08	čevo gl		50			50	Malloon	09	100	50
1,049   1,044   1,04	mumixeM	Right track	10	100	000	200 06 Ni										_														41			~	r - Pan	50	1	70	West .		001	100		
Column   C		Railway line category	6	D4	5			D3	D3	D3	3 5	D3	D3	D3	D3	D3	133	D3	2 2	D3	D3	D3	3 5	D3	D3	D3	D3	50 50	23	D3	D3	D3	D4	Centa		D4	D4	D4	D4	D4	7 E	7 7	₽ 7
Column   C		Class of railway line	∞	M	Z ;	M	- 5	Z Z	M	Z :	≅ ≥	Z	×	M	M	Z	Σ,	Z Z	₹ ≥	Σ	M	M ;	ΣZ	×	M	Z	Σ ;	ΣΣ	Z	M	Z	Z	M	grad		Z	Z	Z,	Z ?	Z :	Z	M	Z
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Fig.		Type of service point	9		7	13	!	3 12	8	- (	o -	m	2	1	3	6	71	e -	۳ ر	-	3	7	0 (	9	2	3	- (	2 6	,	3	3	-	13	10	1	7	ε 1	- 0	n 0	7 0	2 -	4-	Ŀ
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01 20 02 1993   1					_						L						1			L				Ľ				1	L		L		H						_	1	1	*	
		Right track Left track	2										01.06.	1887.												1.11.	1887.																11 10 1935



	əbutitlA	30	104.0	146.0	120.0	95.4	81.7	0./8		102.3	82.0	105.3	171.1		153.3		117.9	0	33.3	108.5		110.9	123.6		145		186.4	264		388.5	501		487.1	411.9		352.1		T	311.6					363.2	401
	Loading gauge	59	S-I	ŽS-I	ŽS-I	ZS-I	7.S-1	78-I	ŽS-I	ŽS-I	ZS-I	r	ŽS-1	ŽS-I	ŽS-I	ŽS-I	ZS-I	I-S	1-87	78.1	ŽS-1	ŽS-I	ŻS-I	ŽS-I	ZS-I	7.S-1	78-I	7.S-1	ŽS-I	ŻS-I	ŽS-I	ŽS-I	I-SZ	ZS-I	ZS-I	7.S-1	78.1	1.0	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	1-62-1 7.S-1	ŽS-I
the line [daV]	<b>←</b>	28		2 Ž	11 Ž	8	7 ×	7 ×	152	$\vdash$	S Z	H	×.	Ž	9 Ž		9 Z	-	+	2 2	- X	1 Ž	3 Ž	Ž	1 × Z	7 10	1 /	1 1	IbK	- Ž	- Ž			16 Ž	+	9	7 10	+	8 Ž	Н	Ž	4 Ž	NÞ	136	Ž
Ruling resistance of	$\rightarrow$	27 2	_		5	v.	,	0		$\vdash$	6	F	12		9		7	+	+	0 0	,	4	4		<b>-</b>	t	cc	17		16	17	_	2		1000		t	t	-			8		v.	13
gradient	Slope	26	3	1	10	œ	t	/		4	S		C		8		œ	•	4 6	2 <		1	2		-	1	-	. 0	,	0	$\vdash$		16	15	c	×	I	I	9			0		c	0
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[0%] uo	Gradient of the static	24	1,34					1,8			3,0	~	2				0		0				1.7		7		23		L	2.5				7		7		┸	7.5		. 9			1.5	
sn	Minimum curve radi	23	300	500	350	350	009	600	200	300	1905		300		400		400		919	450	2	500	450		200		009	300		300	300		300	300	000	200		_	500					500	400
	Open for the accepta dispatching of passer operations	22	P/F	P/F	P/F	ы	A G	P/F	1	P/F		D/T	P/R	Ь	P	P	P/F	Ь	P/F	P/F	***	P/F	P/F	Ъ	P/F	4 6	P/R	Ь	Ь	P/F	P	Ь	P/F	P/F	ы	٦ r	4 0	4	P/F		Ь	P/F	<u>ч</u>	P/F	P/F
100.00.00.00	Occupancy of service		H	Н	Ь	H	+	>	1	ы		٩	+	+	n	$\vdash$	Þ		+	4 F	+	-	Ω	-	Þ	1	Д	+		Ω	Ω	_	+	4	Ė	>	1	1	А	Н		D		Þ	
атотп	Side-\end-loading pl	-	-	S	Ω	Ω	C	2	$\perp$	S/E	_	V	2 00				Ω	7	2 0	2 0	2	S	ß		Ω	4	V.	2		L	Ц	4		Ω	4	4	+	$\downarrow$	ζ.			$\perp$	4	$\downarrow$	S/E
	Freight car scales	19							+	Yes	_	H		_					+	1	-			_		1	+	H	_	_			_					+	Yes	П			_		Ł
oin	Service point code -	18	21002	21003	21004	21005	21006	21008	210012	21009	21099	15501	15201	15202	15203	15204	15205	15206	15207	15200	200	15260	15211	15212	15213	15214	15251	15101	15112	15102	15103	15104	15105	15106	15109	15107	15116	CITCI	15150	: 0	15111	15110	15114	15108	15151
he service point	Manner of securing t	17	1	7	ď	∞ (	0	×	╀	7		F	1-		1		-1	,	1-	- -	1	1	1				-	-	1	1	1		-	-	•	-		$\perp$	-	_		_	**	-	-
noñslu	Manner of traffic reg	16	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	D2 50 station distance	(afin t order)	R.C. with station distance	RC with station distance	RC with station distance	RC with station distance	with station	RC with station distance	RC with station distance	RC with station distance	with station	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	with station	RC with station distance	RC with station distance	INC WILLI SIGNOUS GESTONICS	RC with station distance	RC with station distance	RC with station distance		RC with station distance	RC with station distance	RC with station distance				
B→A	scceptance of the longest trains	15	and 3	3 and 4	3 and 4	and 3		7 and 3		4 and 5	Porodor	3	) 4		3		3		2 4	4 6	1	4	3		3	Ī	4	2		3	3	Ţ,	9	9	,	3		30	ЭР 5f			3		"	
Direction	Maximum permitted train length Tracks for	14	663 2	Н		662 2	_	200		643 4	- ctoto	730	595		768		574		294	00/		652	601		602	ı	503	520		566	544		552	544	9	549	t	10m	649f 649f			553	7.74	563	552
	longest trains		13	Н		and3	+	+		$\vdash$		TO TO								T					1	†						T			T		t	T		П					t
Direction A→B	Tracks for Tracks for acceptance of the		7	Н	3	7	+	7 and 3		4 and 5		, 100 mg			. 3		3	4	1	4 6		4	3		3	-	L	2	L	3		4	1	9	4	3	-		f Sf	Ц		1 3			3
	Maximum permitted		663	836	743	995	,	000		643	_ i	730	594		771		572	5	294	609		649	869		009		506	553		268	54.		554	544	i	331		292	647f	Ц		554		366	558
Maximum permitted speed	Right track Left track	H					100				50	mm) - Trees	70		90	3		8	3		95				100								į	20								100	i i		06
	Railway line categor		D2	D2	D2	D2	D2	77	77	D2	D2	-	D4	D4	D4	D4	D4	D4	4 5	47 5	D4	D4	D4	D4	D4	4 2	1 2	D4	4 2	4 .	40 5	<u>+</u>	D4	D4	D4	D4	D4	D4 D4	70						
	Class of railway line	Н				-	+	Z Z		$\vdash$			>		M	$\vdash$	$\forall$	$\neg$		2 2	٠	+	M	$\dashv$		Z 2	+	+	1	M	M		+	+		+	Z Z	+	-	Н	M		H	Z 2	+
	Single/double-track	Н	52	Н	S	$^{+}$	+	2 0	+	$\vdash$	S M	1	V.	1	S	$\vdash$	1	+	+	2 0	+		S	+	_	+	+	2 00	+	Н	$\vdash$	_	+	+	+	+	20 0	+		S	Н	$\vdash$	+	2 02	+
100	Type of service poin	Н	1	1	1	+	5 .	٦ ،	-	$\vdash$	13	F	-	H	2	$\dashv$	+	+	1.	-	0		1		+	+	o -	+	+	1	2	+	+	+	e -	+	n "	1	-	12	3	+	6 6	+	+
	Name of service point	5	307 BANATSKO NOVO SELO	855 VLADIMIROVAC	554 ALIBUNAR	1041 BANATSKI KARLOVAC	337 NIKOLINCI	33/ ULJMA	797 OPEN LINE JUNCTION A ULIMA		98+314 STATE BORDER	0+435 BESINE	537 BFL A RFK A	205 NENADOVAC	708 BARAJEVO	900 BARAJEVO CENTAR			527 STEPOJEVAC	202 VKEUCI 386 I AZARRVAC		500 LAJKOVAC	982 SLOVAC	900 MLABEVO		69+243 LUKAVAC KOLUBARSKI	734 VALIFVO			D48 LASTRA	145 SAMARI	_		881 KOSJERIC		842 KALENICI	133+600 OTAN 135+800 GTTMAAŽ	מהטיומים	787 POŽEGA	489 JUNCTION POINT 53 POŽEGA	500 RASNA		500 ZLAKUSA	154+200 BUNOVICKA KAMPA 156+974 SEVOINO	161+900 ITŽICE TERETNA
	Chainage	4	34+007	-10				75+300				0+40			15+708					797+78			Ц							94+048	103+145								140+787		145+600				
	Distance in km	3	15.801	11.848	669.7	*5,207	3.996	4 963	6.497	1.056	15.461		7.212	4.568	3.503	2.192	5.194	4.644	6887	8 124	1.514	5.700	6.382	4.918	3.254	2.089	4.437	6.846	7.030	2.448	9.097	4.533	3.674	7.529	4.519	6.442	3.758	7077	4.987	1.702	3.111	3.662	2.238	2.774	4976
handover to public transport	Left track	H	26.08.	1896.			08.12.	1894.			20.07.1858.			29.11.	1958.			29.11.	1958.		07.07.	1968.			29.11.	1908.			2812					-		i c	1977	12/4.		2 76					
Date of	Right track	Γ									20			25%					087		1000			9	w.5)#I											110	ecs" IV	-00.1							



	əbutitlA	30	418.4	520.5	Ī	631		784	612.5		531.5		390.3		447.7		453.2			505.2	561.5	553.7			109		129,5			153.0	171,6		200,1	236,5		241,9	239	216	0 0 0	210,3	187.7	,		202,4
	Loading gauge	56	I-S.	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	1-87	ŽS-I	ŢS-I	S-I	7.5.1 Že 1	78.1	ŽS-I	ŽS-I	ŽS-I	ŻS-I	I-S.	ŽS-I	ŽS-I	1-S7	1-87		ŽS-I	ŢS-I	ZS-I	ZS-I	70.1	1-8	ŽS-I	ŽS-I	ŽS-I	ŢS-I	ZS-I	I-S7	ZS-I	7.S-1	7.S-1	7.S-I	1-82 7.S-1	ŽS-I	ŽS-I	ŽS-I
the line [daN]	<b>←</b>	28	- Z	,	PEN PEN	1 12/4	ž.	2	18		16 Ž	_	17	J PE	4	+	4 Ž	8	Z	1	+	+	2 2	H	3 Ž	Ž		N PE	1 20	4	+	$\vdash$	Z×	- Ž	_		+	6	+	S	8	┰	ZK	8 Ž
Ruling resistance of	$\rightarrow$	27	18	18	1	18	18	16			*	$^{+}$		t	00	,	7	10		10	6	-	×	F	3	Ħ	9	t	t	10	-	-	8	11	-	. †		2	,	3	1.	T	Ħ	00
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gniluA	Incline		16	17		18		16	c		0		0		œ					200	6	_	×		2		ď			00		100		10			ε,	-		7	c			1
[0%] uo	Gradient of the statio			2.3		1.5		2	2.5	0.0	2		0		1.5		1.5	1.5		-	2				2.4		3.2			7.1	2 2 2		4.3	7.0				2.0		4.5	1.8			1.0
sn	Minimum curve radio	23	400	350		400		400	300		300		300		300		350	400		350	400	400			250		550			550	550		300	300		300	375	300	000	300	300			290
	Open for the acceptan dispatching of passer operations	22	Ъ	Д	<u>а</u>	P/F	P/F	Д ,	ъ р		Ь	ЬΡ	P/F	цД	P/F	Ь	Ь	P/F	Ь	Ы	Д	ч		Д	P/F	Ъ	Ы	4	4 6	ц Д	P/F	Ы	P/F	Ъ	<u>ы</u>	P/F	Д.	P//F	J. 6	P/F	P/F	ы	Ъ	P/F
	Occupancy of service		Ы	Þ		D	D	D	11		n	,	4		D	)	I	Ы		Þ	Þ	4		4	Ъ		Þ	1		Þ	4		Ы	Ω	1	4	Þ	4	;	Þ	ρ	1		Ы
птона	Side-/end-loading pla	Н									Ц	3	Σ	L				Ω				1		L	S			1			S		Ø	ß	1	SZ I	SZ I	Σ2	7	S	ις.	2		S
	Freight car scales	19	Ц	$\perp$	1				1		$\Box$	1	1	1							4	4		L	L	Ш	4	1	ļ		L				1	4	1		1		1	L	Ш	$\Box$
nıc	Service point code -	18	15153	15701	15716	15702	15703	15704	15706	15721	15707	15720	15708	15709	15710	15718	15711	15712	15719	15713	15714	15715	15723	13450	13201	13202	13203	13204	13706	13207	13250	13209	13210	13211	13212	13213	13214	13215	13221	13216	13217	13219	13220	13251
he service point	Manner of securing t	11	1	-		1	1	1	-		1	Ţ,	-		-	•	1	1	Ę	-	-	-		-	8		∞	1		œ	9		8	8		× ·	∞ .	-	0	×	œ	Ī		4
ព០ដៃទណ្ឌ	Manner of traffic reg	16	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	RC with station distance	station	with station	RC with station distance	olie - Deneral Tanković - state border - (Volkovo)	(Acoust) Parison	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance														
ν, σ	acceptance of the longest trains	15	1	1		3	3	3	,	1	1		4		3		3	5		3	- ,	3	ić - stat	5 and 6	2		3	Ī		3	3		2	2		2	7	2	,	7	2			4
Direction B→A	train length Tracks for	4	91	7		68	98	11	y		7.5		2	t	61	2	7(	60		552	9	4	Tankor	563 5		H	27	t		42	4	-	8.8	17	1	4	0	9	1	7	746	+	H	738
	longest trains Maximum permitted	14	346	547	-	539	486	53	383		572	+	553	+	549		307	499		55	969	54	eneral	3 56	+	H	722	+	- k	734	844		558	632	-	614	620	2	+	597	74	+	H	73
Direction A→B	acceptance of the Tracks for	13	1	г		3	3	3	ć	9	1		4		г	,	3	S		3	(	3	olie - Đ	2 and 3	2		3			3	3		2	2	0	2	7	r	,	7	2	1		4
900	Maximum permitted train length	12	353	545		539	486	531	550		574		331		551	-	307	495		553	738	547	Kosowo P	530	099		722			734	844		558	632		614	620	591	i	597	746			738
Maximum permitted speed	Right frack Left track				50			70		50				30						20	2		- Lešak - K	8	65			100	100									40						
		Н	4	4	4 4	4	4	4	4 4	4	4	4	4 -	1 4	14	4	4	4	4	4	4	4	- 2		3	3	<sub>ص</sub> ا	<u>"</u>	2 6	2 60	ا م	3	3	8	ر ا	<sub>20</sub>	<u>س</u>		2	m .	2 %	T.,	<sub>ص</sub>	
200	Railway line categor	Н	D4	$\dashv$	7 Z	-			7 2		Н	+	7 5	-	-			D4		+	D 7	+	-   5	₽-		$\vdash$	$\rightarrow$	+	+	3 8	╌	+	S	1	-	+	8	+	3 8	+	3 8	+	ខ	Ü
	Class of railway line	Н	Н	$\dashv$	ZZ				Ξ >	$\vdash$	Н	+	2 2	+	+		M	Z	Σ	$\dashv$		+	S M		M	$\vdash$	+	+	Ξ 2	+	+	+	M	Н	+	+	+		+		ΣΣ	+	1000	M
əni	Single/double-track l	7	S	Ω	SO O	2 02	S	Ω (	Ω V.	20	Ω	S (	Ω	2 00	2 02	S	S	Ω	Ω	ß	52	4	_	-	S	S	S	S	2 0	2 02	S	Ω	ß	ď	Ω	S	SZ I	N C	N C	S C	2 0	2 02	S	S
1	Type of service point	9	1	7	m n	0 64	1	4	υ c	3	2	e .	، ا	ی د	1 -	3	1	Н	3	7	7 ,	- 3	100		-	3	-	n 1	0 6	- ر	-	п	1	1	ω.	-	-	7 '	η,	۰,	ი –	<u>س</u>	3	-
	Chainage Name of service point		163+881 UŽICE	170+644 STAPARI	173+400 RISTANOVIĆA POLJE 176+000 TPIDKOVA	178+350 SUŠICA		193+320 ZLATIBOR	200+300 RIBNICA ZLA HBORSKA 205+407 TABLANICA			219+500 RACA	225+290 PRIBOJ	232+800 PRIBOISKA BANIA	241+278 BISTRICA NA LIMU		252+616 PRUEPOLJE		259+600 VELIKA ŽUPA	264+641 LUČICE	273+329 BRODAREVO	285+193 VRBNICA	287+438 STATE BORDER	0+666 LAPOVO	3+405 BATOČINA	8+300 GRADAC	12+284 BADNjEVAC		20+600 CEPTOTEVAC	22+335 IOVANOVAC	28+829 KRAGUJEVAC	31+300 ZAVOD	34+100 GROŠNICA		44+600 VUČKOVICA		53+474 GRUZA	60+598 GUBEREVAC		20.1081 MIT 437 Zufer	73+935 VITANOVAC			84+744 KRALjEVO
	Distance in km	3	1.981	6.763	2.756	2.350	6.875	8.095	5 107	6.193	3.232	4.668	5.790	4 500	8.478	5.022	6.316	3.240	3.744	5.041	8.688	11.864	2.245		2.739	4.895	3.984	3.516	1.002	1.735	6.494	2.471	2.800	5.451	5.049	2.986	5.888	7.124	1.502	4.235	3.854	5.165	2.800	2.844
handover to public transport	Right track Left track	Н			1		21.05.	1976.								100	21.05.	1976.									03.03.	1887.										1020	.6761			-		
Date of	-1~~++4~; (I																20/1																											



	Altifude	30		271,4	733.4	255,4	304.2	1	343,1	379,8	303	000	406,3		416,5			441		454		470	101	495	496.6	10	49/	7,56	85,1	85,3		86,6	0, 0	7,00	119.6	118,3	124,6	124,7	124,5	1103	113,2
	Loading gauge	56	ŽS-I	ZS-I	7.S-1	78-1	ŽS-I	ŽS-I	7.5.7	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	7S-1	ŽS-I	ŽS-I	ZS-I	ZS-I ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	ŽS-I	ŽS-I	1-87		ŽS-I	ŽS-I	ZS-I	7.S-1	7.07	78.1	ŽS-I	ŽS-I	ŽS-I	ZS-I	7.S-1	78.1	ŽS-I
the line [daN]	<b>←</b>	28			+	o .	6						5		9					4		4	,	2 4	Н				5	1			ر د	ا ن	1	5		4	,,	+	9
Ruling resistance of	$\rightarrow$	27		9	ч	000	9 6		×	8	v) v	3	5		9			œ		00		00	r	S	4			St.	1	1		n "	n v	۳ د	9	3		4	~	0	3
gradient	Slope		$\vdash$	0	+	n c	+	+	>		0	+	г	$\vdash$	3	$\perp$		0	-	7		1	1	+	0				5	1		- v	H	n -	-	S		4	۳	+	9
RulinA	Indine			4. N		67 6		0.00	9 0.7	.1	4 4		0.4		4.8	+	H	0.0	- 1	0.0	-	0.0	000		0.0	+	4	H	0.2 0	0.2		0.0	_	0.0			Н	2.5 4	2 5		1.0
[0%] 110	Gradient of the statio	24	$\perp$	0.4						4.1		_		ш		$\perp$	L				L	Ц	- 1			4		20-20			_							7	,	7	
sn	operations Minimum curve radiu	23		300	100	300	250		300	270	300	7	300		300	) O		300		300		300	300	300	300		300	_	3000	2000		2000	1000	000	3000	3000	1900		1		610
	Open for the acceptan dispatching of passen	22	1	P/F	4	4 0	ا م	Ы	A P	P/F	P/F	Ъ	P/F	Ь	P/F	А	Ь	P/F	Ч	P/F	ь	P/F	P P	P/F	P/F	٤	ਮ		P/F	Ь	]	P/F	D/F	D D	4	P/F		P/F	D/F	L/L	P/F
1	Occupancy of service	21	П	Д	F	- I	þ	ı	٦,	Ь	H	4	Ь		Þ	T		д	0	Д	T	Д	þ	þ	Ь	;	0	-	Ъ	Ω			4 0	4 0	Þ	Ь		D	Д	4	Ъ
шода	side-\end-loading pla	20		Ω				3	2	S	T		w		σ				1	S		Ø	ō	2 02	Ω		-78	4	S		Ī		G/E								S/E
	Freight car scales	19					L	Ш														П											Vec	T C2	I						
nıc	Service point code - 1	18		12101	12102	12103	12105	12116	12115	12107	12108	12110	12111	12112	12113	12117	12114	12001	12002	12003	12004	12005	12019	12007	12008	0000+	77071	25471	25470	25501		25502	25550	24401	24403	24404	24405	24406	24407	24400	23450
he service point	Manner of securing t	17		∞	7	4	3	,	7	8	0	,	S		∞					-		н			10		TO	20 20	1	S	1	v v	o 2	1 v	'n	ď		'n	v	2	4
noitslu	Manner of traffic reg	16	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	stanon distance		station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance
	acceptance of the longest trains	15		3	,	7 6	2 2		7	3	1,	4	2		2	ı		2	,	3	t	3	,	n	1	,	rdut)	-	3 and 4	2 and 3		2 and 3	C pin	2 and 3	2 and 3	3 and 4		2 and 3	2 and 3	Chin	2 and 3
Direction B→A	train length Tracks for	4		=	ţ	, g			980	4	1005	0	7	Н		H		73		579	-	576	630	5 5	01	-	140 order - (F	_			7	$\neg$	$\top$	+					+	_	594 2 8
	longest trains Maximum permitted	Ē		631	î	029	658	H	<u>۾</u>	644	1005	ò	677		638		-	473	+	+	+	57	- 2	545	640	-	ate bor	H	4 732	+	+	3 511	+	+	+	Н		3 617	1 733	+	+
Direction A→B	Tracks for acceptance of the			က	•	4 6	2 64		7	3	н с	4	7	Í	7			2		2 and 3		3	,	0	-		10 Subotica - Bogojevo - state border - (Erdat)		3 and 4	2 and 3	į	2 and 3	2 and	2 and 3	2 and 3	3 and 4		2 and 3	2 and 3	7	2 and 3
10000-00-00-00	Maximum permitted train length	12		631	202	17/	658	300	980	644	1005	0	657		638			479		619		587	073	551	630	20.	- Bogo		730	513		488	505	524	522	525		617	716	01/	594
pəəds	Left track	11					20)						(0)	(no													botica	100	(40)							Su)					
Maximum Permitted	Right track	10					40 (50)						(0)/03	00							50					,	110 Suk	200	) OC							40 (50)					
Á	Railway line categor	6	8	8	3 8	3 8	8	8	3 8	8	8	3 8	S	ន	3 3	3 8	S	$\mathfrak{S}$	D3	D3	D3	D3	D3	D3	D3	D3	US	o.	$\mathbb{C}_3$	D3	D3	D3	27	23	D3	D3	D3	D3	50 5	73	D3
13	Class of railway line	8	M	Z,	Z :	Ξ >	×	Z,	ΣÞ	N	Z Z	Z	M	M	Z	Z	M	M	Z :	ZZ	×	M	Z	Z	M	×;	Z		M	M	M	Z	M	Z >	Z	M	M	Z.	ZZ	Z >	M
əui	Single/double-track l	7	20	S C	02 0	2 0	2 02	SZ (	V (V	S	02 0	2 02	S	S	02 0	ν v2	02	Ø	20	so so	S CO	W	02 0	2 02	S	S C	2		S	ď	20	02 0	2 0	2 0	2 02	S	S	S	o v	2 00	S
1	Type of service point	9	12	- 4	n -	7 6	1 -	ε,	٦ ٣	-	∞ -	3 -	-	ы	1 2	3 6	6	-	6	- "	2 60		m -	- ∞	1	12	-75	13	1	1	9	- -	-	-		1	3		m -	٦ ,	,
	Disfance in km Chainage Name of service point	4	85+714			5.499 1007699 BOGO LOVACKA BANJA 7.962 1084861 DORRE STRANE	118+113	2 3 2	3.693 127+293 USCE 5.507 132+800 LOZNO	136+123	2.190 138+313 PISKANJA		152+310		4.288 161+988 RUDNICA		168+924			4.900 182+800 LEPOSAVIC 5.200 188+000 PRIDVORICA	188+500	192+300	3.400 195+700 PLANDISTE	_	2.	2.367 213+267 JUNCTION POINT	*0,120  0+120 KOSOVSKA MIIKOVICA SEVEK	41+076 STATE BORDER	2.739 43+815 BOGOJEVO	50+067		8.028 58+636 PRIGREVICA 7.444 66+080 BITZOWAČET GAT AŠT	73+450	9 910 83+369 SVETOZAR MILETTÉ	97+501	105+172	6.673 111+845 SKENDEREVO	115+374	3.183 118+557 LjUTOVO 5.204 123+761 ŠERRŠTĆ	128+221	134+538
transport	Dietance in km		0	∞ (	0	0 6	10	l co	2	Ш		, 4	4	ς.	4 (	1	<u>ر</u>	8	S.	4 4	L	<u>د</u>	60 14	9	7	7	- -	_	2	9	0	٦	1	10	14	7	Ц	_	2	7	9
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handover to	Most the 1			24.05.	1931.	1	07.08.	1931.		07.08	1931.			12.02.	1931.						12.02.	1931.								20.11.	1870.						=======================================	1869.			



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	Occupancy of service	21	Ī	<u> </u>	ч а	Ъ	ı	Ы		Ъ	Þ	Þ	4	Ы	5	Ь	T	1	Д		Ъ	Ы		ы	Þ	5	Ħ	1	Ъ	Ъ	1	Д	ч	Ħ
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he service point	Manner of securing t	17	ŀ	+	7 -		h	н		<u>-</u>	Η	н,	7	-		1		ì				Н				l 1	目	Ξ	11	H	1 1	1	-	aomica 1
noilslu	Manner of traffic reg		atajnica	station distance	station distance	station distance	ca	station distance	T. 11 (21) (21)	789   6 and 7	station distance	station distance	ine junction "K/K1")		station distance	menon A - (Resink	station distance	- Rakovica	station distance	Rakovica	station distance	station distance	(Rakovica)	1   16201   Ye station distance   1		station distance unction Dedinie - (C		AB with TWT		AB	Sad marshalling yard - Open line junction Sajlovo	station distance	block post distance	Krsna: (Kolari) - junction point 1 - junction point 28 - (Osipaonica)
	acceptance of the longest trains	5	ica - B	and 8	2 and 3	4	- Ostružni	2		and 7	П	,	unction	and 4		Open me j		_ ≃ .		1,	8 and 9	2	0 - "L.		me junction . B.)			1	3 and 4	4 and 5	unction	1 and 2		· jund
Direction B→A	Lrscks for		stružn			-	Ö			ben 6	Н				4		4	nction	H	- Open line junction "T	8 a	Ц	ction			_ _ _	-	4	$\Box$	-	line		4_	1 July 1
	Maximum permitted train length	14	01	750	733	862	YARD "B"	750		789		000	Open (	845	1	⊿		ine ju	702	ine ju	789	702	line junction			, park		.5	566	749	Ö	798	1	tion p
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Direction	Maximum permitted train length	12	LLING		733	853	SHAI	750	Makiš 2			000	line junction "B" -	845				/ard 'B	702	ling yard "A		702	'ard "B"		N III	ction ]		21 Indiia - Golubinci	644	655	marsha	798	2	na: (Ko
pəəds	Left track	11	Beograd MARSHALLING YARD "A" - Ostružnica - B		_		Beograd MARSHALLING		and track loco Makiš 2 is 2914n	marshanng yard A - Open me junction	_	1	Den		١.		_	marshalling yard "B") - Open line junctionN "R		ਕ			marshalling yard		ea of the Open line junction "INKL": (Open	Open line junction Karadordev park - Open line	50	٦-	80	_	vi Sad			ala Krs
Maximum permitted	Right track	10	ad M.⁄		30		3 eogra	50	dtrad	yard	09	Š	Ca - O	30	-	ig yard D	30	mars	30	d marsh	30	70		30	20	Open	50		08	8	Sad - Novi	50	1	ion Mal
K	Railway line categor	6	Beogr	2	7 7	$\overline{}$	112]	D4	300 ar		D4	70	M   D4   14 Ostružnica		D4		7	6 (Beograd	P4	Beogra	D4 D4	D4	Beograd	D4 .		D4 L		D4	1	D3	Novi Sa	נע	D3	k of the station Mala
3	Class of railway line	œ	=[	Z	Z	Z		M			×	Z :	14 C		Z	REI	×	6 (B	Z	117 E	ZZ		18 B	×	ea oi	M D4		×	18	Z Z	$ \bar{z} $	М	Z	koft
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	Name of service point			0+000 BEOGRAD MARSHALLING YARD A 3+300 OSTBITŽNICA	3+300 OS IRUZNICA 14+500 SURČIN	25+658 BATANICA		0+000 BEOGRAD MARSHALLING YARD B 5+902 OSTRUŽNICA	Distance between Belgrade Marshalling Yard B and Belgrade Marshalling Yard A via junction points	0+000 BEOGRAD MARSHALLING YARD A	2+776 OPEN LINE JUNCTION B	8+857 OPEN LINE JUNCTION K	107419  KESNIK	0+000 OSTRUŽNICA		1+772 BEOGRAD MARSHALLING YARD B	4+895 OPEN LINE JUNCTION R		4+895 OPEN LINE JUNCTION R 5+798 RAKOVICA		5+250 BEOGRAD MARSHALLING YARD A 0+000 OPEN LINE JUNCTION T	RAK	cjunction i and Ostudined Stanon is 2004 in	1+774 BEOGRAD MARSHALLING YARD B 2+483 OPEN LINE JUNCTION T	8+872 OPEN LINE JUNCTION K 1.19 Connecting track at the a	9+335 OPEN LINE JUNCTION KI 120 (Open line junction Pančev	0+000 KARAĐORĐEV PARK	+491 DEDINJE	0+896 INDIJA	11+949 INBIIA TT 4+708 GOLUBINCI		0+000 JUNCTION POINT 6 NOVI SAD 1+850 NOVI SAD MARSHATTING VARD	34689 SAILOVO	123 Deviation tra 0+000 JUNCTION POINT 1 MALA KRSNA 12 12 12 12 12 12 12 12 12 12 12 12 12 12 1
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	a various distribution and a second and	H	+		_	+	-		betwe	16					-	H		1		1		H	2412			-		$\dashv$	H	100	1	700	1	
public transport	Left track	(1)			1967.			02.08. 1970.		02.08.	1970.	28.05.	1907.	28.05.	1967.		1970.		20.10.		02.03.	L9/U.	) I	02.03. 1970.	28.05.	1967.			10.12	1883.		09.12.		



	sbutitlA.	30	102.6		105.5	T	Ī	Π		188,8	18/,/	П			Π			113.2	110,4	1	7 /01	102.3	90.7	85.7	77	77	77	80	82	105	70	78,0	80,0	81,0	0, 18	0 82	78.9	77,6		80,8	80,8	8,08	
	Loading gauge	6,	1	L	ŽS-I	F	ŽS-I	ŽS-I	1		1-97	L	ŽS-I		ŽS-I		H		ŽS-I	ŽS-I	1-S7	I-SZ	ŽS-I	ŽS-I	ŽS-1		I-S	ZS-I	I-S	Ţs-ī	ŽS-I	ŽS-I	I-S	I-SZ	7.S-1	7.S-1	ŽS-I	ŽS-I	I-S	ZS-I	1-S2 7C-1	ŽS-I	
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tnioq a	Occupancy of service	21	Д	Ъ	Ъ	۵	Ъ	٩	4	<u>а</u>	A.	Ь					L	Ы	U	,	4	n	Ч		Д	U	U	ם	0 0	ū	n	Ъ	Ь	F	4	4 0	4	Ъ	П	E	H [	- H	
шоди	Side-\end-loading pla			S		Ø				Ø	v2	S/E		L	L			S/E	Ш		1		Ш	Ц	V.			σ σ	2 02	ď	ď	Ω		ū		2	SÆ	S	Ц	_	Ω	2 02	
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DIC	Service point code - 1	18	13405	13407	13450	12516	12601	12301		12550	17901	12551						23450	23706	0.00	23/04	23702	23701	23199	22001		22002	22003	22005	22006	22201	22202	22203	70000	22204	22.550		22503			22504	22506	
he service point	Manner of securing t	17	H	4	1	-	-	1	1		4	-	-	kula 1	1		ŀ	-	1	-	_	-	-	4	4	4	8	∞ ∝	-	0	8	7	10	10	× -	4 1		1	H	- '	× ×	٦ ١	
notislu	Manner of traffic reg	10	га-тароло	station distance	station distance		AB	AB	ar.	į	AB urd)		AB	Nis: (Crven krst) - junction point 2 - junction point 4 - (Cele kula)	AB			station distance	station distance	station distance	station distance	station distance	station distance	station distance	- (JIIIDOIIA)	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	
	acceptance of the longest trains	5	ag ya	9 and 10	2	rovo	6	T.			- (Niš marshalling yard)		T.	ŭni.	Г		Zke)	nd 3	1 and 2		3 and 4	2 and 3	3 and 4	1000	4 and 5   835   4 and 5		and 3	2 and 3	and 4	and 3	2 and 3	and 3	and 2	6	2 and 3	2 and 3		and 3		-	2 and 3	2 and 3	
Direction B→A	Ттаска for	rehall.				Tedur	_		yard		rshall		_	oint 2			(Rös	2 and 3	1 aı		3.8	2 au	3 aı		4 31	_	2 aı	2 a	3 3 3	2 a	2 a	2 a	1 aı	,	E 7	2 2	1	2 a		١,	2 c		
	Maximum permitted train length	14	D III	836	563	rd - N	885	5/13	- Niš marshalling yard	662	cos gui șii	488		tion p		so.	rder -	594	238	3	643	206	618	4	835	3	249	473	554	534	617	665	253	7.03	524	585	2	629		1	510	576	
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AضA	Tracks for	13	Sol	7 and 8	5	rshalli	0 00	-	Nišn	3	om m	3		krst)		NAL	š - sta	2 and 3	1 and 2		3 and 4	2 and 3	3 and 4	.5	4 and 5		2 and	2 and 3	3 an	2 an	2 and 3	2 an	1 and	6	2 and 3	2 30	2 and 3	2 an		,	2 and 3	2 and 3	
Direction	Maximum permitted train length	12 0000 Va	0,000	849	664	Niš marshalling yard - Međurovo	733	580	++	989	Niš - Open line junction most	490		Crveni		REGIONAL LINES	201 Subotica - Horgos - state border - (Röszke)	594	238	;	654	219	626	7	245		409	473	554	534	617	665	253	20.2	524	585	937	629		1	510	576	
permitted speed	Left track	111	CHOIL LA	10		25 Trupale	9	oc -	126 Crv	30	Open lin	<u>چ</u>	3	on Niš:	30		Subotica	50	100	20		120		- dormo otroio	a staint	50				50 (70)				30 (40)	60 (80)		30		30	$\overline{\mathbf{I}}$	30		
mumixsM	Right track			10		125					Nix-			stat			201													50				30	9						1100		3
۸	Railway line category	9		D4	D4		D4	D4	1	ř	127		D4	track of the	D4			בת	D4	D4	D4	D4	D4	R D4	000	D2	D2	D2	Y Y	A	A	D2	D2	A	A	B2.	B2	B2	B2	B2	B2	A A	
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əui	Single/double-track l	7		D	D		S	S	2	C	2		SO :	128 Connecting	Ø			V	2 02	S	20 0	2 2	S	S	7	S	S	S	2 V	S	S	S	S	S	N C	2 0	2 02	S	S	S	S O	2 22	
1	Type of service point	9	7	1	1	-	1	9	-	н,	-	-	9	Com	12			1 0	<b>√</b> ∞	6	٦ ،	o 6	-	13	-	9	1		-	-	1	1	2	9 -				1	12	6.			
	oint			D										128					A				5				8 4				7												
	Name of service point	\$	0+000 LAPOVO VAROŠ	2+100 LAPOVO MARSHALLING YARD	OAO	TDAIF	MARSHALLING YARD	239+280 OPEN LINE JUNCTION MOST		0+099 CRVENI KRST	MAKSHALLING YAKD	244+632 NIŠ	EN LINE JUNCTION MOST	CTION POINT 3 NIŠ	0+572 JUNCTION POINT 4 NIŠ		7.0312000	0+000 SUBOTICA 1+813 kM 1+813 sC	2+481 SUBOTICA JAVNA SKLADIŠTA	3+848 KM 3+848 SC	PALIC	11+/3/ HAJDOROVO 15+419 BAČKI VINOGRADI	RGOŠ	STATE BORDER	16+196 PANČEVO GLAVNA	17+659 OPEN LINE JUNCTION 2a	JABUKA	26+799 KACAREVO 33+858 CDFDAIA	DEBELIAČA	KOVAČICA	NIC	TOMAŠEVAC	ORLOVAT STOP	OPEN LINE JUNCTION 18	LUKICEVO	ZRENJANIN FABRIKA ZRENJANIN	ZRENJANIN TERETINA	ELEMIR	JUNCTION POINT 1R	KM 102+000 SC	MELENCI	NOVI BEČEJ	
		Ц	LAF	LAF	LAI	TTD	ŠĮ.	OPI	7.7	8	NIS	SIN.	OPE	NIT I	E			SUI	SE	KM	PALIC	BAC	HOI		PAN	OPE	1 JAB	KĀ		KO	UZDIN	TOI				Z Z				K	ME	NON NO	ı
	Chainage	4	0+00	2+100	3+788	235+243 TTD ITD A I F	238+177	239+28(	07	0+095	3+23.	244+632	247+632	JUU+U	0+572			0+00(	2+481	3+848	111757	15+415	24+018 HORGOŠ	27+897	16+106	17+655	22+334	26+799 KACAREY	41+325	45+835	56+271	61+939	64+045	64+760	75+595	88+795	89+703	97+475	99+030	102+000	112+702 KITMANE	121+624	
	Distance in km	3		2.100	1.688		2.934	1.103		70,0	3.134		3.000		0.572		Ī	1 813	0.668	1.367	3.808	3.662	8.599	3.879		1.463	4.675	7.050	7.467	4.510	10.436	5.668	2.106	10 635	10.835	4 397	0.908	7.772	1.555	2.970	3.815	8.922	
transport	Left track	2	T		٦					100		1334			;		İ				٠.		•		r				- E							000		•		10	٠.	<u>.</u>	
handover to	Right track		104	761 L	. p1		9	1947.		1942.		1942	i Ci	01.06	1887.					16.11.	1870.									09.04	100					04.05.1889	100				08.07.	1883.	
Date of	-le -nt tdoid		13	. 0 1 2	r 5											Ш	$\perp$																			2			_	_	_		



		80.4	79,3	78,9	80,0	SO,US		П		T	6,3	80,4	82,0	85,5	% %,	2,5	82,5	83,1	9,68	6,5	106,6	109,6	4, 6	1	77		82,6	T	81,3	4,9	84,8	85,6	85,9	65,7	84,4	85	85,4	П
abuti	1	1											Ł							Н			109,4								4							
egung gange	F	78.1	ŽS-I	ŽS-I	ŽS-I	7c.1	1.07		ŽS-I	7S-1	3	ZS-I	ZS-I	ŽS-I	ZS-I	ŽŠ-1	ŽS-I	ŻS-I	ZS-I	ŻS-I	ZS-I	ŽS-I	ŽS-I		ŽS-I		ŻS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	7.S-I	ZS-I	ZS-I	ŽS-I	7.S-I
Tesi stance of the line [daV]	90		2		9	1						4	4	•	5	13	1	13		·	2	2	2	- 1	1				3	S	4	3	4	•	7	1	•	2
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offent of the station [960]	Ŧ	-	0.0	0.0	0.0	0.0					0.0	0.0			2.5	0.0		1000		3.0	3.2		1.0	2::	0.45		0.0		0.0	0.0			1.0	0.1	0.0	1.0	2.0	2 2 0
nimum curve radius	Mi	500	480	475	500	1903						400	500	500	300	200	300	300	400	1000	1000	3000	500	200	200		400		100	300	400	450	900	0.000	300	300	300	
en for the acceptance and patching of passengers/freight rations	sib S	77	P/F		P/F	14					P/F	Ь	P/F	Ь	P/F		P/F				P/F		P/F		P/F		Ь		P/F	P/F	Ь	P/F	Ь	P/F	Ь	Ь	P/F	P/F
cupancy of service point	00 ;	17 E	ь		ъ	7			Þ		Н	Þ	Н	Þ	H		Ъ				Þ	П	۵	_	P		Ы	•	T	Ь	D	Н		ч	Ь	Þ	Ь	Ъ
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	Name of service point	138 BANATSKO MILOŠEVO POLIFE		600 DERIĆ	160+114 KIKINDA	11+099 BANAISKO VELIKO SELO 14+433 STATE BODDED	STATE DONDER		5+700 TOPČIDER TERETNA	6+795 OPEN LINE JUNCIION G	0+356 BANATSKO MILOŠEVO	5+105 BOCAR 10+700 PSTEP	063 PADEJ	25+230 OSTOJIĆEVO	176 COKA	33+10/ KM 33+10/ SC 38+407 JUNCTION POINT 22 SENTA	000 SENTA	1+391 JUNCTION POINT 23 SENTA	40+759 OPEN LINE JUNCTION SENTA (CANCELLED) 42+293 GORNJI BREG	49+210 BOGARAŠ	54+223 DOLINE 58+048 OROM	071 GABRIĆ	64+592 BIKOVO 76+68\$ STIROTICA		0+275 PANČEVO VAROŠ 1+539 OPEN LINE JUNCTION 2a		0+000 NOVI SAD 3+595 SAJI OVO	9+100 VETERNIK	12+554 FUTOG	111 PETROVAC-GLOŽAN	29+542 BAČKI MAGLIĆ	092 GAJDOBRA	224 PARAGE	447 RATKOVO	59+003 ODŽACI	240 ODŽACI KALVARIJA	65+448 KARAVUKOVO	7.023 72+471 BOGOJEVO SELO 4.214 76+685 BOGOJEVO
rance in km sinage		15 514 137+138		7.309 148+600		3 3 2 4 1 1 + 4 2 3				1.095 6+7		4.749 5+105 5.505 10+700		1000	5.946 31+176				1.534 42+293			4.023 62+071	2.521 64+592 12.003 76+685		0+2 1.264 1+5		3.595											7.023 72+4 4.214 76+6
public track transport		7	1			15.11.1857.			1088	1	15.09.	L	ł	1896.		1915.	*		+ [ ]	14.11.	Ш				09.04. 1894.		36			14.09.	_						24.12.	
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1879   1970   1971   1972		Altimde	30	1 y 8	83,1		8	81,5	81	78,6	88.4	77,4	77,4	79,8	87,8	80,5	80				80.3	6.08		101.0	80.9	81.6	80.0	79.2	79.1	78.5	1 05	1.67		82.4	85.5	91.2	8.06	96.2	101.9	100.2	114.4	122.3	121.6	119.8	134.6
Part   Part		Loading gauge	67	1.5	I-S	I-S	1-S-1	I-S	I-S	I-S	1-S	I-S	I-S	I-S.	I-S.	I-S.	S-I		I-S:	S-I	-	S-I			I-S	I-S:-1	1-S-1	S-I	I-S:	I-S:	I-S	1-5	S-I	I-S:	I-S:	I-S:	I-S:	I-S:	S-I	1.5	1.5	S-I	I-S	S-I	SI
Part   Part	the line [daN]	<b>←</b>	Ц	F	5	PIZ PI	-	-	H	+	+	+	Ž	Н		+	-		ALM IN	-	-	NN -		-	+	+	+	PIN	Z	7	Z PC	1 PLX	PIN	- Z	Ž		ZZ		IN PE	1 100	A PEN	+	Н	+	
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Distributed   Distributed		train length	12	iction Sa	+		+	+-	$\vdash$		+	+	Н	Н	Н	$\dashv$	253	S T T T T		٦.	Open III	+	nction I	639	+	+	+	İ		+	İ	l		H		H	_	_	+	+	Ī	+	Н	_	618
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Column   C			$\tilde{\mathbb{H}}_{s}^{s}$	Z _ 8 -		$\vdash$	+	+	$\vdash$	#	1	1	$\vdash$	Н	$\neg$				_	_	-		Rum	-	1	+	+	t	Н	$\dashv$	+	+	+	$\vdash$	Н	$\vdash$		+	-	+	+	+	Н	+	+
1.0   1.0			Н	-	_	$\vdash$	, ·	+-	Н	3 2	2 2			V2	- 0		<u> </u>	Ь	$\dashv$	-		1	211		+	+	+	⊢	Н		90		-		7,5	Н	-		+	-	+		Н		_
Fig. 18   Fig.		nion enimes to envT	H	F	-		Ŧ	1 -	_		, –	6.	6.1	$\exists$		7	-	H	Ŧ	7	F	10		_	-	~   -	7 (6)		H		-			CA	6.1	-	6.3		-	- 10	, ,	F	.,	7	+
10.827   10.				HOOK SA II OVO				5+218 BUDISAVA	2+224 ŠAJKAŠ				3+845 KNIĆANIN	8+175 PERLEZ	5+522 FARKAŽDIN	5+381 ORLOVAT	5+256 ORLOVAT STOP	1+141 NOVI SAD MARSHALLING YARD	1+595 NOVI SAD LOKOTERETNA	2+185 SAILOVO	5-1015 OBI OVAT					5+675 NIKINCI	8+900 KLENAK		1+952 OPEN LINE JUNCTION 2				4+000 MAJUR	7+725 ŠTITAR			5+800 RIBARI	8+713 PRNJAVOR MAČVANSKI	3+300 PODRINSKO NOVO SELO					5+183 KOVILJAČA	1+/00 GOKNJA KOVLJACA 5+354 BRASINA
		Chainage	4									1000									75+										6.1				16										
15.05. 1930. 1933.		Distance in km	3		5.24	*2,98	1.14	4.64	7.00	6.17	5.58	1.70	2.71	4.33	7.34	9.85	0.87		0.45	*2,04					10.82	5.33	7.55	2.47.	0.57	0.76	860	0.68	2.60	3.72	6.57	7.73	3.76	2.91	4.58	3.00	6.50	5.99	2.00	2.78	3.65
19.5.   19.5.	2	Left track	2	4	. 4		.70	39.		.7.	36.	17.	.7.	1	.60	.5.						1935.			11.	11.			.90	34.								.5	.0.						
40 VANUE		Right track	1	31	196		02.0	188		02.0	188	15.0	192		15.0	192						1.09.	$\  \ $		05.1	190		l	03.0	193								15.0	195						



	900-1000 1000 1000 1000 1000 1000 1000 1		6.9	7.7	П	79.3	Т		П	Т	144	144		4.	4		7.5		169.5	174.8		186.8		c v	7.	2.4		198	212.4		8.7		228.4	7		250.3	291.6		298.2		Τ	
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	Loading gauge	53	ŽS-I	ŽS-I ŽS-I		78.1	127		ŽS-I	ZS-I	ŻS-I	ŽS-I	I-SŽ	ZS-I	1.07	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	ŽS-I	ŽS-I	1-S7	I-SZ	I-SŽ	I-SŽ	7×-1	ŻS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	1.8Z	78.1	ŽS-I	ŽS-I	ŽS-I	I-SŽ	ŽS-I	I-SZ	ŽS-I
resistance of the line [daM]	←	28		. 9	1						10	2		7	4		7		+	2		9			+	7	H	6	9		œ		4	4	,	7	6		5			5
Ruling	→ Slope	6 27		0 4	}	' -		-		+	5 10	1 2	- 1	4	v	-	2 7	Н	+	3	300 3	5 6		-	+	4 7	Н	5	2 6	H	3 8	$\rightarrow$	4 4	4	+	1 7	6		5	+	+	5
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[%] uc	Gradient of the statio				11	T	1	-		t	3.4	0		4.4	5.3	2	8.0		6.2	5.3		4.55		4	2/.0		(	5	7		4.6		9.9	617	-		3.9		3.3	Ť	Ť	
sn	Minimum curve radi	23	700	300		300	200				200	250		250	700		200		500	200		500		003	200	300	0	300	009		009		006	\$00	200							
	Open for the accepta dispatching of passer operations	22	Ъ	Ъ				P/F	Ъ	<u>م</u> م	P/F	P/F	Ъ	A P	4 4	Д	Ъ	Ъ	P/F	A A	. Д	Ъ	Ъ	<u>م</u> ا	ч д	P/F	į	P/F	. A	Ъ	Ъ	Ы	<u>a</u>	P/F	D D	P/F	Ы	Ъ	P/F	Д С	4	P/F
e point	Occupancy of service	21		Ъ	1 [		1	Ъ			n	Ъ	-	Þ	II		U		Ы	Þ		U		i	0	P		1	n		D		D	Д	1	D	Þ		Ы	1		Ь
шоде	Side-/end-loading pl			_	]	4	4	S		1	Ω	S		Ω	V.	2	ß		Ω	ω		Ø		Ö	2	S/E		2	Ś		Ω		Ω	V.		ď			Ω	4	$\perp$	Ω
	Freight car scales			-	1	+	1	_								_		_	4								H							Ves	+			_	$\sqcup$	$\pm$	Ŧ	Yes
oiu	Service point code -	18	16315	16319				13352	12219	12201	12203	12204	12218	12205	12207	12220	12208	12209	12210	12211	12216	12213	12217	12214	13220	13251	300	13007	13003	13004	13005	13014	13006	13012	13010	13007	13008	13013	13009	13015	110011	15150
the service point	Manner of securing t	17		6	4	- -	4	-	Ц	+	∞	4	4	7	6	-	2	H	7	7	-	2	-	c	4	4	H.	2	n	L	3		7	۳	,	6	С		3	+	-	П
noitslug	Manner of traffic reg	16	station distance	station distance		station distance	Senton distance		station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance
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Direction	Дляска Гог праска Тог	14			line ju	t	Žeos	-		+	412	714	,	286	625		602		693	089	-	647		759	/2	738		903	909		605		602 2	877		615	627		819		t	Ħ
	longest trains Maximum permitted				- Oper	+	PVO - P			+	Ī		T			T						=8		1			H				Н	-	-		T		l		П			
Direction A←A	train length Tracks for acceptance of the	13	S - 51		inction 1	-	Stalać - Kralievo - Požesa	4		-	2	4	_	7	۲	H	3	Ц				3				4		2	3	L	3	$\rightarrow$	2 and 3	,	-	3	L		3	_	+	
	Maximum permitted	12			line ju						412	714		286	509		602		693	089		647		239	3	738		603	909		605		602	773	3	615	627		618			Ц
Maximum permitted speed	Right track Left track	Н		50	(Platičevo) - Open line junction 1 - Open line junction 3	50	213			30 (50)									1	25 (40)										00	8								100			
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	Distance in km Chainage Name of service point			0.885 68+685 OPEN LINE JUNCTION DONJA BORINA *0.800 0+800 STATE BORDER		0+000 OPEN LINE JUNCTION 1 0-675 0+675 OPEN LINE HINCTION 3	0	0+374 STALAĆ	1+400	2.487 3+887 MRZENICA 5.083 8+070 MAKRFŠANF		14+559		1.984 21+384 KOSEVI	3.709 294017 STOPANIA	33+700		3.402 38+949 TRSTENIČKI ODŽACI	42+455	6.745 49+200 VRNjACKA BANJA 4 038 53+238 I IDOVA	2.400 55+638 TOMINAC	57+651	59+938	2.287 62+225 VRBA 3.656 65+891 DATINA		3 71+621	72+538	6.099 /8+63/ ADKANI 2.801 81+528 MPSAĆ	84+441	88+610	92+260	94+500		2.697 99+000 BALUGA 6.541 105+541 ČAČAK	110+200	112+994		127+200	128+366		3.800 133+700 BOKACKO 2.334 136+034 JUNCTION POINT 54 POŽEGA	ш
public transport	Leff track	2	15.05.	1950.						15.05.									01.12.	1958.										29.09.	1955.					28.11.	1976.			28.11.		
Date of handover to	Pight track	1	15	19						15	ì								01.	19										29.	19	1				28	IS		3	28	4	



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notielu	Manner of traffic reg	16 19 20 21 No 73 - (Adrani) LINE CLOSED FOR TRAFFIC	station distance	station distance	53 - junction point No 54 - (Dragačevo)		Krsna	defend distance	station distance	station distance	station distance	station distance	station distance				тас)		station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance
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Direction A→B	Tracks for	imedian point No 72 - imedian point			- junction point No	1	unction		1		3	-	4	tion Jez	1	-	en line	4	,					2	4	2		4	e.		2	L	2		L	Ļ	$\downarrow$	3	$oxed{oxed}$	+
	Maximum permitted train length	- innot			(Uzići	L	n line j	460	6		711	l	679	e junc			3or - o	629	5/3	5				540		533	929		604		520		989	700				562	Ш	9
Maximum permitted speed	Right track Left track	9 10 111 Matamiška Bania)	a Danja)		the station Pożega: (Uzići)	20	Smederevo - Open line junction Jezava - Radinac - Mala Krsna		20			ć	OF.	217 Open line junction Jezava - Smederevo luka	ñ	i i	218 Mala Krsna - Bor - open line junction "2" - (Vražogrnac)	ç	9							(08) 09										ï	20			
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I Control Control	Class of railway line	8 slievo	_	N.	ack o	R	1	۴	+	+	R	+	보 전	-		4 24			저 0	+	+	R	R		$\dashv$	+	+	+	+	χ p	+	+		Н	H	+	+	+	A 1	$\pm$
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	Name of service point	5 214 Connecting track of the st	JUNCTION POINT 72 KRALJEVO					BEGINNING OF THE LINE	NCHON EZAVA		RADINAC 1	9649									ŒVAČKI					0.							KAONA 1	KUČEVO	CA		VOLUIA	BRODICA	BOSILjKOVAC	BLAGOJEV KAMEN
	chainagge Chainnagge Name of service point		0+444 JUNCTION POINT 72 KRALJEVO	0+000 JUNCTION POINT 73 KRALJEVO	215 Connect 04-000 HTMCTTON POINT 54 POŽEGA 113			-0+870 BEGINNING OF THE LINE	NCHON EZAVA		6+711 RADINAC 1	JUNCTION POINT 64 RADINAC	NA		2+484 OPEN TINE TINCTION TIGOPETROL				MOST	TO CONTRACT TO CON	ŒVAČKI	BUBUŠINAC/BRATINAC	100+800 BARE/KASIDOL	STIG	MAJILOVAC	SIRAKOVO	Ljubinje		RABROVO/KLENjE	133+OOD MUSITALIC 3		KUČEVSKA TURIJA	144+546 KAONA 1		CA	NERESNICA	159+700 VOLUJA	163+582 BRODICA	166+800 BOSILJKOVAC	170+740 BLAGOJEV KAMEN
		4	0+444 JUNCTION POINT 72 KRALJEVO					-0+870 BEGINNING OF THE LINE	1+749 OPEN LINE HINCHON IEZAVA	3+250 GODOMIN		9+124 JUNCTION POINT 64 RADINAC				4+011 SMEDEREVO LUKA	П	71+272 MALA KRSNA	LJUBICEVSKI MOST	89+100 IUGOVIĆEVO	90+090 SOPOT POŽAREVAČKI	95+632 BUBUŠINAC/BRATINAC	BARE/KASIDOL	102+727 STIG	106+350 MAJLOVAC	109+055 SIRAKOVO	116+414 LjUBINJE	122+272 CESLJEVA BARA	126+038 RABROVO/KLENjE		136+067 ZVIŽD	1 140+650 KUČEVSKA TURIJA		148+582	153+616 NERESNICA	156+492 NERESNICA				3.940 170+740 BLAGOJEV KAMEN
Date of handover to public transport	Distance in km Chainage	3 4	0+444 JUNCTION POINT 72 KRALjEVO	0+000 JUNCTION POINT 73 KRALJEVO	0+000 HINCHION POINT 54 POŽEGA	0+752 JUNCTION POINT 53 POŽEGA			1+749 OPEN LINE HINCHON IEZAVA	3+250 GODOMIN		9+124 JUNCTION POINT 64 RADINAC	97400 VKANUVU 10+872 MALA KRSNA		2+484 OPEN TINE TINCTION TECOPETROL	4+011 SMEDEREVO LUKA	П	71+272 MALA KRSNA	10.928 82+200 LJUBICEVSKI MUST	89+100 IUGOVIĆEVO	90+090 SOPOT POŽAREVAČKI	95+632 BUBUŠINAC/BRATINAC	100+800 BARE/KASIDOL	102+727 STIG	106+350 MAJLOVAC	2.705 109+055 SIRAKOVO	7.359 116+414 LjUBINjE	122+272 CESLJEVA BARA	126+038 RABROVO/KLENjE	131+600 MIŠT IFNOVAC	136+067 ZVIŽD	140+650 KUČEVSKA TURIJA		148+582	153+616 NERESNICA	156+492 NERESNICA	3.208	3.882		3.940



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Disfamence in km   Disfamence	Honey and Tree of Con-	Гец цзск	11									40									(Niš) - (		65			8	3				09		37	50			30				(30)	
District   District	mumizsM	Right track	10						_				_			_	_				219														_				_	_	-	_
Colored   Colo		Railway line categor	6	ប	ε	S	8	3 8	E	ខ	ව	ស	ប	ප	<sub>ව</sub> ි	3 8	3 8	3	8	ន		Ì	B2	E 22	B2	B2	B2	B2	B2	79	B2	7.F	7 P	_ B2	B2							
Distance   Distance	3	Class of railway line	8	R	М	ĸ	K C	X X	2	4	В	씸	ద	씸	24	4 0	4 2	4 22	4 44	Я		19	~ ~	4 2	4 24	R	R	~	4	۲ c	4 64	i z	R	R	R	ద	ĸ	4	저 다	4 4	~	×
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E   E   E   E   E   E   E   E   E   E	,	Type of service poin	. 9	3	2	3	e -	¬ (c	3	2	3	3	-	п		٦ ,	4 -	-	9	9		-	e -	۳,	n e	2	3	-	0 0	, c	4 E	. 4	ъ	1	3	С		e (	n 0	0 -	6	-
110dstrept					Н	191+800	194+700	200+200										244+699				0+957		20+645	27+453									68+365	72+105						$\perp$	
7. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.		Distance in km	3	2.948	5.874	4.126	2.900	3.013	2.100	3.373	2.127	4.000	3.400	2.300	3.901	CATA	6869	6618	4.333	1.013			*4 977	8 263	6.808	2.804	2.343	7.418	5.898	2 2 2 2 2	2.360	9.186	1.863	5.624	3.740	2.908	6.894	2.552	7,831	*7.052	4.254	4.306
		Left track	2					3		7.					5	1907	3 6	5	.96	· ]							0		į							4					WEETING.	
10   10   10   10   10   10   10   10	handover to	Right track	[ _	1				10000	03.0	197						29.11.	196		25.06.	190							15.	192								191						



	əbutitlA	30	116,1	T	,	CII		84,4		9,99			56,9	56,7		30.1	403	55,4					ľ		353.3	T			194			25	212,3			Ĭ		241		255	2.48.8	0,0+2	290
	Loading gauge	56	ŽS-I	ŢS-I	ŻS-I	ZS-1	78-1	1-53	ŽS-I	ŽS-I	ŽS-I	ZS-I	ZS-I	7.S-I	1-62	76.1	1-S2-1	ŽS-I	ŽS-I	ŽS-I		, , , ,	1			1-87				ŢS-I	ZS-I	1-87	7.S-1	75-1	ZS-1	1-82	ŽS-I	ŽS-I	ŽS-I	ZS-I	ZS-I 72-1	-5.2.	ŽS-I
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10.0 WHILL 0800	Maximum permitted train length	12	819		5	549		364		721			511	547		330	583	613	429		junction		- onen 1		618	22 Kuré	618	ljevac -	009			3	264					199		585	480	100	583
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	Name of service point	5	T)	NCTION 2	NCTION 1				KA REKA			Ä							ISTANIŠTE			NCTION 3		NCTION 1			NCTION KASTRAT				ONJEVAC		, m. 4 m.	NIAR					BANJA	ALA PLANA		AN	
	Chainage		118+834		121+900	124+631 TKNAVAC	131+387		138+764	145+656		151+330		156+828	163+608 MOKPANIA			182+015		185+079		0+000 OPEN LINE JUNCTION 3		53+334 OPEN LINE JUNCTION 1		26+363 END OF LINE	0+000 KURŠUMLJIA 2+320 OPEN LINE ITINCTION KASTRAT		0+247		4+800	766+9	10+096	11+000 ZIIORAĐA CENTAR 12+700 REČTCA			18+800			31+734	34+500 BRESNICICI 37+844 RFI OLIN		42+718 PLOČNIK
	Distance in km	3	7.228	2.166	0.900	3 902	*2.871	4.809	2.568	6.892	2.804	2.870	2.136	3.362	3.304	0.4.0	6.278	7.887	2.563	0.501		0.430	20.00		2.560	0.469	2.320			3.053	1.500	1.797	3.499	0.904	2.000	1 525	2.575	3.527	2.687	6.720	3344	2.856	2.018
public transport	Left track	2	Н						<u>.</u>	1					-	_	1	1		_			1					1					2.	5.	1	1	_	1	Ľ		+	2.	٠. —
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Loading gauge	59	ŽS-I	I-S	ZS-I	ZS-1	ŽS-I	ŽS-I	ŽS-I	ŽS-I	+		ŽS-I	78.1 78.1	1.0				ŽS-I	ZS-I	1-87	ŽS-I	ŽS-I	ŽS-I								I-S7			ŽS-I	3	1 20	1.2	1	ŽS-I	ZS-I	rsz. Zs-I	
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Gradient of the station [%o]		2.0 5	S	9	9 4	, 1	-	1.0	2 08		1.7	16	15	1			0.0	_		0.0	1.8 4	H	0.3							2.7 2			_	4	8	Т	7	2.0		_	0.0	1
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dispatching of passengers/freight operations	22			Ъ		۵	ь	Ь	<u>a</u> a	4 4	P	Д 6	4								t		P/F			ATION			P/F	Ì			F					P/F	Ь	P/F	+	1
Occupancy of service point Open for the acceptance and	-	D	+		ם			n	F	-	Ь	+	+				H	n	n :	)	n	D	Ъ			COLL			Ь	þ			T	AFFT/		H	-	Ь		n :	) D	l
Side-/end-loading platform			+	Ť	Ť	1		Ω	0	+	Ħ	+		1			ν2	1			Ť		S/E			EXP			S/E		<del></del> -			Hè		H	1	Ω	_	-	20 20	1
Freight car scales	+		Ħ			t				T	H	+	t	1				T	Ħ	ı	t	Ħ	Yes			LOF			V2	ı				HOT C		H	1		1	Ť		l
Servi ce point code - UIC	18	11111	11126	11112		11122	11125	11115	11127	11123	11117	11120	81111				23306	24202	24203	24204	24206	24207	25550			RAILWAY LINE OUT OF EXPLOITATION			23450	24313				CLOSED FOR TRAFFIC	CECOE			23001	23002	23003	23005	
Manner of securing the service point	17	8	1	+	9 9	,		∞	cc		00		İ				-	7	۲ ,	7	2	10	4			'AYI			-	10			10	101		7	`	00	10	_	3 [	
Manner of traffic regulation	16	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	Station distance	ica)**)	TRAIN SERVICE		station distance	station distance	station distance	station distance	station distance	station distance			RAILW				station distance	CLOSED FOR TRAFFIC	- (Kać)		station distance	305 (Rimski šančevi) - open line junction "1" - open line junction "3" - (Podbara)	7.5	stanon distance		station distance	station distance	station distance	
ongest trains 11 acks 10t  B→A		2	Ì			l		2	2 and 3	Colle	2			- - *	Kosovo Polje Teretna - open line junction 1 - (Drenica)**)	TRAIN !	3 and 4	2 and 3	2 and 3	c and 2	2 and 3	2	2 and 3					A	2 and 3	1 and 2	OSED F	- open line junction "3" - open line junction "2" - (Kac)	1 and 2		unction "			2 and 3		1 and 2	2 and 3	
Maximum permitted Tracks for B—A  Tracks for B—A		410	ı			T		557	393	+	493		t	- Peć	unction	ENDED	938			/30	625	424	403	abrika				olnica		327	- E	line jur	445		n line j		bali	П	$\neg$	$\neg$	278	7
sceeptance of the ongest trains	ı					ŀ		2	2 and 3	+	2 4		t	224 Kosovo Polie - Metohija - Peć **)	en line j	SUSPE	-	+	+	c pup 7	2 and 3 (	2 2		Subotica - Subotica fabrika				Subotica - Subotica bolnica	H	1 and 2	Novi Sad Ložionica LINF	oben	1 and 2		,1" - ope		šančevi - Žabal	2 and 3	-	+	2 and 3	4
Tracks for A→B			4		-	1			-	+		-	+	Jolie - J	tna - op	Vrbas - Sombor TEMPORARILY	_	+	7 0		+		3 2 au	Dotica - Subotica				ica - Su	-	Sec.	lad I oži	tion ,3'	1 a		nction,	H	ski šan	3 2 au	_	+		ł
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Railway line category	9	A	A ·	A ·	A A	4	A	A	A	4	A	Ą	A	4	5 222.	rbas -	1	CJ	S -	A A	4	A	Ą			ខ	S			Α'	Sad (km	94 Podbara		8 8	ski šan	5	3		A	A.	A A	
Class of railway line	8	ĸ	24	<b>A</b>	24 22	4 2	4	~	<u>م</u> م	4 4	~	~	¥ º	4	22.	226 V	18	24	e4 6	<u>ب</u> ک	4 4	ĸ	ĸ			H	1		ļ	η,		304		H	Eij.	1	1	1	H	J ,	7 17	1
Single/double-track line	7	ß	SO E	S (	S S	2 0.	Ω.	Ω	ω v	2 02	S	SO C	20 0	2			19	ď	so c	2 0	2 02	ß	ď			Ω	Ω		2000	S S	303 Nov	2	L	ω v	305	Ţ	2		ďΩ	S C	20 20	1
Type of service point	9	8	0	ω,	9 9	۳ د	0	10	e -	3	8	0	2 2				-	-		٦ ٣	0	10	-		-	-			-	-			1	9 9		9		-	∞	4		1
Name of service point			00 NOVOSELSKE LIVADE	52+000 PEPELjEVAC	53+334 OPEN LINE JUNCTION 1 54+855 OPEN I INF TINCTION KASTRAT		60+800 LjUŠA	10 RUDARE	67+325 DEŠIŠKA 60+880 VOSANIŽKA DAŽA	00 KOSANICA			83+05/ MEKDAKE 84+400 ADMINISTS ATTVE I INF	00 ADMINISTRATIVE LANE			37+137 VRBAS		71 CRVENKA	62+0/0 SI VAC 65+700 NOVI SIVAC	40 KLIAJIĆEVO	79+695 Conoplja	89+710 SOMBOR		0+000 SUBOTICA	08 SUBOTICA FABRIKA	3.00 to km 002+330 maximum cermissible speed is 20 km/h		1+255 SUBOTICA	00 SUBOTICA BOLNICA	4+000 END OF LINE		4+413 ПОДБАРА	6+582 OPEN LINE JUNCTION 3 7+650 OPEN LINE THINGTION 2	Of the there sold there a	0+000 OPEN LINE JUNCTION 1	TO OFFIN TIME JONOTHON 3	10+270 RIMSKI ŠANČEVI	66 BAČKI JARAK	19+734 TEMERIN	2/+333 GOSPOĐINCI 34+016 ŽABALj	
Chainage	4									8		1 = 3													0+0		1 6+139 mum permissible		10 - 9 to				4+41					10+27				l
Distance in km	3	3.928	2.654	2.700	1.534	4245	1.700	2.010	4.515	3.82(	2.195	3.105	1 3/13	Ť.				10.516	7.318	3.024	9.74(	4.255	10.01			3.708	2.431 330 maxim			2.345	0.400			2.169	2	100	0.910	1	6.496	2.968	6.661	
Right track Date of handwer to public track transport	H		.90.90	1930.			ı	11	15.05	1949.										1006					08.01	1885.	up to km 002+3									0001	01.05.1909.		02.07.	1899.	Control of the contro	



			7	: -	7.7	147.7	T	77	77	77	77	2 5	83.1	:	Γ	7.101	ΙΙ		167	<del>.</del>	245.9		271.5	T	T	101	101	84	6 2	2 5	7 08	2 68	ì		101	Т	08	Τ	Π	П	П	٦
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	Loading gauge	53	L	ŽS-I	ŽS-I	ŽS-I		L	ŽS-I	ŽS-I	ZS-I	L	78.1			ŽS-I	ŽS-I	ŻS-I	ZS-I	7c 1	I-SZ	ŽS-I	ŽS-I	ZS-I			ŽS-I	ZS-I	ZS-I	1-S2-	7.5.7 7.5.1	ŽS-1			ŻS-I		, t	-C2			ŽS-I	ŻS-I
resistance of the line [daN]	<b>←</b>	28	L	L	3	3				S		L	13		L	4					3		1			L		က	+	4	4	†		4				4		ļ	6	4
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[0%] u	Gradient of the statio	H	0.0	2.0	0.0	0.0		5 0	0.2	2.0	8.0	0 0				1.9			0.0	T.O.			0.0			2,5	5,0	2,15	17	570	/ÇC	1.5	i.	1	2.5					İ		
sn	Minimum curve radi	23		700	700	700			300	300	250		300	2		338	500	200	009	900	250	400	230	200		280	300		948	300	300	300	2				000	ann				
	Open for the acceptar dispatching of passer operations	22			P/F			P/F	P	P					P/F	F			D.	4						P/F									P/F	ы	P/F				F	
tnioq a	Occupancy of service	21	Δ	L	Ъ			Д	4	ы					Ь	Ь		1	Þ	7	Þ		Þ			Ь			1	)	Ε	0				Þ	Ъ				д	
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	Freight car scales	119	-	Ł	Н	_		-	H	Н	4	Ł	-		L		Н	4	4	+	$\perp$	H	4	-		Yes		4	4	-	+	+	4		Yes	4	H	4		ŀ	+	_
nıc	Service point code -	18		16316	16317	16317		21001	16014	21101					13404	13901	13902	13903	13005	20061	13907	13908	13909			21009		21301	21302	21303	21304	COCTT	-0:		21009		22850				16203	
he service point	Manner of securing t	17	,	,	4	4			L	4	4	-	-	-	-	9			٧		9		9			1			(	6	٥	١.			7	4	;	PT.			101	
noitelu	Manner of traffic reg	16	Zvornik Grad	station distance	station distance	station distance			station distance	station distance	station dist	ction point 23 - Orom	station distance			station distance	station distance	station distance	define distance	station distance	station distance	station distance	station distance	station distance			station distance	station distance	station distance	station distance	station distance	station distance	A TOPING			(6)		Station distance	FFIC		station distance	station distance
B→A	ongest trains				2 and 3			2 and 3		3 and 4		27 - Junic		(Resavica)	5	3			c	0	2		4			4 and 5				1 and 2	2 and 3	Chille			4 and 5	Maten alaka ainkatni kamalala Am 6 4413	2 and 3	FOR TR	R TRAI		3	
Direction	Maximum permitted rain length Tracks for	14	naj Bonna -	t	398 2		Trailor	506 2		174 3				Π.		299			400	06/	764		206	·	(La)	3			-	/53	681		-	rište	643 4	- loles	842 2	OSED	SED FC	men	733	
	ongest trains	3		t	2 and 3	=	X	2 and 3		3 and 4		- Juncti		Despot	4	3			,	T	2		4		Frizzen ela Crk	4 and 5			+	7 pure 1	2 and 3	+	LINE	ac Vaša	4 and 5	- 1.	2 and 3		ECLO	ovo Be	8	1
Direction A→B	rain length Tracks for		LINE JUNCTION Donay	H	+	_	Zono,	⋍⊢	_	-		Senta: (Coka) - junction point	-	Svilainac - Despotovac	5			+		1		H	4	- 100	313 Vršac - Bela Crkva	3 4 8	Н	+	+	+	+		SHUNTING LINES	401 Vršac - Vršac Vašarište	-	-1-1-1	2 2 a	ohala I	vac LD	405 Surčin - Jakovo Bečmen	3	4
	Maximum permitted				398	_	, c	506 Na		174	_	Senta:		ac - Svi	855	299		-0.0	700	-	764		506	- 12	313 V	643	(		i	55/	189	3	SHI	401 Vr	643	- Lotopo	842	mayska	ri Popc	105 Sur	733	_
Maximum permitted speed	Right track Left track	01	- OPEN	50	Ü	4	, C 000	309 F8	G	6		me station	40	311 Markovac -			20	ì				ı							30						50			n A	404 Paragin - Stari Popovac LINE CLOSED FOR TRAFFIC	7	20	
Α	Railway line categor	6	(Brasına)	×	A	A		-	D2	D2		E (K 01 E	A	311	-	B2	A	A	4 <	ζ <	K K	A	Ą	A		F	A	Ą	V.	4 <	4 4	( ⊲	:			27		Boso	4 Par	ŀ	A	A
	Class of railway line			Ľ		ı		3	L	H			_	-	H	L		n i	11	4 +		L		r		-	T	r	7,	+	7 1			G.		man (		man 403	4	ŀ		
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	Chainage		68+685 OPEN LINE HINCHON DON! A BORINA	70+600 RADALi		75+300 ZVORNIK GRAD	074+000 the maximum permissible speed is 10 km/h	0+568 PANČEVO VAROŠ	1+300 PANČEVO STRELIŠTE	2+914 PANČEVO VOJLOVICA	3+475 END OF LINE	38+407 HINCTION POINT 22 SENTA	39+164 ITINCTION POINT 23 SENTA	111111111111111111111111111111111111111	0+500 MARKOVAC	9+932 SVLAINAC	17+500 SEDLARE	23+200 RESAVSKO JASENOVO	27+470 RESAVA	34+400 MONTE	20-400 VOJNIK 42+564 DVORIŠTE	45+800 DUTOVO	53+360 RESAVICA	53+750 END OF LINE		87+546 VRŠAC	88+664 OPEN LINE JUNCTION B JASENOVO	97+263 POTPORANJ		10/+515 JASENOVO	114+049 CKVENA CKKVA 110+067 RF1 A CRKVA	121+500 END OF LINE		Time or	0+558 VRŠAC	3+415 VRSAC VASARISTE	0+000 KIKINDA	0+263 MOK (INDUSTRIAL TRACK)			12+100 SURCIN 15+500 JAKOVO-BEČMEN	16+500 END OF LINE
	Distance in km	3		1,915	2.854	1.846	0 the maxim		0.732	1.614	0.561		0.757			9.432	7.568	5.700	4.270	00001	6.164	3.236	7.560	0.390			1+118				4+418			3	1000	2.857		C97.0				1.000
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noitslu	Manner of traffic reg	16	406 Šid - Sremska Rača Nova - state border - (Bijeljina) LINE CLOSED FOR TRAFFIC	FIC	FIC	FFIC		rad)		station distance	station distance	station distance	
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pəəds	Left track Maximum permitted		/a - state	dinska	patin Fa	nka - G	MUSEUM-TOURIST RAILWAY LINE	itasi - N					
Maximum permitted	Right track	10	ača Nov	407 Ovča - Padinska Skela LINE CLOSED FOR TRAFFIC	408 Sonta - Apatin Fabrika LINE CLOSED FOR TRAFFIC	109 Bačka Palanka - Gajdobra LINE CLOSED FOR TRAFFIC	MU	501 Šargan Vitasi - Mokra Gora - State Border - (Višegrad)		30		20	
A	Railway line categor	6	ka R	0.70	8 Sc	Bač		)1 Šį		8 8	8 8		
30	100		ems	40	40	409		5(		H	-	-	
1	Class of railway line	8	Ş.					10		L			
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1	Type of service point	9	406						1	2	1	13	
	Name and Associated States							- 12			0	-	
	Name of service point								254+706 SARGAN VITASI	JATARE	270+146 MOKRA GORA	276+951 STATE BORDER	*) Distance in km between the service points is not equal to the difference of their line km positions
	Chainage	4							254+706	5 262+262 JATARE	8 8	0	the service poin
	Distance in km	3								7.556	7.884	6.805	n between
transport	Left track	2						7					e in kr
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\*\*) The lines on the territory of Kosovo and Metchija are temporarily under the supervision of UNMIK, according to the Temporary Agreement between ŽTP Belgrade and UNMIK railways, dated May 31, 2002 (records No 300/2002 - 153 dated May 31, 2002)

Col 6

Type of service point State border
 Track transition

 Speed change
 Dispatching point and stop
 Taffic and transport dispatching point
 Loading point 2. Passing point 6. Open-line junction and stap 7. Open-line junction 7. Open-line junction 4. Open line junction and stap 6. Open line junction and stap 7. Open line junction and stap 6. Out 7. Open line junction and stap 6. Out 7. Open line junction and stap 6. In the junction and stap 6. In the junction and stap 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner of securing the service point 6. Out 7. Manner 6.

1. Bierto-relay signalling-safety devices for comprehensive centralisation od bunouts, signals and routes. There is technical dependance between bunouts and signals.

2 Electro-relay signalling-safety devices for partial centralisation od bunouts, signals and routes. There is technical dependance between bunouts and signals. Electro-relay signaling-safety devices expept-adace between tumouts. Signals and software the safety devices with dependance between tumouts. There is technical dependance between tumouts and signals.

5 Electro-relay signalling-safety devices with dependance between tumouts is no dependance between tumouts and signals.

5 Electro-relay signaling-safety devices with dependance between tumouts and semplore signals.

Ordinary signal point for semaphore signals.
 Electrical diffusers. There is no technical dependance between turnouts and diffusers.

7. Mechanical signal point machine There is technical dependance between turnouts and semaphore signals. 8. Electromechanical permissive block device There is no technical dependance between turnouts and semaphore signals.

Col.20- S for the service point with side-loading platform, E for the service point with end-loading platform and S/E for the service point with side-loading platform. 11. Access signals. Turnouts are secured by locking devices without signal.

P for permanently manned, U for permanently unmanned and T for temporarily manned service points

Col.22.P For service points open for the acceptance and dispatching of passengers. T for service points open for freight operations (loading, unloading and transitionent of freight), and PT for service points open for the acceptance and dispatching of passengers and for freight operations



# **Appendix 7. Overview of primary train delay causes**

	Primary train delay causes (IŽS)
No	Name
1.	Waiting for dispatch
2.	Waiting at the automatic block signal or protective signal
3.	Dispatcher's order
4.	Delay caused by the fault of an infrastructure manager's employee
5.	Entrance/exit to a turn
6.	Traffic on the left track
7.	Speed decrease requested by the infrastructure manager
8.	Delivery of order to the train driver
9.	Unplanned line closure by the infrastructure manager
10.	Level-crossing failure
11.	Failure on the overhead contact line
12.	Extended stay of railway vehicles
13.	Delay caused by restricted-speed running
14.	Rail crack
15.	Deformed track
17.	Technically defective switch
18.	Collision, bumping, derailment, avoided collision of railway vehicles
19.	Failure of signalling-interlocking and telecommunication devices
20.	Extension of the foreseen closure (more than 30 min)

	Primary train delay causes (railway undertaking)
No	Name
1.	Increased passenger frequency
2.	Waiting for railway undertaking staff
3.	Waiting for locomotive or multiple-unit set
4.	Delay caused by the fault of an railway undertaking's employee
5.	Cleaning of wagon or multiple-unit set requested by the railway undertaking
6.	Brake test
7.	Failure of wagon, traction unit or multiple-unit set
8.	Wagon repair without de-coupling
9.	Decreased train speed due to failure of wagon/multiple-unit set/traction unit
10.	Change of composition requested by the railway undertaking



11.	Intervention of police officers, requested by train staff
13.	Waiting for shunting locomotive
15.	Shift change of railway undertaking's employees
16.	Waiting for train forming
17.	Weighing
18.	Special consignment transport
20.	Stopping for cooling of brake shoes
21.	Delay caused by turnover of the multiple-unit set/traction unit of the same composition
22.	Accident on industrial siding of the transport client
23.	Breakdown of brake system air duct
24.	Train passing by the signal which indicates that the further running is forbidden
25.	Unallowed train passing through the service point where it had to stop

	Primary train delay causes (external influences)
No	Name
1.	State needs
2.	Train accepted with delay by another railway management
3.	Train rejected by another railway management
4.	Waiting for train staff of another railway management
5.	Train incorrectly formed by another railway management
6.	Taking a defective wagon of another railway management out of service
7.	Taking an incorrectly sent wagon of another railway management out of service
8.	Another railway management's employee being late
9.	Natural disasters (landslide, flood, current, snow-drift, avalanche, fire, fog)
10.	Falling out of train
11.	Jumping in or out of train
12.	Holding of the train by police officers
13.	Holding of the train by custom-inspection officers
14.	Emergency brake abuse
15.	Emergency service intervention
16.	Level-crossing device breaking
17.	Train rocking
18.	Theft of equipment or devices owned by the infrastructure



	Secondary train delay causes
No	Name
1.	Waiting for crossing
2.	Waiting for overtaking of a train
3.	Waiting for annunciation
4.	Waiting with the train which is in delay
5.	Extended stay in the station due to waiting for regular passing
6.	Waiting for locomotive or multiple-unit set from turnover
7.	Waiting for railway undertaking's staff from turnover
8.	Delay caused by failure of another train's traction unit
9.	Waiting for train connection (passenger or goods) of another railway management
10.	Abuse of emergency brake on another train
11.	Announced strike of IŽS or RU
12.	Another train accident



### Appendix 8 Overview of platforms and arranged surfaces in service points

		km position of the		I	Dimensions	3
Service point	Location	beginning and the end	Platform/arranged	Length	Height	Width
Service point	Location	of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
-	Į.	MAIN LINES	7		U	
	101 Belgrade Center- Stara		r - (Tovornik)			
	next to 3rd track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	between the 4th and 5th track		+		/	
DEL CD A DE CENTED		0+155-0+00-0+300	platform	455,00	0,55	10,00
BELGRADE CENTER	between the 6th and 7th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
	between the 8th and 9th track	0+120-0+00-0+300	platform	420,00	0,55	7,00
	next to 10th track	0+120-0+00-0+300	platform	420,00	0,55	
	next to 1st track	3+204,17 - 3+679,48	platform	475,00	0,55	5,60
	between the 1st and 2nd track*	3+204,17 - 3+679,48	platform	475,00	0,55	3,86
		2 : 204 17 2 : 670 49	-1-4f	475.00	0.55	10.46
NOVI BEOGRAD	between the 2nd and 3rd track	3+204,17 - 3+679,48	platform	475,00	0,55	10,46
	between the 3rd and 4th track*	3+204,17 - 3+679,48	platform	475,00	0,55	3,86
		2 : 204 17 2 : 670 49	-1-4f	475.00	0.55	10.46
	between the 4th and 5th track	3+204,17 - 3+679,48	platform	475,00	0,55	10,46 5,60
	next to 5th track	3+204,17 - 3+679,48	platform	475,00	0,55	
Tošin bunar	next to right track	5+104,79 - 5+274,76	platform	110,00	0,55	4,00
	next to left track	5+104,79 - 5+274,76	platform	110,00	0,55	4,00
	between the 1st and 2nd track	8+276 - 8+676	platform	400,00	0,55	6,16
ZEMUN	between the 3rd and 4th track	8+276 - 8+676	platform	400,00	0,55	6,16
ZEWON	between the 6th and 7th track	8+321 - 8+676	platform	355,00	0,55	6,16
	between the 8th and 9th track	8+321 - 8+676	platform	355,00	0,55	6,16
Altina	next to left track	11+256 – 11+366	platform	110,00	0,55	4,00
	next to right track	10+997 - 11+107	platform	110,00	0,55	4,00
ZEMUNSKO POLJE	between the 1st and 2nd track	12+264 -12+374	platform	110,00	0,55	4,00
ZEWONSKO FOLJE	between the 2nd and 3rd track	12+154 -12+374	platform	220,00	0,55	6,16
	between the 3rd and 4th track	12+264 -12+374	platform	110,00	0,55	4,00
Kamendin	next to left track	13+955 - 14+065	platform	110,00	0,55	4,00
Kamenum	next to right track	13+744 - 13+854	platform	110,00	0,55	4,00
	next to 1st track	18+884-19+104	platform	220,00	0,55	4,00
BATAJNICA	between the 2nd and 3rd track	18+884 - 19+104	platform	220,00	0,55	6,16
	next to 6th track	18+884 - 19+104	platform	220,00	0,55	7,41
NOVA PAZOVA	between the 4th and 5th track	26+993-27+243 l.n.	platform	250,00	055	7,91
CTADA DAZOVA	next to 1st track	35+015-35+235 l.n.	platform	220,00	0,55	3,00
STARA PAZOVA	between the 5th and 6th track	35+015-35+265 l.n.	platform	250,00	0,55	6,16
COLUDING	between the 2nd and 3rd track	45+767-45+914	platform	147,00	0,35	1,60
GOLUBINCI	between the 3rd and 4th track	45+767-45+914	platform	147,00	0,35	1,60
DUTING	between the 2nd and 3rd track	53+611,93-53+691,91	platform	79,98	0,35	1,60
PUTINCI	between the 3rd and 4th track	53+611,93-53+691,91	platform	79,98	0,35	1,60
TZ 1' '	next to right track	59+982,18-60+062,18	platform	80,00	0,55	4,00
Kraljevci	next to left track	59+985,29-60+065,29	platform	80,00	0,55	4,00
	between the 2nd and 3rd track	64+733-64+973	platform	240,00	0,35	1,60
RUMA	between the 3rd and 4th track	64+733-64+973	platform	240,00	0,35	1,60
	between the 4th and 5th track	65+821-64+937	platform	116,00	0,35	1,60
MOGINA	between the 2nd and 3rd track	73+368-73+518	arranged surface	150,00	0,00	2,00
VOGANJ	between the 3rd and 4th track	73+368-73+518	arranged surface	150,00	0,00	2,00
CDEMCKA MEDOVICA	between the 2nd and 3rd track	81+563-81+763	platform	200,00	0,35	1,60
SREMSKA MITROVICA	between the 3rd and 4th track	81+563-81+763	platform	200,00	0,35	1,60
Laćarak	between the right and left track	86+109,30-86+159,30	platform	50,00	0,35	1,60
	between the 2nd and 3rd track	94+059-94+159	platform	100,00	0,35	1,60
MARTINCI	between the 3rd and 4th track	94+131-94+141	platform	10,00	0,35	1,60
Kuzmin		NONE		,		,
	between the 2nd and 3rd track	104+935-104+985	platform	50,00	0,45	1,60
KUKUJEVCI-ERDEVIK	between the 3rd and 4th track	104+990-105+040	platform	50,00	0,45	1,60
Bačinci	next to right track	109+070-109+097	platform	27,00	0,35	1,60
Gibarac		NONE		,		,
	between the 1st and 2nd track	116+300-116+490	arranged surface	190,00	0,10	2,50
ŠID	between the 2nd and 3rd track	116+300-116+665	platform.	365,00	0,45	1,60
				,	, , -	,



Service point	Location	km position of the beginning and the end	Platform/arranged	I Length	Dimensions Height	Width
Service point	Location	of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
	between the 3rd and 4th track	116+300-116+677	platform	377,00	0,45	1,60
102 Belgrade Cent	er– Junction "G" – Rakovica - M	lladenovac - Lapovo - Niš	- Preševo - state bo	rder - (Tal		
	next to 3rd track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	between the 4th and 5th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
BELGRADE CENTER	between the 6th and 7th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
	between the 8th and 9th track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	next to 10th track	0+120-0+00-0+300	platform	420,00	0,55	7,00
D. WOLIIGA	next to 2nd track - right	8+460-8+786	platform	326,00	0,55	6,10
RAKOVICA	between the 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10
	between the 5th and 6th track	8+545-8+865	platform platform	320,00	0,55	6,20 1,55
Kneževac	next to right track next to left track	10+645-10+758	platform	113,00	0,55 0,55	1,55
	next to right track	10+645-10+758 11+626-11+731	platform	113,00 105,00	0,55	1,55
Kijevo	next to left track	11+713-11+819	platform	106,00	0,55	1,55
	next to 1st track	14+080-14+240	arranged surface	160,00	0,55	4,00
RESNIK	between the 1st and 2nd track	14+080-14+240	platform	160,00	0,35	1,55
11221 1111	between the 3rd and 4th track	13+943-14+238	platform	295,00	0,55	6,20
PINOSAVA		NONE	F		0,00	-,
Ripanj Kolonija	next to railway line - left	20+080-20+180	platform	100,00	0,35	1,00
<u>, jj</u>	between the 1st and 2nd track	21+324,00-21+356,40	platform	32,40	0,35	1,00
RIPANJ	between the 2nd and 3rd track	21+265,70-21+361,20	platform	95,50	0,35	1,55
	between the 3rd and 4th track	21+265,70-21+361,20	platform	95,50	0,35	1,55
IZI ENIIE	between the 1st and 2nd track	24+743,40-24+804,00	platform	60,60	0,35	1,00
KLENJE	between the 2nd and 3rd track	24+743,40-24+804,00	platform	60,60	0,35	1,00
RIPANJ TUNEL	between the 1st and 2nd track	29+565-29+615	platform	50,00	0,40	1,60
RALJA	between the 1st and 2nd track	34+695-34+774	platform	79,00	0,40	1,60
KALJA	between the 2nd and 3rd track	34+695-34+774	platform	79,00	0,40	1,60
SOPOT KOSMAJSKI	between the 2nd and 3rd track	41+454-41+544	platform	90,00	0,40	1,60
VLAŠKO POLJE	between the 2nd and 3rd track	47+684-47+784	platform	100,00	0,40	1,60
MLADENOVAC	between the 2nd and 3rd track	53+089-53+190	platform	101,00	0,40	1,60
	between the 3rd and 4th track	53+030-53+190	platform	160,00	0,40	1,60
KOVAČEVAC	between the 1st and 2nd track	59+954-60+109	platform	155,00	0,40	1,60
	between the 2nd and 3rd track	59+907-60+056	platform	149,00	0,40	1,60
Rabrovac	next to railway line - left	62+909-63+045	platform	136,00	0,40	1,60
KUSADAK	between the 1st and 2nd track	67+497-67+650	platform	153,00	0,40	1,60
	between the 2nd and 3rd track	67+453-67+600	platform	147,00	0,40	1,60
Ratare	next to railway line - left	70+821-70+931	platform	110,00	0,40	1,60
GLIBOVAC	between the 1st and 2nd track	73+941-74+041	platform	100,00	0,50	1,50
	between the 2nd and 3rd track	73+978-74+078	platform	100,00	0,50	1,50
PALANKA	between the 1st and 2nd track	78+476-78+586 78+476-78+586	platform platform	110,00	0,50	1,50 1,50
IALANNA	between the 2nd and 3rd track between the 3rd and 4th track	78+476-78+586 78+476-78+586	platform	110,00 110,00	0,50 0,50	1,50
MALA PLANA	between the 2nd and 3rd track	85+505-85+605	platform	100,00	0,50	1,50
MILLI LIMA	between the 1st and 2nd track	90+350-90+400	platform	50,00	0,40	1,60
	between the 2nd and 3rd track	90+289-90+430	platform	141,00	0,40	1,60
VELIKA PLANA	between the 3rd and 4th track	90+370-90+510	platform	140,00	0,40	1,60
	between the 4th and 5th track	90+360-90+464	platform	104,00	0,40	1,60
G. G.1	next to right track	94+008-94+055	platform	47,00	0,40	1,60
Staro Selo	next to left track	94+008-94+055	platform	47,00	0,40	1,60
Mayo Cals	next to right track	97+660-97+706	platform	46,00	0,40	1,60
Novo Selo	next to left track	97+660-97+706	platform	46,00	0,40	1,60
	between the 2nd and 3rd track	100+400-100+450	platform	50,00	0,40	1,60
MARKOVAC	between the 3rd and 4th track	100+350-100+452	platform	102,00	0,40	1,60
	between the 4th and 5th track	100+350-100+448	platform	98,00	0,40	1,60
Lapovo Varoš	next to right track	106+250-106+310	platform	60,00	0,35	1,60
Daporo raios	next to left track	106+250-106+310	platform	60,00	0,35	1,60
Lapovo Marshalling Yard	next to right track	108+350-108+400	platform	50,00	0,35	1,60
Transming ruid	next to left track	108+340-108+390	platform	50,00	0,35	1,60
1 / 50770	next to 1st track	109+460-109+510	platform	50,00	0,35	1,60
LAPOVO	between the 2nd and 3rd track	109+560-109+680	platform	120,00	0,35	1,60
	between the 3rd and 4th track	109+560-109+680	platform	120,00	0,35	1,60
Brzan	next to right track	114+140-114+190	platform	50,00	0,35	1,60



Service point	Location	km position of the beginning and the end	Platform/arranged	Length	Dimensions Height	Widt
Service point	Location	of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
	next to left track	114+140-114+190	platform	50,00	0,35	1,60
1.6'1 ×	next to right track	116+940-116+990	platform	50,00	0,35	1,60
Miloševo	next to left track	116+940-116+990	platform	50,00	0,35	1,60
DACDDAN	between the 2nd and 3rd track	120+229-120+330	platform	101,00	0,35	1,60
BAGRDAN	between 3 <sup>rd</sup> and 4th track	120+268-120+390	platform	122,00	0,35	1,60
т 'v,	next to right track	126+920-126+970	platform	50,00	0,35	1,60
Lanište	next to left track	126+920-126+970	platform	50,00	0,35	1,60
D 1 V	next to right track	131+229-131+279	platform	50,00	0,35	1,60
Bukovče	next to left track	131+229-131+279	platform	50,00	0,35	1,6
	between the 1st and 2nd track	135+192-135+342	platform	150,00	0,20	1,9
JAGODINA	between the 2nd and 3rd track	135+122-135+364	platform	242,00	0,20	1,9
	between the 3rd and 4th track	135+182-135+416	platform	234,00	0,20	1,9
C.1.	next to right track	140+550-140+670	platform	120,00	0,55	3,0
Gilje	next to left track	140+550-140+670	platform	120,00	0,55	3,0
DADA ĆINI	between the 3rd and 4th track	155+081-155+184	platform	103,00	0,35	1,6
PARAĆIN	between the 4th and 5th track	155+065-155+166	platform	101,00	0,20	1,9
G11.1 75	next to right track	163+560-163+610	platform	50,00	0,35	1,6
Sikirica- Ratari	next to left track	163+565-163+615	platform	50,00	0,35	1,6
ъ	next to right track	166+605-166+655	platform	50,00	0,35	1,6
Drenovac	next to left track	166+605-166+655	platform	50,00	0,35	1,6
άτάπτις	between the 2nd and 3rd track	171+550-171+640	platform	90,00	0,35	1,6
ĆIĆEVAC	between 3 <sup>rd</sup> and 4 <sup>th</sup> track	171+550-171+640	platform	90,00	0,35	1,6
т	next to right track	173+625-173+674	platform	49,00	0,35	1,6
Lučina	next to left track	173+625-173+674	platform	49,00	0,35	1,6
	between the 2nd and 3rd track	176+222-176+425	platform	203,00	0,28	6,4
STALAĆ	between the 4th and 5th track	176+222-176+425	platform	203,00	0,28	1,6
	between the 6th and 7th track	176+270-176+378	platform	108,00	0,28	5,3
STEVANAC		NONE		,		
	between the 2nd and 3rd track	186+443-186+563	platform	120,00	0,35	1,6
BRALJINA	between the 3rd and 4th track	186+443-186+563	platform	120,00	0,35	1,6
Cerovo-Ražanj	next to railway line - left	190+320-190+370	platform	50,00	0,35	1,6
STARO TRUBAREVO	between the 1st and 2nd track	192+150-192+220	platform	70,00	0,35	1,6
	between the 2nd and 3rd track	194+882-195+003	platform	121,00	0,35	1,6
ĐUNIS	between the 3rd and 4th track	194+882-195+003	platform	121,00	0,35	1,6
	next to right track	199+160-199+210	platform	50,00	0,35	1,6
Vitkovac	next to left track	199+160-199+210	platform	50,00	0,35	1,6
	next to right track	201+175-201+225	platform	50,00	0,35	1,6
Donji Ljubeš	next to left track	201+175-201+225	platform	50,00	0,35	1,6
	next to right track	203+560-203+610	platform	50,00	0,35	1,6
Gornji Ljubeš	next to left track	203+560-203+610	platform	50,00	0,35	1,6
	between the 2nd and 3rd track	205+565-205+675	platform	110,00	0,35	1,6
KORMAN	between 3 <sup>rd</sup> and 4 <sup>th</sup> track	205+545-205+665	platform	120,00	0,35	1,6
	next to right track	208+087-208+186	platform	99,00	0,35	1,6
Trnjani	next to left track	208+087-208+186	platform	99,00	0,35	1,6
	next to 1st track	210+445-210+530	platform	85,00	0,33	5,0
ADROVAC	between the 1st and 2nd track	210+432-210+521	platform	89,00	0,35	1,6
IDROVIC	between the 2nd and 3rd track	210+440-210+562	platform	122,00	0,35	1,6
	between the 2nd and 3rd track	214+067-214+277	platform	210,00	0,35	1,6
ALEKSINAC	between the 3rd and 4th track	214+067-214+277	platform	210,00	0,35	1,6
	next to right track	217+400-217+500	platform	100,00	0,35	1,6
Nozrina	next to left track	217+400-217+500	platform	100,00	0,35	1,6
	next to right track	218+705-218+790	platform	85,00	0,35	1,6
Lužane	next to light track	218+708-218+790	platform	77,00	0,35	1,6
	next to right track	222+062-222+164	platform	102,00	0,35	1,6
Tešica	next to light track	222+062-222+164	*	102,00	0,35	
			platform platform	102,00		1,6
~	between the 2nd and 3rd track between the 3rd and 4th track	224+656-224+758	*		0,35	
GREJAČ		224+656-224+708	platform platform	52,00 68,00	0,35 0,35	1,6
GREJAČ		770   007 770   155	muniorm	DA UU	U 17	1.0
GREJAČ Supovački Most	next to right track	228+087-228+155				
	next to right track next to left track	228+091-228+159	platform	68,00	0,35	1,6
Supovački Most	next to right track next to left track next to right track	228+091-228+159 229+306-229+416	platform platform	68,00 110,00	0,35 0,35	1,60 1,60
	next to right track next to left track	228+091-228+159	platform	68,00	0,35	1,60 1,60 1,60 1,60



	T	Irm mosition of the	<u> </u>	T	Dimensions	
Service point	Location	km position of the beginning and the end	Platform/arranged	Length	Height	Width
Service point	Document	of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
TRUBALE	between the 2nd and 3rd track	234+893-234+994	platform	101,00	0,40	1,60
TRUPALE	between the 4th and 5th track	234+893-234+994	platform	101,00	0,40	1,60
CRVENI KRST	between the 2nd and 3rd track	240+842-240+994	platform	152,00	0,40	1,60
	next to 1st track	243+410-243+763	platform	353,00	0,40	5,80
<u>_</u>	between the 2nd and 3rd track	243+410-243+813	platform	403,00	0,40	8,00
NIŠ	between the 4th and 5th track	243+410-243+771	platform	361,00	0,40	8,00
	between 1b. and 1. track	243+643-243+763	platform	120,00	0,40	5,80
MEDIBOVO	next to 1a. track	243+660-243+763 NONE	platform	103,00	0,40	1,60
MEĐUROVO BELOTINCE	between the 1st and 2nd track	253+906-253+987	platform	81,00	0,40	1,60
Čapljinac	next to railway line - left	255+443-255+493	platform	50,00	0,40	1,60
Malošište	next to railway line - left	257+890-257+940	platform	50,00	0,40	1,60
	between the 1st and 2nd track	261+419-261+527	platform	108,00	0,40	1,60
DOLJEVAC	between the 2nd and 3rd track	261+419-261+526	platform	107,00	0,40	1,60
17. *	next to railway line - right	263+218-263+263	platform	45,00	0,40	1,10
Kočane	next to railway line - right	263+274-263+287	platform	13,00	0,40	1,10
Pukovac	next to railway line - right	265+833-265+862	platform	29,00	0,40	1,60
	next to railway line - right	265+870-265+897	platform	27,00	0,40	1,60
BRESTOVAC	between the 2nd and 3rd track	267+906-267+971	platform	65,00	0,40	1,60
Lipovica	next to railway line - left	270+819-270+844	platform	25,00	0,40	1,10
PEČENJEVCE	next to railway line - left	270+850-270+887	platform	37,00	0,40	1,10
Živkovo	between the 2nd and 3rd track next to railway line - right	275+522-275+596	platform platform	74,00 45,00	0,40 0,40	1,60 1,10
Priboj Leskovački	next to railway line - right	278+820-278+865 280+440-280+480	platform	40,00	0,40	1,30
VINARCI	next to fairway fine - fight	NONE	piationii	40,00	0,40	1,50
	between the 1st and 2nd track	287+460-287+679	platform	219,00	0,40	1,60
LESKOVAC	between the 2nd and 3rd track	287+507-287+630	platform	123,00	0,40	1,60
ĐORĐEVO		NONE		- ,		
GRDELICA	between the 2nd and 3rd track	301+841-301+886	platform	45,00	0,40	1,60
	between the 3rd and 4th track	301+841-301+886	platform	45,00	0,40	1,60
Palojska Rosulja	next to railway line - left	308+614-308+629	platform	15,00	0,40	1,60
PREDEJANE	between the 1st and 2nd track	312+675-312+750	platform	75,00	0,40	1,60
DŽEP	between the 2nd and 3rd track	319+629-319+710	platform	81,00	0,40	1,60
MOMIN KAMEN	next to railway line - left	322+900-322+930	platform	30,00	0,40	1,60
Šelince VLADIČIN HAN	between the 1st and 2nd track	NONE 329+472-329+676	mlatfarm.	204,00	0.40	1.60
SUVA MORAVA	next to 1st track	334+043-334+095	platform platform	52,00	0,40 0,40	1,60 1,60
Lepenički most	next to 1st track	NONE	piationii	32,00	0,40	1,00
Stubal		NONE				
PRIBOJ VRANJSKI		NONE				
VRANJSKA BANJA	between the 1st and 2nd track	347+958-348+080	platform	122,00	0,40	1,60
VRANJE	between the 1st and 2nd track	354+080-354+260	platform	180,00	0,40	1,60
VKANJE	between the 2nd and 3rd track	354+125-354+242	platform	117,00	0,40	1,60
Neradovac		NONE				
RISTOVAC	between the 1st and 2nd track	365+666-365+768	platform	102,00	0,40	1,60
	between the 2nd and 3rd track	365+666-365+768	platform	102,00	0,40	1,60
BUJANOVAC	between the 1st and 2nd track	373+665-373+720	platform	55,00	0,40	1,60
Letovica		NONE				
BUKAREVAC PREŠEVO	between the 1st and 2nd track	NONE 392+256-392+357	platform	101,00	0,40	1,60
1 KESE VU	103 (Belgrade Center) - Rako			101,00	0,40	1,00
	next to 2nd track - right	8+460-8+786	platform	326,00	0,55	6,10
RAKOVICA	between the 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10
	between the 5th and 6th track	8+545-8+865	platform	320,00	0,55	6,20
JAJINCI		NONE				
BELO POTOK	between the 2nd and 3rd track	16+240-16+337	platform	97,00	0,40	1,60
	between the 3rd and 4th track	16+240-16+351	platform	111,00	0,40	1,60
Zuce staj.	next to railway line - right	20+305-20+363	platform	58,00	0,40	1,60
ZUCE	between the 1st and 2nd track	21+180-21+287	platform	107,00	0,40	1,60
VRČIN	between the 1st and 2nd track	24+824-24+932	platform	108,00	0,40	1,60
	between the 2nd and 3rd track	24+824-24+934	platform	110,00	0,40	1,60
Kasapovac	next to railway line - left	27+840-27+938	platform	98,00	0,40	1,60



	T	1 '(' 0.1			D:	
Service point	Location	km position of the beginning and the end	Platform/arranged	Length	Dimensions Height	s Width
Service point	Location	of platform	surface	(m)	(m)	(m)
1	2.	3	4	5	6	7
LIPE	between the 1st and 2nd track	31+208-31+316	platform	108,00	0,40	1,60
	next to 1st track	36+858-36+925	platform	67,00	0,40	1,60
MALA IVANČA	between the 1st and 2nd track	36+863-36+925	platform	62,00	0,40	1,60
Brestovi	next to railway line - left	39+208-39+305	platform	97,00	0,40	1,60
	between the 1st and 2nd track	41+250-41+356	platform	106,00	0,40	1,60
MALI POŽAREVAC	between the 2nd and 3rd track	41+250-41+358	platform	108,00	0,40	1,60
Dražanj-Šepšin	next to railway line - right	43+114-43+219	platform	105,00	0,40	1,60
¥	between the 1st and 2nd track	47+730-47+839	platform	109,00	0,40	1,60
UMČARI	between the 2nd and 3rd track	47+730-47+837	platform	107,00	0,40	1,60
Živkovac	next to railway line - left	52+290-52+340	platform	50,00	0,40	1,60
VODANJ	between the 2nd and 3rd track	55+130-55+229	platform	99,00	0,40	1,60
KOLARI	between the 1st and 2nd track	60+558-60+656	platform	98,00	0,40	1,60
Ralja Smederevska	next to railway line - left	66+573-66+605	platform	32,00	0,40	1,60
Kaija Silieueievska	between the 1st and 2nd track	69+030-69+175	platform	145,00		1,90
	between the 1st and 2nd track	69+030-69+175	platform	145,00	0,40 0,40	1,90
MALA KRSNA			•			1,90
	between the 3rd and 4th track between the 4th and 5th track	69+042-69+184 69+080-69+230	platform platform	142,00 150,00	0,40 0,40	1,90
Skobalj		71+981-72+015	platform	34,00	0,40	1,60
J	next to railway line - left					
Osipaonica staj.	next to railway line - left	74+749-74+784	platform	35,00	0,40	1,60 1,60
OSIPAONICA	between the 1st and 2nd track	76+168-76+231	platform	63,00	0,40	
т		76+177-76+229 77+867-77+904	platform	52,00	0,40	1,60
Lugavčina	next to railway line - right		platform	37,00	0,40	1,30
Saraorci	1 1 2 1 12 14 1	NONE	1.46	102.00	0.40	1.60
LOZOVIK-SARAORCI	between the 2nd and 3rd track	82+710-82+812	platform	102,00	0,40	1,60
Miloševac	next to railway line - left	85+500-85+602	platform	102,00	0,40	1,60
KRNJEVO-TRNOVČE	between the 2nd and 3rd track	90+248-90+348	platform	100,00	0,40	1,60
	between the plateau in front of	04 606 50 04 650 50	1	22.00	0.40	1.
VELIKO ORAŠJE	the station building and 2 <sup>nd</sup>	94+626,50-94+658,50	platform	32,00	0,40	1,6
	track					
	between the 2nd and 3rd track	94+586,50-94+689,50	platform	103,00	0,40	1,6
	between the 1st and 2nd track	90+350-90+400	platform	50,00	0,40	1,60
VELIKA PLANA	between the 2nd and 3rd track	90+289-90+430	platform	141,00	0,40	1,60
	between the 3rd and 4th track	90+370-90+510	platform	140,00	0,40	1,60
	between the 4th and 5th track	90+360-90+464	platform	104,00	0,40	1,60
	104 (Jagodina) – Open Lin		T			
ĆUPRIJA	between the 1st and 2nd track	0+516-0+641	platform	125,00	0,20	1,60
	between the 2nd and 3rd track	0+516-0+641	platform	125,00	0,30	1,60
PARAĆIN	between the 3rd and 4th track	155+081-155+184	platform	103,00	0,35	1,60
	between the 4th and 5th track	155+065-155+166	platform	101,00	0,20	1,90
10	5 (Belgrade Center) - Stara Pazo		·		,	
STARA PAZOVA	next to 1st track	34+015-35+235 л.н.	platform	220,00	0,55	3,00
SIMOTIALOVA	between the 5th and 6th track	35+015-35+265 л.н.	platform	250,00	0,55	6,16
INĐIJA	next to 1st track	42+577 - 42+977	platform	400,00	0,55	4,10
	between the 4th and 5th track	42+577 - 42+977	platform	400,00	0,55	7,55
BEŠKA	next to 1st track	53+922 - 54+142	platform	220,00	0,55	4,00
	next to 4th track	53+922 - 54+142	platform	220,00	0,55	4,00
SREMSKI KARLOVCI	between the 1st and 2nd track	65+759 - 65+979	platform	220,00	0,55	4,00
SKEWSKI KAKLUVU	between the 1st and 2nd track	65+759 - 65+979	platform	220,00	0,55	4,00
DETDOUADADIN	between the 1st and 2nd track	70+603 - 70+823	platform	220,00	0,55	6,10
PETROVARADIN	between the 5 <sup>th</sup> and 6 <sup>th</sup> track	70+708 - 70+928	platform	220,00	0,55	6,10
	between the 10th and 11th	77+077-77+214	·			
	track		platform	137,00	0,55	6,10
	between the 7th and 8th track	76+794-76+919	platform	125,00	0,55	
NOVI SAD	next to 1st track	76+809-77+214	platform	405,00	0,55	8,60
	between the 2nd and 3rd track	76+819-77+247	platform	428,00	0,55	8,60
	between the 4th and 5th track	76+837-78+247	platform	410,00	0,55	8,60
			•			6,00
		76+892-77+177	platform	285.00	(1.77	(1.(1))
DIMENIVA	next to the 6th track	76+892-77+177 NONE	platform	285,00	0,55	0,00
RUMENKA VISAČ	next to the 6th track	NONE				-,
RUMENKA KISAČ	next to the 6th track next to the 1st track left	NONE 90+222-90+442	platform	220,00	0,55	4,00
KISAČ	next to the 6th track  next to the 1st track left next to the 4th track right	NONE 90+222-90+442 90+222-90+442	platform platform	220,00 220,00	0,55 0,55	4,00 4,00
	next to the 6th track next to the 1st track left	NONE 90+222-90+442	platform	220,00	0,55	4,00



		km position of the	D1 . C . /	I	Dimensions	<u> </u>
Service point	Location	beginning and the end	Platform/arranged surface	Length	Height	Width
_		of platform	surrace	(m)	(m)	(m)
1	2	3	4	5	6	7
		100 101 100 501	1 0	***	0.77	4.00
ZMAJEVO	next to the 1st track right	102+481-102+701	platform	220,00	0,55	4,00
	next to the 4th track left	102+664-102+884	platform	220,00	0,55	4,00
TIDD ( G NOV)	next to the 1st track right	113+500-113+720	platform	220,00	0,55	4,00
VRBAS NOVA	between the 1st and 2nd track	113+410-113+810	platform	400,00	0,55	6,60
LOUGENIA C. MALLIDOĞ	between the 5th and 6th track	113+410-113+810	platform	400,00	0,55	6,60
LOVĆENAC – MALI IĐOŠ	next to the 1st track right	129+386-129+606	platform	220,00	0,55	4,00
	next to the 4th track left	129+386-129+606	platform	220,00	0,55	4,00
BAČKA TOPOLA	next to the 1st track left	143+406-143+806	platform	400,00	0,55	4,00
ŽEDNIK	next to the 4th track right	143+406-143+806	platform	400,00	0,55	4,00
ŽEDNIK	next to the 1st track right	156+965-157+185	platform	220,00	0,55	4,00
NATIMOVIĆENO	next to the 4th track left	156+965-157+185	platform	220,00	0,55	4,00
NAUMOVIĆEVO	next to the 1st track left	166+393-166+613	platform	220,00	0,55	4,00
	next to the 4th track right	166+393-166+613	platform	220,00	0,55	4,00
	next to the 1st track left	176+606-176+850	platform	244,00	0,55	3,00
Subotica	between the 2nd and 3rd track	176+450-176+850	platform	400,00	0,55	6,10
	between the 4th and 5th track	176+550-176+820	platform	270,00	0,55	6,10
	between the 6th and 7th track	176+605-176+826	platform	221,00	0,55	6,10
		GRAD - state border -(D		252.00	I 0 10 I	
	next to 1st track	243+410-243+763	platform	353,00	0,40	5,80
	between the 2nd and 3rd track	243+410-243+813	platform	403,00	0,40	8,00
NIŠ	between the 4th and 5th track	243+410-243+771	platform	361,00	0,40	8,00
	between 1b and 1st track	243+643-243+763	platform	120,00	0,40	5,80
	next to 1a. track	243+660-243+763	platform	103,00	0,40	1,60
Palilulska rampa	next to railway line - left	1+669-1+769	platform	100,00	0,40	1,60
	next to railway line - left	1+809-1+875	platform	66,00	0,40	1,60
Vojna Bolnica		NONE	1			
ĆELE KŲLA	between the 2nd and 3rd track	5+422-5+502	platform	80,00	0,40	1,60
EI NIŠ		NONE	1			
NIŠKA BANJA	between the 2nd and 3rd track	10+450-10+558	platform	108,00	0,40	1,60
Prosek	next to railway line - right	14+712-14+731	platform	19,00	0,40	1,60
	next to railway line - right	14+740-14+770	platform	30,00	0,40	1,60
SIĆEVO		NONE	1			
OSTROVICA	between the 1st and 2nd track	22+475-22+529	platform	54,00	0,40	1,60
Majdan Ostrovica		NONE	T			
Radov Dol	next to railway line - left	29+494-29+520	platform	26,00	0,40	1,60
DOLAC	between the 2nd and 3rd track	31+640-31+739	platform	79,00	0,40	1,60
Crveni Breg	next to railway line - left	34+262-34+292	platform	30,00	0,40	1,60
CRVENA REKA	between the 2nd and 3rd track	36+393-36+451	platform	58,00	0,40	1,60
Belanovac	next to railway line - left	39+691-39+761	platform	70,00	0,40	1,60
BELA PALANKA	between the 2nd and 3rd track	44+907-44+977	platform	70,00	0,40	1,60
Çrkvica		NONE				
ČIFLIK		NONE				
Sinjac		NONE				
Đurđevo polje		NONE				
Crvenčevo		NONE				
STANIČENJE		NONE				
Sopot		NONE			1	
PIROT	between the 1st and 2nd track	72+901-72+989	platform	87,00	0,40	1,60
	between the 2nd and 3rd track	72+868-73+021	platform	153,00	0,40	1,60
Božurat		NONE				
Veliki Jovanovac		NONE				
SUKOVO		NONE			ا ء ا	
Činiglavci	next to railway line - left	90+465-90+471	platform	6,00	0,40	1,60
-	next to railway line - left	90+485-90+491	platform	6,00	0,40	1,60
Srećkovac		NONE				
DIMITROVGRAD	next to 14th track	97+126-97+267	platform	141,00	0,40	2,50
	between the 1st and 2nd track	97+316-97+717	platform	401,00	0,40	3,20
107	Belgrade Center-Pančevo Mair				, , , , , , , , , , , , , , , , , , ,	
	next to 3rd track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	1 1 4 1 151 4 1	0 - 155 0 - 00 0 - 200	1 4.C	155.00	0.55	10.00
BELGRADE CENTER	between the 4th and 5th track between the 6th and 7th track	0+155-0+00-0+300 0+155-0+00-0+300	platform platform	455,00 455,00	0,55 0,55	10,00



		km position of the		I	Dimensions	3
Service point	Location	beginning and the end	Platform/arranged	Length	Height	Width
•		of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
	between the 8th and 9th track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	next to 10th track	0+120-0+00-0+300	platform	420,00	0,55	7,00
Karađorđev park	between the tracks (next to left Banat track)	1+123-1+215	platform	92,00	0,55	7,00
Karadordev park	between the tracks (next to right Banat track)	1+222-1+314	platform	92,00	0,55	7,00
	between the tracks	2+754,13-2+829,13 (chainage along the left) 2+850,52-2+925,52	central platform	75,00	0,95	18,60
		(chainage along the right)				
	between the tracks (next to right Banat track)	2+785,52-2+850,52	lateral platform towards the Center	65,00	0,95	3,50
Vukov spomenik	between the tracks (next to right Banat track)	2+925,52-3+010,52	lateral platform towards the bridge	85,00	0,95	3,50
	between the tracks (next to left Banat track)	2+689,13-2+754,13	lateral platform towards the Center	65,00	0,95	3,50
	between the tracks (next to left Banat track)	2+829,13-2+914,13	lateral platform towards the bridge	85,00	0,95	3,50
	next to 1st track	4+590-4+741	platform	151,00	0,90	4,94
PANČEVAČKI MOST	next to 2nd track	4+694-4+845	platform	151,00	0,90	4,94
TAIVEL VACKI MOST	next to railway line - right	10+500-10+600	Danube platform	100,00	0,35	1,60
Krnjača most	Between the left and right track	7+003,50-7+223,50	platform	220,00	0,60	7,00
KRNJAČA	next to 4th track	8+165,06-8+385,06	platform	220,00	0,55	3,00
KINJACA	next to 1st track	8+182,24-8+402,24	platform	220,00	0,55	3,00
Sebeš	next to left Banat track	9+975,05-10+085,05	platform	110,00	0,60	3,10
	next to right Banat track	9+975,05-10+085,05	platform	110,00	0,60	3,10
OVČA	next to 1st track between the 4th and 5th track	12+537,60-12+757,60 12+537,60-12+757,60	platform platform	220,00 220,00	0,55 0,55	4,00 6,10
	between the 4th and 3th track	15+913-16+033	platform	120,00	0,33	1,60
PANČEVO MAIN	between the 1st and 2nd track	16+090-16+210	platform	120,00	0,40	1,60
STATION	between the 2nd and 3rd track	15+913-16+210	platform	297,00	0,40	1,60
	between the 3rd and 4th track	15+987-16+137	platform	150,00	0,40	1,60
	next to 1st track	18+131-18+223	station plateau	92,00	0,40	1,60
PANČEVO VAROŠ	between the 1st and 2nd track	18+105-18+345	platform	240,00	0,40	1,60
	between the 2nd and 3rd track	18+100-18+364	platform	264,00	0,40	1,60
BANATSKO NOVO SELO	between the 2nd and 3rd track	33+981-34+035	arranged surface	54,00	0,30	0,50
VLADIMIROVAC	between the 1st and 2nd track	45+806-45+906	arranged surface	100,00	0,00	1,30
	between the 2nd and 3rd track	45+806-45+906	arranged surface	100,00	0,00	1,30
ALIBUNAR	between the 1st and 2nd track	53+503-53+603	arranged surface	100,00	0,00	1,30
	between the 2nd and 3rd track	53+503-53+603	arranged surface	100,00	0,00	1,30
BANATSKI KARLOVAC Nikolinci	between the 2nd and 3rd track	NONE				
ULJMA	between the 2nd and 3rd track	NONE				
Vlajkovac	between the 2nd and 3rd track	NONE				
	between the 1st and 2nd track	82+807,5-82+902,5	platform	95,00	0,40	1,60
VRŠAC	between the 2nd and 3rd track	82+807,5-82+902,5	platform	95,00	0,40	1,60
1	.08 (Belgrade Center) - Resnik -				5,10	-,00
	next to 1st track	14+080-14+240	arranged surface	160,00	0,55	4,00
RESNIK	between the 1st and 2nd track	14+080-14+240	platform	160,00	0,35	1,55
	between the 3rd and 4th track	13+943-14+238	platform	295,00	0,55	6,20
BELA REKA	between the 1st and 2nd track	7+538-7+648	platform	110,00	0,35	1,60
Nenadovac	next to railway line - left	12+077-12+127	platform	50,00	0,35	1,60
BARAJEVO	between the 2nd and 3rd track	15+654-15+764	platform	110,00	0,35	1,60
Barajevo Centar	next to railway line - left	17+895-18+003	platform	108,00	0,35	1,60
VELIKI BORAK	between the 1st and 2nd track	23+039-23+151	platform	112,00	0,35	1,60
Leskovac Kolubarski	next to railway line - right	27+720-27+770	platform	50,00	0,35	1,60
STEPOJEVAC	between the 2nd and 3rd track	30+572-30+682	platform	110,00	0,35	1,60



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Service point	Location	km position of the beginning and the end	Platform/arranged		Dimensions	S Width
Service point	Location	of platform	surface	Length	Height (m)	(m)
1	2.	3	4	(m) 5	6	7
1	between the 2nd and 3rd track	37+150-37+300	•	150,00	0,35	1,60
VREOCI	between the 3rd and 4th track	37+150-37+300	platform platform	150,00	0,35	1,60
	between the 1st and 2nd track	45+311-45+462	platform	151,00	0,35	1,60
LAZAREVAC	between the 1st and 2nd track	45+311-45+462	platform	151,00	0,35	1,60
	between the 1st and 2nd track	52+547-52+697	platform	150,00	0,33	1,60
LAJKOVAC	between the 1st and 2nd track	52+527-52+697	platform	170,00	0,40	1,60
	between the 1st and 2nd track	58+899-59+052	platform	153,00	0,35	1,60
SLOVAC	between the 1st and 2nd track	58+899-59+052	platform	153,00	0,35	1,60
Mlađevo	next to railway line - right	63+958-64+035	platform	77,00	0,35	1,60
Miadevo	between the 1st and 2nd track	67+043-67+213	platform	170,00	0,35	1,60
DIVCI	between the 2nd and 3rd track	67+043-67+213	platform	170,00	0,35	1,60
Lukavac Kolubarski	next to railway line - right	69+165-69+265	platform	100,00	0,35	1,60
Iverak	next to railway line - right	72+725-72+825	platform	100,00	0,35	1,60
iverak	next to 1st track		platform		0,35	5,4
VALJEVO	between the 2nd and 3rd track	77+550-77+851 77+562-77+863	platform	301,00 301,00	0,35	7,55
VALJEVSKI GRADAC	next to railway line - right	84+560-84+610	platform	50,00	0,35	1,60
Leskovice	next to railway line - right	91+605-91+655	platform	50,00	0,35	1,60
LASTRA	between the 2nd and 3rd track	93+985-94+131	platform	146,00	0,35	1,60
SAMARI	between the 2nd and 3rd track		platform	,		1,60
SAMARI Drenovački Kik	next to railway line - right	103+118-103+168 107+700-107+750	platform	50,00	0,40 0,40	1,60
	i		-	,		
RAŽANA	between the 3rd and 4th track	111+284-111+430	platform	146,00	0,35	1,60
KOSJERIĆ	between the 3rd and 4th track	118+748-118+948	platform	200,00	0,40	1,60
T 1://	between the 4th and 5th track	118+748-118+948	platform	200,00	0,40	1,60
Tubići	next to railway line - left	123+446-123+496	platform	50,00	0,35	1,60
KALENIĆI	between the 3rd and 4th track	129+772-129+918	platform	146,00	0,35	1,60
Otanj	next to railway line - right	133+600-133+710	platform	110,00	0,40	1,50
Glumač	next to railway line - right	135+807-135+863	platform	56,00	0,40	1,60
POŽEGA	next to 1st track	140+720-140+975	platform	255,00	0,45	10,00
	between the 2nd and 3rd track	146+675-140+984	platform	309,00	0,45	6,20
Rasna	next to railway line - right	145+618-145+650	platform	32,00	0,40	1,00
UZIĆI	between the 1st and 2nd track	149+125-149+255	platform	129,00	0,40	1,60
	between the 2nd and 3rd track	149+255-149+389	platform	134,00	0,40	1,60
Zlakusa	next to railway line - right	151+536-151+566	platform	30,00	0,40	1,60
Bukovička Rampa	next to railway line - right	154+141-154+161	platform	20,00	0,40	1,60
SEVOJNO	between the 1st and 2nd track	156+882-157+082	platform	200,00	0,40	1,60
UŽICE FREIGHT STATION	between the 2nd and 3rd track	161+795-161+995	platform	200,00	0,40	1,60
	between the 1st and 2nd track	161+813-161+953	platform	140,00	0,40	1,60
UŽICE	next to 1st track	163+645-163+900	platform	255,00	0,40	3,00
	between the 2nd and 3rd track	163+626-163+881	platform	255,00	0,60	5,10
STAPARI	between the 1st and 2nd track	170+590-170+710	platform	120,00	0,40	1,60
Ristanovića Polje	next to railway line - left	173+412-173+425	platform	13	0,40	1,60
	next to railway line - right	173+426-173+464	platform	38	0,40	1,60
Tripkova	next to railway line - right	176+045-176+095	platform	50	0,40	1,60
SUŠICA	between the 2nd and 3rd track	178+251-178+371	platform	120,00	0,40	1,60
*	next to 1st track	185+181-185+291	platform	110,00	0,40	5,50
BRANEŠCI	between the 1st and 2nd track	185+181-185+291	platform	110,00	0,40	1,60
	between the 2nd and 3rd track	185+181-185+291	platform	110,00	0,40	1,60
ZLATIBOR	between the 2nd and 3rd track	193+234-193+404	platform	170,00	0,40	1,60
Ribnica Zlatiborska	next to railway line - left	200+350-200+400	platform	50,00	0,40	1,60
JABLANICA	between the 3rd and 4th track	204-405-204+550	platform	145,00	0,40	1,60
Goleš	next to railway line - right	211+590-211+616	platform	26,00	0,40	1,00
ŠTRPCI	between the 2nd and 3rd track	214-755-214-900	platform	145,00	0,40	1,60
Rača	next to railway line - right	219+515-219+536	platform	21,00	0,40	1,00
PRIBOJ	between the 2nd and 3rd track	225+227-225+490	platform	263,00	0,50	5,10
LKIDOJ	between the 6th and 7th track	225+137-225+237	platform	100,00	0,50	3,00
Poljice	next to railway line - right	228+110-228+190	platform	80,00	0,40	1,60
Pribojska Banja	next to railway line - right	232+867-232+899	platform	32,00	0,40	1,00
BISTRICA NA LIMU	between the 2nd and 3rd track	241+208-241+352	platform	144,00	0,40	1,60
Džurovo	next to railway line - right	246+300-246+328	platform	28,00	0,40	1,00
	next to 1st track	252+396-252+705	platform	309,00	0,40	4,60
PRIJEPOLJE	between the 2nd and 3rd track	252+396-252+705	platform	309,00	0,40	7,00
PRIJEPOLJE FREIGHT	between the 2nd and 3rd track	255+789-255+982	platform	187,00	0,35	1,60
	and the state of t	====	F	,	.,	-,



	T		1			
g		km position of the	Platform/arranged		Dimensions	
Service point	Location	beginning and the end	surface	Length	Height	Width
1	2	of platform	4	(m)	(m)	(m)
I CELETION	2	3	4	5	6	7
STATION	between the 3rd and 4th track	255+789-255+982	platform	187,00	0,35	1,60
Velika Župa	next to railway line - right	259+605-259+624	platform	19,00	0,40	1,00
LUČICE	between the 2nd and 3rd track	264+581-264+714	platform	133,00	0,35	1,60
BRODAREVO	between the 2nd and 3rd track	273+255-273+404	platform	149,00	0,30	1,60
VRBNICA	between the 1st and 2nd track	285+205-285+255	platform	50,00	0,30	1,60
	between the 2nd and 3rd track	285+112-285+256	platform	144,00	0,30	1,60
109 La	povo - Kraljevo - Lešak - Kosovo				0.07	
	between the 2nd and 3rd track	109+560-109+680	platform	120,00	0,35	1,60
LAPOVO	between the 3rd and 4th track	109+560-109+680	platform	120,00	0,35	1,60
D. M. ŽD.	next to 1st track	109+460-109+510	platform	50,00	0,35	1,60
BATOČINA	between the 1st and 2nd track	3+374,70-3+421,90	platform	47,20	0,12	1,30
Gradac	left side	8+243,40-8+292,90	platform	49,50	0,30	1,05
BADNJEVAC	between the 2nd and 3rd track	12+264,50-12+311,50	platform	47,00	0,14	1,80
Resnik Kragujevački		NONE				
Milatovac	right side	18+206,90-18+253,70	platform	46,80	0,33	1,10
Cvetojevac	right side	20+381-422,20	platform	41,20	0,25	1,20
JOVANOVAC	between the 2nd and 3rd track	22+308-22+352	platform	44,00	0,22	1,75
KRAGUJEVAC	between the 1st and 2nd track	28+726-28+918,70	platform	192,70	0,24	1,20
RRAGUJEVAC	between the 2nd and 3rd track	28+752-28+907	platform	155,00	0,24	1,80
Zavod	right side	31+280,50-31+288,25	platform	7,75	0,10	0,50
GROŠNICA	between the 1st and 2nd track	34+062,80-34+104,30	platform	41,50	0,22	1,50
DRAGOBRAĆA	between the 1st and 2nd track	39+529-39+565	platform	36,00	0,20	1,20
Vučkovica	right side	44+513-44+538	platform	25,00	0,30	1,20
KNIĆ	between the 1st and 2nd track	47+560-47+607	platform	47,00	0,30	1,40
GRUŽA	between the 1st and 2nd track	53+458-53+505,5	platform	47,50	0,22	1,40
GUBEREVAC	between the 1st and 2nd track	60+567-60+614	platform	47,00	0,20	1,55
Tomića Brdo	right side	64+795-64+822,50	platform	27,50	0,35	1,00
VITKOVAC	between the 1st and 2nd track	66+309-66+353	platform	44,00	0,25	1,25
Milavčići	left side	70+141,80-70+172,80	platform	31,00	0,35	1,40
VITANOVAC	between the 1st and 2nd track	73+904,30-73+948,70	platform	44,40	0,22	1,40
Šumarice	left side	79+111-79+128,4	platform	17,40	0,25	0,50
Sirča	right side	82+006-82+069	platform	63,00	0,25	1,90
Silca	between the 1st and 2nd track	84+649-84+733	platform	84,00	0,33	1,60
KRALJEVO			platform			
MATARUŠKA BANJA	between the 2nd and 3rd track	84+649-84+748	•	99,00	0,33	1,60
		93+895-93+940	platform	45,00	0.20	1,80
Progorelica PANIA	left side	97+352-97+386	platform	34,00	0,25	1,40
BOGUTOVAČKA BANJA	between the 1st and 2nd track	100+868-100+919	platform	51,00	0,22	1,80
DOBRE STRANE		NONE		<b>70</b> 00	0.04	4.50
POLUMIR	between the 1st and 2nd track	118+291-118+344	platform	53,00	0,26	1,50
Pusto Polje	left side	123+555-123+589	platform	34,00	0,25	1,00
UŠĆE	between the 1st and 2nd track	127+223-127+281	platform	58,00	0,34	1,50
Lozno	right side	132+832-132+866	platform	34,00	0,22	0,50
JOŠANIČKA BANJA	between the 1st and 2nd track	136+102-136+152	platform	50,00	0,25	1,45
Piskanja	left side	138+842-138+884	platform	42,00	0,21	1,00
BRVENIK	between the 1st and 2nd track	143+481-143+528	platform	47,00	0,32	1,50
Rvati	left side	148+258-148+304	platform	46,00	0,22	1,00
RAŠKA	between the 1st and 2nd track	152+236-152+353	platform	117,00	0,32	1,80
Kaznovići	left side	157+700-157+740	platform	40,00	0,23	1,00
RUDNICA	between the 1st and 2nd track	161+970-162+022	platform	48,00	0,25	1,55
Donje Jarinje		NONE	-			
Jerina	next to railway line - left	168+865-168+935	arranged surface	70,00	0,20	1,60
	between the 1st and 2nd track	172+294-172+394	platform	100,00	0,35	1,60
LEŠAK	between the 2nd and 3rd track	172+294-172+394	platform	100,00	0,35	1,60
Dren		NONE	F	,	0,00	
LEPOSAVIĆ	between the 1st and 2nd track	182+675-182+775	platform	100,00	0,35	1,60
Pridvorica	Services the 1st and 2st track	NONE	pianoini	100,00	0,00	
Sočanica	next to railway line - left	190+000-190+040	platform	40,00	0,35	1,00
IBARSKA SLATINA	next to fairway fine - left	NONE	Piatrollii	70,00	0,55	1,00
Plandište		NONE				
BANJSKA		NONE				
Valač	between the 1st and 2nd track	208+170-208+230	arranged surface	60.00	0.25	1.00
ZVEČAN	next to 1st track	210+900-211+000	platform	60,00	0,35	1,00
			•	100,00	0,35	1,60
Kosovska Mitrovica Sever	next to railway line - left	213+390-213+440	platform	50,00	0,35	1,60



		km position of the		ī	Dimensions	,		
Service point	Location	beginning and the end	Platform/arranged	Length	Height	Width		
Service point	2000000	of platform	surface	(m)	(m)	(m)		
1	2	3	4	5	6	7		
	110 Subotica - Bo	gojevo - state border - (E	rdut)					
BOGOJEVO		NONE						
SONTA		NONE						
PRIGREVICA	between the 1st and 2nd track	58+619-58+649	platform	30,00	0,30	1,55		
	between the 2nd and 3rd track	58+619-58+649	platform	30,00	0,30	1,57		
BUKOVAČKI SALAŠI		NONE		60.00	0.21	1.61		
	between the 1st and 2nd track	73+417-73+477	platform	60,00	0,31	1,61		
	between the 1st and 2nd track	73+584-73+612	arranged surface	28,00 150,00	0,05 0,05	1,50 1,50		
SOMBOR	between the 1st and 2nd track between the 2nd and 3rd track	73+673-73+823 73+417-73+477	platform	60,00	0,03	1,61		
	between the 2nd and 3rd track	73+584-73+612	arranged surface	28,00	0,05	1,50		
	between the 3rd and 4th track	73+584-73+701	arranged surface	117,00	0,05	1,50		
SVETOZAR MILETIĆ	between the 2nd and 3rd track	83+340-83+397	platform	56,70	0,30	1,68		
ALEKSA ŠANTIĆ	between the 2nd and 3rd track	97+500-97-556	platform	55,61	0,24	1,90		
BAJMOK	between the 2nd and 3rd track	105+138-105+193	platform	55,00	0,23	1,90		
Skenderevo		NONE		,	*,==	-,,,		
TAVANKUT	between the 2nd and 3rd track	etween the 2nd and 3rd track 115+350-115+400 platform 50,00 0,30 1,80						
Ljutovo		NONE						
ŠEBEŠIĆ		NONE						
Subotica predgrađe	next to railway line - left	128+229-128+270	platform	41,00	0,25	1,60		
	between the 1st and 2nd track	176+360-176+414	arranged surface	54,00	0,05	1,70		
	between the 1st and 2nd track	176+414-176+487	platform	73,00	0,25	1,60		
SUBOTICA	between the 1st and 2nd track	176+487-176+838	arranged surface	351,00	0,05	1,70		
	between the 2nd and 3rd track	176+322-176+838	arranged surface	516,00	0,05	1,70		
	between the 3rd and 4th track	176+335-176+573	arranged surface	238,00	0,05	1,70		
257.05.155	111 Belgrade Marshallin	ig Yard "A" – Ostružnica	- Batajnica					
BELGRADE		NONE						
MARSHALLING YARD A		NONE						
OSTRUŽNICA		NONE NONE						
SURČIN	between the 1st and 2nd track	20+510 - 20+768	platform	258,00	0,35	1,90		
	between the 2nd and 3rd track	20+543 - 20+722	platform	179,00	0,35	1,90		
BATAJNICA	between the 3rd and 4th track	20+598 – 20+722	platform	124,00	0,35	1,60		
	between the 4th and 5th track	20+598 – 20+722	platform	124,00	0,35	1,60		
		shalling Yard "B" - Ostru		, , , ,		,		
BELGRADE		NONE						
MARSHALLING YARD B		NONE						
OSTRUŽNICA		NONE						
	de Marshalling Yard,,A" - Open	line junction "B" - Open	line junction "K/K	1" - Resnil	ζ			
BELGRADE		NONE						
MARSHALLING YARD A				1.60.00	0.55	4.00		
DEGNIIZ	next to 1st track	14+080-14+240	arranged surface	160,00	0,55	4,00		
RESNIK	between the 1st and 2nd track	14+080-14+240	platform	160,00	0,35	1,55		
	between the 3rd and 4th track  114 Ostružnica - Open line ju	13+943-14+238	platform	295,00	0,55	6,20		
OSTRUŽNICA	114 Ostruzinca - Open inie ju	NONE						
	ade Marshalling Yard,,B" - Ope			- (Resnik)				
BELGRADE		•	<b>4</b>	(21001111)				
MARSHALLING YARD B		NONE						
	116 (Belgrade Marshalling Yar	rd,,B") - Open line junction	on "R" - Rakovica					
	next to 2nd track - right	8+460-8+786	platform	326,00	0,55	6,10		
RAKOVICA	between the 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10		
	between the 5th and 6th track	8+545-8+865	platform	320,00	0,55	6,20		
	117 Belgrade Marshalling Ya	rd,,A" - Open line junctio	n "T" - Rakovica					
BELGRADE		NONE						
MARSHALLING YARD A				22 4 6 6	0.55	6.10		
DAMOUNC!	next to 2nd track - right	8+460-8+786	platform	326,00	0,55	6,10		
RAKOVICA	between the 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10		
	between the 5th and 6th track  118 Belgrade Marshalling Yar	8+545-8+865	platform T" (Polyovice)	320,00	0,55	6,20		
BELGRADE	110 Deigrade Marsnalling Yar	•						
MARSHALLING YARD B		NONE						
	one of Open line junction "K/K1	": (Onen line junction B	(a) - Open line iunci	tion K" -	Onen line	innetion		
117 connecting track in the Z	one of open fine junction "IX/IXI	Open fine junction 91	, open inc junc	,,11	Spen mie	janenon		



		km position of the		Ī	Dimension	S
Service point	Location	beginning and the end	Platform/arranged	Length	Height	Width
•		of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
		K1" - (Jajinci)				
120 (Open line junction Pan	čevački most)-Open line junction	n Karađorđev park-Open	line junction Dedir	ije-(Open l	line juncti	on "G")
	between the tracks (next to left Banat track)	1+123-1+215	platform	92,00	0,55	7,00
Karađorđev park	between the tracks					
	(next to right Banat track)	1+222-1+314	platform	92,00	0,55	7,00
		nđija - Golubinci				
INĐIJA	between the 1st and 2nd track	42+840-42+970	platform	130,00	0,40	1,60
11.03.071	between the 2nd and 3rd track	42+783-42+928	platform	145,00	0,40	1,60
GOLUBINCI	between the 2nd and 3rd track	45+767,00-45+914,00	platform	147,00	0,35	1,60
	between the 3rd and 4th track  122 Novi Sad- Novi Sad Mars	45+767,00-45+914,00	platform	147,00	0,35	1,60
	next to 11th track	77+836-77+950	platform	114,00	0,40	3,00
	between the 11th and 10th track	77+822-77+950	platform	128,00	0,40	3,72
	between the 10th and 1st track	77+835-77+887	platform	52,00	0,40	4,20
NOVI SAD	next to 1st track	77+835-78+250	platform	415,00	0,40	4,20-8,90
	between the 2nd and 4th track	77+843-78+181	platform	338,00	0,40	8,75
	between the 12thand 1st track	78+104-78+250	platform	146,00	0,40	8,90
	between the 14 <sup>th</sup> and 13 <sup>th</sup> track	78+104-78+249	platform	145,00	0,40	6,46
NOVI SAD		NONE				
MARSHALLING YARD						
123 by-pass track	of Mala Krsna station: (Kolari) -			[028 - (Osi]	paonica)	
	124 Open line junction Lapovo			(0.00	0.25	1.60
Lapovo Varoš	next to right track next to left track	106+250-106+310 106+250-106+310	platform platform	60,00	0,35	1,60
LAPOVO MARSHALLING	next to left track	NONE	ріацопп	60,00	0,55	1,60
YARD		NONE				
11110	between the 2nd and 3rd track	109+560-109+680	platform	120,00	0,35	1,60
LAPOVO	between the 3 <sup>rd</sup> and 4 <sup>th</sup> track	109+560-109+680	platform	120,00	0,35	1,60
	next to 1st track	109+460-109+510	platform	50,00	0,35	1,60
	125 Trupale - Niš	Marshalling Yard - Meðu				
TRUPALE	between the 2nd and 3rd track	234+893-234+994	platform	101,00	0,40	1,60
	between the 4th and 5th track	234+893-234+994	platform	101,00	0,40	1,60
NIŠ MARSHALLING	next to 1a. track	238+216-238+289	platform	73,00	0,40	2,20
YARD MEĐUROVO		NONE				
WEDUKOVO	126 Cryeni K	rst - Niš Marshalling yard	<u> </u>			
CRVENI KRST	between the 2nd and 3rd track	240+842-240+994	platform	152,00	1,60	0,40
NIŠ MARSHALLING	next to 1a. track	238+216-238+289	platform	73,00	0,40	2,20
YARD			1		,	ŕ
	127 Niš - Open line jun	ction Most - (Niš Marshal				
	next to 1st track	243+410-243+763	platform	353,00	0,40	5,80
×	between the 2nd and 3rd track	243+410-243+813	platform	403,00	0,40	8,00
NIŠ	between the 4th and 5th track	243+410-243+771	platform	361,00	0,40	8,00
	between the 1b. and 1st track next to 1a. track	243+643-243+763	platform platform	120,00	0,40	5,80
128 Connecting to	rack of Niš station: (Crveni Krst)	243+660-243+763 - separation switch No3		103,00 <b>No4 - (Ć</b> el		1,60
120 Connecting to		AL RAILWAY LINES	separation Switch	1107 - (CEI	C IXUIAJ	
		orgoš - state border - (Rös	zke)			
	between the 1st and 2nd track	176+360-176+414	arranged surface	54,00	0,05	1,70
	between the 1st and 2nd track	176+414-176+487	platform	73,00	0,25	1,60
SUBOTICA	between the 1st and 2nd track	176+487-176+838	arranged surface	351,00	0,05	1,70
	between the 2nd and 3rd track	176+322-176+838	arranged surface	516,00	0,05	1,70
	between the 3rd and 4th track	176+335-176+573	arranged surface	238,00	0,05	1,70
JAVNA SKLADIŠTA	next to railway line - left	2+275-2+385	platform	110,00	0,55	3,00
PALIĆ	next to 2 <sup>nd</sup> track (right)	7+575-7+685	platform	110,00	0,55	3,00
** ** *	next to 4th track	7+575-7+685	platform	110,00	0,55	8,00
Hajdukovo	next to railway line - right	12+002-12+112	platform	110,00	0,55	3,00
BAČKI VINOGRADI	next to 2 <sup>nd</sup> track (right)	15+360-15+470	platform	110,00	0,55	3,00
HORGOŠ	next to 2 <sup>nd</sup> track (right) next to 5th track	23+995-24+105 23+995-24+105	platform platform	110,00	0,55 0,55	4,00
	202 Pančevo Main St Zrenj			110,00	0,55	+,00
PANČEVO MAIN	between the 1st and 2nd track	15+913-16+033	platform	120	0,40	1,60
	In 15t and Die truck	10.910 10.000	Familia		5,.0	1,00



		km position of the		Ī	Dimension	15
Service point	Location	beginning and the end	Platform/arranged	Length	Height	Width
service point	Location	of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
STATION	between the 1st and 2nd track	16+090-16+210	platform	120	0,40	1,60
STATION	between the 2nd and 3rd track	15+913-16+210	platform	297	0,40	1,60
	between the 3rd and 4th track	15+987-16+137	platform	150	0,40	1,60
JABUKA	between the 3rd and 4th track	NONE	piationii	130	0,40	1,00
KAČAREVO	between the 1st and 2nd track	26+784-26+834	platform	50	1.6	0,35
	between the 1st and 2nd track		piationii	30	1,6	0,33
CREPAJA		NONE				
DEBELJAČA	1 1 1 1 1 1 1 1	NONE	NONE			
KOVAČICA	between the 1st and 2nd track	NONE	NONE			
UZDIN		NONE				
TOMAŠEVAC	between the 1st and 2nd track	61+920-61+970	platform	50	1,6	0,35
	between the 2nd and 3rd track	61+920-61+970	platform	50	1,6	0,35
ORLOVAT STAJALIŠTE	between the 1st and 2nd track	64+025-64+075	platform	50	1,6	0,35
LUKIĆEVO		NONE				
ZRENJANIN FABRIKA		NONE				_
	next to 1st track	88+705-88+776	platform	71	1,3	0,55
ZRENJANIN	between the 1st and 2nd track		NONE			
	between the 2nd and 3rd track		NONE			
ELEMIR		NONE				
MELENCI	between the 2nd and 3rd track		NONE			
KUMANE		NONE				
NOVI BEČEJ		NONE				
BANATSKO MILOŠEVO						
POLJE		NONE				
	next to 1st track		NONE			
BANATSKO MILOŠEVO	between the 1st and 2nd track		NONE			
Bin willbirg willbest ve	between the 2nd and 3rd track		NONE			
Derić	Setween the 2nd and 3rd track	NONE	TOTAL			
	next to 1st track	160+030-160+166	platform	136,00	0,19	3,30-4,40
KIKINDA	between the 1st and 2nd track	160+064-160+190	arranged surface	126,00	0.00	1,50
BANATSKO VELIKO	between the 1st and 2nd track	100+004-100+170	arranged surrace	120,00	0,00	1,50
SELO		NONE				
	rad (km 7+041) – Belgrade Duna	oy - Onen line junction Pa	nčovački most – TR	AFFIC SI	ICDEND	FD
203 Beigrade Donji G	204 Topčider Putnička (km 4+			MITTO DO	OSI EAU	<u> </u>
		Miloševo - Senta - Subotic				
	next to 1st track	villosevo - Senta - Subotic	NONE			
BANATSKO MILOŠEVO	between the 1st and 2nd track		NONE			
BANATSKO MILOSEVO						
D- Y	between the 2nd and 3rd track		NONE			
Bočar	between the 1st and 2nd track	NONE	NONE			
Ester						
Later	1 / 1 1 1 2 1 1	NONE	NONE			
PADEJ	between the 1st and 2nd track	NONE	NONE			
PADEJ	between the 2nd and 3rd track	NONE	NONE			
	between the 2nd and 3rd track between the 1st and 2nd track	NUNE	NONE NONE			
PADEJ Ostojićevo	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track	NONE	NONE NONE NONE			
PADEJ	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track	NONE	NONE NONE NONE NONE			
PADEJ Ostojićevo ČOKA	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track		NONE NONE NONE NONE NONE			
PADEJ Ostojićevo ČOKA SENTA	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track	102+905-102+950	NONE NONE NONE NONE	45,00	0,17	1,90
PADEJ Ostojićevo ČOKA SENTA Gornji Breg	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track		NONE NONE NONE NONE NONE	45,00	0,17	1,90
PADEJ Ostojićevo ČOKA SENTA	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track	102+905-102+950 NONE NONE	NONE NONE NONE NONE NONE	45,00	0,17	1,90
PADEJ Ostojićevo ČOKA SENTA Gornji Breg	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track	102+905-102+950 NONE	NONE NONE NONE NONE NONE	45,00	0,17	1,90
PADEJ Ostojićevo ČOKA SENTA Gornji Breg Bogaraš	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track	102+905-102+950 NONE NONE	NONE NONE NONE NONE NONE	45,00	0,17	1,90
PADEJ Ostojićevo ČOKA SENTA Gornji Breg Bogaraš Doline	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track	102+905-102+950 NONE NONE NONE	NONE NONE NONE NONE NONE	45,00	0,17	1,90
PADEJ Ostojićevo ČOKA SENTA Gornji Breg Bogaraš Doline OROM	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track	102+905-102+950 NONE NONE NONE NONE	NONE NONE NONE NONE NONE	45,00	0,17	1,90
PADEJ Ostojićevo  ČOKA  SENTA Gornji Breg Bogaraš Doline OROM Gabrić	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track	102+905-102+950 NONE NONE NONE NONE NONE NONE	NONE NONE NONE NONE NONE platform		0,17	
PADEJ Ostojićevo  ČOKA  SENTA Gornji Breg Bogaraš Doline OROM Gabrić	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track between the 1st and 2nd track between the 1st and 2nd track	102+905-102+950 NONE NONE NONE NONE NONE NONE 176+360-176+414	NONE NONE NONE NONE NONE platform  arranged surface	54,00	0,05	1,70
PADEJ Ostojićevo  ČOKA  SENTA Gornji Breg Bogaraš Doline OROM Gabrić Bikovo	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track between the 1st and 2nd track between the 1st and 2nd track	102+905-102+950 NONE NONE NONE NONE NONE NONE 176+360-176+414 176+414-176+487	NONE NONE NONE NONE NONE platform  arranged surface platform	54,00 73,00	0,05	1,70 1,60
PADEJ Ostojićevo  ČOKA  SENTA Gornji Breg Bogaraš Doline OROM Gabrić	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track between the 1st and 2nd track between the 1st and 2nd track between the 1st and 2nd track between the 1st and 2nd track between the 1st and 2nd track	102+905-102+950 NONE NONE NONE NONE NONE NONE 176+360-176+414 176+414-176+487 176+487-176+838	NONE NONE NONE NONE NONE platform  arranged surface platform arranged surface	54,00 73,00 351,00	0,05 0,25 0,05	1,70 1,60 1,70
PADEJ Ostojićevo  ČOKA  SENTA Gornji Breg Bogaraš Doline OROM Gabrić Bikovo	between the 2nd and 3rd track between the 1st and 2nd track between the 1st and 2nd track between the 2nd and 3rd track between the 3rd and 4th track between the 1st and 2nd track between the 1st and 2nd track	102+905-102+950 NONE NONE NONE NONE NONE NONE 176+360-176+414 176+414-176+487	NONE NONE NONE NONE NONE platform  arranged surface platform	54,00 73,00	0,05	1,70 1,60

206 Pančevo Varoš - Open line junction 2a - (Jaбука)								
PANČEVO VAROŠ	next to 1st track	18+131-18+223	station plateau	92,00	0,40	1,60		
	between the 1st and 2nd track	18+105-18+345	platform	240,00	0,40	1,60		
	between the 2nd and 3rd track	18+100-18+364	platform	264,00	0,40	1,60		
207 Novi Sad- Odžaci - Bogojevo								



Service point		km position of the		Г	Dimensions	2
•	Location	beginning and the end	Platform/arranged	Length	Height	Width
		of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
	next to 11th track	77+836-77+950	platform	114,00	0,40	3,00
	between the 11th and 10th track	77+822-77+950	platform	128,00	0,40	3,72
	between the 10th and 1st track	77+835-77+887	platform	52,00	0,40	4,20
NOVI SAD	next to 1st track	77+835-78+250	platform	415,00	0,40	4,20-8,90
	between the 2nd and 4th track	77+843-78+181	platform	338,00	0,40	8,75
	between the 12 <sup>th</sup> and 1 <sup>st</sup> track	78+104-78+250	platform	146,00	0,40	8,90
	Between 14th and 13th track	78+104-78+249	platform	145,00	0,40	6,46
Veternik		NONE				
FUTOG		NONE				
PETROVAC - GLOŽAN		NONE				
Bački Maglić		NONE				
GAJDOBRA		NONE				
Parage		NONE				
RATKOVO		NONE				
ODŽACI		NONE				
Odžaci - Kalvarija		NONE				
KARAVUKOVO		NONE				
Bogojevo Selo		NONE				
BOGOJEVO		NONE				
	NOVI SAD) - Open line junction		nčevi- Orlovat Staja	lište		
RIMSKI ŠANČEVI		NONE				
KAĆ		NONE				
Budisava		NONE				
ŠAJKAŠ		NONE				
Vilovo-Gardinovci		NONE				
Lok		NONE				
TITEL		NONE				
Donji Titel		NONE				
Knićanin		NONE				
PERLEZ		NONE				
FARKAŽDIN		NONE				
ORLOVAT		NONE				
ORLOVAT STAJALIŠTE	between the 1st and 2nd track	64+025-64+075	platform	50,00	1,6	0,35
	rshalling yard separation switch	No7 - Novi Sad Lokotere	etna - Open line jun	ction SAJI	<u> </u>	
NOVI		NONE				
SADMARSHALLING		NONE				
YARD	210 0-14 0	. P	·			
ODLOVAT	210 Oriovat - Ope	n line junction 1a - (Lukio	cevo)			
ORLOVAT	Ruma - Šabac - Open line juncti	NONE				
211	Kuma - Sabac - Open ime juncu	on Donja Borma - state b		oi)		
	hatrriagn the 2nd and 2nd two als	64 - 722 64 - 072	· · · · · · · · · · · · · · · · · · ·		0.25	1.60
DIMA	between the 2nd and 3rd track	64+733-64+973	platform	240,00	0,35	1,60
RUMA	between the 3rd and 4th track	64+733-64+973	platform platform	240,00 240,00	0,35	1,60
	between the 3rd and 4th track between the 4th and 5th track	64+733-64+973 65+821-64+937	platform platform platform	240,00 240,00 116,00	0,35 0,35	1,60 1,60
BUĐANOVCI	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00	platform platform platform platform	240,00 240,00 116,00 31,00	0,35 0,35 0,35	1,60 1,60 1,60
BUĐANOVCI Nikinci	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70	platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00	0,35 0,35 0,35 0,35	1,60 1,60 1,60 1,60
BUĐANOVCI Nikinci PLATIČEVO	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00	platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00	0,35 0,35 0,35 0,35 0,35	1,60 1,60 1,60 1,60 1,60
BUĐANOVCI Nikinci PLATIČEVO Klenak	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15	platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00	0,35 0,35 0,35 0,35 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00	platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40	1,60 1,60 1,60 1,60 1,60
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70	platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40	1,60 1,60 1,60 1,60 1,60 1,60
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI Podrinsko Novo Selo	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE NONE	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00 22,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI Podrinsko Novo Selo LEŠNICA	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left between the 1st and 2nd track between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE NONE NONE NONE NONE NON	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00 22,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00 1,60
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI Podrinsko Novo Selo LEŠNICA Jadarska Straža	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE NONE NONE NONE 34+900,00-35+025,00 38+860,00-38+940,00	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00 22,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI Podrinsko Novo Selo LEŠNICA Jadarska Straža Lipnica	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left between the 1st and 2nd track between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE NONE NONE NONE NONE NON	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00 22,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00 1,60
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI Podrinsko Novo Selo LEŠNICA Jadarska Straža Lipnica LOZNICA	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left between the 1st and 2nd track between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE NONE NONE NONE NONE NON	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00 22,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00 1,60
BUĐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI Podrinsko Novo Selo LEŠNICA Jadarska Straža Lipnica LOZNICA Loznica Fabrika	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - left between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE NONE NONE NONE NONE NON	platform platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 54,00 50,00 22,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00 1,60 0,55 1,60
BUÐANOVCI Nikinci PLATIČEVO Klenak ŠABAC Majur ŠTITAR Dublje Mačvansko PETLOVAČA Ribari PRNJAVOR MAČVANSKI Podrinsko Novo Selo LEŠNICA Jadarska Straža Lipnica LOZNICA	between the 3rd and 4th track between the 4th and 5th track between the 1st and 2nd track next to railway line - left between the 1st and 2nd track next to railway line - right between the 1st and 2nd track next to railway line - left between the 1st and 2nd track between the 1st and 2nd track	64+733-64+973 65+821-64+937 11+324,00-11+355,00 16+657,70-16+688,70 21+293,00-21+323,00 28+873,15-28+904,15 32+684,00-32+738,00 3+975-4+025 7+713,70-7+735,70 NONE NONE NONE NONE NONE NONE NONE NON	platform platform platform platform platform platform platform platform platform platform platform platform	240,00 240,00 116,00 31,00 31,00 30,00 31,00 54,00 50,00 22,00	0,35 0,35 0,35 0,35 0,35 0,35 0,40 0,35 0,35	1,60 1,60 1,60 1,60 1,60 1,60 1,00 1,60



		km position of the		Ī	Dimension	S
Service point	Location	beginning and the end	Platform/arranged surface	Length	Height	Width
		of platform		(m)	(m)	(m)
1	2	3	4	5	6	7
Donja Borina	next to railway line - right	68+650-68+750	platform	100,00	0,35	1,60
	212 (Platičevo) - Open line j	unction 1 - Open line junc ić - Kraljevo - Požega	ction 3 - (Stitar)			
	between the 2nd and 3rd track	176+222-176+425	platform	203,00	0,28	6,40
STALAĆ	between the 4th and 5th track	176+222-176+425	platform	203,00	0,28	6,40
STREETE	between the 6th and 7th track	176+270-176+378	platform	108,00	0,28	5,30
Mrzenica	right side	3+868-3+910	platform	42,00	0,35	2,00
Makrešane		NONE		·		ĺ
DEDINA		NONE				
KRUŠEVAC	between the 2nd and 3rd track	14+451-14+626	platform	175,00	0,35	2,84
	between the 3 <sup>rd</sup> and 4 <sup>th</sup> track	14+490,3-14+610,3	platform	120,00	0,35	1,60
<u>Čitluk</u> KOŠEVI		NONE				
Globoder		NONE NONE				
STOPANJA		NONE				
Donja Počekovina		NONE				
POČEKOVINA		NONE				
Trstenički Odžaci		NONE				
TRSTENIK	between the 2nd and 3rd track	42+400-42+500	platform	102,00	0,35	1,80
VRNJAČKA BANJA	between the 2nd and 3rd track	49+136-49+241	platform	105,00	0,35	1,60
Lipova		NONE				
Tominac		NONE				
PODUNAVCI		NONE				
Vraneši Vrba		NONE NONE				
RATINA		NONE				
Sirča	left side	68+880,70-68+940,40	platform	59,70	0,35	1,60
	between the 1st and 2nd track	84+641,9-84+774,9	platform	133	0,30	1,60
KRALJEVO	between the 2nd and 3rd track	84+644,4-84+773	platform	128,6	0,30	1,60
ADRANI	between the 2nd and 3rd track	78+622,20-78+657,20	platform	35,00	0,35	1,60
Mrsać	left side	81+513-81+553	platform	40,00	0,33	0,50
SAMAILA		NONE	·			
Goričani	left side	88+610-88+658	platform	48.00	0.37	1,00
MRŠINCI	between the 2nd and 3rd track	92+241-92+279	platform	38.00	0.35	1,00
Kukići		NONE				
ZABLAĆE Baluga		NONE NONE				
Daiuga	left from 1st track	105+500-105+590	platform	90,00	0,44	6,50
ČAČAK	between the 1st and 2nd track	105+494-105+628	platform	134,00	0,37	1,60
0.10.11	between the 2nd and 3rd track	105+494-105+615	platform	121,00	0,38	1,60
Trbušani	next to railway line - left	110+240-110+263	platform	23,00	0,40	1,60
PRIJEVOR	between the 2nd and 3rd track	112+820-113+070	platform	250,00	0,40	1,60
	next to railway line - right	120+450-120+550	platform	100,00	0,40	1,60
OVČAR BANJA	between the 1st and 2nd track	120+450-120+652	platform	202,00	0,35	1,60
Jelen Do	next to railway line - right	127+180-127+230	platform	50,00	0,40	1,60
DRAGAČEVO	between the 2nd and 3rd track	128+295-128+405	platform	110,00	0,40	1,60
Gugalj		NONE				
Boračko		NONE	1		1 0 1	
POŽEGA	next to 1st track	140+720-140+975	platform	255,00 309,00	0,45 0,45	10,00
214	between the 2nd and 3rd track	140+675-140+984	platform			6,20
	of Kraljevo station: (Mataruška I track of Požega station: (Uzićo) - s					ш)
213 connecting	216 Smederevo – Open line			ODT - (DIA)	546670)	
(IMEDEDELIA)	between the 1st and 2nd track	0+000-0+103	platform	103,00	0,40	1,60
SMEDEREVO	between the 2nd and 3rd track	0+000-0+105	platform	105,00	0,40	1,60
Godomin	next to railway line - left	3+303-3+350	platform	47,00	0,40	1,60
RADINAC	next to 1st track	6+650-6+800	platform	150,00	0,50	2,20
	between the 2nd and 3rd track	6+650-6+800	platform	150,00	0,60	6,20
Vranovo	next to railway line - left	9+475-9+537	platform	62,00	0,40	1,90
	between the 1st and 2nd track	69+030-69+175	platform	145,00	0,40	1,90
MALA KRSNA	between the 2nd and 3rd track	69+030-69+175	platform	145,00	0,40	1,9
MALA KRSNA	between the 3rd and 4th track	69+042-69+184	platform	142,00	0,40	1,90
	between the 4th and 5th track	69+080-69+230	platform	150,00	0,40	1,90



		km position of the	D1 . C	I	Dimension	S
Service point	Location	beginning and the end	Platform/arranged surface	Length	Height	Width
		of platform		(m)	(m)	(m)
1	2	3	4	5	6	7
	<u> </u>	ction Jezava – Smederevo Open line junction "2" - (V				
	between the 1st and 2nd track	69+030-69+175	platform	145,00	0,40	1,90
	between the 2nd and 3rd track	69+030-69+175	platform	145,00	0,40	1,90
MALA KRSNA	between the 3rd and 4th track	69+042-69+184	platform	142,00	0,40	1,90
	between the 4th and 5th track	69+080-69+230	platform	150,00	0,40	1,90
Ljubičevski most		NONE	1			
POŽAREVAC	between the 1st and 2nd track	87+703-87+826	platform	123,00	0,40	1,80
	between the 2nd and 3rd track	87+712-87+816	platform	104,00	0,40	1,60
Jugovićevo Sopot Požarevački	next to track - left next to track -right	89+078-89+094 90+082-90+107	platform platform	16,00 24,00	0,50	1,00 1,60
BUBUŠINAC-BRATINAC	next to track -right	NONE	piationii	24,00	0,40	1,00
Bare - Kasidol		NONE				
STIG	between the 1st and 2nd track	102+693-102+764	platform	71,00	0,40	1,60
Majilovac		NONE				
SIRAKOVO	between the 1st and 2nd track	109+026-109+079	platform	53,00	0,40	1,60
LJUBINJE	between the 1st and 2nd track	116+381-116+444	platform	63,00	0,40	1,60
Češljeva Bara RABROVO-KLENJE	next to railway line - left between the 1st and 2nd track	122+138-122+200	platform	62,00	0,40	1,60
Mustapić	between the 1st and 2nd track	126+007-126+067 NONE	platform	60,00	0,40	1,60
Mišljenovac		NONE				
ZVIŽD		NONE				
Kučevska Turija		NONE				
KAONA		NONE				
KUČEVO		NONE				
Neresnica		NONE				
Neresnica (tov.)		NONE				
Voluja	1 2 1 12 14 1	NONE	1.46	<i>c</i> 1.00	0.40	1.60
BRODICA Bosiljkovac	between the 2nd and 3rd track	164+515-164+576 NONE	platform	61,00	0,40	1,60
Blagojev Kamen		NONE				
MAJDANPEK	between the 2nd and 3rd track	178+769-178+920	platform	151,00	0,35	1,60
Debeli Lug	next to railway line - left	181+300-181+318	platform	18,00	0,35	1,60
LESKOVO	between the 2nd and 3rd track	187+660-187+722	platform	62,00	0,35	1,60
Jasikovo	next to railway line - left	191+810-191+890	arranged surface	80,00	0,09	1,60
Vlaole Selo	next to railway line - right	194+740-194+780	arranged surface	40,00	0,20	1,60
VLAOLE	between the 2nd and 3rd track	197+163-197+224	platform	61,00	0,35	1,60
Gornjane	next to railway line - right	200+288-200+386	arranged surface	98,00	0,35	1,60
CEROVO Kriveljski most	next to railway line - right	NONE 207+905-207+995	arranged surface	90,00	0,35	1,60
Kriveljski potok	next to railway line - left	211+873-211+913	arranged surface	40,00	0,35	1,60
MALI KRIVELJ	between the 1st and 2nd track	215+171-215+206	platform	35,00	0,35	1,60
Brezonik	next to railway line - left	217+490-217+540	platform	50,00	0,35	1,60
BOR	next to 1st track	221+369-221+452	platform	83,00	0,35	8,00
	between the 2nd and 3rd track	221+352-221+452	platform	100,00	0,35	1,60
BOR FREIGHT STATION	between the 2nd and 3rd track	224+320-224+375	platform	55,00	0,35	1,60
BORSKA SLATINA		NONE				
ZAGRAĐE	hotwoon the 1st and 2nd tra-1-	NONE	nlotform	90.00	0.25	1 40
RGOTINA	between the 1st and 2nd track	244+658-244+738 rst - Zaječar – Prahovo Pr	platform	80,00	0,35	1,60
CRVENI KRST	between the 2nd and 3rd track	240+842-240+994	platform	152,00	0,40	1,60
Pantelej	next to railway line - left	7+455-7+507	platform	52,00	0,35	1,60
MATEJEVAC	between the 1st and 2nd track	12+370-12+395	platform	25,00	0,35	1,50
Gornja Vrežina		NONE			· · · · · · · · · · · · · · · · · · ·	
Jasenovik		NONE				
GRAMADA	between the 1st and 2nd track	30+232-30+282	platform	50,00	0,35	1,60
Hadžićevo		NONE	1.6	150.00	0.27	1.10
SVRLJIG	between the 1st and 2nd track	39+925-40+075	platform	150,00	0,35	1,60
Niševac	next to railway line - right	46+002-46+018	platform	16,00	0,35	1,60
PALILULA Svrljiški Miljkovac	between the 1st and 2nd track	49+320-49+355 NONE	platform	35,00	0,35	1,60
PODVIS	between the 1st and 2nd track	60+853-60+903	platform	50,00	0,35	1,60
Rgošte	Secretario 15t and 2nd track	NONE	Pauronn	20,00	0,55	1,00
1.500.0	i .	110111				



		km position of the		ī	Dimension	<u> </u>
Service point	Location	beginning and the end	Platform/arranged	Length	Height	Width
Z S S F S S S		of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
KNJAŽEVAC	between the 1st and 2nd track	68+338-68+392	platform	54,00	0,35	1,60
Gornje Zuniče	next to railway line - right	72+080-72+142	platform	62,00	0,35	1,60
Donje Zuniče	next to railway line - right	74+988-75+076	platform	88,00	0,35	1,60
MINIĆEVO	between the 1st and 2nd track	81+830-81+930	platform	100,00	0,35	1,60
	between the 2nd and 3rd track	81+930-81+975	platform	45,00	0,35	1,60
Selačka Reka	next to railway line - right	84+450-84+500	arranged surface	50,00	0,35	1,60
Mali Izvor	next to railway line - right	88+180-88+230	platform	50,00	0,35	1,60
Vratarnica	between the 1st and 2nd track	96+048-96+098	platform	50,00	0,35	1,60
GRLJAN	between the 1st and 2nd track	102+955-103+105	platform	150,00	0,35	1,60
Timok	next to railway line - left between the 1st and 2nd track	107+320-107+380	arranged surface	60,00 198,00	0,35 0,35	1,60 1,60
ZAJEČAR	between the 2nd and 3rd track	111+622-111+820 111+662-111+815	platform platform	153,00	0,35	1,60
ZAJECAK	between the 3rd and 4th track	111+651-111+803	platform	152,00	0,35	1,60
VRAŽOGRNAC	between the 1st and 2nd track	118+760-118+910	platform	150,00	0,35	1,60
TRNAVAC	between the 1st and 2nd track	124+593-124+668	platform	75,00	0,35	1,60
Čokonjar	next to railway line - left	128+500-128+550	platform	50,00	0,35	1,60
Sokolovica	next to railway line - right	131+100-131+125	platform	25,00	0,35	1,60
TABAKOVAC	between the 1st and 2nd track	136+170-136+223	platform	53,00	0,35	1,60
Tabakovačka reka	next to railway line - right	138+740-138+790	platform	50,00	0,35	1,60
BRUSNIK	between the 1st and 2nd track	145+616-145+696	platform	80,00	0,35	1,60
Tamnič	next to railway line - right	148+420-148+480	platform	60,00	0,35	1,60
Crnomasnica	next to railway line - right	151+323-151+364	platform	41,00	0,35	1,60
Rajac	next to railway line - right	154+430-154+505	platform	75,00	0,35	1,60
ROGLJEVO	between the 1st and 2nd track	156+795-156+875	platform	80,00	0,35	1,60
Veljkovo	NONE					
Mokranja		NONE				
Kobišnica NEGOTIN	hatryaan the 2nd and 2nd tocals	NONE 174+049-174+199	platform	150.00	0,35	1.60
PRAHOVO	between the 2nd and 3rd track between the 2nd and 3rd track	181+974-182+054	platform	150,00 80,00	0,35	1,60 1,60
PRAHOVO PRISTANIŠTE	between the 2nd and 3rd track	NONE	plationii	00,00	0,55	1,00
	220 (Rgotina) - Open line junct	ion "3" - Open line juncti	on "1" - (Trnavac)			
		n line junction "1" - Kurs				
KURŠUMLIJA		NONE	•			
	222 Kı	ıršumlija - Kastrat				
KURŠUMLIJA		NONE				
		strat - Merdare - Kosovo		100	1 0 40 1	4.40
DOLJEVAC	between the 1st and 2nd track	261+419-261+527	platform	108	0,40	1,60
ă ··	between the 2nd and 3rd track	261+419-261+526	platform	107	0,40	1,60
Šajinovac		NONE				
Toplički Badnjevac  Jasenica		NONE NONE				
ŽITORAĐA		NONE NONE				
Žitorađa Centar	next to railway line - left	10+925-10+977	platform	52,00	0,40	1,60
Rečica	none to fairway fine fort	NONE	•	52,00	0,40	1,00
Lukomir		NONE				
Podina		NONE				
Babin Potok	next to railway line - right	18+726-18+774	platform	48,00	0,40	1,60
PROKUPLJE	between the 1st and 2nd track	22+257-22+370	platform	113,00	0,40	1,60
Gornja Draganja	next to railway line - left	24+990-25+027	platform	37,00	0,40	1,60
Toplička Mala Plana		NONE				
Bresničići		NONE				
BELOLJIN		NONE				
Toplica Milan		NONE				
Pločnik		NONE				
Barlovo		NONE				
Novoselske Livade Pepeljevac		NONE NONE				
Rasputnica Kastrat						
		NONE				
		NONE NONE				
Visoka		NONE				
Visoka Ljuša		NONE NONE				
Visoka Ljuša Rudare Dešiška		NONE				
Visoka Ljuša Rudare		NONE NONE NONE				



	1	km position of the		1	Dimension	18
Service point	Location	beginning and the end	Platform/arranged	Length	Height	Width
Partition Partition		of platform	surface	(m)	(m)	(m)
1	2	3	4	5	6	7
Kosanica		NONE				
Kosančić Ivan		NONE				
Vasiljevac		NONE				
Merdare		NONE				
1violetti e	224 Kosovo	Polje - Metohija – Peć**	'			
		t - Open line junction 1 -	(Dranica) **			
		Vrbas - Sombor	(Dienica)			
	between the 2nd and 3rd track	116+702-116+770,3	platform	68,00	0,35	1,40
VRBAS	between the 3rd and 4th track	116+702-116+770,3	platform	68,00	0,35	1,40
KULA	between the 2nd and 3rd track	47+626-47+667	platform	41,00	0,35	1,52
CRVENKA	between the 1st and 2nd track	54+956-54+986	platform	30,00	0,25	1,56
SIVAC	between the 1st and 2nd track	NONE	•	30,00	0,13	1,50
Novi Sivac	1 1 1 1 1 1 1	NONE		20.00	0.15	1.20
KLJAJIĆEVO * .:	between the 1st and 2nd track	75+417-75+456	platform	39,00	0,15	1,38
Čonoplja	between the 1st and 2nd track	79+692-79+722	platform	30,00	0,15	1,31
	between the 1st and 2nd track	73+417-73+477	platform	60,00	0,31	1,61
	between the 1st and 2nd track	73+584-73+612	arranged surface	28,00	0,05	1,50
SOMBOR	between the 1st and 2nd track	73+673-73+823	arranged surface	150,00	0,05	1,50
SOMDOK	between the 2nd and 3rd track	73+417-73+477	platform	60,00	0,38	1,61
	between the 2nd and 3rd track	73+584-73+612	arranged surface	28,00	0,05	1,50
	between the 3rd and 4th track	73+584-73+701	arranged surface	117,00	0,05	1,50
		, , , , , , , , , , , , , , , , , , , ,		,	-,	
	LOCAL	L RAILWAY LINES				
	301 Subotica - Subotica Fabrika		OUT OF SERVICE			
		ica - Subotica Bolnica	De l'Ol BERVICE			
	between the 1st and 2nd track	176+360-176+414	arranged surface	54,00	0.05	1,70
	between the 1st and 2nd track	176+414-176+487	platform	73,00	0,25	1,60
SUBOTICA	between the 1st and 2nd track	176+487-176+838	arranged surface	351,00	0,05	1,70
SUBOTICA	between the 2nd and 3rd track	176+322-176+838	arranged surface	516,00	0,05	1,70
			•			
	between the 3rd and 4th track	176+335-176+573	arranged surface	238,00	0,05	1,70
		1+042) - Novi Sad Ložioi	_	11100	T 0.40	1 2 00
	next to 11th track	77+836-77+950	platform	114,00	0,40	3,00
	between the 11th and 10th	77+822-77+950	platform	128,00	0,40	3,72
	track		*		, ,	
NOVI SAD	between the 10th and 1st track	77+835-77+887	platform	52,00	0,40	4,20
NOVIBRID	next to 1st track	77+835-78+250	platform	415,00	0,40	4,20-8,
	between the 2nd and 4th track	77+843-78+181	platform	338,00	0,40	8,75
	између 12. и 1. колосека	78+104-78+250	platform	146,00	0,40	8,90
	између 14. и 13. колосека	78+104-78+249	platform	145,00	0,40	6,46
	304 Podbara - Open line jun	ction "3" - Open line june	ction "2" - (Kać)			
30	05 (Rimski Šančevi) - Open line ju	ınction "1" - Open line ju	nction "3" - (Podba	ra)		
	306 Ri	mski Šančevi- Bečej				
RIMSKI ŠANČEVI		NONE				
Bački Jarak		NONE				
TEMERIN		NONE				
GOSPOĐINCI		NONE				
ŽABALJ		NONE				
ČURUG		NONE				
Bačko Gradište		NONE				
Bečej predgrađe		NONE				
BEČEJ		NONE				
DECEI	308 (Brasina) - Open line					
ZVORNIK GRAD	Joo (Di asma) - Open fille	<u>junction Donja Borina – z</u> NONE				
L VOININ UKAD	200 Danžava 1	NONE Varoš - Pančevo Vojlovic				
				02.00	0.40	1.60
DANČENO MAROŠ	next to 1st track	18+131-18+223	station plateau	92,00	0,40	1,60
PANČEVO VAROŠ	between the 1st and 2nd track	18+105-18+345	platform	240,00	0,40	1,60
	between the 2nd and 3rd track	18+100-18+364	platform	264,00	0,40	1,60
Pančevo Strelište	next to railway line - left	1+290-1+400	platform	110,00	0,40	1,60
PANČEVO VOJLOVICA	between the 3rd and 4th track	2+632-2+852	platform	220,00	0,40	1,60
	next to 4th track	2+645-2+965	platform	220,00	0,40	1,60
310 Connecti	ng track of Senta station: (Čoka)	- separation switch No 22	- separation switch	No23 - (O	rom)	
	311 Markovac – Svi	ilajnac – Despotovac – (R	esavica)			
MARKOVAC	between the 2nd and 3rd track	100+400-100+450	platform	50	0.4	1.6



km position of the Platform/arranged Dimensions										
Service point	Location	beginning and the end	surface	Length	Height	Width				
		of platform	surface	(m)	(m)	(m)				
1	2	3	4	5	6	7				
	between the 3rd and 4th track	100+350-100+452	platform	102	0.4	1.6				
	between the 4th and 5th track	100+350-100+448	platform	92	0.4	1.6				
	312 M	etohija - Prizren**								
	313 V	ršac – Bela Crkva								
VRŠAC	between the 1st and 2nd track	82+807,5-82+902,5	platform	95,00	0,40	1,60				
VKSAC	between the 2nd and 3rd track	82+807,5-82+902,5	platform	95,00	0,40	1,60				
Potporanj		NONE								
Straža		NONE								
JASENOVO		NONE								
Crvena Crkva NONE										
	between the 1st and 2nd					1.60				
BELA CRKVA	track	119+052-119+082	platform	30,00	0,30	1,60				
	SHI	UNTING LINES								
	401 Vrš	ac - Vršac Vašarište								
VRŠAC	between the 1st and 2nd track	82+807,5-82+902,5	platform	95,00	0,40	1,60				
VRSAC	between the 2nd and 3rd track	82+807,5-87+902,5	platform	95,00	0,40	1,60				
	402 Kikinda – Metano	olsko sirćetni kompleks (k	m 6+413)							
KIKINDA	next to 1st track	160+030-160+166	platform	136,00	0,19	3,30-4,40				
KIKINDA	between the 1st and 2nd track	160+064-160+190	arranged surface	126,00	0,00	1,50				
		ka Obala – TRAFFIC SU								
		opovac - TRAFFIC SUSP	ENDED							
	405 Sur	čin – Jakovo-Bečmen								
SURČIN		NONE								
		ča Nova - state border - (E				T				
,	between the 1st and 2nd track	116+300-116+490	arranged surface	190,00	0,10	2,50				
ŠID	between the 2nd and 3rd track	116+300-116+665	platform.	365,00	0,45	1,60				
			platform	377,00	0,45	1,60				
Adaševci	NONE									
MOROVIĆ	between the 1st and 2nd track	12+360-12+390	platform 30,00		0,35	1,60				
VIŠNJIĆEVO	between the 1st and 2nd track	19+633-19+655	platform	22,00	22,00 0,35 1,60					
Rasputnica Rača NONE										
SREMSKA RAČA NOVA	between the 1st and 2nd track	24+169-24+205	platform	36,00	0,35	1,60				
		Skela - TRAFFIC SUSPI	ENDED							
		ta – Apatin Fabrika	DELIDED							
	409 Bačka Palanka – G	Sajdobra - TRAFFIC SUS	PENDED							

Note: In column one halts are marked with small letters and all other service points with capital letters.



<sup>\*</sup> not intended for handling of passengers
\*\* The lines on the territory of Kosovo and Metohija are temporarily under the supervision of UNMIK, according to the Temporary Agreement between ŽTP Belgrade and UNMIK railways, dated May 31, 2002 (records No 300/2002 - 153 dated May 31, 2002).

### Appendix 9 Method for calculation of electricity consumption for train traction

Compensation for calculation of electricity consumption for train traction is determined as follows:

$$Csv/brtkm = \frac{MES.RAČ-TROŠ.INF}{BRTKMter + K*BRTKMput}$$

#### where:

**Csv/brtkm** – monthly rate of electric energy spent for train traction, expressed in RSD per grosstonne km.

MES.RAČ – monthly bill amount for high voltage electric energy issued by electric energy supplier. TROŠ.INF – monthly expenses for electric energy for train traction need used by "Infrastruktura

**BRTKMter** – total (all railway undertakings) monthly freight transport expressed in gross-tonne km.

K – coefficient by means of which is taken into consideration that passenger trains consume more electric energy per gross-tonne km than freight trains.

**BRTKMput** – total (all railway undertakings) monthly passenger transport expressed in gross-tonne km.

The compensation amount per individual RU is calculated by multiplication of monthly rate of electrical energy for train traction with gross-tonne kilometers realized by the respective RU (BRTKMter for freight service, and K\* BRTKMput for passenger service):

Ntern = Csv/btkm \* BRTKMtern for freight service, i.e Nputn = Csv/btkm \* K \* BRTKMputn for passenger service,

### where:

**Ntern** – compensation paid by x RU in freight service for the consumption of electrical traction, expressed in RSD.

**BRTKMtern** – gross-tonne kilometres realized by x RU in freight service in the given month.

**Nputn** - compensation paid by x RU in passenger service for the consumption of electrical traction, expressed in RSD.

**BRTKMputn** - gross-tonne kilometres realized by x RU in passenger service in the given month.

The compensation is paid to Infrastructure Manager on a monthly basis, based on the issued bill.

K coefficient values are as follows:

železnice Srbije"

month	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
K	2	1,8	1,7	1,5	1,35	1,4	1,4	1,4	1,35	1,5	1,7	1,9



## Appendix 10 Railway node boundaries

Node	Border station (service point) of the node	Chainage of the station (service point)	Entry signal from the direction	Railway line	Chainage of mandatory signal	Distance [m]
D	Batajnica	19+031 <sup>P</sup> / 20+616 <sup>T</sup>	Nova Pazova	101 Belgrade Center - Stara Pazova - Šid - state border - (Tovarnik)	19+960 <sup>P</sup> / 21+396 <sup>T</sup>	929 <sup>P</sup> / 780 <sup>T</sup>
	Ovča	12+555 / 12+653	Pančevo Main St.	107 Belgrade Denter - Pančevo Main St Vršac - state border - (Stamora Moravita)	13+550 / 13+647	995
BEOGRAD	Jajinci	10+988	Beli Potok (Mala Krsna)	103 (Belgrade Center) - Rakovica - Jajinci - Mala Krsna - Velika Plana	12+045	1057
BEO	Resnik	14+059	Pinosava (Mladenovac)	102 Belgrade Center - Open line junction "G" - Rakovica - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce)	14+848	789
	Resnik	0+000	Bela Reka (Valjevo)	108 (Belgrade Center) - Resnik - Požega - Vrbnica - state border - (Bijelo Polje)	0+825	825
	Naumovićevo	166+519	Žednik (Vrbas)	105 (Belgrade Center) - Stara Pazova - Novi Sad - Subotica - state border - (Kelebia)	165+640	879
SUBOTICA	Palić	7+658	Bački Vinogradi (Horgoš)	201 Subotica - Horgoš - state border - (Roszke)	8+614	956
JBOJ	Subotica	76+739	Orom (Senta)	205 Banatsko Miloševo - Senta - Subotica	74+990	1751
S	Subotica Freight St.	75+972	Orom (Senta)	205 Banatsko Miloševo - Senta - Subotica	74+990	982
	Šebešić	123+761	Tavankut (Sombor)	110 Subotica - Bogojevo - state border - (Erdut)	122+915	846
	Novi Sad	77+101	Rumenka (Vrbas)	105 (Belgrade Center) - Stara Pazova - Novi Sad - Subotica - state border - (Kelebia)	78+552	1542
	Sajlovo rasp. i odj.	0+000	Futog (Bogojevo)	207 Novi Sad - Odžaci - Bogojevo	0+280	280
NOVISAD	Sajlovo rasp. i odj.	0+000	Rimski Šančevi (Orlovat)	208 (Novi Sad) - Open line junction Sajlovo - Rimski Šančevi - Orlovat Stajalište	4+093	1370
NC	Sajlovo rasp. i odj.	0+000	Rumenka (Vrbas)	Sajlovo - Rumenka	1+295 / 1+248	1287
	Petrovaradin	70+870	Sremski Karlovci (Inđija)	105 (Belgrade Center) – Stara Pazova – Novi Sad – Subotica – state border – (Kelebia)	69+870	1000
ovo	Lapovo Varoš	106+302	Markovac (Velika Plana)	102 Belgrade Center - Open line junction "G" - Rakovica - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce)	105+710	592
LAPOV	Lapovo	109+597	Bagrdan (Stalać)	102 Belgrade Center - Open line junction "G" - Rakovica - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce)	110+540	943
	Batočina	3+405	Badnjevac (Kragujevac)	109 Lapovo - Kraljevo - Lešak - Kosovo Polje - Đeneral Janković - state border - (Volkovo)	4+419	1014
	Trupale	234+939	Grejač (Stalać)	102 Belgrade Center - Open line junction "G" - Rakovica - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce)	233+934	1005
NIŠ	Crveni Krst	0+000	Matejevac (Zaječar)	219 (Niš) - Crveni krst - Zaječar - Prahovo Pristanište	(0+957=3+455) 3+736	1238
	Međurovo	249+462	Doljevac	102 Belgrade Center - Open line junction "G" - Rakovica - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce)	250+323	861
	Ćele Kula	5+461	Niška Banja (Pirot)	106 Niš - Dimitrovgrad - state border - (Dragoman)	6+320	859
VO	Pančevo Main St.	16+069	Ovča (Beograd)	107 Belgrade Center - Pančevo Main St Vršac - state border - (Stamora Moravita)	14+878	1191
PANČEVO	Pančevo varoš	18+206	Banatsko Novo Selo (Vršac)	107 Belgrade Center - Pančevo Main St Vršac - state border - (Stamora Moravita)	19+242	1036
PA	Open line junction 2a senger traffic (fro	17+659	Jabuka (Zrenjanin)	202 Pančevo Main St Zrenjanin - Kikinda - state border - (Jimbolia)	18+160	501

P – passenger traffic (from the direction of Novi Sad) F- freight traffic (mixed, from the direction of Šid)

