#### INFRASTRUCTURE OF SERBIAN RAILWAYS JSC

# NETWORK STATEMENT 2019

Adopted by the Meeting of ,,Infrastructure of Serbian Railways " JSC No: 5/2018-148-62 dated January 9, 2018

Effective as of Decembre 9, 2018 Applicable to 2018/2019 Timetable На основу члана 27. став 3. Закона о железници ("Службени гласник РС", бр. 45/13 и 91/15) 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 и 44/15),

Влада доноси

#### Р Е Ш Е Њ Е О ДАВАЊУ САГЛАСНОСТИ НА ВИСИНУ НАКНАДА ЗА КОРИШЋЕЊЕ ЈАВНЕ ЖЕЛЕЗНИЧКЕ ИНФРАСТРУКТУРЕ

I

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II

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Новак Нелић

потпредседник владе

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#### Amendments, corrections and interpretations

No	Subject	Determined by the act no.	Valid as of
1.	The first Amendments	The Decision of the Meeting of "Infrastructure of Serbian Railways" JSC no: 5/2018-171-72 from August 15, 2018	August 15, 2018
2.	The second Amendments	The Decision of the Meeting of "Infrastructure of Serbian Railways" JSC no: 5/2019-205-87 from 11 February 2019	February 12, 2019
3.	The third Amendments	The Decision of the Meeting of "Infrastructure of Serbian Railways" JSC no: 5/2019-206-89 from February 22, 2019	February 22, 2019
4.	The forth Amendments	The Decision of the Meeting of "Infrastructure of Serbian Railways" JSC no: 5/2019-210-90 from March 20, 2019	March 20, 2019

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#### 1. GENERAL INFORMATION

#### 1.1 Introduction

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

Railway infrastructure is a good intended for use by the general public, 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, telecommunication, signalling & interlocking, electric traction, power supply and other trackside installations and devices, track equipment, service point buildings, and other facilities on the trackside land used for regulation of railway traffic and maintenance of railway infrastructure, terminals, trackside land and the airspace above the track, 12 m high, i.e. 14m high at over 220kV overhead power lines, measured from top of rail.

The Network Statement is a document that contains all information in accordance with the Law on Railways of the Republic of Serbia ("Official Gazette of the RS" No. 41/18), and the Rules on Content and Form of Network Statement ("Official Gazette of the RS" No. 97/2013).

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, traffic operation, terms and conditions for access to railway infrastructure and infrastructure charging scheme.

#### 1.1.1. Background Information on Infrastructure Manager

Joint stock company for public railway infrastructure management "Infrastructure of Serbian Railways", Belgrade (hereinafter: Company) 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

Short Company's 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 include: Service activities in land transport. The activity includes the management of public railway infrastructure in part of maintenance of public railway infrastructure, organization and control of railway traffic, the provision of access and use of public railway infrastructure to all interested railway undertakings, as well as to legal entities and natural persons performing transport for their own purposes, and protection of public railway infrastructure. The company performs activities on general interest in accordance with the law. The company performs activities and services in internal and foreign trade in accordance with the law.

Responsible persons: Acting General Manager PhD Miroljub Jevtić Tel.: +381 11 3618 330 kabinet.infrastruktura@srbrail.rs



#### 1.1.2. Organisational Chart of Infrastructure Manager

Organizational chart for Joint Stock Company for public railway infrastructure management "Infrastructure of Serbian Railway ", Belgrade is based on 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 Company), in order to perfom activities of management of public railway infrastructure is organized according group of operations, as follow:

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

Company operation are being performed through its departments, centers, and sections, technical-technological departments, stations and operational sections and other lower organizational forms.

The management of public railway infrastructure includes the maintenance of public railway infrastructure, organization and control of railway traffic, the provison and access and the use of public railway infrastructure to all interested railway undetakings, as well as legal and natural persons performing transport for their own purposes and protection of public railway infrastructure, as well as performing the function of employer on reconstruction of public railway infrastructure.

The following operations are performed in the Company- traffic, civil engineering and electrotecnical operations, development and investment operations, projects management and common affairs: finance, plan and analyses, reconstruction and cooperation with international financial institutions, accounting, public procurements and central warehouses operations, human resources management, safety and health at work, operations related to property and inventory, operations of implementation and development of information technologies, internal safety, international affairs and ethic's operations. Beside that in order to achieve business, professional and administrative functions operations which are organizationally related to the General Manager's Office are also performed.

Operations referred to in the previous paragraph, are performed within:

- 1. Traffic department,
- 2. Railway infrastructure access department,
- 3. Centre for auxiliary 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 plan and analyses,
- 10. Centre for restructuring,
- 11. Procurement and central warehouses department.
- 12. Investment department,
- 13. Development department,
- 14. Centre for Management of the Project Belgrade Subotica State Border High –Speed Railway
  - 15. Human resources and general affairs department,
  - 16. IT department,
  - 17. Centre for security,
  - 18. Real estate department,
  - 19. Inventory department,
  - 20. Centre for international affairs,
  - 21. Ethic's office,
  - 22. Company's Management Secretariat,
  - 23. Legal department,



- 24. Centre for internal audit.
- 25. Centre for internal control
- 26. Centre for Security Management System (SMS)

The Organization chart of "Infrastructure of Serbian Railways" JSC is set forth in Annex 1.

#### 1.1.3. Contact details

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

Acting General Manager PhD Miroljub Jevtić Tel.: +381 11 3618 330

kabinet.infrastruktura@srbrail.rs

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Railway infrastructure access department

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Civil engineering department

Nemanjina 6 11000 Belgrade

Tel.: +381 11 3618 248 Fax: +381 11 3616 874 infr.sektorzagp@srbrail.rs

Electrical engineering department

Nemanjina 6 11000 Belgrade Tel.: +381 11 3618 241

Fax: +381 11 3618 130

etp@infrazs.rs

Centre for auxiliary train operations Nemanjina 6 11000 Belgrade

Tel.: +381 11 3620 899 Fax: +381 11 3620 899 direktor.tkp@infrazs.rs

#### 1.2 Objective of the Network Statement

The Network Statement contains information on characteristics of the public railway infrastructure available to railway undertakings and information defining the access conditions. Sections of this Network Statement define:

- characteristics of the infrastructure, available to railway undertakings, and the conditions for access to respective parts of the railway infrastructure (tracks);
- principles of charges and tariffs, the data necessary for the calculation of charges, and the formulas for the calculation of charges;
- capacity allocation principles and criteria, containing general characteristics of the infrastructure available
  to railway undertakings and all restrictions with respect to its use, including possible requirements



regarding the capacity maintenance and also the special procedures and terms related to capacity allocation:

- capacity allocation specification, particularly:
  - procedures to be followed by the applicant requesting capacity allocation from the Infrastructure Manager,
  - requirements to be met by applicants,
  - schedule of applications submission and capacity allocation process,
  - principles of coordination process,
  - procedures and criteria applied in case of conflicting applications for particular parts of the infrastructure.
  - detailed restrictions in use of the infrastructure,
  - other conditions taking into account the previous capacity level over the course of setting the allocation process priorities;
  - measures subject to ad-hoc procedure.

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 decision on its adoption will be published in the "Official Journal of ZS".

#### 1.3 Legal Framework

Operation of infrastructure and traffic on the network managed by "Infrastructure of Serbian Railways" JSC is regulated by:

- regulations of the Republic of Serbia,
- acts of Infrastructure Manager "Infrastructure of Serbian Railways" JSC,
- acts and technological procedures of the railway undertakings falling within the scope indicated in the above legal regulation.

#### 1.3.1 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);
- Law on interoperability of railway system ("Official Gazette of the RS", no. 41/18);
- Law on safety in railway traffic ("Official Gazette of the RS", no. 41/18")
- Rules on the Content and Form of Network Statement ("Official Gazette of the RS", no. 97/13);
- Regulation on Classification of Railway Lines ("Official Gazette of the RS", no. 115/13);
- Rules on Railway Infrastructure Elements ("Official Gazette of the RS", no.10/14);
- Rules on Timetable ("Official Gazette of the RS", nos 39/14, 36/17);
- 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 Time Schedule for Railway Infrastructure Capacity Allocation ("Official Gazette of the RS", no. 140/14);
- Law on Railway Transport Agreements ("Official Gazette of the RS", no. 38/15);
- 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 programmed 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 trading ("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),
- Rules on elements of the contract on the use of railway infrastructure ("Official Gazette of the RS", no. 8/2019);



- Rules on transport of exceptional consignments ("Official Gazette of the RS", no. 6/17);

#### 1.3.2 International Regulations

When using the allocated train path, the railway undertaking must abide by all legal norms contained in the sources of international law, as well as in national laws and bylaws.

#### 1.3.3 Acts of the Infrastructure Manager

Internal regulations (acts) and technological procedures of relevance for the present document are listed in the Annex 2.

#### 1.4 Legal Status

#### 1.4.1 General conditions

Network Statement is based on the legal framework defined in section 1.3. In case of ambiguity or legal proceedings, the relevant provisions of legal regulations of the Republic of Serbia will apply. The Network Statement is a document containing the information intended for specific users and its contents are not legally binding.

#### 1.4.2 Liability

"Infrastructure of Serbian Railways" JSC (hereinafter: IŽS) is liable for the accuracy of information provided in the present Network Statement.

#### 1.4.3 Appeals Procedure

Appeals procedure in respect of the Network Statement, and to other acts of the IM relating to the path allocation procedure and use of railway infrastructure, is regulated by the Law on Railways.

The function of the regulatory body for the railway sector is performed by the Directorate for Railways (hereinafter: Directorate) as a separate organization, which runs the railway-specific state administration affairs as determined by the Law on Railways and the law governing the railway safety and interoperability.

The scope of the Directorate for Railways has been defined in Articles 118-129 of the Law on Railways ("Official Gazette of the RS" no. 41/2018) 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:

- activities for regulation of railway services market;
- licensing of railway undertakings;
- passenger rights;
- safety in railway traffic and interoperability of railway systems;
- cableway;
- realization of international cooperation within its competence;
- performs other tasks in terms of this law and other laws regulating the area of safety in railway transport, interoperability of railway systems and cableways for transport.

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

As a regulatory body, the Directorate deliberates on the complaints lodged by applicants for train path allocation, especially taking into account possible unfair treatment or discrimination by the infrastructure manager or railway undertakings, in connection with:

- (1) Network statement,
- (2) the criteria set 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 he is or may be obliged to pay,
- (6) information about 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 and appeal against it may be lodged with the Administrative Court within 30 days of its receipt.

#### 1.5 Structure of Network Statement

The Network Statement has been drawn up pursuant to provisions of the Rules on the content and form of the network statement ("Official Gazette of the RS" No. 97/2013), and in accordance with the general structure for network statements of the European Railway Association (RailNetEurope association), by which the most of infrastructure managers in Europe are being governed during the preparation of network statement.

The Network Statement makes information available to prospective and existing railway undertakings and is in accordance with the harmonized format of other infrastructure managers' network statements.

The Network Statement is divided in the following way:

- 1. General Information contain the objective of issuance of the Network Statement, legal provisions on railway infrastructure and transport operations on railway infrastructure;
- 2. Conditions for access to and use of railway infrastructure provides specification of conditions to be met by a railway undertaking before gaining access to railway infrastructure,
- 3. Overview of transport and technical characteristics of the available railway infrastructure and restrictions on its use –contains the description of the network managed by "Infrastructure of Serbian Railways" JSC;
- 4. Types of services provides specification of services provided by "Infrastructure of Serbian Railways" JSC,
- 5. Principles, priorities and criteria for infrastructure capacity allocation provides specification of capacity allocation procedure and allocation conditions,
- 6. Types of services provides specification of services provided by "Infrastructure of Serbian Railways" JSC,
- 7. Principles for collection of charges and service rates, as well as for charge levels with the manner of their calculation providing the specification of methodology for calculation of the railway infrastructure access charges and for other services provided by "Infrastructure of Serbian Railways" JSC on the network.

#### 1.6 Effectiveness of and Amendments to Network Statement

#### 1.6.1 Validity Period of Network Statement

This Network Statement shall be valid during the timetable validity period, from December 9, 2018 to December 14, 2019.

The Network Statement shall be published not later than 4 months prior to the commencement of deadline for submission of applications for path allocation and shall remain valid during the entire timetable validity period.

#### **1.6.2 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 on the "Infrastructure of Serbian Railways" JSC website <a href="www.infrazs.rs">www.infrazs.rs</a>, and both the amended segment of the Network Statement and the entire amended and updated Network Statement will be published.

#### 1.7 Publishing, Distribution and Availability of the Network Statement

The Network Statement will be published on the "Infrastructure of Serbian Railways" JSC website (<a href="www.infrazs.rs">www.infrazs.rs</a>), both in Serbian and English languages, and in the "Official Journal of ZS".

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 form or e-mail it.

#### 1.8 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

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#### 1.9 Rail Freight Corridors

Pan-European Corridor X stretching from Salzburg in Austria to Thessaloniki in Greece goes through the infrastructure network of "Infrastructure of Serbian Railways" JSC (Appendix 3.1.). 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 Sid to Presevo:

- Belgrade Sid State border,
- Belgrade Mladenovac Nis,
- (Belgrade) Rakovica Jajinci Mala Krsna Velika Plana,
- Nis Presevo State border.

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

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

"Infrastructure of Serbian Railways" JSC in cooperation with Ministry of transport, construction and infrastructure participates in the initiative for forming and inclusion of new RFC 10 Alpine –West Balkan into the network of railway corridors in accordance with the Regulation 913/2010/EU.

#### 1.10 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 is 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. Since 2005, RNE has taken over the full responsibility for preparation of the international Timetable and for the support of its activities; it operates with information systems: collection of charges CIS (Charging Information System), for coordination of paths PCS (Path Coordination System), information about trains TIS (Train Information System).

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.

#### 1.10.1 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 RNE. As regards the international path allocation applications, the users only need to contact one of these OSSs, who 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 RNE;
- process the applications for international path allocation within 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", 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 <a href="https://www.railneteurope.com">www.railneteurope.com</a>.

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

#### 1.11 Glossary

### Public railway infrastructure

means the entire railway infrastructure which constitutes the network being managed by infrastructure manager, including railway lines and secondary tracks (industrial railway line and industry tracks) being connected to the network:

#### Infrastructure Manager

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

#### Railway Undertaking

is a public enterprise or other legal entity, registered for the main activity of provision of freight/passengers transport services and to whom the license was issued, with an obligation to provide train traction or that only provide train traction; Railway undertaking is also an public enterprise or other legal entity that provide railway transport for its own purposes and to whom the license for transport for its own purposes was issued;

#### Transport License

is a document by which a relevant licensing authority confirms the capacity of public enterprise or other legal entity that is 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 natural persons or legal entities, such as competent authorities, consignors, forwarding agents or combined transport operators, with commercial interest of provision of public service or commercial interest for allocation of railway infrastructure capacity;

#### Ad hoc request

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

#### Network

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

#### Path

means the capacity of railway infrastructure necessary for transport of two trains between two places during a certain period;



means a formal document of the public railway infrastructure manager defining the schedule of operation for passenger and freight trains as well as trains

operating for own purposes on the public railway infrastructure of the

infrastructure manager;

Infrastructure capacity means a possible number of train paths for timetabling on particular part of

railway infrastructure over a given period of time;

Congested means a section of railway infrastructure for which infrastructure capacity demand cannot be completely satisfied during certain time periods, even after

different infrastructure capacity requests for have been coordinated;

**Path allocation** means allocation of public railway infrastructure by the infrastructure manager;

Access right means the right of a railway undertaking to use the railway infrastructure;

Coordination means a process whereby the infrastructure manager and applicants make an

adjustment of individual requests for path allocation;

means an evidence that railway undertaking has established safety management system and that he has met all requirements set out in technical specifications of interoperability, national safety regulations and other relevant regulations in

order to control risks and safe railway traffic operations on network;

Competent institution, Relevant authority

Relevant authority (body)

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

Relevant Railway

Authority

Safety Certificate

means a body authorised to act regarding administrative issues in the railway sector of the Republic of Serbia (Directorate for Railways or the Ministry of

Construction, Transportation and Infrastructure, as the case may be).

is entity responsible for managing one or more service facilities for providing *facility* one or more services to railway undertakings (basic, additional and/or

Service

**Operator** 

one or more services to railway undertakings (basic, additional and/or accompanying), including managing of railway infrastructure which forms part

of service facility.

Information about

service facility

is a document containg detialed information necessary for access to a service facility and services (basic, additional and accompanying) with reference to performance of railway transport provided by 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, Transportation and Infrastructure of the Republic of Serbia

15

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

IZS "Infrastructure of Serbian Railways" JSC

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



Top of rail TOR

RS Law on Transport of Dangerous Goods ("Official Gazette of the RS" no. 106/2016, 83/2018, 95/2018 (other law), 10/2019 (other law))

LTDG



## 2. CONDITIONS FOR ACCESS TO AND USE OF RAILWAY INFRASTRUCTURE

#### 2.1 Introduction

Within corporate and financial restructuring aimed at institutional and corporate improvements, the main activities of IZS in respect of access to railway infrastructure are the following:

- development and functioning of administration, and functioning of path allocation procedures,
- provision of services and information (to railway undertakings) related to train paths.

#### 2.2 General access requirements

A railway undertaking can provide transport services on IZS 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 of the RS and the Rules on the requirements for issuance of and the content of certificate on safety for carriage in railway transport.

#### 2.2.1 Requirements for the submission of requests for train path allocation

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.

#### 2.2.2 Entities permitted to provide railway transport services

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 requiremements 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.

#### 2.2.3 Transport License

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,



- б) financial capability,
- в) proficiency and
- r) 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' soffice tel. (011) 361 68 66 fax (011) 361 83 46 e-mail: administration@raildir.gov.rs

web page: www.raildir.gov.rs

#### 2.2.4 Safety Certificates

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 identitification 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: administration@raildir.gov.rs

web page: www.raildir.gov.rs

#### 2.2.5 Cover for Civil Liability (Insurance)

On the day of commencement of the transport activities on the railway infrastructure, the railway undertaking is obliged to conclude an insurance contract, covering potential damage arising from transport operation, and it has to remain insured over the entire period of transport operation on the infrastructure. The ability to compensate damages that may arise during railway transport operations and provision of guarantee for covering the damage in accordance with the law and other regulations shall be one of the conditions for obtaining a transport license.

#### 2.3 Submission of Path Allocation Requests

Prior to applying for a train path, the railway undertaking must fulfil the requirements set forth in clause 2.2. For applying for train path, please refer to Chapter 4 hereof.

#### 2.4 General Terms and Conditions of Business

#### 2.4.1 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 framework agreement shall not contain a detailed train path, but it shall satisfy legitimate commercial needs of the applicant and be concluded, as a rule, for five years.

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.

#### 2.4.2 Contract for Use of Public Railway Infrastructure

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 use of infrastructure are concluded no later than 2 (two) months 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.

#### 2.5 Operating Rules

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.

The list of applicable regulations and instructions related to operating rules is given in a separate annex, which constitutes an integral part of this document.



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

#### 2.6 Transport of Special Loads

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. IZS 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).

IZS 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 IZS. 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 3616 814 sektor.sp@srbrail.rs

#### 2.7 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).

#### 2.8 Rolling Stock Acceptance Procedure

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 IZS 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.



#### 2.9 Acceptance Procedure for Railway Undertaking's staff

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. OVERVIEW OF OPERATIONAL AND TECHNICAL CHARACTERISTICS OF THE AVAILABLE RAILWAY INFRASTRUCTURE AND RESTRICTIONS TO ITS USE

#### 3.1 Introduction

The purpose of this section is to provide the information on the railway infrastructure owned by the Republic of Serbia and managed by IZS, 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 IZS network can be found on the website <a href="https://www.infrazs.rs">www.infrazs.rs</a>.

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.

#### 3.2 Network Size

The total structural length of the standard-gauge lines on the territory of "Infrastructure of Serbian Railways" JSC network amounts 3735,8 km, out of which 3441,1 km of single-track and 294,7 km of double-track lines. Out from the mentioned length, 1759,1 km of the main tracks and 1976,7 km of other tracks. Totalling of km of 1278,4 km of open track have been electrified, together with the main through tracks (984,0 km of single-track and 294,4 km of double-track lines).

The total length of tracks on electrified open tracks and the main running tracks is 2.263 km out of which the length of electrified open tracks and running tracks 1.546 km. All above data relate to standard-gauge 1435 mm tracks. Detailed information is given in Appendix 6.

Besides that, "Infrastructure of Serbian Railways" JSC is also managing with museum-tourist railway line - "Shargan Eight" - which is 22, 5 km long and whereof track gauge is 760 mm.

#### 3.2.1 Network Connections with Neighbouring Infrastructure Managers

In terms of ownership and management of the railway network, there is only one railway network in the Republic of Serbia, and this is the state-owned network, managed by IZS. Therefore, the term "border" also means a state border and represents one of the borders with the neighbouring 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 & Herzegovina.

The IZS railway network borders with the neighbouring railway networks are the following border stations: Subotica, Horgos, Presevo, Djeneral Jankovic, Vrbnica, Bogojevo, Sid, Brasina, Kikinda, Vrsac and Dimitrovgrad.

At crossing the state borders, the track gauge remains unchanged. The type of traction is changed only at the border crossing with Bulgaria, in the station Dimitrovgrad on the railway line Nis- Dimitrovgrad- State border

For more detailed information please refer to Table 1. The data given therein relate to the railway lines of foreign Infrastructure Managers.

Table no. 1. Border crossings, border railway lines, and stations at which traffic is handed over

No	Inter-state railway border crossings	Dondon mailway lines	Border stations	Stations where traffic is handed over		
		Border railway lines		Name	Passenger	Freight
1	Serbia/Croatia	Sid (IZS)-Tovarnik (HŽ)	Sid Tovarnik	Sid	X	X
		Bogojevo (IZS)-Erdut (HŽI)	Bogojevo Erdut	Erdut	X	X
2	Serbia/Hungary	Subotica (IZS)- Kelebia (MAV Zrt)	Subotica Kelebia	Subotica	X	X
		Horgos (IZS)- Roszke (MAV Zrt)	Horgos Roszke	1)	X	



3	Serbia/Romania	Vrsac (IZS)-Stamora Moravita (CFR SA)	Vrsac Stamora Moravita	Vrsac	X	X
		Kikinda (IZS)-	Kikinda	Kikinda		X
		Jimbolia (CFR SA)	Jimbolia	Jimbolia	X	
4	L Serbia/Bulgaria	Dimitrovrad (IZS)- Dragoman (BDZ)	Dimitrovgr ad Dragoman	Dimitrovgr ad	X	X
	Serbia/ North Macedonia	Presevo (IZS)-	Presevo/			
5		` ′	Ristovac Tabanovci	Tabanovci	X	
		Djeneral Jankovic (IZS)-Volkovo (MZ)		2)		
6	Serbia/Montenegr	Vrbnica (IZS) -Bijelo	Vrbnica/Prije	Prijepolje freight.3). 3)		X
0	0		polje ter. Bijelo Polje	Belo Polje	X	
7	Serbia/Bosnia & Herzegovina	Brasina (IZS)-Zvornik Novi (ZRS)	Brasina Zvornik Novi	Zvornik Novi <sup>3)</sup> / Brasina		X

(The names of stations in neighbouring countries are in given in their original form, as recorded in official timetables.)

- 1) Trains crossing at this border crossing are not planned. .
- 2) Under temporary control of UNMIK Railways
- 3) For railway undertakings "Combined Transport"d.o.o. and "NCL neo cargo logistic" doo

Within the national network, the public railway infrastructure managed by IZS is connected with other railway infrastructures in the Republic of Serbia. The sidings of Thermal Power Plant Obrenovac, REIK Kolubara, Smederevo Ironworks and REIK Bor are connected to the national IZS network. These sidings are used for transport of goods for own needs and they do not belong to the national railway network

#### 3.2.2 Other infomation

For other information on the railway infrastructure managed by IZS, but not included and presented in this document, please contact IZS on the following address:

"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

#### 3.3 Description of railway network

#### 3.3.1 Geographic data

General network information are given in Table no. 2.

Table no 2. Structural lenght of the lines within the network

Total network length	3 735,8 km			
Single-track lines	3 441,1 km			
Double track lines	294,7 km			
Narrow-gauge lines	22,5 km*			
Non-electrified lines	2 457,1 km			
Electrified lines	1 278,7 km			

<sup>\*</sup> the line Sargan – Mokra Gora – BiH state border

#### 3.3.1.1 Types of railway lines



Based on the Regulation on Classification of Railway ("Official Gazette of the RS" No. 115/13) applicable at IZS, railway lines are divided on the main, regional, local and shunting lines.

Pursuant to the Law on Railway, 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.

#### There are the following main line:

- 1. Belgrade-S. Pazova-Sid-St.bord.-(Tovarnik)
- 2. Belgrade -Mladenovac-Lapovo-Nis-Presevo-State border-(Tabanovce)
- 2a. (Jagodina)-Cuprija Junction (Rasputnica)-Paracin
- 3. (Belgrade)-Rakovica-Jajinci-M.Krsna-V.Plana
- 4. (Belgrade)-S.Pazova-N.Sad-Subotica-St.bord.-(Kelebia)
- 5. Nis-Dimitrovgrad-St.bord.-(Dragoman)
- 6. Belgrade Centre-Pancevo Main-Vrsac- St.bord.-(Stamora Moravita);
- 7. (Belgrade)-Resnik-Pozega-Vrbnica- St.bord.-(Bijelo Polje)
- 8. Lapovo-Kraljevo-Lesak-Kosovo Polje-Djeneral Jankovic- St.bord.-(Volkovo)
- 9. Subotica-Bogojevo-St.bord.-(Erdut)
- 10. Belgrade Centre-Novi Beograd
- 11. Belgrade Centre-Junction "G"-(Rakovica)
- 12. Belgrade Marshalling Yard "A"-Ostruznica-Batajnica
- 13. Belgrade Marshalling Yard "B"-Ostruznica
- 14. Belgrade Marshalling Yard "A"-Junc. "B"- Junc. "K/K1"-Resnik
- 15. Ostruznica-Junc. "B"-(Junc. "K/K1")
- 16. Belgrade MY "B"-Junc. "R"- Junc. "A"-(Resnik)
- 17. (Belgrade MY "B")-Junc. "R"-Rakovica
- 18. Belgrade MY "A"-Junc. "T"-Rakovica
- 19. Belgrade MY "B"-Junc. "T"-(Rakovica)
- 20. Connecting line in the area of Junction "K/K1": (Junc. "B")--Points "K"-Points "K1"-(Jajinci)
- 21. Topcider-Junc. Savski most-(Novi Beograd)
- 22. Topcider-Belgrade Spoljna- Belgrade Dunav-Junc. Pancevacki most
- 23. Deviation at the station Belgrade Spoljna: (Topcider)-Blok 1 "Obala"-Blok 2 "Prelaz"-(Belgrade Lower City)
- 24. (Junc. Pancevo Bridge)-Junc. Karadjordjev park-Junc. Dedinje-(Junc. "G")
- 25. Indiiia-Golubinci
- 26. N. Sad-N. Sad MY-Junc. Sajlovo
- 27. Deviation at the station Mala Krsna: (Kolari)-Junction points 1-Junction points 28-(Osipaonica)
- 28. Junc. Lapovo Varos-Lapovo MY-Lapovo
- 29. Trupale-Nis MY-Medjurovo
- 30. Crveni krst-Nis MY
- 31.Nis-Junc. bridge-(Nis MY)
- 32. Junction track at the station Nis: (Crveni krst)-Junction points 2-Junction points 4-(Cele kula)

#### There are the following regional lines:

- 1. Subotica-Horgos-St.bord.-(Roszke)
- 2. Pancevo Main-Zrenjanin-Kikinda-State border-(Jimbolia) Pancevo Glavna-Zrenjanin-Kikinda-St.bord.-(Jimbolia)
- 3. Banatsko Milosevo-Senta-Subotica
- 4. Pancevo Varos-Junc. "2a"-(Jabuka)
- 5. Novi Sad-Odzaci-Bogojevo
- 6. (N.Sad)-Junc. Sajlovo-Rimski Sancevi-Orlovat stop
- 7. N.Sad MY-Sajlovo Junc.
- 8. Orlovat- Junction "1a"-(Lukicevo)
- 9. Ruma-Sabac-Junc. Donja Borina-St.bord.-(Zvornik Novi)
- 10.(Platicevo)-Junc. "1"-Junc. "3"-(Stitar)
- 11. Stalac-Kraljevo-Pozega



- 12. Junction track at the station Kraljevo: (Mataruska Banja)-Junction points 72-Junction points 73-(Adrani)
- 13. Junction track at the station Pozega: (Uzici)-Junction points 53-Junction points 54-(Dragacevo)
- 14. Smederevo-Mala Krsna
- 15.) Mala Krsna-Bor-Junction "2"-(Vrazogrnac)
- 16. Crveni krst-Zajecar-Prahovo Port
- 17. (Rgotina)-Junction "3"-Junction "1"-(Trnavac)
- 18. Doljevac-Kastrat-Kosovo Polje
- 19. Kursumlija-Kastrat
- 20. (Barlovo)-Junction "1"-Kursumlija
- 21. Kosovo Polje-Metohija-Pec
- 22. Kosovo Polje Teretna-Junc. "1"-(Drenica)

#### There are the following local lines:

- 1. Subotica-Subotica Factory
- 2. Subotica-Subotica Hospital
- 3. Kanjiza-Horgos
- 4. Novi Sad-Novi Sad stokehold
- 5. (Podbara)-Junc. ,,3"-Junc. ,,2"-(Kac)
- 6. (Rimski Sancevi)-Junction "1"-Junction "3"-(Podbara)
- 7. Rimski Sancevi-Becej
- 8. Vrbas-Sombor
- 9. Petrovaradin-Beocin
- 10. Apatin Factory-Strilic-Sombor
- 11. Bac-Karavukovo
- 12. Backa Palanka-Gajdobra
- 13. (Brasina)-Junc. Donja Borina-Zvornik Grad
- 14. Sid-Sr.Raca Nova-St.bord.-(Bijeljina)
- 15. Kikinda-Banatsko Arandjelovo
- 16. Secanj-Jasa Tomic
- 17. Zrenjanin Factory-Vrsac-Bela Crkva
- 18. Pancevo Varos-Pancevo Vojlovica
- 19. (Uljma)-Junc. "A"-Junc. "B"-(Jasenovo)
- 20. Junction track at the station Senta: (Coka)-Junction points 22-Junction points 23-(Orom)
- 21. (Pozarevac)- Junc. Sopot Pozarevački-Kostolac
- 22. Markovac-Resavica
- 23. Ovca-Padinska Skela
- 24. Metohija-Prizren

#### There are the following shunting lines:

- 1. Becej-Vrbas
- 2. Vrsac-Vrsac Vasariste
- 3. Alibunar-Seleus
- 4 Vladimirovac-Kovin
- 5. Coka-Novi Knezevac
- 6. Kikinda-MSK(km 6+413)
- 7. Sombor-Ridjica
- 8. (Sombor)-Junc. Strilic-Backi breg
- 9. Sombor-Ridjica
- 10. (Visnjicevo)-Junc. Raca-Sremska Raca
- 11. Paracin-Stari Popovac
- 12. Surcin-Jakovo-Becmen
- 13. (Belgrade spoljna)-km 2+290 Junction points-Sugar Factory

The change in the concept of development of Belgrade Node caused the complete closure of line to a traffic in the area of Sava Amphitheater, which resulted in removal of stations/stops Belgade and the removal of public railway traffic on the part of railway line Topcider –Block Sava Obala – Belgrade Donji Grad- Belgrade Dunav- Pancevacki Most from Topcider to Belgrade Donji Grad. Public railway traffic was closed to traffic on certain local and shunting lines the Government of the



Republic of Serbia gave approval to initiate the procedure of seizing property in general use. Besides that, due to technical condition of certain local and shunting lines, traffic is not possible on them and they are currenly out of exploitation or they are completely or partially closed to traffic. Further details are given in Appendix 6.

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

#### Direction North - South

E 771 Subotica-Bogojevo

E 79 Belgrade - Vrbnica

E 85 Subotica-Beograd-Nis-Presevo

Kraljevo-Djeneral Jankovic

#### Direction West - East

E 66 Belgrade-Vrsac

E 70 Sid-Belgrade-Nis-Dimitrovgrad

#### 3.3.1.2 Track gauge

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

#### 3.3.1.3 Names of railway stations and nodes

Km-points and distances in km between particular stations, locations and railway nodes are given in Appendix 6 and Appendix 10.

#### 3.3.2 The characteristics of the railway infrastructure

#### 3.3.2.1 Loading gauge

Loading gauge (train 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 IZS lines for international traffic is UIC GB, except for parts of the railway lines Valjevo – Kalenic and Grlica - Djeneral Jankovic, where the registered loading profile is UIC GA. These loading gauges are in line with the UIC Leaflet 506.

The loading gauge that applies to domestic traffic on IZS lines is JZ I. JZ 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.

IZS 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 IZS:

JSC "Serbian Railways Infrastructure"

Traffic Operations Department

6 Nemanjina St.

11000 Belgrade

Serbia

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

#### 3.3.2.2 Admissible weights per axle and per linear metre

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.



Lines were classified pursuant to what was stated above (Regulations on classification of railway lines No. 325, published in the Official Gazette of the Community of Yugoslav Railways (ZJZ) Nos. 7/89 and 9/90). The classification of IZS railway lines is shown in Table No. 3.

Table No 3: Classes of admissible loads on IZS network

A descionible	laada		Admissible loads per axle			
Admissible linear metro		per	A	В	С	D
illiear illetie	5		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

#### 3.3.2.3 Characteristic line gradient and resistance

In order to determine required train braked weight, characteristic gradients for braking must be determined for each line or track section. Characteristic 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 steepest longitudinal gradient (rising or falling) on a specific line (or section), over the length of 1000 metres or more, is considered to be the characteristic gradient of that specific line or section. In determining characteristic gradient for braking, curve and tunnel related resistances are not taken into consideration.

The characteristic resistance of a line or one of its sections means the value of its specific resistance on gradients, in curves and tunnels, on the basis of which train weight i.e. locomotive hauled load is determined.

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

#### 3.3.2.4 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 devices on the line, and it may not exceed the lowest one of such speeds.

Restricted speeds are permanently prescribed lower speeds than maximum permissible speeds on the railway line along which traffic can be operated only over some of its parts owing to its technical condition, or the speeds permissible over the points area.

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

#### 3.3.2.5 Maximum train lengths

The length of each train is determined during capacity allocation procedures and it is expressed in rounded metres. The maximum permissible length of a train operating on a line, for the purpose of its unobstructed acceptance and forming in railway stations, at passing points and other locations, 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 ZJZ 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 locations and maximum permitted 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 length. The passenger train can be longer than the length of the platforms and arranged areas in service point, and if the railway undertaking requires their engagement in such service points, in accordance with local and / or other specific circumstances, he must set and ensure the necessary safety measures for passengers.

Passenger train length is limited by platform length. The overview of platforms and arranged areas in locations is given in Appendix 8 and for further details, please contact IZS:

"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

#### 3.3.2.6 The power supply system

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

The power supply system voltage is U=25 kV, and its frequency is f=50Hz. The heights of the contact wire are Hkpmin=5000 mm, Hkpnom=5500 mm and Hkpmax=6000 mm. Staggering of the contact wire 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 IZS network, with double contact strip and pneumatic actuator, are in accordance with the provisions of UIC Leaflet 608 and are shown in Table No 4.

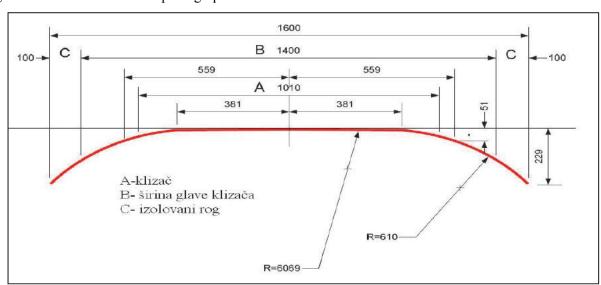


Figure No 1. – Dimensions of pantograph



Table no. 4: 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

#### 3.3.3 The traffic control (regulation) and communication equipment and systems

Train traffic control, including the signalling system, regulation of train movements, acceptance and dispatching of trains, and communication related to train movements, is performed via signalling and interlocking devices and telecommunication devices.

The overviews of signalling and interlocking devices and telecommunication devices are presented in Appendices 3.6. and 3.7.

#### 3.3.3.1 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.

Signalling Regulations (Regulations No. 1, published in the "Official Gazette of ZJZ" No. 4/96) are applicable regarding the use of signals and signal identification with corresponding amendments, corrections and interpretations.

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

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

- Belgrade-Nis-Presevo: Siemens SpDrS-64/JZ track circuit system
- Belgrade Resnik-Vrbnica: Siemens SpDrS-64/JZ axle counter system
- Belgrade-Sid: Siemens SpDrS-64/JZ track circuit system
- Indjija-Subotica: Westinghouse track circuit system

The main arterial routes Sid-Belgrade-Nis-Presevo and Belgrade-Vrbnica are included in the system of remote traffic control and supervision – remote control centre (manufactured by Westinghouse). There are three remote control centres - in Belgrade, Pozega and Nis. Based on this device 3 remote control centres were built in Bekgrade, Nis and Pozega with total of 140 controlled stations.

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

Stations Belgrade Centre, Pancevo Glavna and Cuprija are equiped with electronic signalling & interlocking devices.

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

#### 3.3.3.2 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 time intervals. For control of the trains following one another in particular time 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 points 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 JSC "Serbian Railways Infrastructure" 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 use 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.

The train control system is governed by the Traffic Regulations (Regulations No 2 published in the "Official Gazette of the Community of Yugoslav Railways (ZJZ)" No. 3/94) and Traffic Instructions (Instructions No. 40, published in the "Official Gazette of the Community of Yugoslav Railways (ZJZ)" No. 6/80-47), with all appurtenant amendments, corrections and interpretations.

The train control methodology is presented in Appendix 6.

#### 3.3.3.3 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 (Regulations No 2), Regulations on domestic and international telegraph, telephone and radio-traffic (Regulations No 8), Traffic Instructions (Instructions No 40) and Instructions on traffic operation forms and their keeping (Instructions No 58).

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

IZS 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.

#### 3.3.3.4 Automatic train control system-ATC systems

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



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.

#### 3.4 Traffic restrictions

#### 3.4.1 Specialised Infrastructure

According to Directive 2001/14/EC Article 24, if there are appropriate alternative routes, Infrastructure Manager may, upon consulting interested parties, designate the specialised infrastructure for particular types of traffic. Such infrastructure will be deemed available for all types of traffic that are in accordance with the characteristics required for the traffic on such routes. This will not prevent the use of the same infrastructure for other types of traffic when capacities are available and when the rolling stock are in line with the technical characteristics necessary for traffic on that line.

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

#### 3.4.2 Environmental restrictions

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

#### 3.4.3 Dangerous goods

The transport of dangerous goods on the railway infrastructure operated by IZS is regulated by international and national regulations in the field of transport of dangerous goods in accordance with 2.7 - Transport of Dangerous Goods.

Locations for loading, unloading, transhipment of dangerous goods must meet the requirements prescribed by the regulations for load transfer points (Article 26 of ZOTOT). 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 transhipment of dangerous goods can be performed is given in Appendix 3.8.b.

For further details, please contact IZS:

JSC "Serbian Railways Infrastructure"
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>.

In addition, handling of dangerous goods can be performed on handling points of the industrial sidings not owned by IZS. Appendix 3.8. contains the list of stations with appurtenant industrial sidings where it is possible to handle dangerous goods.



#### 3.4.4 Tunnel restrictions

On the railway line Belgrade Centre –Pancevo Main Station - Vrsac- State border through tunnel «Vracar» i.e. on section junction Karadjordjev park – junction and stop Pancevo Bridge and through tunnel «connecting line» i.e. on the route junction Karadordev park- junction Dedinje trains with motive power, trains with deiesel traction, as well as vehicles with diesel set cannot be regularly dispached (energy-distribution wagon, reefers with generator station). Exceptions to this are diesel traction trains series 711 and auxiliary trains with diesel traction of infrastructure manager which urgenly refer to eleminate accidents occured and diesel motor track vehicles to eliminate obstacles that disable traffic, while respecting the limitations that interval of clearance and time between passing any two vehicles with diesel drive cannot be shorter than 30 minutes.

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

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

- on the part of railway line Pancevo Bridge-Rakovica and Pancevo Bridge Belgrade Centre trains can operate only in period whn traffic of passengers trains is not organized i.e. when the station is closed for passengers transport,
- on the part of railway line Pancevo Bridge –Rakovica and Belgrade Centre there can be only one train with coar marked RID i.e. does not let meeting of two freight trains if at least one is composed of car marked RID;
- during the operation of trains composed of car marked RID an additional technical inspection must be carried out, whick included checking bearing heat and enhanced visual control of loads (valve, clamps etc.) for the train which operaters in direction Pancevo Bridge Rakovica and Pancevo Bridge Belgrade Centre in Pancevo Glavna station, for trains operating in direction Rakovica –Pancevo Bridge or in Rakovica station or in Belgrade Marshalling yard (if it is performed in Belgrade Marshalling yard, there is no need to be performed in Rakovica station);
- obligation of railway undertaking upon perfomed additional technical inspection of trains in stations at stations Pancevo glavna, Rakovica, and Belgrade marshalling is to register clause in telegraph-telephone log (C-43) "The additional technical inspection of train was performed on date \_\_\_\_at\_hours of train no\_\_\_\_ (signature of authorized representative of railway undertaking)", thereby to inform the train dispacher in proved way that technical inspection of train was completed before dispaching on the part of railway line Pancevo Bridge-Rakovica. In the event that railway undertaking does not have organized inspection service in stations Pancevo Main, Rakovica and Belgrade marshalling, and that technical inspection of trains composed of loaded or empty car marked RID, such train can not operate on the part of railway line Pancevo Bridge -Belgrade.

Freight trains, which have a loaded or empty car with the mark RID, must in no case operate in the direction of Belgrade Center - Pančevački Bridge.

#### 3.4.5 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 "Pancevo bridge" across Danube river, on the railway line Belgrade Centre – Pancevo Main Station – Vrsac – State Border, between location on junction Pancevo bridge—Krnjaca bridge all assemblies of two freight trains are prohibited on "Pancevo bridge".

#### 3.4.6 Restrictions in traffic organization and compiling of paths

For all freight trains running in the south-north and transit the part of railway infrastructure between station Velika Plana and node Belgrade, regulary 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.



#### 3.5 Availability of the railway infrastructure

All railway lines operated by IZS 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, IZS 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).

IZS 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.

The railway lines on the territory of Kosovo and Metohia 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.

#### 3.6 The stations, passing points and stops for passenger arrival and departure

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.

#### 3.7 Freight terminals

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

In this respect we differentiate between: stations and transport forwarding, terminals for intermodal freight transport, port terminals.

On the public railway network of IŽS there is only one intermodal transport terminal located within the Belgrade Marshalling Yard, until the reconstruction of station Belgrade Marshalling Yard and the construction of terminal ŽIT within station tracks. The service is provided by Railway Integral Transport Belgrade (ŽIT Belgrade d.o.o.).,,Serbian Railways" JSC is a founder of this subsidiary company and capital, and the current adress is Belgade, Mashalling Yard, Železnik, Belgrade. Tel: 011/361- 6844, 011/361 – 6842, 064/810-6640.

#### Capacities of ŽIT d.o.o. are the following:

- 3 tracks of 550 m for train acceptance,



- 3 for preparation and dispaching of trains- 1000m each.
- 1.000 TEU for containers storage,
- 1 Reachstacker carrying capacity 45 t,
- 4 tow-cars carrying capacity 30 t; 45 t; 70 t and 100 t
- 17 hauler trucks,
- 5 tractors for operating on industry tracks and stations where it is feasable,
- 2 locomotives for maneuvering,
- 12 semitrailers with tipping equipment,
- 5 commercial semitrailers,
- 1 low bearing semitrailers with carrying capacity. 44 t,
- 10 fork trucks, carrying capacity 2 12.5 t,
- 400 OPEN TOP 20' containers for scattered materials.

#### **Types of services are:**

- acceptance and dispaching of complete container trains,
- transshipment of containers full/empty,
- containers transport to the final user.
- contenerisation (loading and unloading with all type of goods)
- forming of consignor's freightliner trains towards destinations in domenstic and international traffic,
- realization of direct railway lines with all Adriatic ports.

The amount of charge is agreed in direct communication with service applicant. The particular insights and information will be published upon the completion of the trial work with the mobile manipulator on new location.

#### **Technical conditions of access**

Technical access to the terminal is from direction of highway south – Bubanj Potok by the bypass through Železnik.

Direction north—west is across Dobanovci to the road to Obrenovac

**Scope of services:** 6.500 containers and 14.000 TEU.

Type of services:

- pet granulate,
- stone granite panels,
- different wooden elements (multi-layer plywood, plywood, logs, flour, car tires, food products,,consumer goods, crushed aggregate (crashed stone). Freight terminal connected with the public railway network are located at: "Port Belgrade", "Port Novi Sad", "Zelezara Smederevo", "Port Senta", Port "Dannube" Pancevo, PTC Port "Leget" Sremska Mitrovica and "Zorka transport" d.o.o. Sabac in luquidation.

Ports open for internation traffic are determined with the Decision of the Government on the desgination of ports for the international traffic (("Official Gazette of the RS", Nos. 51/05 and 14/10). The following ports determined with this decisions are connected with the public railway network: Belgrade (port operator: Port, Belgrade"), Novi Sad (port operator: "Port Novi Sad"), Pancevo (port operator: Port "Dannube" Pancevo), Prahovo (port operator: "IHP Prahovo - Krajina d.o.o.. –in luquidation"), Smederevo (port operator: "Zelezara Smederevo") and on river Tisa Senta (port operator: "Luka Senta).

**Nelt Co." d.o.o. Belgrade** operates with headquarters in Street Marsala Tita 2016, 11272, Dobanovci, Belgrade, contact 011/3779-143, office@nelt.com, www.neltlsp.com

Intermodal transport is the part of logistic complex so-called Central Distribution Centre "Nelt Co." d.o.o. on the above mentioned in Dobanovci.

The geographic position of terminal is 44°48'22.3"N 20°14'29.3"E, located at the distance of 6 km from the highway E-75 and E-70, and at the distance of 10 km from the airport "Nikola Tesla" and at the distance of 1 km from the railway station Surcin.



In station Surcin on the railway line Belgrade Marshalling Yard "A" - Ostruznica - Batajnica for the public railway infrastructure managed by 3a "Infrastructure of Serbian Railways" JSC is connected to industry track owned by "Nelt Co." d.o.o. Belgrade.

The industry track starts in the extension of the forth track of station Surcin with junction point no. 2 at km 14+166,57 of the railway line Belgrade Marshalling Yard "A"- Ostruznica - Batajnica.

The industry track has a total construction length of 1293, 31 m and consists of three parts as follows:

- central track with construction length of 616,00 m
- track 1 with construction length of 348,00 m
- track 2 with construction length of 343,31 m

Tracks 1 and 2 have useful length 300 m each, so that the total useful length on the industry tracks is 600 The axle pressure of track is 20 tons. Tracks go into the hall 1 with capacity of 20.000 m2 where cranes operate with carrying capacity of 8t. - 4 pieces 5t. - 2 pieces, 6.3t. - 1 pieces.

The storage capacity of terminal is 1.000 TEU and the direct manipulation is provided: wagon –terminal – wagon which is performed with the mobile forklift produced by "FERRARI" with carrying capacity of 45t. The part of terminal is registered as the public customs warehouse. The terminal is equipped with the connections for temperature-controlled containers.

The logistic complex whose terminal has 65.000 m2 of warehouses in different temperature regimes specialized for general goods, consumer goods, and pharmaceutical products with following feet of forklifts. Customs office "Warehouses Dobanovici" 11134 is located inside the complex while truck scale is located next to the terminal and it is part of its infrastructure.

The terminal, as well as the whole logistic complex is fenced, equipped with static and mobile cameras, covered with physical and technical security 24 hours, 7 days in week.

The basic terminal service is handling with full and empty containers: acceptance, transshipment, disposal, storage and shipment. Additional services: intervention during customs procedures, loading and unloading, goods storage in temperature-ambient controlled warehouses, additional services (marking, packing etc.), distribution of goods to end customers with their own fleet of 186 vehicles. Follow-up services: maintenance, cleaning and repair of containers, necessary inspections and the preparation of temperarute-contolled containers, vehicles parking (capacity of 100 semitrailer trucks 100), road transport-arrival of containers."

**Joints Stock Company Port "Belgade"** operates with its headquarters in the Streez Zorza Klemensoa no. 37, contact: + 381 (0)11 2752 971. The existing port in Belgrade is located in Belgrade on 1168. km of Dannuabe river right bank, pool type with maritime zone of 11 ha surface and 4 m deep during low navigation level. The port can simultaneously process eight floating vassels. The total lenght of operating coast is 940 m. The industry railway track in the lenght over 12 km, is connected with the public railway network. The port operator is joint stock company Port "Belgrade" owned by the company Worldfine from Luxemburg.

Transhipment of general cargo, bulk cardo and containers is perfomed in the port. Equipment of Port "Belgrade" JSC consists of nine portal cranes with loading capacity of 3-6 t, three bridge cranes with loading capacity of 3 t, 20 t and 50 t, two tow-cars with loading capacity of 16 t and 40 t, 30 forklifts with loading capacity up to 12,5 manipulator for containers with loading capacity of 27 t, universal road-railway vehicle (Unimog), more trucks, semitrailers and other equipment. Port "Belgrade" JSC has 200.000 m² of closed warehouses and 600.000 m² of open warehouses. It has container terminal for storage of 10.000 TEU on annual level.

Other information related to transport of goods by usage of this port and that be used by other railway undertakings can be found on the following web page: http://www.lukabeograd.com.

**Joint Stock Company "Port Novi Sad"** operates with its headquarters in the Street Carinska no.1, 21000 Novi Sad, contact: + 381 (0) 21 2102 110.

The port is located on 1254 km of the left bank of Danube river, at the entrance into the channel Danube -Tisa - Danube. Port maritime zone has 6 ha surface and it is deep 4 - 10 m. The total length of operating coast is 800 m, with the possibility of simultaneous berth and processing of five



floating vessels the industry railway track in length of 6.000 m is connected with the public railway network.

Port operator is joint stock company "Port Novi Sad". It is 99,38% state owned and 0,62% owned by small stakeholders. Transshipment and storage of bulk cargo, general cargo, containers and liquid cargo. Transshipment mechanization of "Port Novi Sad" JSC is consisting of six portal cranes with loading capacity of 5 t up to 27,5 t, 14 forklifts with loading capacity 3 t up to 12,5 t, one forklift with loading capacity 28 t, 5 loaders, two weighbridges of which one is road –railway weighbridge and with gauge of 100 t, tree telescopic hoppers with portals for transshipment of bulk cargo up to 250 t/h, two devices of packing 50 kg bags and 1.000 kg bags, tape transporter, pneumatic equipment, pumps for oil derivates etc. "Port Novi Sad" JSC has 44.000 m² closed warehouses and 100.000 m² open warehouses in function of public and public customs warehouses. The capacity of warehouse for oil derivates is 270.000 m³.

Other information related to transport of goods by usage of this port and that be used by other railway undertakings can be found on the following web page: http://www.lukanovisad.rs/.

**Joint Stock Company Port "Danube" Pancevo** operates with its headquarters in Street Luka Danube 1, 26000 Pancevo contact: + 381 (0) 13 302 303.

Port in Pancevo, together with with ports in Belgrade and Novi Sad, represents the most developed port in the Republic of Serbia from the point of constructed infrastructure and the quantity of transshipped goods. The Port is located at rkm 1153 on the left bank of river Dannuber, pool tupe and it has maritime zone of 21 ha and 5 m deep at the low navigable level. The port has possibility of simultaneous berth and processing of nine floating vessels and the total length of vertical embracement is a 860 m. The industry railway track is connect in the length of 6.100 m is connected with the public railway network.

Port operator is Joint Stock Company is "Danube" Pancevo, and the right of performing port activities is acquired through the process of ownership transformation. Transshipment of general cargo, bulk cargo, liquid cargo and containers is performed in the port and transshipment mechanization of Port "Danube"Pancevo is consisting of three portal cranes, two tow-cars, three tower cranes, four hoppers for bulk cargo transshipment, 19 forklifts with loading capacity up to 12,5 t more trucks and semitrailers, tape transporter and pneumatic equipment etc. Port "Danube" Pancevo has 40.000 m2 of closed warehouses and 100.000 m² open warehouses in the function of public and customs warehouses.

Other information related to transport of goods by usage of this port and that be used by other railway undertakings can be found on the following web page: http://www.lukadunav.co.rs/.

**Port Smederevo, - Zelezara Smederevo d.o.o.** operates with its headquarters in street Radinac bb, 11300 Smederevo, contact: + 381 (0) 26 4627 749.

Port in Smederevo is positioned on two locations, as follows: "New Port" at rkm 1111. and "Old Port" at rkm 1116. of the right bank of Danube river. The port is open type and it has five places for simultaneous berth of floating vessels. The total length is 572 m, out of which og 172 m is newly built vertical embankment. The industry railway track is on location "Old port", in the length of 600 m and it is connected with the public railway network.

Port operator is "Zelezara Smederevo"d.o.o. that is currenty performing transshipment of raw materials and finished products for the needs of this iron and steel plant. Transshipment mechanization of this port is consisting of portal crane capacity 5/6 t, 2 two portal cranes type Ganz with capacity 16/27 t, and other mechanization.

The development plans of port in Smederevo include construction and extension of operating coast on the location of "New port", as well as supply of additional portal cranes. The location of "Old port" is in the centre of Smederevo city, near the protected area of history monuments – Smederevo fortress so that due to the valorization of the concerned location the construction of exclusively passenger's bay open for international traffic is planned. The existing equipment for transshipment of cargo from the location of "Old port" would be dislocated on location of "New port".



Priority investment is the construction of the industry track on the location of operating coast of "New port"and its connection with the public railway network i.e. with the network of the industry tracks within the complex of Zelezara.

Other information related to transport of goods by usage of this port and that be used by other railway undertakings can be found on the following web page: http://www.zelsd.rs/.

**Port Prahovo – IHP Prahovo – Krajina d.o.o.** in luquidation operates with its headquarters in the street Radujevacki put b.b.. 19330 Prahovo, contract: + 381 (019) 543 991

Port in Prahodvo is located on rkm 861. of the right coast of Danube river. The post is open and the length of operating coast is 560 m. The industry railway track is in the length of 971 m and it is connected with the public railway network.

Port operator is "IHP Prahovo–Krajina" d.o.o. – under restructuring. Transshipment of general and bulk cargo is done. Transshipment mechanization is consisting of three portal cranes with capacity of 10 t, 6 t and 5 t, three bridge cranes with capacity of 10 t and 40 t, tape transporter etc.. The port has 2.000 m² of closed warehouses and 6.000 m² open warehouses.

**Joint stock company "Port Senta"** operates with its headquarters in the street Pristanisna no.1, 24400 Senta, contact: + 381 (0) 24 815 233. The port in Sentra is located at rkm 122 of the right coast of river Tisa. Maritime zone has 1,2 ha, and the minimal depth is 3 m. The total length of operative coast is 130 m, and simultaneous berth of two floating vessels is possible. The railway track in length of 1.050 m is connected with the public railway network.

Port operator is joint stock company "Port Sent". Transshipment mechanization of "Port Senta" is consisting of one bridge crane with capacity of 25 t, more forklifts with capacity from 2 to 6 t, more loaders and trucks, tape transport, different pneumatic equipment, hoppers for transshipment of bulk cargo etc. "Port Cargo" has 18.260 m² closed warehouses out of which 1.290 m² are public customs warehouses and 20.000 m² of open warehouses out of which 5.000 m² are customs warehouses. The company has the warehouse for the liquid petroleum gas (LPG) with the capacity of 1.000 m3.

Other information related to transport of goods by usage of this port and that be used by other railway undertakings can be found on the following web page: www.luka-senta.rs.

**Joint Stock Company RTC Port "Leget"Sremska Mitrovica** operates with its headquarters in steet Jaracki put 10, 22000 Sremska Mitrovica, contact: + 381 (022) 611 163. Port in Sremska Mitrovica is located at rkm 133. of the left coast of Sava river and it is open for domestic traffic. Port is pool type with maritime zone of 1 ha and 2,5-7 m deep. The total length of vertical embarkment is 100 m, and 3.100 m of industry railway tracks are connected with the public railway network.

Port operator is joint stock company RTC Port "Leget"and the right for performing port activities is acquired by privatization process. Transshipment of bulk cargo, general cargo and containers. Beside transshipment activities, the port operator is also engaged in exploitation of gravel and sand.

Transshipment mechanization of RTC Port "Leget" JSC consists of one portal crane with capacity of a 6 t, 1manipulator for operation with containers, one tow-car with capacity of 12 t, tape transporter, more forklifts, semitrailers, more floating vessels, backhoe loaders, bucket excavators, etc. RTC Port "Leget" JSC has 20.000 m² closed warehouses and 10 ha of open warehouses.

"Zorka transport" d.o.o. Sabac, in luquidation operates with its headquarters in the street Narodnih heroja 1, 15000 Sabac, contact: + 381 (0) 15 352-707. Port in Sabac is located at rkm 103. Of the right coast of Sava river and it is open for domestic traffic. Port is open type, and the length of vertical embarkment is 150 m and and simultaneous berth of two floating vessels is. Industry railway track is connected with the public railway network.

<sup>&</sup>lt;sup>1</sup> Data was taken from register of Business Registers Agency



Port operator is "Zorka transport" d.o.o. in in restructuring. In function of industrial port the transshipment of raw materials and finished products for needs of chemical industry Zorka – Sabac. Transshipment mechanization is consisting of gantry cranes 5/6 t.

Port Governance Agency was founded to carry out development, professional and regulatory activities in the field of port development and port activities in the Republic of Serbia based on article 206. of Law on Navigation and Ports on Inland Waters ("Official Gazette of RS", no. 73/2010, 121/2012 and 18/2015).

Detailed information on operation of Port Governance Agencycan be found on web page: http://www.aul.gov.rs.

Transfer station of territory of IZS is Aleksinac. Mobile portable crane PD 86 with capacity up to 32 t is used for transshipment.

## 3.8 Service facilities – facilities for providing of services

## 3.8.1 Train formation yards

#### Freight trains forming yards

Freight train formation yards are places where trains may be split or joined and such stations are called marshalling and distribution yards. On IŽS network there are the following marshalling yards: Novi Sad Ranžirna, Beograd Ranžirna, Lapovo Ranžirna and Niš Ranžirna. Beside marshalling and distribution yards, train formation can be performed in other stations depending of available capacities of stations and planned volume of traffic.

Overview of distribution stations-section for freight trains operation

Distribution station	Distribution section	Comments	
	Belgrade Centre – Pancevo Main St.	For trains sent by	
BELGRADE CENTRE	Belgrade Centre– Ruma	alternative routes and which fulfill set	
		conditions	
	Belgrade Marshalling Yard – Pancevo main station		
	Belgrade Marshalling Yard – Ruma		
	Belgrade Marshalling Yard – Lapovo marshaling yard Belgrade Marshalling Yard – Pozega		
BELGRADE	Belgrade Marshalling Yard – Pozarevac		
MARSHALLING YARD	Belgrade Marshalling Yard- Smederevo		
	Node Belgrade		
BOGOJEVO	Bogojevo- Odzaci-N.Sad- Novi Sad Marshalling Yard		
	Bogojevo - Sombor		
	Bogojevo - Erdut (HŽI)	if applicable	
BOR	Bor freight station – Majdanpek		
FREIGHT STATION	Bor freight station - Zajecar		
	Bor freight station - Prahovo port		
BIJELO POLJE	B. Polje (ZICG) - Vrbnica – Prijepolje freight station		
(ZICG)			
BRASINA	Brasina - Ruma		
	Brasina – Zvornik	for both directions	
	Brasina - Zvornik (ZRS)		
VRSAC	Vrsac – Pancevo main station		
	Vrsac – Bela Crkva	for both directions	
	Vrsac - Stamora Moravita (CFR SA)		
	Vrsac - Boka - Secanj - Zrenjanin	if applicable	
GAJDOBRA	Gajdobra – Backa Palanka** for both direction		
DIMITROVGRAD	Dimitrovgrad – Nis marshalling yard		



ERDUT (HŽI)	Erdut (HŽI) - Bogojevo	if applicable
ZAJECAR	Zajecar – Nis marashalling yard	
	Zajecar – Prahovo port	
	Zajecar – Bor freight station	
ZVORNIK NOVI (ZRS)	Zvornik novi (ZRS) – Brasina	
ZRENJANIN	Zrenjanin - Secanj - Boka - Vrsac	if applicable
	Zrenjanin- Kikinda	
	Zrenjanin – Pancevo main station	
	Zrenjanin – Novi Sad marshalling yard	
	Zrenjanin – Senta	
KARAVUKOVO	Karavukovo - Bac	for both directions
KIKINDA	Kikinda - Mokrin*	for both directions
	Kikinda - Zrenjanin	101 00 111 011 0110
	Kikinda - Senta	
	Kikinda - Jimbolija ( CFR SA)	for both directions
KOSOVO POLJE	Traffic is temporarily regulated by	
FREIGHT STATION	UNMIK railways	
KELEBIA (MAV ZRT)	Kelebia (MAVZRT) - Subotica	
KRALJEVO	Kraljevo - Lapovo marshalling yard	
	Kraljevo – Pozega	
	Kraljevo - Stalac	
	Kraljevo –Kosovska Mitrovica North	for both directions
LAPOVO MARSHALLING YARD	Lapovo marshalling yard – Belgrade mashalling yard	
	Lenovo marshaling yard - Smederevo	
	Lapovo marshalling yard – Resavica	
	Lapovo marshalling yard – Nis marshaling yard	
	Lapovo marshalling yard – Kraljevo	
	Lapovo marshalling yard – Pozarevac	
	Lapovo marshalling yard – Belgrade marshalling yard-	
	Ostruznica – (Ruma)	For trains which transit
		through Belgrade node
MA ID ANDERS	Lapovo marshalling yard Pancevo main station  Majdanpek - Pozarevac	
MAJDANPEK	Majdanpek - Pozarevac  Majdanpek – Bor freight station	
NIS MADSHALLING	Nis marshalling station- Crveni Krst - Dimitrovgrad	
MARSHALLING STATION	Nis mashalling station- Crveni Krst - Zajecar	
	Nis marshalling station - Presevo	
	Nis marshalling station - Kursumlija	for both directions
	Nis marshalling station - Lapovo marshalling	
	Nis marshalling station - Lapovo	for certain trains
	Node Nis Novi Sad mashalling yard-Tomasevac – Pancevo main	
NOVI SAD	st.	
		1



MARSHALLING YARD	Novi Sad marshalling yard - Subotica freight st.	
	Novi Sad marshalling yard - Odzaci - Bogojevo	
	Novi Sad marshalling yard - Zrenjanin	
	Novi Sad marshalling yard.– Rimski Sancevi - Becej	for both directions
	Pancevo Main St – Belgrade Centre - (Ruma)	lor both directions
	Pancevo main st. – Belgrade mashalling st.	
PANCEVO MAIN	Pancevo main st. – Lapovo mashalling st.	
STATION	Pancevo main st. – Novi Sad mashalling st. Pancevo main st Zrenjanin	
	Pancevo main st Vrsac	
PARACIN	Paracin – Stari Popovac*	for both directions
PEC	Traffic is temporary regulated by UNMIK railways	
POZAREVAC	Pozarevac – Majdanpek	
	Pozarevac - Smederevo	
	Pozarevac – Lapovo mashalling st.	
	Pozarevac – Kostolac*	if applicable
	Pozarevac – Belgrade marshalling st.	a approact
POZEGA	Pozega- Kraljevo	
	Pozega – Prijepolje freight st.	
	Pozega – Belgrade mashalling st.	
PRAHOVO	Prahovo port – Zajecar	
PORT	Prahovo port –Bor freight st.	
PRESEVO	Presevo – Nis mashalling st.	
	Presevo - Tabanovci (MZI)	
PRIJEPOLJE	Prijepolje freight st Pozega	
FREIGHT ST.	Prijepolje freight st Vrbnica – Bijelo Polje (ZICG)	
PRIZREN	Traffic is temporary regulated by UNMIK railways	
	Ruma- Belgrade marshalling st.	
RUMA	Ruma- Belgrade Centre- (Pancevo Main St.)	
	Ruma – Sabac –Brasina	
	Ruma – Sid	
	Ruma- Sabac	
	Ruma– Ostruznica – Lapovo marshalling st.	for trains transitting
		through node Belgrade
Roske (MAV ZRT)	Rozske (MAV ZRT) - Horgos - Subotica freight station	
SENTA	Senta – Subotica freight station	
	Senta – Kikinda	
	Senta - Zrenjanin	
SMEDEREVO	Smederevo –Lapovo marshalling st.	
	Smederevo – Pozarevac	
	Smederevo – Belgrade marshalling st.	
SOMBROR	Sombor – Subotica freight st.	
	Sombor - Bogojevo	
	Sombor - Vrbas	for both directions
STALAC	Stalac – Kraljevo	101 00th directions
	Stalac - Krusevac	for both directions
<u>l</u>		101 00m directions



SUBOTICA	Subotica freight st Novi Sad marshalling st.		
FREIGHT ST.	Subotica freight st. – Sombor		
	Subotica freight st Kanjiza	for both directions	
	Subotica freight st Horgos - Roszke (MAV ZRT)		
	Subotica freight st Subotica - Kelebia (MAV ZRT)		
	Subotica freight stSenta		
STAMORA	Stamora Moravita (CFR SA) - Vrsac		
MORAVITA (CFR SA)			
TABANOVCI (MZ)	Tabanovci (MZ) – Presevo		
DJENERAL	Traffic is temporary regulated by UNMIK railways		
JANKOVIC			
SABAC	Sabac - Ruma		
SID	Sid –Sremska Raca Nova –Bijeljina (ZRS)	if applicable	
	Sid - Ruma		

Certain trains are: trains to which this is starting station or of crew or location change, or station on auxiliary route

## Passenger trains forming yards

All railway stations on the railway network on which passenger transport operations are taking place can be passenger train formation yards. For detailed information on the passenger train formation yards please contact IŽS.

"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

Overview of distribution stations-section for passengers trains operation

Distribution station	ntion Distribution section	
1	2	3
	For trains from BG voz system	
	Belgrade Centre - Ruma	
BELGRADE CENTRE	Belgrade Centre – Pozega	
	Belgrade Centre -Lapovo	
	Belgrade Centre – Pancevo Main St.	
BIJELO POLJE (ZICG)	Bijelo Polje (ZICG) - Vrbnica -	
BIJELO FOLJE (ZICG)	Prijepolje freight st.	
	Bogojevo - Sombor	
BOGOJEVO	Bogojevo- Novi Sad	
	Bogojevo - Erdut (HŽI)	
	Vrsac – Pancevo Main St.	if necessary in both
VRSAC	Vrsac – Bela Crkva	direction
	Vrsac - Stamora Moravita (CFR SA)	
ERDUT (HŽI)	Erdut (HŽI) – Bogojevo	
DIMITROVGRAD	Dimitrovgrad - Nis	
Jimbolia (CFR SA)	Jimbolia (CFR SA) - Kikinda if applicable	



<sup>\*</sup> in current conditions traffic is organized until location Stara Palanka

<sup>\*\*</sup> temporary on this railway line traffic is not organized

	Zajecar - Nis	
ZAJECAR	Zajecar – Prahovo Pristaniste	
2.102.0111	Zajecar - Pozarevac	
ZVORNIK	Zvornik - Ruma	if applicable
	Zrenjanin - Kikinda	
ZRENJANIN	Zrenjanin – Novi Sad	if applicable
ZRENJANIN	Zrenjanin – Pancevo main st.	if necessary in both
	Zrenjanin - Secanj	directions
Kelebia (MAV ZRT)	Kelebia (MAV) - Subotica	
KIKINDA	Kikinda - Jimbolia (CFR)	по потреби
	Kikinda – Zrenjanjin	1) To Vegevelve
	Kraljevo – Kosovo Polje <sup>1)</sup> Kraljevo - Lapovo	<ol> <li>To Kosovska Mitrovica</li> </ol>
KRALJEVO	Kraljevo - Lapovo Kraljevo - Pozega	North,
Market VO	Kraljevo - Stalac	temporary,
	Tranjevo Statue	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Kursumlija – Kosovo Polje <sup>2)</sup>	2) To Merdare
KURSUMLIJA	Kursumlija - Nis	for both
KUKSUWLIJA		directions
		temporary,
	Lapovo- Kraljevo	
	Lapovo - Nis Lapovo - Belgrade Centre	
LAPOVO	Lapovo – Smederevo	
Litti O V O	Lapovo – Resavica	
	Dapovo Resuviou	if necessary in both
		directions
	Nis - Lapovo	
	Nis - Lapovo – Belgrade Centre*	* agency train
	Nis - Presevo	
NIC	Nis - Dimitrovgrad	** E ' :
NIS	Nis – Zajecar Nis - Kursumlija	** For trains across Crveni Krst station or
	Nis – Nis marshalling st.**	across Junction
	1 115 Tria marshaming st.	bridge for both
		directions
	Novi Sad - Subotica	
	Novi Sad – Bogojevo	
	Novi Sad – Vrbas	
NOVI SAD	Novi Sad - Zrenjanin * Novi Sad - Pancevo Main St.	
NOVI SAD	Novi Sad – Pancevo Main St.	
		if applicable
		if necessary in both
		directions
	Pancevo Main st Zrenjanin	
	Panceo Main st Vrsac	
PANCEVO MAIN ST.	Pancevo Main St Pancevo Vojlov.	in both directions
	Pancevo Main.St – Belgrade Centre	in both directions
	Pozaravac I anovo	
	Pozarevac – Lapovo Pozarevac - Smederevo	if applicable
POZAREVAC	Pozarevac - Zajecar	п аррпсанс
	Pozarevac – Belgrade Centre	



	Pozega – Belgrade Centre	
	Pozega - Kraljevo	
POZEGA	Pozega – Kraljevo Pozega – Projepolje freight	
FOZEGA	Pozega - Projepone neight Pozega - Uzice	
	rozega - Ozice	in both directions
PRAHOVO PORT	Prahovo Port - Zajecar	iii botii directions
TRAHOVOTORT	Prijepolje Port - Vrbnica -	
PRIJEPOLJE FREIGHT	Bijelo Poljr (ZICG)	
I KIJEI OLJE I KEIGIII	Prijepolje freight - Pozega	
	Presevo - Nis	
PRESEVO	Presevo – Tabanovci (MZI)	
	Ruma - Sabac- Zvornik	
DUMA	Ruma - Sid	
RUMA	Ruma- Belgrade Centre	
ROSZKE (MAV ZRT)	Roszke (MAV ZRT) - Horgos -	if applicable
ROSZIE (MITY ZRT)	Subotica	
SENTA	Senta – Subotica	
DEI (III	Senta - Kikinda	for both directions
SMEDEREVO	Smederevo – Lapovo	
SHIED ETTE Y O	Smederevo - Pozarevac	
	Sombor- Subotica	
SOMBOR	Sombor - Bogojevo	in both directions
	Sombor- Vrbas	
STALAC	Stalac - Kraljevo	
	Stalac - Jagodina	in both directions
STAMOR MORAVITA (CFR	Stamora Moravita (CFR SA) – Vrsac	
SA)	~	
	Subotica – Novi Sad	
	Subotica - Senta	
SUBOTICA	Subotica - Sombor	
	Subotica – Kelebia (MAV ZRT)	.0 1: 11
	Subotica - Horgos - Roszke (MAV	if applicable
TADANOVCI (MZD	ZRT) - Horcos - Kanjiza	if applicable
TABANOVCI (MZI)	Tabanovci (MZI) - Presevo	
TOVARNIK (HŽI)	Tovarnik (HŽI) - Sid	
TOPCIDER	Topcider – Pozega	
	Topcider - Lapovo	
SABAC	Sabac – Ruma	
SID	Sid – Ruma	
	Sid – Tovarnik (HŽI)	

## 3.8.2 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 is usually carried out in departure stations for passenger service, on the tracks designated for that specific purpose.

Storing of DMUs, EMUs and locomotives is carried out in all depots for accommodation and storing of rolling stock of "Serbia Cargo" JSC and "Serbia Voz" JSC.

Storing of freight wagons is carried out mainly on special storage sidings for surplus freight wagons at marshalling yards and some other major stations.

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.



## 3.8.3 Maintenance facilities

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

## 3.8.4 Refueling facilities

There are refueling facilities on IŽS network, and details about refueling facilities can be found in point 5.3.9.

#### 3.8.5 Technical facilities

#### **Preheating facilities**

Facility for electrical preheating of passenger coaches is located in Subotica station.

## Water supply facilities

Facilities for supply of passenger coaches with water are located at the following stations: Nis, Zajecar, Lapovo, Subotica, Novi Sad, Vrsac.

#### Wagon scales

The list of stations in which are located wagon scales is given in the Table 5.

Table no. 5: Wagon scales

1 abic 110. 5. v	rable no. 5: wagon scales			
No.	Station	Carrying Capacity (t)	Length of weigh bridge (m)	NOTE:
1	Sid	100	20	Wagon scale is electronic.
2	Novi Sad Marshalling Yard	100	20	Wagon scale is electronic.
3	Pancevo main st.	100	20	Wagon scale is electronic.
4	Vrsac	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	Nis Marshalling Yard	100	20	Wagon scale is electronic.
9	Pozega	100	20	Wagon scale is electronic.
10	Cacak	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.

#### 3.8.6 Other facilities

## Ramps for loading and unloading of the load

"Serbian Railways Infrastructure" 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 Topcider, Novi Sad, Subotica and Nis. In case of traffic interruption and need for unloading or reloading of the accompanied vehicles on the railway line (Belgrade) - Resnik - Vrbnica - State border, in railway stations/stops Valjevo, Požega, Užice freight and Prijepolje freight, there are ramps for reloading. The need for usage of the ramps



for loading and unloading of the accompanied vehicles must be shown by the railway undertakings in the capacity allocation procedure.

## Loading gauge

Loading gauges are present at the following stations on the network: Novi Sad Marshalling Yard, Vrsac, Cacak, Pozega, Dimitrovgrad, Josanicka Banja and Kragujevac.

On IZS network there are more stations with loading gauge 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.

## 3.9 Infrastructure development projects

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.



## 4. PRINCIPLES, PRIORITIES AND CRITERIA FOR ALLOCATION OF INFRASTRUCTURE CAPACITY

#### 4.1 Introduction

Pursuant to the Law on Railways and decision of the Government of the Republic of Serbia, "Infrastructure of Serbian Railways" JSC performs the activities of public railway infrastructure management, it 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 2 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 capacity allocation procedure for the annual Timetable;
- Infrastructure capacity allocation procedure outside the annual timetabling process (ad hoc requests).

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 website: www.infrazs.rs.

Requests are submitted according to procedures defined under section 4.3.

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 4.3 of the present Network Statement.

Defining of procedures and deadlines in capacity allocation is harmonized with Directive 2012/34/EU and its appendices, RNE recommendations from "Procedures for International Path Requests" and Rulebook on time schedule for railway infrastructure capacity allocation ("Official Gazette of RS", No 140/14).

## 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 FTE and is actively involved in the activities of these international organizations.

#### 4.3 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.

The applicant will submit a request for capacity allocation after the Network Statement has been published and not earlier than 12 months prior to the Timetable effectiveness. A request for train path allocation is submitted in accordance with the schedule for timetabling, i.e., in accordance with the deadlines specified in Appendix 4.3.

### 4.3.1 Schedule for working Timetable

Capacity allocation requests of railway undertakings for the annual timetable are submitted on the prescribed form and within specified deadlines, as follows:

- 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

Deadlines for submission of requests and capacity allocation for the 2018/2019 Timetable entering into force on December 9, 2018 and lasting until December 14, 2019, are presented in Appendix 4.3.

## 4.3.2 Schedule for Requests for train paths outside the timetabling process (including ad hoc requests)

Where railway undertakings wish to order additional capacities or change the already allocated train paths, IŽS will enable capacity allocation as follows:



## 4.3.2.1. Allocation of capacities in the course of valid annual Timetable for a shorter period of service provision, taking into consideration regular amendments to the annual Timetable

Requests for allocation of capacities in the course of a valid annual Timetable are submitted in line with specified deadlines for regular amendments to the annual Timetable, presented in Appendix 4.4. After the 5<sup>th</sup> regular amendments to the 2018/2019 Timetable enter into force it will be only possible to submit ad hoc requests for capacity allocation. If there is still a need for the same capacity, the request should be submitted in accordance with Appendix 4.4. Requests are submitted:

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

## 4.3.2.2. Allocation of capacities in the course of valid annual Timetable for ad hoc capacities

Requests for allocation of ad hoc capacities in the course of valid annual Timetable are submitted:

- By mail:

"Infrastructure of Serbian Railways" JSC Department for access to railway infrastructure 6, Nemanjina St 11000 Belgrade, Serbia

- By e-mail: <u>sektor.pzi@srbrail.rs</u>

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.

#### 4.3.2.3. Transport of exceptional consignments

Deadline for submission of request for transport of exceptional consignments is not later than 15 days prior to service provision.

Depending on the type of exceptional consignment, request processing may require either a longer or shorter period for processing and for this reason railway undertakings should consult IŽS on the possibility of consignment transport and accordingly submit a request on time. 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:

By mail:

"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: sektor.sp@srbrail.rs

## 4.4 Allocation process (of train path)

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 obtained after the final deadline for request submission will not be considered.

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.

#### 4.4.1 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 4.4.3.

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.

## 4.4.2 Dispute resolution

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.



#### 4.4.3 "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" and notify the Directorate for Railways thereof.

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.

#### 4.4.4. Impact of framework agreements

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

#### 4.5 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.

IŽS will notify all railway undertakings 30 days in advance of any other longer subsequently envisaged works on railway infrastructure which could affect transport operations.

## 4.6 Cancellation rules / Non-usage of allocated train path

#### 4.6.1 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 6. Borderline degree of utilization

Train type	Borderline degree of utilization [%]
Passenger trains	80
Freight trains	40
Circuit-working and industrial trains	20
Locomotive and facultative trains	10

Facultative train is a train which uses the train path, allocated according to the annual request or extraordinary request for amendment of the Timetable, as necessary and in respect of which the borderline utilization degree is 10%.

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.

## 4.6.2. Train path cancellation rules

A Railway Undertaking may cancel the allocated train path in the following deadlines:

- 30 days prior to service provision without charge,
- from 30 days up to 7 days prior to service provision with payment of 10% of the charge for the entire train path,
- less than 7 days prior to service provision with payment of the full charge for the entire train path.

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

- By mail:
- "Infrastructure of Serbian Railways" JSC

Department for access to the railway infrastructure

6. Nemaniina St

11000 Belgrade, Serbia

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

A cancelled train path is also the one which has not been used by the Railway Undertaking and which had not been cancelled by the Railway Undertaking in the above mentioned manner. In such case, the full charge for the entire train path will be charged.

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

#### 4.7. Exceptional transports and dangerous goods

#### 4.7.1. 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.



Allocation of capacities for the transport of exceptional consignments is carried out according to process described under 4.3.2.

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.

Further information can be obtained at the following address:

"Infrastructure of Serbian Railways" JSC

Traffic Department

6, Nemanjina St

11000 Belgrade, Serbia

- by e-mail: sektor.sp@srbrail.rs

## 4.7.2. 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 2.7 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.

Allocation of capacities for transport of dangerous goods is performed according to the process defined under 4.3.2.

## 4.8. Special measures to be taken in the event of disturbance

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, namely:

- Lack of traction and other capacities for provision of transport service
- Slowed down or insufficient unloading of wagons in the unloading stations
- Limited or hindered handover of gross load to neighbouring railways
- Difficulties in transport caused by creation of bottlenecks due to accidents or incidents, line closures etc., and
- Other reasons.

#### 4.8.1. 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 4.8.2., 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.

## 4.8.2. Operational 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 (2) and other internal documents of IŽS.

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 Regulations on investigating, recording, statistical monitoring and publishing of data on accidents and incidents ("Official Gazette of RS" No 4/16), Instructions on procedures in case of accidents and incidents (79) and Instructions on procedures in case of accidents and incidents in the area of "Infrastructure of Serbian Railways" JSC ("Official Gazette of ŽS" 52/18). 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.

## 4.8.3. 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 (2) and other regulations governing the above mentioned.

## 4.8.4. 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.

## 4.9. Allocation of capacity for service facilities

Railway Undertakings can submit requests to "Infrastructure of Serbian Railways" JSC for the use of only those facilities that are operated by IŽS on ownership basis.

Railway Undertakings can submit requests for the use of services facilities as follows:

- within requests for the train path;
- with special written request addressed to:

"Infrastructure of Serbian Railways" JSC

Department for access to the railway infrastructure

6 Nemanjina St

11000 Belgrade, Serbia

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

Requests for the use of facilities not operated by IŽS are to be submitted to legal persons who are the owners of such facilities.



## 5. TYPES OF SERVICES

#### 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 realistic alternatives under market 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 Railways" 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 5.5, 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;
- "Srbija Voz" JSC based on separate contracts;
- "Srbija Kargo" JSC based on separate contracts;
- Other service providers based on separate contracts.



#### 5.2 Minimum package of services

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 an access price to "Infrastructure of Serbian Railways" JSC based on the Contract for the use of public railway infrastructure. The calculation method and the level of prices for the minimum package of services are presented in Chapter 6 of this document.

## 5.2.1. 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.

## 5.2.2. 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 2 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.

#### 5.2.3. 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.

## 5.2.4. 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.

#### 5.2.5 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).

## 5.2.6 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.

#### 5.3 Access to services facilities and provision of basic services

Services facilities for provision of basic services include:

- 1) Station buildings, i.e. the part of station buildings and other facilities used for passenger traffic including travel information displays and adequate location for ticketing services;
- 2) Freight terminals:
- 3) Marshalling yards and train formation tracks including the shunting tracks;
- 4) Storage sidings intended for the rolling stock of railway undertakings used on the allocated infrastructure capacity;



- 5) Maintenance facilities, except for 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 technical facilities including cleaning and washing facilities;
- 7) Inland port facilities which are connected to railway activities;
- 8) Relief facilities;
- 9) Facilities for storing and refueling in respect of which the prices are quoted separately.

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.

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.

In order to use the above mentioned services facilities railway undertakings will conclude a contract with "Infrastructure of Serbian Railways" JSC and "Srbija Kargo" JSC, i.e. with the provider of the service in question.

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. The methodology for calculation as well as the level of the charge for such services are described in Chapter 6 of this document.

## 5.3.1 Basic service - use of station buildings for passenger traffic

"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.

## **5.3.2** Basic services in freight terminals

IŽS does not operate nor provide services in any freight terminal within the meaning of its definition of an arranged and organized area where the receiving, storage, preparation, transhipment and dispatching of various types of goods is carried out. The freight terminal service providers within this meaning are listed in paragraph 3 and paragraph 8 of point 3.7 of this document.

IŽS does not have the information on the services facility which, according to Article 18 of the Law on Railways, the freight terminal operator is obliged to publish and 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 Ranžirna (Belgrade Marshalling Yard), Lole Ribara 2 Železnik, Belgrade and Hajduk Veljkov Venac 4/1

11000 Belgrade, Serbia

Tel: +381 (0)11 361- 6844, +381 (0)11 361 - 6842, +381 (0)64 810-6640.

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

Addressa: Maršala Tita 2016, 11272 Dobanovci, Belgrade Tel: +381 (0)11 3779-143, office@nelt.com, www.neltlsp.com



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

## 5.3.3 Basic service in marshalling yards and train formation tracks, including shunting tracks

"Infrastructure of Serbian Railways" will enable all railway undertakings to use the marshalling yards and train formation tracks, including shunting tracks, in a non-discriminatory manner and upon their request.

Their use means the use of track capacities and turnouts, including the signalling and interlocking equipment, as well as the use of catenary (when required) and any other special facilities according to local conditions.

IŽS provides the services of its shunting staff if such service is included in the special contract between IŽS and Railway Undertaking. The type and prices of services are defined in point 6.3.2.1.

The stations/yards providing the shunting services are: Novi Sad Ranžirna, Ruma, Beograd Ranžirna, Pančevo Glavna, Mala Krsna, Radinac and Nis Ranžirna. The shunting operations in these stations can be performed by IŽS shunting staff.

## 5.3.4 Basic service - storage sidings for rolling stock

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

#### 5.3.5 Basic service in maintenance facilities

Maintenance facilities, except for 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, exist on IŽS network but the basic maintenance service in such facilities is not provided by "Infrastructure of Serbian Railways" JSC. Information on facilities for rolling stock maintenance are provided in Appendix 3.10.

## **5.3.6** Basic services in other technical facilities including the cleaning and washing facilities Other technical facilities are listed in point 3.8.5.

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

- Water supply at facilities located in stations: Niš, Zaječar, Lapovo, Subotica, Novi Sad and Vršac;
- Use of wagon scales in stations, where available, according to table 5 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;
- Facility manning;
- Use of portal crane in Aleksinac station:
- Operations of issuing of train accompanying documents (train dispatcher);
- Staff training and testing.

The need for using the basic services listed in bullets 1, 3, 5 and 6 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-mail: sektor.sp@srbrail.rs

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

## 5.3.7 Basic services in inland port facilities connected to railway activities

There are seven inland ports connected to railway activities. These ports and their basic characteristics are specified in point 3.7 of this document.



The inland ports also include the combined transport terminals on railway network since they represent a location where it is possible to perform transhipment of intermodal transport units from one to another mode of transport.

The Rules on combined transport terminals on railway network and routes for transport to and from the combined transport terminal ("Official Gazette of RS" No 26/18) determine the road routes to and from them.

IŽS does not have the Information on the services facility which, according to Article 18 of the Law on Railways, the Port Operator is obliged to publish, for more detailed information on the services provided at the above stated services facilities the contact details of the inland ports are listed in point 3.7 of this document.

#### 5.3.8 Basic services – relief services

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

Center for auxiliary train activities

6, Nemanjina St

11 000 Belgrade, Serbia Tel: +381 11 3620 899 Fax: +381 11 3620 899

Email: direktor.tkp@infrazs.rs

## 5.3.9 Basic services at fuel storage and 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.

The fuel prices are presented and charged separately.

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

Lapovo, Kraljevo, Požarevac, Požega, Sombor, Kikinda, Beograd Ranžirna, Crveni Krst, Ruma, Novi Sad teretna – ložionica, Zaječar, Zrenjanin, Vršac, Subotica and Šid.

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 3618 437

Email: nabavke.infra@srbrail.rs

#### 5.4 Additional services

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

Department for access to the railway infrastructure

6 Nemanjina St

11000 Belgrade, Serbia Tel: +381 11 3618 214 Fax: +381 11 3616 814 sektor.pzi@srbrail.rs

## 5.4.1 Supply of electricity for traction

Methodology for charging of electricity for train traction is presented in Appendix 9.

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

## 5.4.2 Preheating of the passenger trains, water supply etc.

On IŽS network there is a device for preheating of passenger trains installed in Subotica station. Mandatory preheating operations include inspection of HV connecting devices prior to connecting to HV, turning on/off of high voltage connecting cable into the high voltage connecting box of passenger coach and connecting of HV to a fixed facility (or train locomotive), turning on of preheating and checking of electrical heating command and checking of train heating.

"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

## 5.4.3 Services for transport of exceptional consignments and dangerous goods

#### 5.4.3.1 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.

#### 5.4.3.2 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.

## 5.5 Ancillary services

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.

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.

#### 5.5.1 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.

#### **5.5.2** Provision of supplementary information

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

- Training and taking of exams in accordance with the internal rules and technological procedures of IŽS:
- Program of mandatory training from particular fields in accordance with the internal rules and technological procedures of IŽS;
- Provision of Timetable material (timetable graphs, timetable booklets) prepared and published by IŽS:
- Provision of online access to the Network Statement or submission of hard copy;
- 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.

## 5.5.3 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.

## 5.5.4 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.



## 5.5.5. 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.



# 6. PRINCIPLES OF LEVYING CHARGES AND SERVICE PRICES, LEVEL OF CHARGES INCLUDING THE METHOD OF THEIR CALCULATION

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, include:

short-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).

## 6.1 Charing principles

## 6.1.1 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.

#### 6.1.2 Charge for track access and use of service facilities (categories IIa 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.



#### 6.1.3 Charge for additional services (category III)

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.

## 6.1.4 Charge for ancillary services (category IV)

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

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

## 6.2 Charging system

Charging system for the use of railway infrastructure is determined in accordance with the provisions of the Law on the Railways; the detailed description of the method of calculation of charges and parameters required for the calculation, depending on the type of service, is presented in item 6.3 of this document.

## 6.3 Tariff system

When submitting the request for train path allocation the Applicant is obliged to pay the fee for the train path allocation procedure costs.

IŽS will not charge the costs for the allocation of annual train paths for the 2018/2019 Timetable nor for the allocation of train paths under the requests for amendment of annual 2018/2019 Timetable performed within the deadlines prescribed in Appendix 4.4.

The costs of the procedure for allocation of train path under the extraordinary request for amendment of the annual timetable amount to 17.137,00 RSD per train path.

The costs of the procedure for allocation of ad-hoc train path amount to 12.213,00 RSD per train path.

## 6.3.1. Minimum package of services (category I)

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

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

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)

 $C_{V\!K\!M}$  - 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)



 $C_{\it BRTKM}$   $_{\it ij}$  - 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.

## 6.3.2. Track 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:



$$NKIIa = \left(\sum Va_{lmn} \cdot C_{Va\ lmn}\right) + \left(\sum BRTKM_{lm} \cdot C_{BRTKM}_{lm}\right)$$

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

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 (1), train category (m) and traction type (n)

 $Va_{lmn}$  - number of trains in the node in relation to node (l), 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)

 $(\sum \textit{BRTKM}_{lm} \cdot C_{\textit{BRTKM}_{lm}})$  - 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)

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

 $C_{\it BRTKM}$  im - charge per one gross-tonne km in the node in relation to node (l) and train category (m)

 $\sum Vb_{lm} \cdot C_{Vb_{lm}}$  - 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

## 6.3.2.1 Price of shunting services and other related services

The unit price for the service of provision of shunting staff is determined based on the actual costs incurred in respect of a necessary technological process of shunting upon the Railway Undertaking's request and unit prices for the hired staff of the public railway infrastructure manager in accordance with price list No



4/2017-245-89 dated 23.03.2017 which is applied in a non-discriminatory manner for all railway undertakings.

Shunting by means of shunting or train locomotive

Operation type and hired shunting team	Measuring unit	Price in RSD/measuring unit VAT exclusive		
shunting of wagons without special shunting condition	ons			
1 shunting operator from RU + 1 shunter	1 wagon	60,00		
1 shunting operator from RU + 2 shunters	1 wagon	120,00		
1 shunting operator+ 1 shunter	1 wagon	123,00		
1 shunting operator+ 2 shunters	1 wagon	183,00		
shunting of wagons with special shunting conditions for the respective service point (cautious, repairs, exceptional consignments, military transports)				
1 shunting operator from RU + 1 shunter	1 wagon	132,00		
1 shunting operator from RU + 2 shunters	1 wagon	240,00		
1 shunting operator+ 1 shunter	1 wagon	270,00		
1 shunting operator+ 2 shunters	1 wagon	396,00		

## Shunting operations in marshalling and train formation in stations

Operation type	Traffic staff work by operations	Measuring unit	Price in RSD, VAT exclusive
Prior operations  • uncoupling of train locomotive from the train • preparation of shunting composition for marshalling (air discharge, decoupling of semicouplings and coupling loosening)		1 train (in arrival)	519,00
Main and final operations	<ul> <li>transferring of shunting locomotive to shunting composition and coupling</li> <li>pushing and marshalling of shunting composition via the processing facility (hump/shunting track)</li> <li>closing up and coupling of wagons</li> </ul>	train/composition (marshalled via processing facility)	1.513,00

Remark:

Removal of tail light from trains in arrival i.e. coupling of train locomotive and placing of tail light to trains in dispatching is performed by the qualified staff from the Railway Undertaking at train formation stations.

### 6.3.2.2 Price for services in other technical facilities

The price for provision of basic services in other technical facilities is determined based on the actual costs incurred during the provision of such service and is applied in a non-discriminatory manner for all railway undertakings.

#### Service for using of wagon scales

"Infrastructure of Serbian Railways" JSC is providing the service of using the wagon scales. The amount of the price depends on whose shunting staff is hired during the use of wagon scales.

Station (wagon scales location)	Hiring of shunting staff	Price for the use of wagon scales [RSD/wagon VAT exclusive]
Beograd ranžirna, Novi Sad ranžirna, Niš ranžirna and Pančevo Glavna	From Infrastructure Manager	4.426,00
Šid, Vršac, Zrenjanin fabrika, Subotica teretna, Sombor, Požega, Čačak, Lapovo ranžirna and Dimitrovgrad	From Railway Undertaking	3.309,00



#### Manning of unmanned service points and services facilities

The structure for manning of unmanned service points and services facilities upon the railway undertaking's request is the following one:

- Manning of service points of public railway infrastructure manager upon the request of the railway
  undertaking for the purposes of managing the traffic or shunting movements in such service points
  outside the service point's working hours, and
- Manning of service facilities defined under Article 15 of the Law on Railways ("Official Gazette of RS" No 41/2018) upon the request of the user for the purposes of managing the shunting movements.

Unit price for manning with traffic staff amounts to:

Work place	Train Dispatcher	Turnout operator
Price in RSD/hour, VA exclusive	Г 1.090,00	823,00

#### Service of excessive occupancy of station sidings:

The prices for excessive occupancy of station sidings is defined by types of service points, type and purpose of tracks and time period of track occupancy.

- 1) Occupancy of acceptance-dispatching i.e. marshalling-dispatching tracks:
  - At distribution and marshalling yards: 2.275,00 RSD/track per hour VAT exclusive
    - For arriving trains which are to undergo marshalling, recording of occupancy is performed upon expiry of 24 hours from the moment of train arrival to the station,
    - For departing marshalled trains, recording of occupancy is performed for the trains which were on the track for more than 24 hours before train dispatching, and
    - For transit trains, recording of occupancy is performed upon expiry of 1 hour from the moment of train arrival to the station.
  - At in-between stations: 3.500,00 RSD/track per hour VAT exclusive recording of occupancy is performed upon the expiry of 1 hour from the moment of train arrival to the station.
  - At border stations: 4.725,00 RSD/track per hour VAT exclusive
    - recording of occupancy is performed upon expiry of 5 hours from the moment of train arrival to the station if the train composition does not include the goods subject to inspection
    - recording of occupancy is performed upon expiry of 17 hours from the moment of train arrival to the station if the train composition includes the goods subject to inspection
    - recording of occupancy is performed upon expiry of 17 hours from the moment of train arrival to the station for the train hauled from Subotica Station to Subotica Teretna Station.

## 2.) Occupancy of station-shunting tracks:

Occupancy of station shunting tracks for the purposes of freight operations (loading, unloading, transhipment) is charged upon expiry of 36 hours from the moment of wagon placement to shunting track until the moment of wagon hauling from the shunting tracks and it amounts to:

- If the wagon remaining on the shunting track does not affect the placement and/or hauling of another railway undertaking's wagon, the price is 158,00 RSD/track per hour VAT exclusive;
- If the wagon remaining on the shunting track affects the placement and/or hauling of another railway undertaking's wagon, the price is:

158,00 RSD/track per hour VAT exclusive – if during the track occupancy an S-22 has been submitted by another railway undertaking for placement of the wagon on the same track, and the track was released before the expiry of 5 hours from the moment of submission of S-22 by such railway undertaking, and

13.865,00 RSD/track per hour VAT exclusive – if upon expiry of 5 hours from the moment of submission of such S-22 by another railway undertaking the track is still occupied.



#### 3) Occupancy of other station sidings

Other station sidings include the tracks that do not fall into the group of tracks listed under 1) and 2) but that are suitable for storing or longer stay of wagons (rolling stock).

Occupancy calculation is performed upon expiry of 24 hours from the moment of track occupancy according to the following prices:

- At distribution and marshalling yards: 60,00 RSD/track per hour VAT exclusive
- At in-between stations: 80,00 RSD/track per hour VAT exclusive, and
- At border stations: 100,00 RSD/track per hour VAT exclusive

### 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.

#### Operations of issuing of train accompanying documents (train dispatcher)

Operation	Measuring unit	Price in RSD VAT exclusive
Train inventory and entry into the conductor's report	wagon	18,00
Issuing of journey report with entry of all data	1 journey report	54,00
Calculation of braked weight required to stop a train, real braked weight and issuing of Report on train composition and braking	1 train	182,00

#### Staff training and testing

This additional service is provided in case of a request for training and testing of knowledge of the staff of the user of services provided by public railway Infrastructure Manager. 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

## 6.3.2.3 Price of services regarding the provision of relief

The price for providing the basic service regarding the provision of relief 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.



Price for equipment and tools for the operation of auxiliary train

No	Asset description	Type of work	Measu ring unit	Price in RSD, VAT exclusive	
1	Auxiliary train	Dispatching from the location to the place of work and return as well as traction vehicle's expecting of work or shunting according to the railway undertaking's tariff	km	According to tariff	
2	Auxiliary train	Work on preparation and retrieval of intervention equipment	hour	2.500,00	
3	Auxiliary train	Work	hour	3.000,00	
4	Jack EDK 1000	Expecting of work	hour	5.000,00	
5	Jack EDK 300	Expecting of work	hour	5.000,00	
6	Jack DHPD 65	Expecting of work	hour	5.000,00	
7	Jack EDK 1000	Preparation, Work, Retrieval	hour	41.000,00	
8	Jack EDK 300	Preparation, Work, Retrieval	hour	20.000,00	
9	Jack DHPD 65	Preparation, Work, Retrieval	hour	21.500,00	
10	LUKAS equipment	Work	hour	6.000,00	
11	WALTER trolley	Installation	hour	6.000,00	
12	WALTER trolley	Transport	km	Acc.to tariff + 30%	
13	WALTER trolley	Remaining of trolley under the rolling stock – lump sum	hour	500,00	
14	WALTER trolley	Removal	hour	6.000,00	
15	Road-rail vehicle	Transporting of auxiliary train's equipment and staff	hour	15.156,00	
16	Road-rail vehicle	Vehicle operation during the intervention	hour	15.156,00	

## Labour costs for auxiliary train's staff

No	Description	Type of work	Measu ring unit	Price in RSD VAT exclusive
1	Auxiliary train/wagon party	Work on preparation of equipment for the intervention, intervention and retrieval of equipment	hour	5.616,99
		For EDK1000, EDK300, DHPD65	hour	11.233,98
4	Daily allowances	Employees participating in the work of auxiliary train	pcs	1.800,00

## 6.3.2.4 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 fuel price is determined according to a separate price list.

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.

## 6.3.3. Additional services (category III)

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.

#### **6.3.3.1 Prices of traction electricity**

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.

## 6.3.3.2 Preheating of passenger trains

The service of preheating of passenger trains is provided by "Srbija Voz" a.d.

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

## 6.3.3.3 Services of transport of exceptional consignments and dangerous goods

The unit price of the service for transport of exceptional consignments and dangerous goods is determined based on the actual costs incurred during the provision of such service and unit prices of hired staff from the public railway Infrastructure Manager according to the price list No 4/2017-245-89 dated 23.03.2017 which 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	12.668,00

## Accompanying the trains with exceptional consignments:

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.

Operation - operators	Measuring unit	Price in RSD VAT exclusive
Accompanying performed by an employee from traffic department	Effective hour of accompanying	1.734,00
Accompanying performed by an employee from civil engineering department	Effective hour of accompanying	1.216,00
Accompanying performed by an employee from electrical engineering department	Effective hour of accompanying	1.324,00



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.

#### 6.3.4. Ancillary services (category IV)

Ancillary services can be the ones according to point 5.5 of this Network Statement. Given that the Infrastructure Manager is not obliged to provide these services, the prices 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.

#### **6.4 Efficiency 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.



#### 6.5 Modification of charges for the use of infrastructure

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.

#### 6.6 Discounts

"Infrastructure of Serbian Railways" JSC is not approving quantity discounts.

#### 6.7 Billing arrangements

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

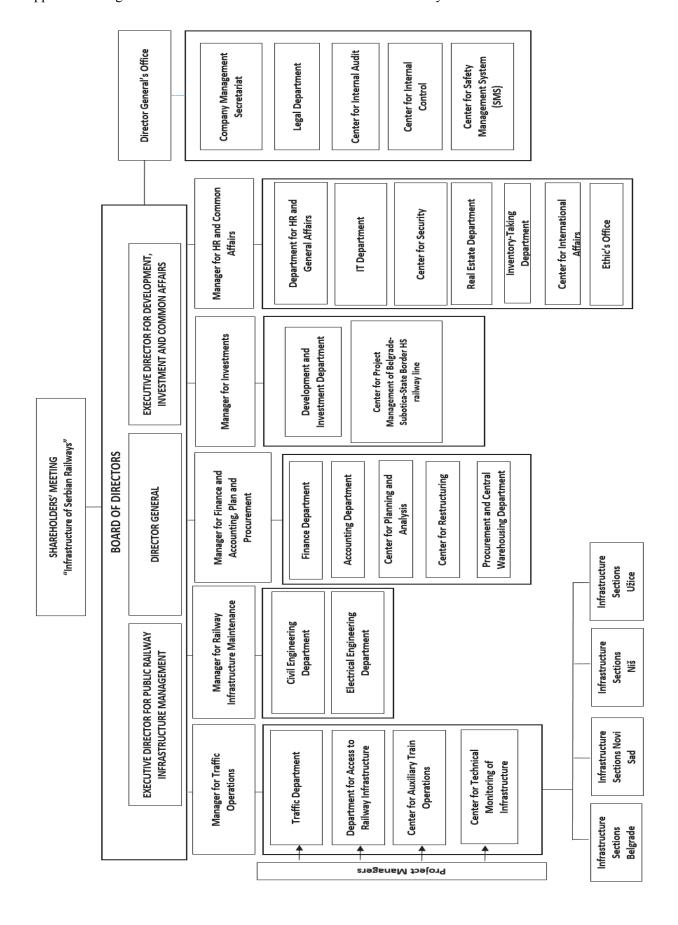


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- 9. Method for calculation of electricity consumption for train traction
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Appendix 1: Organizational chart of "Infrastructure of Serbian Railways" JSC





Appendix 2: List of internal regulations (documents) and technological procedures:

Internal documents – regulations taken over in accordance with the Law on Safety and Interoperability of Railways – Article 152 para 2

- 1) Regulations on special train operations ("Official Gazette of ZJŽ", No 9/78);
- 2) Instructions for control of Timetable implementation and applying of traffic-technical regulations ("Official Gazette of ZJŽ", No 3/84 and 2/87);
- 3) Regulations on parlour car operations ("Official Gazette of ZJŽ", No 2/80);
- 4) Instructions on technical norms and data for drafting and implementation of Timetable with appendices 1, 2 and 3 ("Official Gazette or ZJŽ No 9/89, 6/91, 8-9/91, 4/92 and 9/92);
- 5) erased
- 6) erased
- 7) Instructions for preparation of technological process for operation of marshalling and distribution yards ("Official Gazette or ZJŽ, No 6/72);
- 8) Guidelines for sending of telegrams on JŽ in domestic and international railway telecommunication traffic ("Official Gazette of ZJŽ", No 11/93 and 4/96);
- 9) Instructions for wagon inventory taking on JŽ lines ("Official Gazette of ZJŽ", No 3/85, 2/89, 14/90 and 8/94);
- 10) Instructions for processing of data obtained in wagon inventory taking on JŽ lines ("Official Gazette of ZJŽ", No 7/85, 2/89, 14/90 and 8/94);
- 11) Instructions on the use of wagons and loading tackle ("Official Gazette of ZJŽ", No 3/97);
- 12) Regulations on the method for equipping the wagons with fire extinguishers containing chemical fire extinguishing agents ("Official Gazette of ZJŽ", No 6/92);
- 13) Regulations on the compensation of damages occurring on transport means in railway traffic ("Official Gazette of ZJŽ", No 2/96);
- 14) Regulations on welding works performed on rolling stock ("Official Gazette of ZJŽ", No 5/81);
- 15) Regulations on use of electric traction stable facilities on JŽ ("Official Gazette of ZJŽ", No 2/85);
- 16) Instructions on operation of JŽ controlling and acceptance bodies ("Official Gazette of ZJŽ", No 1/03);
- 17) Instructions on safety measures on JŽ electrified lines ("Official Gazette of ZJŽ", No 8/88);
- 18) Regulations for applying the electricity safety measures on OCL single phase system 25 kV, 50Hz of JŽ ("Official Gazette of ZJŽ", No 5/79);
- 19) Instructions for performing the operations on JŽ electrified lines equipped with single phase system 25 kV, 50Hz ("Official Gazette of ZJŽ", No 4/90);
- 20) Instructions on operating the speedometers on traction and other stock and processing of recording tape ("Official Gazette of ZJŽ", No 6/80 and 8/90);
- 21) Regulations on technical and wagon operations ("Official Gazette of ZJŽ", No 6/88);
- 22) Instructions for measurement of ohm resistance on railway vehicle wheel-set ("Official Gazette of ZJŽ", No 4/78);
- 23) Instructions for operation and maintenance of bogies type Y-25 and Y-27 adopted on Yugoslav Railways ("Official Gazette of ZJŽ", No 2/87);
- 24) Instructions for operation and inspection of electrical devices on coaches ("Official Gazette of ZJŽ", No 3/02):
- 25) Instructions for repairing of wheel-sets and axle bearings for JŽ wagons ("Official Gazette of ZJŽ", No 2/00):
- 26) Instructions for operation of motor trains ("Official Gazette of ZJŽ", No 6/82 and 10/82);



- 27) Instructions for wagon lubricating operations ("Official Gazette of ZJŽ", No 1/55);
- 28) Instructions for wagon inspectors ("Official Gazette of ZJŽ", No 2/06);
- 29) Instructions for technical-wagon service record taking and technical data on JŽ wagons (with collection of TK forms) ("Official Gazette of ZJŽ", No 3/02);
- 30) Regulations on cleaning of coaches/wagons and motor trains ("Official Gazette of ZJŽ", No 6/88);
- 31) Interim special conditions on inclusion of wagons for transport of passenger cars in passenger and high speed trains on JŽ lines ("Official Gazette of ZJŽ", No 6/70, 8/71);
- 32) Instructions on transport of M-84 tank and its modifications ("Official Gazette of ZJŽ", No 1/88);
- 33) Instructions on quality guarantee for repairs performed on rolling stock ("Official Gazette of ZJŽ", No 7/79);
- 34) Instructions for regular repair of buffing and draw gear ("Official Gazette of ZJŽ", No 10/92);
- 35) Instructions for the use of Soviet (SŽD) tank wagons on JŽ lines ("Official Gazette of ZJŽ", No 6/88);
- 36) Instructions on storing of technical documents on JŽ ("Official Gazette of ZJŽ", No 3/88);
- 37) Instructions on the procedure in case of damaging of foreign wagons on JŽ lines ("Official Gazette of ZJŽ", No 5/03);
- 38) erased
- 39) Regulations for thermic processing of turnout elements and rail ends for insulated rail joints ("Official Gazette of ZJŽ", No 4/86);
- 40) Regulations on the measures for traffic safety and safety of workers performing the trackside works ("Official Gazette of ZJŽ", No 6/92);
- 41) Instructions for securing of traffic in winter conditions ("Official Gazette of ZJŽ", No 1/04);
- 42) Instructions for welding of railway rails in aluminum-thermic procedure ("Official Gazette of ZJŽ", No 10/86);
- 43) Instructions for controlling the compacting degree of railway line substructure applying the dynamic method on JŽ network ("Official Gazette of ZJŽ", No 1/06);
- 44) Instructions for uniform criteria for controlling the line condition on JŽ network ("Official Gazette of ZJŽ", No 6/01 and 4/04);
- 45) Instructions for delivery, installation and maintenance of *Kraiburg* rubber panels for level crossings on JŽ network ("Official Gazette of ZJŽ", No 4/03);
- 46) Instructions for delivery, installation and maintenance of *Pandroll k-lock* track fastening on JŽ network ("Official Gazette of ZJŽ", No 3/04);
- 47) Instructions for delivery, installation and maintenance of *Pandrol-Fastclip* fastenings on JŽ network ("Official Gazette of ZJŽ", No 1/03);
- 48) Instructions for delivery, installation and maintenance of *Pandroll* elastic fastenings on JŽ network ("Official Gazette of ZJŽ", No 8-9/87);
- 49) Instructions for delivery, installation and maintenance of SKL-2 elastic clamp on JŽ network ("Official Gazette of ZJŽ", No 8-9/87);
- 50) Instructions on technological procedure for protection against corrosion of rails, turnouts, bridges, jack and W-shape supports ("Official Gazette of ZJŽ", No 11/87);
- 51) Instructions for manufacturing, control and acceptance of *Walter BAU-AG* single unit pre-stressed concrete sleepers on JŽ network ("Official Gazette of ZJŽ", No 5/04);



- 52) Instructions for delivery, installation and maintenance of turnouts on concrete sleepers manufactured by *Walter BAU-AG* on JŽ network ("Official Gazette of ZJŽ", No 2/05);
- 53) Instructions for manufacturing, control and acceptance of *PFLEIDERER* pre-stressed concrete sleepers for turnouts and crossings on JŽ network ("Official Gazette of ZJŽ", No 4/05);
- 54) Instructions for delivery, installation and maintenance of *Tensar* two-axle geonet on JŽ network ("Official Gazette of ZJŽ", No 5/05);
- 55) Instructions for manufacturing and implementation of clamps for S-49 and UIC 60 rails on JŽ network ("Official Gazette of ZJŽ", No 1/06);
- 56) Instructions for operation of inductive auto-stop device I 60 ("Official Gazette of ZJŽ", No 2/75, 7/78, 8/81 and 8/89);
- 57) Instructions on technical inspection of signalling and safety devices ("Official Gazette of ZJŽ", No 10/78);
- 58) Instructions on the types and use of telecommunication devices and connections (1977);
- 59) Regulations on company clothing on Yugoslav Railways ("Official Gazette of ZJŽ", No 4/88, 13/89, 6/92 and 6/93);
- 60) Instructions for proving the presence of alcohol in the employee's organism during the work on JŽ ("Official Gazette of ZJŽ", No 5/67);
- 61) Regulations for calculation and determination of train running duration (1956);

## The company is also applying other internal documents – Regulations, Instructions, Permanent Orders, General Orders and other orders

- 1) Internal Rules of Procedure of Company's Shareholders Meeting ("Official Gazette of Serbian Railways" No 28/15);
- 2) Internal Rules of Procedure of Company's Board of Directors ("Official Gazette of Serbian Railways" No 15/15);
- 3) Regulations on organization and systematization of jobs in Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade ("Official Gazette of Serbian Railways" No 55/18, 67/18, 9/19, 10/19);
- 4) 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 21/2017, 37/18);
- 5) Instructions for restricted speed running procedures in the area covered by "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 21/2017);
- 6) Instructions for the preparation of Station Regulations in the area covered by "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 21/2017, 7/18);
- 7) Instructions on procedures in case of incidents and accidents in the area covered by "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 52/18);
- 8) Instructions for regulation and management of train movements on lines equipped with traffic remote control as well as for operation of FLEXICODE 560/I system remote control devices;
- 9) Instructions for traffic organization, performing of traffic operations and operating of traffic remote control devices on Batajnica Stara Pazova Ruma Šid railway line;
- 10) Instructions on traffic organization, performing of traffic operations and operating of traffic remote control devices on Belgrade (Resnik) Požega Vrbnica railway line and on the (Belgrade) Resnik-Požega-Vrbnica-State Border (Bijelo Polje) railway line ("Official Gazette of Serbian Railways" No 53/18);



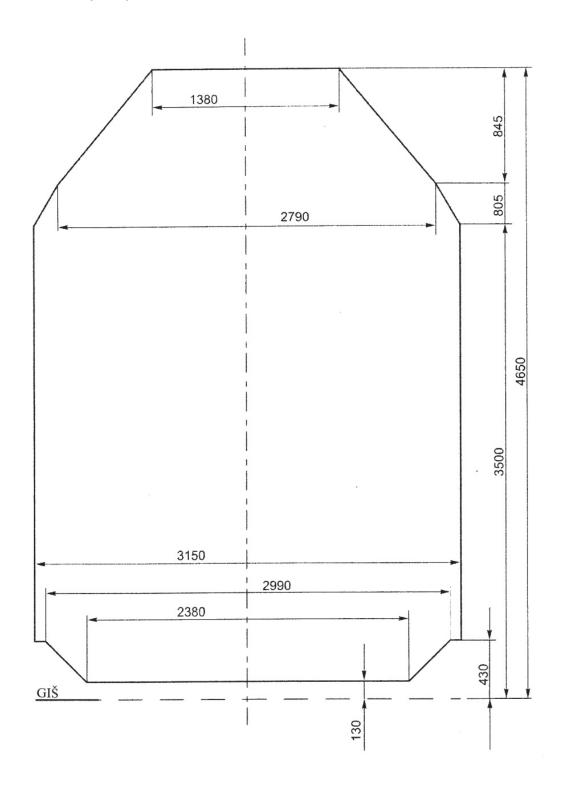
- 11) Several instructions for use of radio connection on particular railway lines (Lapovo-Kraljevo, Crveni Krst-Zaječar and other railway lines);
- 12) Regulations on organization and performing of internal control and monitoring operations in Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade ("Official Gazette of Serbian Railways" No 13/2017);
- 13) Instructions on administrative-office operations ("Official Gazette of Serbian Railways" No 56/16);
- 14 Regulations on fire protection of public company "Serbian Railways" ("Official Gazette of Serbian Railways" No 4/2007);
- 15) Collective agreement for "Serbian Railways" Joint Stock Company ("Official Gazette of Serbian Railways" No 25/18);
- 16) Instructions for implementation of employee rights to compensation of costs for arriving to work and returning from work ("Official Gazette of Serbian Railways" No 7/15);
- 17) Regulations on scholarships ("Official Gazette of Serbian Railways" No 7/15);
- 18) Regulations on operation of fund for allocation of funds for preserving of work and health capacities of employees ("Official Gazette of Serbian Railways" No 8/15);
- 19) Instructions on the procedures for determining the responsibility for occurrence of damages inflicted by employees, while deciding on the rights, obligations and responsibilities, to other employees ("Official Gazette of Serbian Railways" No 10/15);
- 20) Regulations on the procedure for internal whistle blowing with the employer Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade ("Official Gazette of Serbian Railways" No 30/15);
- 21) Regulations on leasing of business premises, advertising space and space for accommodation of devices for telecommunication operators by "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 12/16);
- 22) Internal Audit Charter for "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 2/18);
- 23) Regulations on inventory taking and reconciliation of accounting condition with the actual condition ("Official Gazette of Serbian Railways" No 25/17);
- 24) Plan for optimization of staff numbers with the employer Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade ("Official Gazette of Serbian Railways" No 29/17);
- 25) Instructions for classification of used wooden railway sleepers of "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 32/17);
- 26) Instructions for organization and recording of working hours ("Official Gazette of Serbian Railways" No 35/17);
- 27) Regulations on conditions for the use and maintenance of company vehicles of "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 38/17);
- 28) Statutes of Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade ("Official Gazette of RS" No 60/15, 73/15 and "Official Gazette of Serbian Railways" No 14/17);
- 29) Long-term and medium-term plan for business strategy and development adopted by the Government of the Republic of Serbia ("Official Gazette of RS" No 82/17);
- 30) Regulations for more detailed regulation of public procurement procedure ("Official Gazette of Serbian Railways" No 16/16 and 66/17);



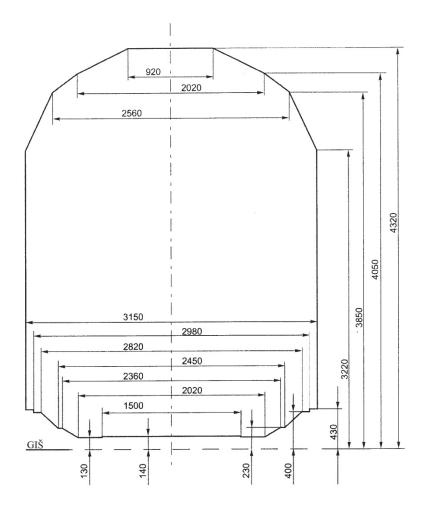
- 31) Internal plan for prevention of corruption in public procurements ("Official Gazette of Serbian Railways" No 16/16);
- 32) Regulations on recording, storing, movement and sales of inactive stocks and material obtained in the work process ("Official Gazette of Serbian Railways" No 16/16);
- 33) Instructions on the method for handling, warehousing, sales and handover of dangerous waste material ("Official Gazette of Serbian Railways" No 16/16);
- 34) Act on safety of ICT system of "Infrastructure of Serbian Railways" ("Official Gazette of Serbian Railways" No 18/18);
- 35) Instructions for safe and healthy work of employees with another employer, pupils and students in manufacturing work, professional practice, practical education and persons attending professional training at Joint Stock Company for Public Railway Infrastructure Management "Infrastructure of Serbian Railways", Belgrade ("Official Gazette of Serbian Railways" No 12/18);
- 36) Instructions for maintenance of rolling stock operated by "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 7/18);
- 37) Instructions for drafting, adopting and publishing of internal documents ("Official Gazette of Serbian Railways" No 35/18);
- 38) Regulations on applying fire protection measures at locations of temporary welding, cutting and soldering at "Infrastructure of Serbian Railways" JSC ("Official Gazette of Serbian Railways" No 35/18);
- 39) Regulations on combined transport terminals on railway network and road routes for transport to and from combined transport terminals ("Official Gazette of RS" No 26/2018);
- 40) Regulations on types, marking method and more detailed technical conditions to be fulfilled by loading units, rolling stock and railway infrastructure in combined transport ("Official Gazette of RS" No 70/2018).



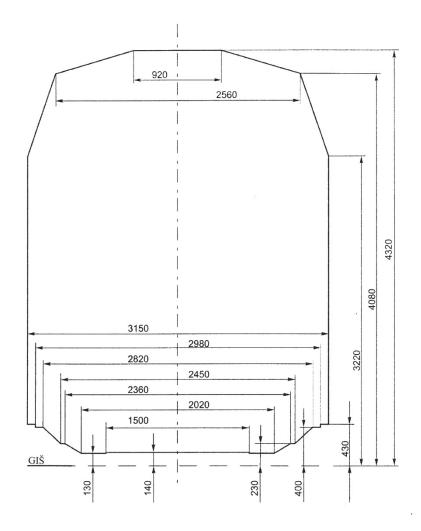
Appendix 3.1. Loading Gauge ZS I













#### Appendix 3.4. Electrified lines

#### Main lines:

- 1. Beograd Stara Pazova Šid State Border (Tovarnik)
- 2. Beograd Mladenovac Lapovo Niš Preševo State Border (Tabanovce)
- 3. (Beograd) Rakovica Jajinci Mala Krsna Velika Plana
- 4. (Beograd) Stara Pazova Novi Sad Subotica State Border (Kelebia)
- 5. Niš Dimitrovgrad State Border (Dragoman):
  - electrified on section Dimitrovgrad State Border
- 6. Beograd Centar Pančevo glavna stanica Vršac State Border (Stamora Moravita):
  - electrified on section Beograd Centar Pančevo varoš
- 7. (Beograd) Resnik Požega Vrbnica State Border (Bijelo Polje)
- 10. Beograd Centar Novi Beograd
- 11. Beograd Centar Rasputnica G (Rakovica)
- 12. Beograd Ranžirna "A" Ostružnica Batajnica
- 13. Beograd Ranžirna "B" Ostružnica
- 14. Beograd Ranžirna "A" Rasputnica "B" Rasputnica "K/K1" Resnik
- 15. Ostružnica Rasputnica "B" (Rasputnica "K/K1")
- 16. Beograd Ranžirna "B" Rasputnica "R" Rasputnica "A" (Resnik)
- 17. (Beograd Ranžirna "B") Rasputnica "R" Rakovica
- 18. Beograd Ranžirna "A" Rasputnica "T" Rakovica
- 19. Beograd Ranžirna "B" Rasputnica "T" (Rakovica)
- 20. connecting track in the area of Rasputnica "K/K1": (Rasputnica "B") skretica "K" skretnica "K1" (Jajinci)
- 21. Topčider Rasputnica Savski most (Novi Beograd)
- 24. (Rasputnica Pančevački most) Rasputnica Karađorđev park Rasputnica Dedinje (Rasputnica G)
- 25. Inđija Golubinci
- 26. Novi Sad Novi Sad Ranžirna Rasputnica Sailovo
- 27. bypass track of station Mala Krsna: (Kolari) branching turnout 1 branching turnout 28 (Osipaonica)
- 28. Rasputnica Lapovo Varoš Lapovo ranžirna Lapovo
- 29. Trupale Niš ranžirna Međurovo
- 30. Crveni krst Niš ranžirna
- 31. Niš Rasputnica most (Niš ranžirna)

#### **Regional lines:**

- 5. Novi Sad Odžaci Bogojevo:
  - > electrified on section Novi Sad Sajlovo
- 11. Stalać Kraljevo Požega:
  - > electrified on section Kraljevo Požega
- 13. connecting track to station Požega: (Uzići) branching turnout No 53 branching turnout No 54 (Dragačevo)
- 14. Smederevo Mala Krsna
- 15. Mala Krsna Bor Rasputnica 2 (Vražogrnac):
  - electrified on section Mala Krsna Požarevac

#### **Local lines:**

- 4. Novi Sad Novi Sad ložionica:
  - electrified on section Novi Sad Blok 3 Novi Sad
- 18. Pančevo Varoš Pančevo Vojlovica



### Appendix 3.5 Power supply facilities

No	Facilities	Chainage
	ne 1. Beograd – Stara Pazova – Šid – State Border– (Tovarnik)	Chamage
1.	EVP Zemun	009+671
2.	PSN Batajnica	021+735
3.	PS Nova Pazova	027+100
4.	PS Stara Pazova	035+000
5.		043+015
6.	EVP Indija	
	PS Putinci	053+600
7. 8.	PSN Ruma	066+245
	PS Sremska Mitrovica	081+700
9.	EVP Martinci	094+200
10.	PS Kukujevci	105+000
11.	PS Šid	116+400
	ne 2. Beograd – Mladenovac – Lapovo – Niš – Preševo – State Border–	
12.	PS Savski Most	000+615
13.	PSN Košutnjak	007+726
14.	PS Rakovica	008+656
15.	PS Kijevo	010+128
16.	EVP Resnik	014+020
17.	PS Klenje	024+800
18.	PSN Ralja	032+340
19.	PS Sopot Kosmajski	041+565
20.	EVP Mladenovac	053+100
21.	PS Glibovac	074+000
22.	PSN Mala Plana	084+350
23.	PS Plana	089+700
24.	EVP Markovac	099+345
25.	PS Lapovo Varoš	106+309
26.	PS Lapovo Putnička	109+207
27.	PSN Bagrdan	119+122
28.	EVP Jagodina	136+262
29.	PS Ćuprija	148+200
30.	PS Paraćin	154+971
31.	PSN Sikirica	165+025
32.	PS Stalać	176+154
33.	PS Braljina	186+600
34.	EVP Đunis	195+130
35.	PS Korman	205+540
36.	PS Aleksinac	214+077
37.	PSN Grejač	223+479
38.	PS Trupale	234+104
39.	PS Niš	243+287
40.	EVP Niš	248+755
41.	PS Doljevac	261+410
42.	PSN Pečenjevce	276+752
43.	PS Leskovac	287+910
44.	EVP Grdelica	300+580
45.	PS Džep	319+561
46.	PSN Suva Morava	332+860
47.	PS Vranjska Banja	347+765
48.	EVP Ristovac	365+370
49.	PS Bukarevac	386+617
50.	PSN Tabanovci	400+060

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Main I	Line3. (Beograd) – Rakovica – Jajinci – Mala Krsna – Velika Plana	<u> </u>
51.	PS Beli Potok	017+800
52.	PSN Vrčin	026+400
53.	PSMali Požarevac	042+800
54.	EVP Vodanj	056+700
55.	PS Mala Krsna	070+600
56.	PSN Lozovik	086+000
	Line 4. (Beograd) – Stara Pazova – Novi Sad – Subotica – State Bo	
57.	PS Indija	042+230
58.	PSN Beška	051+880
59.	PS Sremski Karlovci	066+480
60.	PS Novi Sad	077+670
61.	EVP Novi Sad	081+0209
62.	PS Kisač	091+602
63.	PSN Zmajevo	105+045
64.	EVP Vrbas	120+135
65.	PS Lovéenac	127+824
66.	PSN Bačka Topola	142+745
67.	PS Žednik	157+926
68.	EVP Naumovićevo	168+590
69.	PS Subotica	177+262
70.	PSN Kelebija	184+398
	Line 6. Beograd Centar – Pančevo glavna stanica – Vršac – State B	
71.	PS Beograd Centar  PS Beograd Centar	000+000
72.	PS Pančevački Most	004+687
	Line 7. (Beograd) – Resnik – Požega – Vrbnica – State Border– (Bi	
73.	PS Barajevo	015+420
74.	PSN Stepojevac	029+610
75.	PS Lazarevac	045+310
76.	EVP Slovac	059+248
77.	PS Valjevo	077+905
78.	PSN Lastra	093+056
79.	PS Ražana	111+239
80.	EVP Kosjerić	118+229
81.	PS Požega	140+420
82.	PSN Uzići	150+295
83.	PS Užice – teretna	162+319
84.	EVP Sušica	178+379
85.	PS Zlatibor	193+407
86.	PSN Jablanica	206+350
87.	PSN Jabianica PS Priboj	225+338
88.	EVP Pribojska Banja	225+338 232+750
88. 89.	PS Bistrica	241+248
90.	PSN Prijepolje	257+226
91.	PS Lučica  EVP Prodovovo	264+695
92.	EVP Brodarevo	273+360
93.	PS Vrbnica	285+096
	Line 12. Beograd Ranžirna "A" – Ostružnica – Batajnica	001 : 200
94.	PS Železnik – ulaz	001+290
95.	PS Železnik – izlaz	002+615
96.	PSN Surčin	013+485
Region	nal Line 11. Stalać – Kraljevo – Požega	



97.	EVP Kraljevo	080+565
98.	PSN Ovčar Banja	120+900

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

**Note:** the border between CDU Beograd and CDU Novi Sad is at km 042+470 of main line 4. (Beograd) – Stara Pazova – Novi Sad – Subotica – State Border– (Kelebia), and the border between CDU Beograd and CDU Niš is at km 115+486 of main line 2. Beograd – Mladenovac – Lapovo – Niš – Preševo – State Border– (Tabanovce)

#### **Abbreviations:**

**EVP** - Electric traction substation

**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

-PP	Cham 5.0 0 v							0		8	, -										1	·PP																				
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her	Mechanical signal	als 17				,	20			30	16	I		I		I		I	Ι												4	20	2	∞	11	$\prod$	o	5	11			
Signal type in Other	Light signal	or sign	217	196	3	73		103	177	12	13	2	-	1	4	2	-		1		1		ж	4		_	28	106	3 6		Ц	Ξ	2	7	4	-	- 1	4	43	L		т
Signs	Mechanical signal	umber			_	,	20	19		37	49	1	Ц	1	4	1		4	L		1				Ц			1	L		Ξ	26	7	∞	11	Ц	2	10	Ξ			Ц
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lockir	On-site control and interlocking by means of electrical controller	irnouits 10				25																																				
Turnout inter	Central control desk and interlocking by means of mechanical devices	Number of t				4		∞			63																				4		7		8							
csl	Central control desk and interlocking by means of electric positioning devices	o	341	639	151	121		116	306	91	61		32	2				- 0	132	3				4			44	100	4			7	19	6			۰	∞	22			22
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thiv	Electrical-mechanical devices <i>n</i> signal-turnout dependence	Number of sta	,	1			27	1		1	œ												2				1				1		1		2		,	2	7			-
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10 Á	Complete interlocking with rela electronic devices	,,	15	55	,	C 7	2	S	34	2	-	_	2	1	-	1		_	-	-			ļ.			L	2	-	1	a		1 1	-	-		$\coprod$		-	∞			-
	RAILWAY LINES		Beograd - Stara Pazova - Šid - State Border - (Tovamik)	Beograd - Mladenovac - Lapovo - Niš - Preševo - State Border -	(c)	(Beograd) - Kakovica - Jajinci - Maia Krsna - Velika Plana (Beograd) - Stara Pazova - Novi Sad - Subotica - State Border -	(Kelebia) Niš - Dimitroverad - Slate Border - (Dragoman)	Beograd Centar - Pančevo glavna stanica - Vršac - State Border - (Stannora Moravita)	(Beograd) - Resnik - Požega - Vrbnica - State Border - (Bijelo Polje)	Lapovo - Kraljevo - Lešak - Kosovo Polje - Đeneral Janković - State Border - (Volkovo)	Subotica - Bogojevo - State Border - (Erdut)	Beograd Centar - Novi Beograd	Boograd Ranžirna "A" - Ostružnica - Batajnica	Ranžirna "B" - Ostružnica	Beograd Ranzirna "A" - Rasputnica "B" - Rasputnica "K/K1" - Resnik	Ostružnica - Rasputnica "B" - (Rasputnica "K/K1")	Beograd Ranžirna "B" - Rasputnica "R" - Rasputnica "A" - (Resnik)	(Beograd Ranžirna "B") - Rasputnica "R" - Rakovica Roomed Danžirna "A" - Dasputnica "T" - Daleovica	J Kalizinia A - Kaspuunka 1 - Kakovika J Ranžima "B" - Rasputnica "T" - (Rakovika)	vezni kolosek na području Rasputnice "K/K1": (Rasputnica "B") -	skretnica "K" - skretnica "K1" - (Jajinci) Topčider - 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 Annii grad)	Rasputnica Panckackit most) - Rasputnica Karadordev park - Rasputnica Docinie - (Rasputnica G)	- Golubinci	obilazin kolosek sanice Mala Krsna: (Kolari) - odvojna skretnica 1 -	odvojna skretnica zo - (Osipaonica) Rasputnica Lapovo Varoš - Lapovo ranžirna - Lapovo	Trupale - Niš ranžirna - Međurovo	Niš - Rasputnica most - (Niš ranžirna)	Spojni kolosek stanice Niš: (Crveni krst) - odvojna skretnica 2 - odvojna skremica 4 - (Čele knla)	Subotica - Horgos - State Border - (Roszke)	Pančevo Glavna stanica - Zrenjanin - Kikinda - State Border - (Jimbolia)	Banatsko Miloševo - Senta - Subotica	Pančevo Varoš - Rasputnica 2a - (Jabuka) Novi Sad - Odžaci - Bogojevo	(Novi Sad) - Rasputnica Sajlovo - Rimski šančevi - Orlovat stajalište	Novi Sad Ranžirna - Sajlovo Rasputnica	Orlovat - Rasputnica 1a - (Lukiċevo) Ruma - Ŝabac - Rasputnica Donja Borina - State Border - (Zvornik	) - Dacondrien   - Dacontries 3 - (Štitor)	(Platicevo) - Kasputinea 1 - Kasputinea 3 - (Sutar) Stalać - Kraljevo - Požega	spojni kolosek stanice Kraljevo: (Mataruška Banja) - odvojna skretnica broj 72 - odvojna skretnica broj 73 - (Adrani)	spojni kolosek stanice Požega: (Uziči) - odvojna skretnica broj 53 - odvojna skretnica broj 54 - (Drasačevo)	Smederevo - Mala Krsna
			3eograd	Beograd .	Tabanov	Beograd	Kelebia) Jiš - Din	Stamora	Beograd	apovo -	Subotica	Seograd	3cograd	Seograd	Seograd	Stružni	Seograd	Beogra	3eograc	ezni ko	opčide	Topčide	bilazni	Rasput	ndija -	bilazni	asputr	Trupale	Jiš - R	Spojni	ubotic	ančevo	3anatsk	Jančevo Jovi Sa	Novi Sa	Vovi Sac	Jrlovat -	Novi)	stalać - K	spojni ko roj 72 -	spojni ko	Smede
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	ıer	Mechanical signal	IS	17	4	22		51	8	e					-				4	2				12	77		2				-	12																263
tribo.	Other	Light signal	Signs	16	45	4	T				T	-	1	Γ	-			2	4	$ \top $	,	2	Τ	Τ	2		3	3	П		Γ				T	T	T	T	T	T	T	T	T	T	Τ	T	Τ	1217
Signal terro	Main	Mechanical signal	umber or	15	13	34	1	36	3	3	Ī	İ	İ	I	-				4	2		I	Ī	15	3		2				-	12							1	1	1	1	ŀ	1	1	ļ	I	338
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	ρλ	On-site control and interlocking means of turnout lock		= }	156	127		59	10	3		ı	, ,	4	-	4		84	46	56	19	01	OI	52	91		41	11			9	64	17		41			20	9					- 1		4 4	<u>,                                    </u>	2574
rlocking	-	On-site control and interlocking by means of electrical controller	urmours	10				9																																								31
Turnout interlocking		Central control desk and interlocking by means of mechanical devices	Number of	6	-	∞																																										103
		Central control desk and interlocking by means of electric positioning devices	Ī	∞ :	09	15		66				T	Ī						4																					T	1	T		T	T	T	T	2349
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r	-	Electrical devices without signal- furnout dependence	ons	9	9	-	†	†	1	1	$\dagger$	-	+						1	1	1	+	$\dagger$	$\dagger$	-		1	-	1			4			†	†	1		†	†	†	†	$\dagger$	$\dagger$	t	t	t	55
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	10 8	Complete interlocking with relay electronic devices		ε ;	01	2	-	4											2																													187
		RAILWAY LINES		2	Mala Krsna - Bor - Rasputnica 2 - (Vražogrnac)	Crveni krst - Zaječar - Prahovo pristanište	(Rgotina) - Rasputnica 3 - Rasputnica 1 - (Trnavac)	Doljevac - Kastrat - Kosovo Polje	Kuršumlija - Kastrat	(Barlovo) - Rasputnica 1 - Kuršumlija	Kosovo Polje - Metohija - Pec	Nosovo Pojje Terena - Kaspunica 1 - (Dremea). Suborica - Suborica fabrilea	Subotica - Subotica bolinica	Kanijža - 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	Backa Palanka - Gajdobra	(Brasilia) - Kaspittinca Donja bornia - Zvornik Orad Šid - Sremska Raža Mova - State Border - (Bijelijna)	Kikinda - Banatsko Arandelovo	Sečani - Jaša Tomić	Zrenjanin Fabrika - Vršac - Bela Crkva	Pančevo Varoš - Pančevo Vojlovica	(Uljma) - Rasputnica A - Rasputnica B - (Jasenovo)	spojni kolosek stanice Senta: (Coka) - odvojna skretnica 22 - odvojna	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 sirćetni kompleks (km 6+413)	Bogojevo - Dunavska obala	(Sombor) - Rasputnica Strilić - Bački breg	Sombor - Kıdıca	(Visnjičevo) - Rasputnica Rača - Sremska Rača	Paracin - Stari Popovac	Surcin - Jakovo Becmen Recensal snolina) - km 2+200 odvojna skretnica - Fabrika šećera	(Deograd spojjua) - mii 27270 omojjua smetijica - faditna secera Šarganska osmica	Total:
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			e traic	ert əl	mces	e trac	le tra	Number of block points	als	als ec									e trac	le tra	ote co	ote cc	otely
	No		single	qoop	dista	signk	qnop	ploc	Number of signals	Number of signal auto-stop devices									signk	quop	rem	reme	rem.
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ŝ.			kı		kom	k							pcs			9				m		pes	
1	la	2 Beograd - Stara Pazova - Šid - državna granica -	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	101	(Tovarnik)					v	61	120	120	14	12					_		¢:	97÷918	1	5	6
2	102	Beograd - Mladenovac - Lapovo - Niš - Preševo - državna granica - (Tabanovec)	6+000		1		14+150	195	443	289	37	53	-1	1	2		8	4			2	38	15
3	103	(Beograd) - Rakovica - Jajinci - Mala Krsna - Velika Plana				93+143		41	81	81	11	3					1				1	12	4
	104	(Beograd) - Stara Pazova - Novi Sad - Subotica -	15+020		4	133+722	9 8	61	121	121	15	8			2	1	1	2	9.				
5	105	državna granica - (Kelebia) Niš - Dimitrovgrad - državna granica - (Dragoman	12.040		(530)	16+100		6	11		5	7	_		3	4	7	4				-	
6	106	Beograd Centar - Pančevo glavna stanica - Vršac -	82+200	19+070	14		19+600	10	26	26	4	2					8	1	10.5				
	107	državna granica - (Stamora Moravita (Beograd) - Resnik - Požega - Vrbnica - državna	287+013		33						3	9	-1:	15					287±013		1	26	9
7	(HONE)	granica - (Bijelo Polje) Lapovo - Kraljevo - Lešak - Kosovo Polje - Đeneral	20/10/13		.13						1000	3	- 1	13		-	Tyggs	1 91.	20:7013		4	40	
8	108	Janković - državna granica - (Volkovo			1100						3		2		1		7	4			3		
9		Subotica - Bogojevo - državna granica - (Erdut Beograd Centar - Novi Beograd	69+820		-11		2+887	2	4	4	-1	5	- 1				11	10			4		
11	111	Beograd Centar - Rasputnica G - (Rakovica)				201600	4+416	4	8	8													-
12		Beograd Ranžima "A" - Ostružnica - Batajnica Beograd Ranžima "B" - Ostružnica				25+658 5+902		14	26 2	26	1	1									1	9. 3	2
14	114	Beograd Ranžima "A" - Rasputnica "B" - Rasputnica "K/K1" - Resnik				10+419		4	8	8	1						10					1	1
15	115	Ostružnica - Rasputnica "B" - (Rasputnica "K/K1")				2+121		1	2	2		100							100				
16	116	Beograd Ranžima "B" - Rasputnica "R" - Rasputnica "A" - (Resnik)				4+538		2	2	2								- C					
17		(Beograd Ranžirna "B") - Rasputnica "R" - Rakovica			,	1+149													,				
18		Beograd Ranžima "A" - Rasputnica "T" - Rakovica Beograd Ranžima "B" - Rasputnica "T" - (Rakovica				0+709 8+379		3	5	5									S			1/2 2	
		vezni kolosek na području Rasputnice "K/K1"; (Rasputnica "B") - skretnica "K" - skretnica "K1" -				0+463							3						0.			0	
20	2000	(Jajinci)				700000																	
21		Topèider - Rasputnica Savski most - (Novi Beograd Topèider - Beograd spoljna - Beograd Dunav -				3+578		1	1							1	Together the second	V 00					-
22	122	Rasputnica Pančevački mos				6+257	4+519									1	0	0	10				
	123	obilazni kolosek stanice Beograd Spoljna: (Topčider) - Blok 1 "Obala" - Blok 2 "Prelaz" - (Beograd donji grad)				1+757											1						
23	_			-																			-
	124	(Rasputnica Pančevački most) - Rasputnica Karadordev park - Rasputnica Dedinje - (Rasputnica G)					1+591																
24	125	Indija - Golubinci	4+020		1	4+020		2	4	4	-		-					-	a v	-		57 7	-
26		Novi Sad - Novi Sad Ranžima - Rasputnica Sajlovo	3+749		2						1												
-80	127	obilazni kolosek stanice Mala Krsna: (Kolari) - odvojna skretnica 1 - odvojna skretnica 28 - (Osipaonica)	8			2+387					1												
27	-		-				Susses							-	(3)								-
28		Rasputnica Lapovo Varoš - Lapovo ranžima - Lapovo					3+788																
29 30	130	Trupale - Niš ranžirna - Međurove Crveni krst - Niš ranžirna				1+220 17+100	1	2	3 2	1													
31	131	Niś - Rasputnica most - (Niš ranžima) Spojni kolosek stanice Niš: (Crveni krst) - odvojna			N.	4+990		4	7		1	1	3		8		9	5. 51			3	3 9 2 7	
32	132	skretnica 2 - odvojna skretnica 4 - (Čele kula)				0+500						2											
33	32/15	Subotica - Horgoš - državna granica - (Roszke Pančevo Glavna stanica - Zrenjanin - Kikinda - državna	24+351		5						3	146			- 45		2	2				-	
34 35	202	granica - (Jimbolia)	131+318		14						4	10		1,2	1		11	4			3		
36	204	Banatsko Miloševo - Senta - Subotica Pančevo Varoš - Rasputnica 2a - (Jabuka)	80+264 1+600		1							1					2	2	11				
37	Over 10	Novi Sad - Odžaci - Bogojeve (Novi Sad) - Rasputnica Sajlovo - Rimski šančevi -	89+457		10							1			1		7	4					
38	206	Orlovat stajalište	65+405		11						2	1					4	3	6		3		
39 40		Novi Sad Ranžima - Sajlovo Rasputnica Orlovat - Rasputnica 1a - (Lukićevo)	2+502 0+630		1																		
41	209	Ruma - Šabac - Rasputnica Donja Borina - državna granica - (Zvornik Novi)				101+951						3			4	3	3	6					
42	210	granica - (Zvornik Novi; (Platičevo) - Rasputnica 1 - Rasputnica 3 - (Štitar)										0					j				2		
43	211	Stalać - Kraljevo - Požega				135+733						2	1		2		4	5					
	***	spojni kolosek stanice Kraljevo: (Mataruška Banja) -																					
44	212	odvojna skretnica broj 72 - odvojna skretnica broj 73 - (Admii)																					
	213	spojni kolosek stanice Požega: (Uzići) - odvojna															Î						
45		skretnica broj 53 - odvojna skretnica broj 54 - (Dragačevo)			_							9	-		De la constant			-			4		
46		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			1		7	1					
49 50	218	(Rgotina) - Rasputnica 3 - Rasputnica 1 - (Tmavac) Doljevac - Kastrat - Kosovo Polje													1			0			3		
51		Kuršumlija - Kastrat																					



91

											INTER	LOCKI	NG FAC	CILITIE	S							_	$\neg$
														crossing		levices							$\neg$
			Intersta	tion deper	ndence		Auto	matic b	loc		Auton	natic nos	itioning			al positi	ioning of	level	Traf	fic remote	contro	ol dev	ices
				device							Pruton		sings	or icver	Migh	cros		icver					
										æ	half-ha	rrier or					-				SI	sue	
					l ii					Number of signals equipped with auto-stop devices		rier		colour		rical		anical			Number of remote control centers	Number of remote control stations	lled
		RAILWAY LINE	ine	line	Number of distances between stations	ine	line			bbec	logitu	ıdinal	light s	signals	dev	ices	dev	ices	ine	line	10	s lo	Number of remotely controlled stations
			cength of single track line	Length of double track line	s pe	Length of signle track line	ength of double track line	Number of block points		qui									Length of signle track line	Length of double track line	out	contr	00 /
			tra c	e tr	nce	Et :	e tr	k pc	als	als									ET 2	le tr	ote c	ote c	otely
	S.		ngle	Iqno	lista	gnlc	Iqnc	loc	ign	igna									gnle	Iqnc	emc	emc	emc
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	y Li		gth	gth	ons	gth	gth	per	per	ber-sto	ation	ack	atio	ack	ation	ack	atio	ack	stho	gth	ber	per	ons
	Railway Line		- cu	eng	Yun	cng	cug	l i	Number of signals	Number of signal auto-stop devices	in station	on track	in station	on track	n station	on track	n station	on track	eng	eng	1	II Z	Number
S <sub>N</sub>	Rai		kı	n	kom	k	m	_		A 10		_ 0	pcs	_ 0		0	-=	0		m		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
52	220	(Barlovo) - Rasputnica 1 - Kuršumlija																			ш	Ш	$\vdash$
53 54	221	Kosovo Polje - Metohija - Peć Kosovo Polje Teretna - Rasputnica 1 - (Drenica)																			$\vdash$	$\vdash$	$\vdash$
55	301		4+100		1								$\vdash$	1				4	_		$\vdash$	Н	$\vdash$
56	302	Subotica - Subotica bolnica	2+745		1									,							$\Box$	$\Box$	$\Box$
57		Kanjiža - Horgoš																					
58	304		2+870		1										2			1			$\sqcup$	Ш	$\vdash$
59		(Podbara) - Rasputnica 3 - Rasputnica 2 - (Kać) (Rimski šančevi) - Rasputnica 1 - Rasputnica 3 -	3+659		2						_		_								$\vdash$	$\vdash$	$\vdash\vdash\vdash$
60	306	(Podbara)	0+910		1																		
61	307	Rimski šančevi - Bečej													1		9				$\vdash$	П	П
62	308	Vrbas - Sombor									1	1			2		1	1					
63		Petrovaradin - Beočir	17+035		3												2	2			$\sqcup$		
65	310		38+304 13+420	_	2								_		,		1	2	_		$\vdash$	$\vdash$	$\vdash\vdash$
66		Bač - Karavukovo Bačka Palanka - Gajdobra	13+420		2										1		2	4			$\vdash$	H	H
67		(Brasina) - Rasputnica Donja Borina - Zvornik Grac	14:422			6+818							$\vdash$								$\vdash$	Н	$\Box$
	314	Šid - Sremska Rača Nova - državna granica - (Bijeljina)				25+612												2			П	П	
68			12:01/			23.012					_		_				2	-			$\vdash$	Ш	Ш
69 70		Kikinda - Banatsko Aranđelovc Sečanj - Jaša Tomić	12+916 10+363	_	4								$\vdash$				2		_		$\vdash$	$\vdash$	$\vdash\vdash$
71		Zrenjanin Fabrika - Vršac - Bela Crkva	65+3348		4							1					4				$\vdash$	$\vdash$	Н
72	318	Pančevo Varoš - Pančevo Vojlovica	2+907		2							1			1	3							
73	319	(Uljma) - Rasputnica A - Rasputnica B - (Jasenovo)	0+488		1																$\square$		
74	320	spojni kolosek stanice Senta: (Čoka) - odvojna skretnica	1																				
/4		22 - odvojna skretnica 23 - (Orom)				50000000															$\vdash$	H	$\vdash$
75	321	(Požarevac) - Rasputnica Sopot Požarevački - Kostolac				9+900																	
76	322					53+250						1		1	1		3	4					
77 78		Ovča - Padinska Skela	18+580		1	18+580															$\vdash$	$\vdash$	$\vdash\vdash$
79		Metohija - Prizren.  Bečej - Vrbas															1				$\vdash$	$\vdash$	$\vdash\vdash\vdash$
80		Vršac - Vršac Vašarište															1				$\vdash$	$\vdash$	$\square$
81	403		8+386		1																		
82	404		43+030		1													2			$\Box$		
83 84	405		12+300 7+255	_	2						<b>—</b>		<u> </u>				1	_			$\vdash$	$\vdash$	$\vdash \vdash \vdash$
85	_	Kikinda - Metanolsko sirćetni kompleks (km 6+413) Bogojevo - Dunavska obala	2+733		1																+	$\vdash$	$\vdash\vdash$
86	408	(Sombor) - Rasputnica Strilić - Bački breg	28+090		1																$\Box$	$\Box$	$\Box$
87	409	Sombor - Ridica	32+741		1																		
88	410	(Višnjićevo) - Rasputnica Rača - Sremska Rača				3+830															$\sqcup$	$\sqcup$	$\sqcup$
89 90		Paraćin - Stari Popovac Surčin - Jakovo Bečmer		-	-	4+400					1		-				1		_		$\vdash$	Н	$\vdash\vdash$
70		(Beograd spoljna) - km 2+290 odvojna skretnica -																			$\vdash$	H	Н
91	413	Fabrika šećera				0+600															$\sqcup$	$\square$	ш
92	501	Šarganska osmica							0.00					- 10							Щ		
$\Box$		Total			161			416	876	699	107	127	7	18	28	12	115	76			6	82	37



Appendix 3.7 Overview of telecommunication devices equipping level

		Station dispatching devices		32	2 6 8	92	0	٥	37	0		0	0	0	0 0	0	0 0	0	0	0		0	4	0 0	0	00	0	0 0	0	0	0 0		0	0	0	0 0	0	0	0
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clegraph		"Zıcb på sţeb" sàsţem	Н	Н	30	-39	$^{+}$	Н	+	Н	+	H	+				+	H	+		H	+		+	H	W-39		+	+		+	H	+	+		+			+
				Η,	tg-529	TW-39	+		TW-39			H	$\downarrow$		-		_	Н	+		-	_		+		TW		+	-		$\downarrow$	H	1	$\downarrow$		+	$\parallel$		$\mathbb{H}$
		Ејесдонје	bcs	28	2 2 0	0	0	Н	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
			type	27				dkts	žeatc 100	omni s3																													
UNITS			bcs	26	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
EXCHANGE UNITS		EZK	type	25	Ħ		T		0			Ħ	T			П	T	П	T	T	T	T	П	T		T		T	T	П	T		T	T	П	T	П	T	Ħ
EXC			bcs	24	000	0	0	0	71 0	0	0 0	0	0	0	0	0	0 0	0	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0	0
Telephon		EMD with electric motor dialler	type	23	$\dagger \dagger$		Ť		Siemens	T		Ħ	Ť		T	Ħ	T		T		T	$\dagger$	П	Ť				T	T	П	Ť	T	T	Ť	П	Ť	Ħ	T	Ħ
			Н	Н	+	+	+	Н	Sic	$\perp$	$\perp$	H	+		+	H	+	Н	+	$\perp$	+	+	Н	+	$\perp$	+	Н	+	+	Н	+	Н	+	+	Н	+	$\mathbb{H}$	+	+
		Cross-bar	Н	Н	- 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	0	0	
			type	21	$\coprod$	D97	+	Н	0	L	$\perp$	$\coprod$	$\downarrow$		+	Н	+	Н	$\perp$	$\perp$	$\perp$	+	Н	+	$\perp$	+		+	_		$\downarrow$	H	+	$\downarrow$		+	Н		$\!$
		"Zieb by step" system	bcs	20	4 -	- 6	0	0	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	0 0	0	0	0
		maters "note ad mate"	type	61	$\dagger$	eb5	CEL	Н	ISKRA	H	$\perp$	H	$\dagger$	$\parallel$	$^{+}$	H	+	H	$\dagger$	+	t	+	Н	$^{+}$	$\vdash$	fb5	H	$\dagger$	t	Н	$\dagger$	Н	+	$\dagger$	Н	$\dagger$	Н	+	$\dagger$
		Sound signalling devices	Н	81 9	0 4 0	0 6	6	Ħ	59 IS	3	- 0	00	0	0	0 0	0	0 0	0	0	0	-	0 -	0	0 0	0	2	0	0 0	0	0	0 0	0	2 2	7 0	0	0 0	0	0	-
ą		Telefaxes	bcs	17	2 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 9	0	0 0	0	0 0	0 0	0	0 -	- 0	0	0 0	0	0	0
Telegraph		Teleprinters	Н	91	31.0	2 2	0	9	51 %	0	- 0		0	0 6	7 0	e 0	2	0 0	7 0	0 0	0	0 -	2	0 0	0		0	0 0		0 0	0 0	2	0 0	4 0	0	0 0	0	0 0	0
Н		Oppers	Н	15		25	0	15	0,	0	0 0	00	00	0 0	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	6	0 0		0	0 0	0	0 0	
	85	At automatic block (APB)	bcs	Н	+	+	+	12	0,0	H	1 4	4 6	1 -		7 -	0.	- 0	- 0	0	0 (	0	0 0	0 0	0 0	0	0 0	0	0 0	+	0 0	0 0	Н	0 0		0	0 0	0	0 0	
	telephone		H	Н	87 1	+	+		28	4	0 0	7 2		_ 0		0 0		0	0	0 0		_ <		0 0	0	0 -	0	0 -	. 0	0	0 0	4	∞ <u>y</u>		0	0 0	0	0 0	
	Trackside teleph	At exit signals	Н	Н	8 LI %	+	9	Н	2 4		50 50	500		0,				0 0		0 0		+ 6					0	0 -		0	0 0	Н	# 6		0			0 0	
ICES		At evity signals	Н	Н	+	+	+	Н	69									_													+	Н	-						
VAL DEV	loute		Н	Н	+		+	Н	+		7		1		-		- 4	6.	<u> </u>	0	4 64	0 4		- 0	$\vdash$	- 0		+	0	Н	0 0	Н	4 6		Н	0 0	Н		
FINAL TERMINAL DEVICES Telephone	Traff.remote control desks		Н	Н	+	+	4	7	35	0	- 0	2 0	0	0	1 0	0	0 8	- 0	0	+	+	+	Н	0 0	+	0 -	0	+	0	Н	+	Н	2 2	+	Н	+	0	+	
FINAL TE Telephone	Traff	erones gnidotequib lanoitaroqo 1A	bcs	Н	+	+	0	-	21 12	0	0 0		0	0	+ 0	0	0 0	0 0	0	$^{+}$	0	+	0	0 0	+	+	Н	+	+	0	+	Н	+	+	Н	+	Н	+	
		sənonqələi Aq	bcs	∞ <	2 2 0	0	0	0	0	Н	0	0	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	0 0	0	0 0	
		PPA telephones	bcs	7	- 22 0	2 0	=	2	0 1	0	0 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	16	0	0 0	0	0	00
		Sестейату sets	bcs	Н	9 6	4 E	0	9	- 59	0	0	0 0	0	0 9	0	33	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	0 0	200
		Automatic telephone devices	bcs	320	1347	\$99	28	245	283	2	0 %	9 0	-	0 8	3 0	168	0 8	0	0	0	30	0 (	88	0 0	0	216	9	0 7	3 00	2 0	0 45	8	9 201	200	e .	0 0	0	0	9 8
		CB telephone devices	bcs	4 50	2 52 5	30	0	0	25	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	000
		LB telephone devices	bcs	3	284	59	2	46	68	22	9 %	0	~	2	0 -	e .	3 6		7 -	2	0 %	0 6	- 2	0 -	0	13	2	0 0	9	0	0 %	21	14	12	7	0 0	0	0	9 4
		RAILWAY LINE		BOTH & SECTION 1	101 BOD-Suc-State Border. 102 BOD-Madenovae-Niè-Preševo-State Border. 103 RGDI, Polyonico-Logine i M. Krons, M. Plone.	(BGD)-S. Pazova-Indija-Subotica-State Border.		-	(BGD)-Resnik-Podgonea-Bar		Beograd Centar-Novi Beograd  RGD Centar-B countries "C" - Relevoires	_	113 BGD Ranzirna. B -Ostručnica 114 BGD Ranzirna "A"-Rasp."B"-Rasp."K"-Resnik		BOD Kanzirna B - Kasp. K - Kasp. A (BGD Ranzima "B")-Rasp. R"-Rakovica		BGD Ranzirna "B"-Rasputnica "1"-(Rakovica) (BGD Ranz."A"-Ras.B)-Ras.K-Ras.K1-Jajinci				N.Sad-N.Sad Ranžirna-Sajlovo Rasp.		Trupale-Niš Ranžima-Međurovo	Crveni Krst-Niš Ranžirna Niš-Barantnica Most-J.Niš Paražirna)		Subotica-Horgos-Nate Border. Pančevo Glavna-Zrenjanin-Kikinda-State Border.		Pančevo Varoš-Rasputnica "2a"-(Jabuka) N Sad-Sallovo Damentnica Bonojevo			Orlovat-Kasputnica "1a"-(Lukicevo) Ruma-Šabac-Rasn Donia Borina, Stata Border		Smederevo-Mala Krsna		(Niš)-Dolje	Kuršumlija-Kastrat (Badovo), Basurnica "1", Kuršumlija		Subotica-Subotica bolnica	Natiza-Horgos Novi Sad-Novi Sad Iožionica
					102	104	105	901	108	109	110	112		112	117	811	120	121	123	124	126	127	129	130	132	202	203	4 6	200	207	208		214	9	218	~1~	301	010	304



l				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	181
	$\mid$			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	10
	- ha	11.4			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	7
	Teleoranh	10 Kgia		"Zieb pλ sieb" sysiem	type	59																1		T	T	Ī	Ī						1	
	ŀ	+			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	s
				Ејесвопіс	type	27	_				+	+		_			_		+	+		+	+	+	t	+	t		H				+	
S		-			H	H																+	+	+	+	+	H						+	
GE UNIT				ESK	s bcs	H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥	0	0 0			0	0	0	0	0	0	٥	17
EXCHANGE UNITS		-			type	H				_	_	_							_	4	_	4	4	+	+	+	ļ		L				$\downarrow$	
	Telephone	allone		EMD with electric motor dialler	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	٥	7
	Teler	10101			type	23																												
				ma stava	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
				Cross-bar	type	21																			I									
					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	17
				"Step by step" system	e	_					+	4		_						+	_	+	+	+	+	+	_		L				+	
F				2 2	s type	$\vdash$															1	1	_	+	+	1	<u> </u>						1	9
F	Τ	Т		Sound signalling devices		H	0	0	0	0	0	0	0	0	0	0	0	0		0	+	+	+	0 0	Ŧ	+	╀	0	0	0	0	$\perp$	0	156
	Teleoranh	Cicgiapii		Telefaxes		17	0	0	0	0	0	0	0	0	0	0	0	0	+	0	+	+	+	+		+	+	0	0	0	0	+	٥	=
	-	+		Teleprinters		H	0	0	0	0	0	0	0	0	0	0	0	0	+	0	+	+	+	+		+	╀	0	0	0	0	+	٥	88
				StorthO		H	0	0	0	0	0	0	0	0	0	0	0	0		0	+	+	+	0 0	+		╀	0	0	0	0	+	0	126
			slephones	At automatic block (APB)	F	H	0	Н	0	$\dashv$	0	+	0	0	0	0	0	0	+	0	+	+	+	0 0	+	+	╀	0	0	0	0	+	٥	397
			Trackside telephones	(PP)		13	0	+	0	$\dashv$	0	+	0	0	0	0	0	0	0	0	0	0	0	0 0			0	0	0	0	0	+	٥	284
CES			T	slangis tixs 1A	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	351
TERMINAL DEVICES		-	lo	slengis vinn 1A	bcs	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	415
TERMIN	vuon	alle	remote control desks	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
FINAL	Tolonh	Icichii	Traff.r	At 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	٥	24
		-		PA telephones	bcs	∞	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	٥	90
		-		PPA telephones	bcs	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0 0		0	0	0	0	0	0	0	0	96
		ŀ		Sестейлу sets	bcs	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	bcs	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	4598
		-		CB telephone devices	bcs	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	262
L				LB telephone devices	bcs	6	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	٥	0	0		0	0	0	0	0	0	0	٥	880
				RAILWAY LINE	KSI	2	306 (Rim. Šančevi)-Rasput "1"-Rasput. "3"-(Podb.)	308 Vrbas-Sombor	309 Petrovaradin-Beočin	310 Sonta-Apatin fabrika-Strilić-(Sombor)	311 Bač-Karavukovo		313 (Ruma)-Rasp.Donja Borina-Zvomik Grad	314   Šid-Sremska Rača Nova-State Border.	315 Kikinda-Banatsko Aranđelovo	316 Sečanj-Jaša Tomić	317 (Zrenjanin)-Zrenjanin fabr.Vršac-Bela Crkva	318 Pančevo Varoš-Pančevo Vojlovica	$\overline{}$	$\neg$	$\neg$	_		403 Alibunar-Seleuš	_		+	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:
$\vdash$		_			oN	-	45 3	$\rightarrow$	69	$\rightarrow$	$\dashv$	$\rightarrow$	_	-	90 3	71 3	81 3	Н	$\vdash$	$\dashv$	-	-	$\rightarrow$	53	+	-	+	72 4	73 4	79 4	Н	$\overline{}$	57 4	



											O	THER TE	OTHER TELECOMMUNICATION DEVICES	INICATIC	ON DEVIC	ES									
		Devices	for record staten	Devices for recording of transmitted statements	nsmitted	De	Devices displaying accurate time	nying accu	rate time		P,	PA devices			Inter	Interphones		Pov	Power supply devices	r devices		Passenger	Passenger visual information display	rmation d	splays
oV anii yewl	RAILWAY LINE	8 channels	12 channels	lo channels	24 channels	snoishs to 15dmuN	Clock exchange units	Masiet clocks	Impulse regenerators	Auxiliary clocks  Number of statons	stofiliquiA	Speakers	Microphone console	Number of stations	Interphone exchange units	noisellalani 100bni 107	noitellatani 100btuo 107	Acummulator batteries	Retifiers	Сопуенегя	Motor electric generator units	enoinste 10 15dmuV	Control desks	sysiqsib noitsmroftil	nformation kiosks
oN -		bcs	bcs	bcs	bcs	pcs	bcs	bcs	H		H	H	bcs	bcs	bcs	bcs	bcs	pcs	bcs	bcs	bcs	bcs	bcs	bcs 1	DCS 2
5 101 BG	BGD-Šid-State Border	1	- 24	0	000	3 0	2	1	+	t	+	4 6	35	0	4 0	0 49	0	90	16	0	0	10	0	0 0	0
	BGD-Mladenovac-Niš-Preševo-State Border.	9	2	0	-	9	2	21	Н	323 20	0 50	325	20	9	4	38	17	72	71	0	-	-	-	4	0
$\overline{}$	(BGD)-Rakovica-Jajinci-M.Krsna-V.Plana		0	0	0	20	0 0	20	20	18 1	- :	9	- 5	0 ,	0 0	0	0	25	25	0	0	0	0 0	0	0
22 105 Niš	(BGD)-5. Pazova-Indija-Subotica-State Border. Niš-Dimitrov grad-State Border.		0	0	0	0	0 0	2	3	20 1	1 1	3	1 IO	0	0	0	0	7	111	0	0	0	0 0	0 0	0 0
106	BGD Centar-Pančevo-Vršac-State Border.	2	0	-	0	5	3	3	5	92 2	52	1131	3	-	-	99	0	3	2	0	0	2	3	93	0
1 107 (BC	(BGD)-Resnik-Podgorica-Bar	1	0	-	0	34	0	34	34 2	212 7	7	72	9	1	-	ю	-	62x12V 222x2V 16x6V	47	0	0	0	0	0	0
20 108 Lap	Lapovo-Kraljevo-B Janković-State Border.	- 0	0	0	0	8	0 0	m 0	0 0	18 3	m 0	24	0 0	0	0 0	0	0	28	26	- 0	0 0	0	0 0	0	0
110	Suborica-Bogolevo-State Boricer. Beograd Centar-Novi Beograd	0	0	0	0	0	0	-	-	+	7	27	9	0	0	0	0	4		0	0	0	0	0	0
111	BGD Centar-Rasputnica"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
15 112 BG 14 113 BG	BGD Ranzima "A"-Ostruzmea-Bataj mea BGD Ranzima."B"-Ostružnica	0	0 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
114	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
25 115 Ost	Ostružnica-Rasp. "B"-(Rasp. "K"-Resnik) RGD Ranžima "R"-Rasn "R"-Rasn "A"	0 0	0 0	0 0	0 6	0 0	0 0	0 -	0 0	0 0	0 5	0 02	0 -	0 0	0 0	0 0	0 0	0 -	0 %	0 0	0 0	0 0	0 0	0 0	0 0
117	GD 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
118	(BGD)-BGD Ranžima "A"-Rasp."T"-Rakovica	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	GD Ranz. "A"-Ras.B)-Ras.K-Ras.K1-Jajinci	0	0	0	0	3	0	3	0	01	4	31	2	0	0	0	0		2	0	0	0	0	0	0
121	Topčider-Rasp.Savski Most-(Novi BGD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	-1	0	0	0	0	0	0
27 123 (To	TopcBlok 1Obata-Blok 2 pretKas.Pan.Most (Topč)-Blok 1Obata-BGD Spolina-Blok 2 pret	0	0	0	0	0 0	0 0	0 0	0 0	0 0	0	0 0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	0 0
124	(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
24 126 N.S	Indija-Golubinei N.Sad-N.Sad Ranžirna-Sajlovo Rasp.	0	0	0	0	0	0	0	0 1	0 0	0	0	0	0	0	0	0	1	1	0	0	0	0	0 0	0 0
127	ilazni 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
129	Lapovo varos-Lapovo Kanzina-Lapovo Trupale-Niš Ranžina-Međurovo	0	0	0	0	0	0	1	0	26	9	35		0	0	0	0	2	0 60	0	0	0	0	0	0
130	Crveni Krst-Niš Ranžirna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23 131 NIS 18 132 (Cr	Nis-Kasputinca Most-(Nis Kanzima) (Cr.Krst-Skr.2)-Skr.3-Skr.4-(Cele 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 0	0	0 0	0 0	0 0
201	Subotica-Horgos-State Border.	0	0	0	0	0	0	- 0	0	3		m 1	- 4	0	0	0	0	2	2	0	0	0	0	0	0
202	Pancevo Giavna-Zrenjamn-Kikinda-State Border. Banatsko Miloševo-Senta-Subotica	- 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 2	0	0 2	0 0	0 0	0 0	0 0	0	9 0	0 0	0 0	0 0	0 0	0 0	0 0
204	Pančevo Varoš-Rasputnica "2a"-(Jabuka)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	N. Sad-Sajlovo Rasputnica-Bogojevo (N. Sad) - Sajl. Rasp R. Šanč Ori. staj (Tomaš)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0
207	N.Sad Ranžima-Sajlovo Rasputnica	0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0 0	0	0	0 0	0
$\neg$	Oriovat-Rasputinica 1a - (Lukicevo) Ruma-Šabac-Rasp.Donja Borina-State Border.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
211	Stalac-Kraljevo-Požega	0	0	0	0	2	0	2		14	2	20	-	0	0	0	0	17	20	0	0	0	0	0	0
34 215 M.I	Smederevo-Mata Krsna M. Krsna-Bor-Rasputnica "2"-(Vražogrnac)	0	0	0	0	7 8	0 0	2 0	7	10 3	4	22	3 1	0	0	0	0	18	10	0	0	0	0 0	0 0	0 0
216	Nis-Zaječar- Prahovo pristanište	0	0	0	0	1	0	- 0	0	0	2	20	- 0	0	0	0	0	\$	1	0	0	0	0	0	0
69 218 (NI	(NIS)-Doljevac-Kastrat-Kosovo Polje Kurkumlija-Kastrat	0 0														0		0 0	0				0 0		
220	(Barlovo)-Rasputnica "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
$\neg$	Subotica-Subotica fabrika	0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
303	Subouca-Subouca bonnea Kanjiža-Horgoš	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	Novi Sad-Novi Sad Iožionica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0
37 305 Poc 45 306 (Ri	Podbara-Rasput. "3"-Rasput. "2"-(Kać) Rim Šančevi)-Rasmut "1"-Rasmut "3"-(Podh.)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	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	Vrbas-Sombor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Petrovaradin-Beočin	0	0	0	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	Soma-Apaun raonka-Strine-(Sombor) Bač-Karivukovo	0	0	0	0	0	0	0 0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0
55 312 Bad	Bačka Palanka-Gajdobra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



	lays	Information kiosks	SS	57	(		0	0	0			0	(		0	0	0			0	0	0	0			0	0
	ation disp		H	H	0	0		L			Ĺ							0	0						0	Н	
	ıl inform	sysiqsib noitsmoini	H	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97
	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
	Passen	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	17
		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	7
	devices	Сопуетегя	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	Rctiffers	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
	Pov	Seirellstor 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
SS	hones	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
OTHER TELECOMMUNICATION DEVICES	Interphones	Interphone exchange 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
ICATION		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	97
R TELEC	vices	Speakers	sod	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	sıəililqmA	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
	9	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
	olaying ac	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
	Devices displaying accurate time	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
	De	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	7
	ng of tran	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	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	v
	Devices 1	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		2	(Ruma)-Rasp.Donja Borina-Zvornik Grad	314 Šid-Sremska Rača Nova-State Border.	315 Kikinda-Banatsko Arandelovo	Sečanj-Jaša Tomić	(Zrenjanin)-Zrenjanin fabr. Vršac-Bela Crkva	Pančevo Varoš-Pančevo Vojlovica	(Uljma)-RaspA-RaspB-(Jasenovo)	320 Senta-Odvojna skr. 22 Senta	(Požarevac)-Rasput.Sopot PožKostolac	Markovac-Resavica	Ovča-Padinska Skela	Alibunar-Seleuš	Vladimirovac-Kovin	Čoka-Novi Kneževac	Kikinda-MKS (ind.kolosek)	Bogojevo-Dunavska obala	Sombor-Bački Breg	Sombor-Ridica Sombor-Ridica	(Višnjićevo)-Rasput.Rača-Sremska Rača	Paraćin-Stari Popovac	412 Surčin-Jakovo-Bečmen-(Boljevci)	413 (Bgd spoljna)-km 2+290-Fabrika šećera	Total:
		oV anil yewli	Rai	L	313	314	315	316	317	318	319	-	321	322	323		404	405	406	407	408	409	410	411	412	413	
			οN	-	46	52	09	71	81	67	78	48	70	63	99	53	80	59	61	28	72	73	79	89	77	57	



	Г	In-ground amplifiers	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	0	0	0	0	0	0	0		0	0	0	0 0	0	0	00
		Above ground amplifiers	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	0	0	0	0	0	0	0	0	0		0	0	0	0 0	0	0	00
			bcs	25	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	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
	Digital telephone	s\text{idM SSI}	type	24	KeymileUMUX	31M-1			KeymileUMUX STM-1																																Ī			
	Digita	s\tidM 8	type pcs	-	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0 0
			pcs tyl	21 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 0	0	0	0 0		0	0	0	0	0	0	0		0	0	0	0 0		0	00
ES		s\tidM S	type	20	siemens			H	siemens								t			+		1			+				t								t	t		1	t	t		t
DEVIC	L		pcs	_	0 15 sie	3	4	0	0 sie	9 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	0 0		0	00
MULTI-CHANNEL DEVICES		flqs13919T	type	1	ıskra iskra	iskra	AUSO UTB ISKRA		iskra	siemens-WT100 EI		iskra	iskra		iskra											iskra												iskra	iskra					
	Γ	rəfiliqma bnuozg-nl	bcs	17	0 16	0	0	0	0	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		0	0	0	0 0	, 0	0	00
		Above ground amplifiers	bcs	-	0 88	5	=	0	0	4 c	0	0	0 0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	۷ C	0	0	0	0 0	, 0	0	00
	one	Over 12 channels	e bcs	$\rightarrow$	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	0	0		0	0	0	0 0	0	0	00
	teleph		s type	$\dashv$	V300	_		Н		V300	_	Ц	1	Ļ		4	1	L		1	Н	4		Н	4			1	1	Ц		Н		_		4	1	$\downarrow$	Ш	4	$\downarrow$	$\downarrow$	Н	4
	Analogue telephone	Up to 12 channels	type pcs	7	Z 12 0 Z12 16	Z 12 3	FPD12 4	VZ12k 0	Ausso 0	Z 12 2	+	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	+	0	0	0	0 0	, 0	0	00
	1		pcs ty	+	Z 0	Z 0	0 FP	0 VZ	0 Au	1 Z	+	0	0 0	0	0	0	0 0	0	0	0 0	0	0 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
		nb to 3 channels	type	10	z 3	İ			Z3F	EI	103						İ	İ					İ		1				İ		Kt3-1			İ		Z3F	7C7	İ	Z3F		İ	İ		İ
		Local	km	6	111,88	0	71,00	3,67	10,000	63,144	7,561	0	0 0	0	0	0	0 0	22,559	0	0 0	0	0	0	2,700	0	0	0	31,500	0	4,451	1,660	0	14,5	0	0	0	0 0	0	47,000	0	0 0	0	0	0 0
	es	Fiber optic	km	∞	0	0	0	0	0	0 0	0	0	0 0	0	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0 0
4S	Cable lines	ATS	km	7	162,917	105,043	15,878	0	26,000	0 \$ 3 \$ 0	0	3,648	0 0	11,755	34,460	0	0,250	0	0	2,130	0	0	9,536	0	0	0	0	17,257	0	0	0	0	0	0	0	0 40	76.4	0	0	0	0 0	0	0	0 0
LE SYSTEMS		STKA	km		135,061	0	135,857	12,479	0	370,388	0	0	0 0	0	0	0	0 0	0	0	0 0	0	0	0 0	2,000	0	0	0	0 0	0	1,5	0	0	0	0	0	0		0	0	0	0 0		0	0 0
CABLE		Overhead cables	km	$\frac{1}{1}$	0 0	0	0	74,00	13,00	0 34	20,00	0	0 0	0	0	0	0 0	0	0	00	0	0	0 0	0	0	0	0	0 0	10	41,2	0	0	0	0	0	0	0,41	0	0	0	0 0		0	0 0
	Overhead lines	nori-	km	4	0 0	0	0	0	0	0 0	+	Н	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0 0	0	0 0	0	0	0 0	0	,65	0	0	29	0	0	0 0		0	0	0	0 0	0	0	0 0
	Over	SiBr Two wire overhead lines	km k		0 0	0	0	0	2,00	0 0		0	0 0	+	0	+		0	0	0 0	Н	0 0	+	0	0 0	0	Н	0 0	+	2	0	0	+	0	0	0 0			0	+	0 0		0	00
L	L	Two-wire overhead lines	Ā	1		<u> </u>		T	2,					T		1				<u> </u>		1	<u> </u>		1	<u> </u>		<u> </u>	T		_			<u> </u>		1	1	_		1	1	1		<u> </u>
		RAILWAY LINE			BGD-State Border BGD-Mladenovac-Niš-Preševo-State Border.	(BGD)-Rakovica-Jajinci-M.Krsna-V.Plana	_	Niš-Dimitrovgrad-State Border.	BGD Centar-Pančevo-Vršac-State Border.	(BGD)-Resnik-Podgorica-Bar	-		BGD Centar-Rasputnica"G"-(Rakovica)  RGD Ranžima "A"-Ostružnica-Batainica			Ostružnica-Rasp."B"-(Rasp."K"-Resnik)		1 ~		(BGD Ranz."A"-Ras.B)-Ras.K-Ras.K1-Jajinci Tončider-Rasn Savski Most-(Novi RGD)	_		(Vukov Sp.)-Kas. K. Fark-Kas. Dedinje-(Kakov.) Indija-Golubinci		Obilazni kolosek Mala Krsna			Nis-Rasputnica Most-(Nis Ranžirna)		$\overline{}$	Banatsko Miloševo-Senta-Subotica	Pančevo Varoš-Rasputnica "2a"-(Jabuka)	N.Sad-Sajlovo Rasputnica-Bogojevo		-		Statac-Krajevo-Fozega Smederavo, Mala Krena				Kuršumlija-Kastrat (Barlovo)-Rasmitnica "1"-Kuršumlija		Subotica-Subotica bolnica	Kanjiža-Horgoš Novi Sad-Novi Sad ložionica
		oM anil yawl	Rai		101	103	104	105	106	107	109	110	111	113			110			120	122	123	125	126	127	129	130	131		202	203	204		207		209	т.	215	216	218	220		302	303
			οN	-	0 0	4	2	22	9	1 20	26	7	× 5	14	13	25	10	6	12	29	28	27	19	24	141	30	17	23	51	43	32	44	39	38	42	47	40	34	35	64	62	76	75	36



A	Г	П	In-ground amplifiers	pcs	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	0
Control lines   Control line				-	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	0	0
Particular   Par				-	⊢	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
College   Coll		I telephone	s/JidM 22.1																																
Continue   Continue		Digita	s\tidIv[ 8		$\vdash$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Comparison   Com					Н	0	0	0	0	0	0	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   FALL	VICES		s\ridM \( \)	Н	20																														
FALLWAY LINE   FALL	EL DE	Г		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
Partial Holes   Partial May LINE   Partial Holes   Partial H	MULTI-CHANN		Поравоја	type	18																														
Note   Companies			reground 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
CABLE SYSTEMS    Cable   Cab			Phove ground amplifiers	bcs	16	0	0	0	0	0	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
Fig. 15				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	æ
Fig. 15		ephone	Over 12 channels	type	14																												П		П
Fig. 15		ue tek		-	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 SVSTEMS   Cable lines   Coerhead lines   Cable lin		Analog	Up to 12 channels	type	Т																														
Continued 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
Projective Date State	L			type	10																														
Particular Section   Particular Strains   Particular Popular Strains   Particular Popular Strains   Particular Strains   Particular Strains   Particular S			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	427,07
CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SYSTEMS   CABLE SWEET   CABLE SYSTEMS   CABLE SWEET   CA		lines	Бірет ортіс	km	∞	0	0	0	0	0	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
Second-Seronical Beckins   Color Seronical	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-Ray Line   Coverhead lines   Coverhead lines	SABLE SYS		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   Fig. 2		ines	Оverhead 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		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	31,650
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"-(Kać)	(Rim.Šančevi)-Rasput "1"-Rasput. "3"-(Podb.)	3 Vrbas-Sombor				2 Bačka Palanka-Gajdobra	3 (Ruma)-Rasp.Donja Borina-Zvornik Grad	4 Šid-Sremska Rača Nova-State Border.	5 Kikinda-Banatsko Aranđelovo			Pančevo Varoš-Pančevo Vojlovica		) Senta-Odvojna skr. 22 Senta	[ (Požarevac)-Rasput.Sopot PožKostolac	2 Markovac-Resavica	3 Ovča-Padinska Skela	3 Alibunar-Seleuš	4 Vladimirovac-Kovin		5 Kikinda-MKS (ind.kolosek)					Paraćin-Stari Popovac			Total
	Railway line No					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	
	Г			οN	_	37	-	33	69	74	54	55	-	$\overline{}$	09	71	$\overline{}$	-	-	-				-	-	59	$\overline{}$	$\overline{}$	72	73	$\overline{}$		П	$\neg$	



			RADIO DEVICE  Locomotive dispatching radio devices  Traffic running networks (2m)  Station radio networks (0,7m)														
			Loc			ching		Traffic	running	netwo	rks (2m	1)	Sta	tion rad	lio netw	orks (0	,7m)
	Railway line No	RAILWAY LINE		Length of covered railway line	Trackside 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
2 1	Rai	2	85 3d Exchange units (with railway line splitter)	km 29	pcs 30	pcs 31	pcs 32	pcs 33	pcs 34	pcs 35	pcs 36	pcs 37	pcs 38	pcs 39	pcs 40	pcs 41	pcs 42
5		BGD-Šid-State Border	1	100	8	0	0	0	0	0	0	0	8	0	8	0	21
3	102	BGD-Mladenovac-Niš-Preševo-State Border. (BGD)-Rakovica-Jajinci-M.Krsna-V.Plana	3	377 100	42 12	8	0	0	0	0	0	0	17	0	19	3	53
2	104	(BGD)-S.Pazova-Inđija-Subotica-State Border.	1	155	10	4	0	0	0	0	0	5	7	1	16	0	74
6	105 106	Niš-Dimitrovgrad-State Border. BGD Centar-Pančevo-Vršac-State Border.	0	20	0	0	0	0	0	0	0	0	3	0	3	0	12 11
20	107 108	(BGD)-Resnik-Podgorica-Bar	1 0	176 0	35 0	0	0	0	0	0	0 4	0	14 0	0	13	4	35 0
26	108	Lapovo-Kraljevo-Đ.Janković-State Border. Subotica-Bogojevo-State Border.	0	0	0	0	0	0	0	16 0	0	0	0	0	0	0	0
7		Beograd Centar-Novi Beograd BGD Centar-Rasputnica"G"-(Rakovica)	0	10 10	0	164 0	0	0	0	0	0	0	0	0	0	10	0
15	112	BGD Ranžirna "A"-Ostružnica-Batajnica	0	20	2	0	0	0	0	0	0	0	0	0	0	0	0
14		BGD Ranžirna."B"-Ostružnica BGD Ranžirna "A"-Rasp."B"-Rasp."K"-Resnik	0	0 20	0	0	0	0	0	0	0	0	0	0	0	0	0
25	115	Ostružnica-Rasp."B"-(Rasp."K"-Resnik)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10		BGD Ranžirna "B"-Rasp."R"-Rasp."A" (BGD Ranžirna "B")-Rasp."R"-Rakovica	0	8	4	0	0	0	0	0	0	0	6	0	0	0	19
9	118	(BGD)-BGD Ranžirna "A"-Rasp."T"-Rakovica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 16		BGD Ranžirna "B"-Rasputnica "T"-(Rakovica) (BGD Ranz."A"-Ras.B)-Ras.K-Ras.K1-Jajinci	0	0	0	0	0	0	0	0	0	0	3	0	5	0	12
29	121	Topčider-Rasp.Savski Most-(Novi BGD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 27	122	TopčBlok 1Obala-Blok 2 prelRas.Pan.Most (Topč)-Blok 1Obala-BGD Spoljna-Blok 2 prel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 19		(Vukov Sp.)-Ras.K.Park-Ras.Dedinje-(Rakov.) Inđija-Golubinci	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	126	N.Sad-N.Sad Ranžirna-Sajlovo Rasp.	0	0	0	0	0	0	0	0	0	0	4	0	4	0	11
41 21	127 128	Obilazni kolosek Mala Krsna Lapovo Varoš-Lapovo Ranžirna-Lapovo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	129	Trupale-Niš Ranžirna-Međurovo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17 23	130	Crveni Krst-Niš Ranžirna Niš-Rasputnica Most-(Niš Ranžirna)	0	0	0	0	0	0	0	0	0	0	5	0	8	0	19
18	132	(Cr.Krst-Skr.2)-Skr.3-Skr.4-(Ćele Kula)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51 43	201	Subotica-Horgoš-State Border. Pančevo Glavna-Zrenjanin-Kikinda-State Border.	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
32	203	Banatsko Miloševo-Senta-Subotica	0	0	0	0	1	0	2	8	0	6	0	0	0	0	0
44 39	204	Pančevo Varoš-Rasputnica "2a"-(Jabuka) N.Sad-Sajlovo Rasputnica-Bogojevo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
40 38	206 207	(N.Sad)-Sajl.RaspR.ŠančOrl.staj(Tomaš)	0	0	0	0	0	0	2	18 0	0	4	0	0	0	0	0
42	208	N.Sad Ranžirna-Sajlovo Rasputnica Orlovat-Rasputnica "1a"-(Lukićevo)	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
47 50	209 211	Ruma-Šabac-Rasp.Donja Borina-State Border. Stalać-Kraljevo-Požega	0	0	0	0	0	0	1	8	0	0	0	0	0	0	5
49	214	Smederevo-Mala Krsna	0	0	0	0	0	0	0	0	0	0	4	0	4	0	12
34 35		M.Krsna-Bor-Rasputnica "2"-(Vražogrnac) Niš-Zaječar- Prahovo pristanište	0	0	0	0	0	0	2	0 14	0	0	0	0	0	0	5
64	218	(Niš)-Doljevac-Kastrat-Kosovo Polje	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62 56	219 220	Kuršumlija-Kastrat (Barlovo)-Rasputnica "1"-Kuršumlija	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	301	Subotica-Subotica fabrika Subotica-Subotica bolnica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75 65	302 303	Kanjiža-Horgoš	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 37	304 305	Novi Sad-Novi Sad ložionica Podbara-Rasput. "3"-Rasput. "2"-(Kać)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	306	(Rim.Šančevi)-Rasput "1"-Rasput. "3"-(Podb.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33 69	308 309	Vrbas-Sombor Petrovaradin-Beočin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74 54	310	Sonta-Apatin fabrika-Strilić-(Sombor) Bač-Karavukovo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55		Bačka Palanka-Gajdobra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 52	313 314	(Ruma)-Rasp.Donja Borina-Zvornik Grad Šid-Sremska Rača Nova-State Border.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	315	Kikinda-Banatsko Aranđelovo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71 81	316 317	Sečanj-Jaša Tomić (Zrenjanin)-Zrenjanin fabr.Vršac-Bela Crkva	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0 4
67	318	Pančevo Varoš-Pančevo Vojlovica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78 48	319 320	(Uljma)-RaspA-RaspB-(Jasenovo) Senta-Odvojna skr. 22 Senta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 63	321 322	(Požarevac)-Rasput.Sopot PožKostolac	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	323	Markovac-Resavica Ovča-Padinska Skela	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53 80	403 404	Alibunar-Seleuš Vladimirovac-Kovin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	405	Čoka-Novi Kneževac	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61 58	406 407	Kikinda-MKS (ind.kolosek) Bogojevo-Dunavska obala	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	408	Sombor-Bački Breg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73 79	409	Sombor-Riđica (Višnjićevo)-Rasput.Rača-Sremska Rača	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68 77	411 412	Paraćin-Stari Popovac Surčin-Jakovo-Bečmen-(Boljevci)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57		(Bgd spoljna)-km 2+290-Fabrika šećera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total:	9	996	122	176	8	2	11	89	4	27	83	6	95	20	298



Appendix 3.8. List of stations with industrial sidings on which it is possible to handle dangerous goods (RID goods)

Given the fact that the stations on Infrastructure of Serbian Railways' network are not enabled for handling of dangerous goods (loading, unloading, transshipment, pouring out, decanting, etc), handling of RID goods is banned on station tracks.

This appendix contains the list of industrial sidings where it is possible to handle dangerous goods in case the conditions stipulated by law are met (licenses issued by competent bodies and institutions are mandatory).

The table contains the names and codes of the stations that industrial sidings are connected to, the names of the owners and co-users of industrial sidings as well as the names of dangerous goods under RID with UN number.

No	Name and code of the station	Name of industrial siding	Type of goods under RID
1	2	3	4
1	Belgrade 16050 7 Topčider 16104 2 / Sugar Factory, Belgrade	OUT OF EXPLOITATION	
2	Beograd Dunav	IBL "Duga" JSC	• TURPENTINE OIL, REPLACEMENT, UN 1300/30-CLASS 3 • XYLENES UN 1307/30 - CLASS 3
	16005 1	TP "Tehnohemija" DD	* The table of RID goods, which manipulation is possible on this track, is on the end of the list
3	Bor Freight 14305 7	RTB Bor - Group	SULPHURIC ACID WITH MORE THAN 51% OF ACID, UN 1830/80 - CLASS 8     AMMONIUM NITRATE FERTILIZERS, UN 2067/50- CLASS 5.1     AMMONIUM NITRATE, UN 1942/50 - CLASS 5.1
4	Vrbas 23306 4	Sugar Factory "Bačka" Sunoko ltd.	• SULPHUR DIOXIDE, UN 1079/268 – CLASS 2 • FORMALDEHYDE SOLUTION WITH AT LEAST 25% OF FORMALDEHYDE, UN 2209/80 - CLASS 8 • DIESEL FUEL, UN 1202/30 - CLASS 3
5	Vreoci 15250 4	PE TE "Nikola Tesla"	HEATING OIL, UN 1202/30 – CLASS 3     SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, IF NOT STATED OTHERWISE (E.G. OIL FUEL), UN 3082/90-CLASS 9     HYDROSHLORIC ACID, UN 1789/80 – CLASS 8
6	Vršac 21009 6	JSC "VIK"	AMMONIUM NITRATE FERTILIZERS, UN 2067/50- CLASS 5.1     AMMONIUM NITRATE, UN 1942/50 - CLASS 5.1
7	Dedina 12203 6	"BIN Commerce"d.o.o. Belgrade"	<ul> <li>CHLORINE, UN 1017/265 - Class 2</li> <li>SULPHURIC ACID with more than 51% of acid, UN 1830/80 - Class 8</li> <li>ISOBUTANOL (ISOBUTYL ALCOHOL), UN 1212/30 - Class 3</li> <li>HYDROSHLORIC ACID, UN 1789/80 - Class 8</li> <li>SODIUM HYDROXIDE, SOLUTION, UN 1824/80- Class 8</li> <li>CARBONILE SULPHIDE, UN 2204/263 - Class 2</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>CARBON DISULFIDE, UN 1131/336 - Class 3</li> <li>FERTILIZERS BASED ON AMMONIUM NITRATE, UN 2067/50- Class 5.1</li> <li>SODIUM CYANIDE, UN 1689, Class 6.1</li> <li>POTASSIUM HYDROXIDE, SOLID, UN 1813/80 Class 8</li> <li>POTASSIUM HYDROXIDE, SOLUTION, UN 1814/80, Class 8</li> <li>PENTANOLS, UN 1105, Class 5</li> </ul>
		JSC "Henkel-Merima"	• SODIUM HYDROXIDE, SOLUTION, UN 1824/80 - Class 8
		TRAYAL Corporation	• PENTA ERITRIT TETRANITRATE, UN 0150/1.1D - Class 1
8	Doljevac 11001 5	JSC "Beopetrol" (Lukoil – Beograd)	• DIESEL FUEL (euro diesel), UN 1202/30 - Class 3



			• SULPHURIC ACID, SMOKY, UN 1831/X 886 - Class 8
9	Dragačevo 13009 6	"Milan Blagojević" Namenska - Lučani	<ul> <li>NITRIC ACID, SMOKY, UN 2032/856 - Class 8</li> <li>ETHANOL, SOLUTION (ETHYL ALCOHOL, SOLUTION), UN 1170/33 —</li> </ul>
	13009 6	Namenska - Lucam	Class 3
			NITRIC ACID, UN 2031/8856- Class 8
			MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED
		NIS-TNG RC Zrenjanin	INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 -
			Class 2  • PETROL UN 1203/33 - Class 3
			• BUTADIENE, STABILIZED, OR MIXTURE OF BUTADIENE AND
	Elemir		HYDROCARBONS, STABILIZED, UN 1010/239 - Class 2
10	22503 7		• METHANOL, UN 1230/336 - Class 3
		HIP "Petrohemija" FSK	• STYRENE, MONOMER, STABILIZED, UN 2055/39- Class 3
		Elemir	• MIXTURE OF HYDROCARBONS, TRANSFORMED INTO LIQUID
			CONDITION; if not stated otherwise, UN 1965/23 - Class 2  • SULPHURIC ACID, UN 1830/80 - Class 8
			PHOSPHORIC ACID, SOLUTION, UN 1805/80 - Class 8
			, ,
11	Zrenjanin Factory	PE "TE-TO"	• SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise., (e.g. oil fuel) UN 3082/90- Class 9
	22501 1	JSC "Dijamant"	• SULPHURIC ACID with more than 51% of acid, UN 1830/80 - Class 8
	Jagodina	JSC "Beopetrol"(Lukoil -	
12	13350 4	Beograd)	• Oil and oil derivatives– Class 2 and 3
			- MINTERS OF CASEOUS INVENOCARRONS TRANSFORMED DITO
			• MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23- Class 2
	Tona dina	Company Milojević PP "Gile gas", co-user:	• PROPANE, UN 1978, Class 2
13	Jagodina 13350 4	"EURO GAS", JSC	BUTANE, UN 1011, Class 2
	/ Bagrdan 13303 3 *)		<ul><li>ISOBUTANE, UN 1969, Class 2</li><li>PROPYLENE, UN 1077, Class 2</li></ul>
		Company Milojević PP	• CALCIUM CARBIDE UN 1402/423 - Class 4.3
		"Gile gas"	CALCION CARBIDE ON 1402/425 - Class 4.5
14	Kaona	US Steel "Serbia" "Balkan" (Branch	• DIESEL FUEL, UN 1202/30 - Class 3
	14514 4	Kučevo)	BESSE FOLE, ON 1222/30 CMSS 3
15	Kikinda	JSC "MSK"	ACETIC ACID, GLACIAL, UN 2789/83 - Class 8
	22850 2	100 11011	• METHANOL, UN 1230/336 - Class 3
16	Kovačica 22006 1	T.P. "ATAKO" ltd.	• MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO
		Community Control ISC IIT's	LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
17	Kosjerić 15106 8	Cement factory JSC "Titan – Kosjerić"	• SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise (e.g. heavy fuel oil), UN 3082/90 – Class 9
			• SULPHURIC ACID with more than 51% of acid, UN 1830/80 - Class 8
		"ZASTAVA Energetika"	• HYDROCOLIC ACID, UN 1789/80 - Class 8
	Kragujevac	Ltd.	SODIUM HYDROXIDE, SOLUTION, UN 1824/80 - Class 8
18	13250 6	(Energetika Ltd. in the process of restructuring)	• SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not
			stated otherwise, UN 3082/90 - Class 9
		Žitoprodukt JSC	• FLAMMABLE LIQUIDS, if not stated otherwise, UN 1933/33 - Class 3 • TYPE OF GOODS UNDER RID, Class 3, Class 6.1, Class 8, Class 9, Class
			5.1
	Kragujevac 13250 6	Guberevac - Column code 01	• PETROL, UN 1203/33 - Class 3
19	/Guberevac	(Tariff Spt 37.	• DIESEL FUEL, UN 1202/30 - Class 3
	13215 9 *)	Part 6a)	• KEROSENE, UN 1223/30 - Class 3
20	Kruševac	NICT 1.	• DIESEL FUEL, UN 1202/30 - Class 3
20	12204 4	NIS Lubricants factory	CRUDE OIL DISTILLATES, if not stated otherwise, UN 1268/33 - Class 3
	l		01. 1200,00 · Ottos 5



		"BIN Commerce"d.o.o. Belgrade	<ul> <li>CHLORINE, UN 1017/265 - Class 2</li> <li>SULPHURIC ACID with more than 51% of acid, UN 1830/80 - Class 8</li> <li>ISOBUTANOL (ISOBUTYL ALCOHOL), UN 1212/30 - Class 3</li> <li>HYDROSHLORIC ACID, UN 1789/80 - Class 8</li> <li>SODIUM HYDROXIDE, SOLUTION, UN 1824/80- Class 8</li> <li>CARBONILE SULPHIDE, UN 2204/263 - Class 2</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>CARBON DOSULFIDE, UN 1131/336 - Class 3</li> <li>AMMONIUM NITRATE BASED FERTILIZERS, UN 2067/50- Class 5.1</li> <li>SODIUM CYANIDE, UN 1689, Class 6.1</li> <li>POTASSIUM-HYDROXIDE, SOLID, UN 1813/80, Class 8</li> <li>POTASSIUM-HYDROXIDE, SOLUTION, UN 1814/80, Class 8</li> </ul>
		JSC "Henkel-Merima"	PENTANOLS, UN 1105, Class 5"     SODIUM HYDROXIDE, SOLUTION, UN 1824/80 - Class 8
		TRAYAL Corporation	• PENTA ERITRIT TETRANITRATE, UN 0150/1.1D - Class 1
		"Metalpromet" JSC	<ul> <li>AMMONIUM NITRATE BASED FERTILIZERS, UN 2067/50- Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> </ul>
21	Kruševac 12204 4 /Koševi 12205 1 **)	DP Oil Factory (Plima M)	• CRUDE OIL DISTILLATES, if not stated otherwise, UN 1268/33 - Class 3
22	Majdanpek 14401 4	RTB Bor, Rudnik Majdanpek (RBM Majdanpek)	<ul> <li>AMMONIUM NITRATE BASED FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> </ul>
23	Mladenovac 15460 9	DP "Keramika", co-user "Inter gas" Ltd	MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - CLASS 2
24	Naumovićevo 23409 6	DP "Azotara"	<ul> <li>AMMONIUM NITRATE, UN 1942/50 – Class 5.1</li> <li>HYDROSHLORIC ACID, UN 1789/80 - Class 8</li> <li>SODIUM HYDROXIDE, SOLUTION, UN 1824/80- Class 8</li> <li>AMMONIA, WATERLESS, UN 1005/268 - Class 2</li> </ul>
25	Niš 12551 8 /Ćele Kula 12402 4 *)	EI-KKC Ltd	SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise (e.g. fuel oil), UN 3082/90 - Class 9  MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
26	Novi Sad Marshalling Yard	SARTID Limprodukt (Limprodukt)	MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
	16871 6	Port of Novi Sad JSC	• Class 2 until 9, except Class 7
27	Novi Sad Marshalling Yard 16871 6 /Podbara 22312 3 *)	NIS-TNG RC Novi Sad	<ul> <li>Oil and oil derivatives- Class 2 and 3</li> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise, (e.g. heavy fuel oil), UN 3082/90 - Class 9</li> </ul>
28	Ovča 16007 7	<ul> <li>NIS -TNG,</li> <li>RC Beograd</li> <li>Sugar Factory</li> <li>"Dimitrije</li> <li>Tucović"</li> </ul>	MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2



		T	
29	Odzaci 25003 5	JSC "HIPOL"	<ul> <li>PROPYLENE, UN 1077/23 - Class 2</li> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>BUTANE, UN 1011/23 - Class 2</li> <li>PROPANE, UN 1978/23 - Class 2</li> </ul>
		JSC "Graneksport"	• AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1 • AMMONIUM NITRATE, UN 1942/50 - Class 5.1
		DD "Port of Danube"	<ul> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>CRUDE OIL, UN 1267/33 - Class 3</li> <li>DIESEL FUEL, UN 1202/30 - Class 3</li> <li>SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise (e.g. heavy fuel oil), UN 3082/90- Class 9</li> <li>dangerous substances, that remain in any packaging form, during handling (bottles, barrels, etc.)</li> <li>possible transshipment of loaded containers:  AMMONIUM NITRATE FERTILIZERS, in bags, UN 2067/50 - Class 5.1  PATRONES FOR WEAPONS WITH INTERNAL MISSILE, in boxes, UN 0012/1.4S - Class 1</li> </ul>
0	Pančevo Varoš 21001 3	HIP "Azotara" and co- user: HIP "Petrohemija"	<ul> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>CRUDE OIL, UN 1267/33 - Class 3</li> <li>DIESEL FUEL, UN 1202/30 - Class 3</li> <li>AMMONIA, WATERLESS, UN 1005/268 - Class 2</li> </ul>
		"Utva"  NIS "Oil Rafinery"- Pančevo	<ul> <li>SODIUM HYDROXIDE, SOLUTION UN 1824/80- Class 8</li> <li>SODIUM HYDROXIDE, SOLID UN 1823/80- Class 8</li> <li>PHOSPHORIC ACID, SOLUTION, UN 1805/80- Class 8</li> <li>HYDROCHLORIC ACID, UN 1789/80 - Class 8</li> <li>POTASSIUM HYDROXIDE, SOLID UN 1813/80- Class 8</li> <li>POTASSIUM HYDROXIDE, SOLUTION, UN 1814/80- Class 8</li> <li>TRICHLOROETHYLENE, UN 1710/60 - Class 6.1</li> <li>TETRACHLORETHYLENE, UN 1897/60 - Class 6.1</li> <li>HYDROGEN PEROXIDE, UN 1490/50 - Class 5.1</li> <li>IRON (III) CLASS (FERICHLORIDE), SOLUTION, UN 2582/80 - Class 8</li> <li>HYPOCHLORITE, SOLUTION UN 1791/80 - Class 8</li> <li>NITRIC ACID, UN 2031/80 - Class 8</li> <li>NITRIC ACID, UN 2031/85 - Class 8</li> <li>NITRIC ACID, UN 2031/85 - Class 8</li> <li>Class 2 and 3</li> </ul>
31	Paraćin	JSC "SFS" (for "Euro gas")	MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
	13310 8	on "Triangla" for VRP "Company"	MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
32	Petrovaradin 16807 0	MK Komerc "Pobeda"	<ul> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50- Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> </ul>



33	Pirot 12420 6	JSC "Tigar"	• SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise (e.g. fuel oil), UN 3082/90 - Class 9
34	Požega 15150 6		<ul> <li>PETROL OR FUEL FOR OTTO ENGINES, UN 1203/33 - Class 3</li> <li>DIESEL FUEL, UN 1202/30 - Class 3</li> </ul>
35	Prahovo 14115 0	IHP Holding "Prahovo"	SULPHURIC ACID with more than 51% of acid, UN 1830/80 - Class 8 PHOSPHORIC ACID, SOLUTION, UN 1805/80 - Class 8 SODIUM HYDROXIDE, SOLID, UN 1823/80 - Class 8 SODIUM HYDROXIDE, SOLUTION UN 1824/80 - Class 8 FLUOROSILICIC ACID, UN 1778/80 - Class 8 AMMONIA, WATERLESS, UN 1005/268 - Class 2 AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1
36	Prahovo Port 14170 5	"Jugopetrol", Oil Industry of Serbia	• oil and oil derivatives - Class 2 and 3
37	Prijepolje Freight 15712 3	JSC "Elan"	ETHYL METHYL KETONE , (methyl ethyl ketone), UN 1193/33 - Class 3     METHYL ACETATE, UN 1231/33 - Class 3
38	Prokuplje 11106 2	DP "Topličanka" (Topličanka - MB Gas)	• MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
39	Radinac 13603 6	U.S. Steel "Srbija" Ltd.	• HYDROSHLORIC ACID, UN 1789/80 - Class 8 • AMMONIA, WATERLESS, UN 1005/268 - Class 2
40	Senta 23801 4	Sugar Factory "Kristal" (co-user: "Potisje")	<ul> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> </ul>
		DP Public Warehouses	<ul> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>BUTANE, UN 1011/23 - Class 2</li> <li>ISOBUTANE, UN 1969/23 - Class 2</li> <li>PROPANE, UN 1978/23 - Class 2</li> <li>DIESEL FUEL (EURO DIESEL), UN 1202/30- Class 3</li> </ul>
41	Subotica 23450 0	"Ingrad" Ltd.	<ul> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>BUTANE, UN 1011/23 - Class 2</li> <li>ISOBUTANE, UN 1969/23 - Class 2</li> <li>PROPANE, UN 1978/23 - Class 2</li> <li>DIESEL FUEL (EURO DIESEL), UN 1202/30- Class 3</li> </ul>
		"Integral - Betonirci"JSC. (co-user EURO GAS)	<ul> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>BUTANE, UN 1011/23 - Class 2</li> <li>ISOBUTANE, UN 1969/23 - Class 2</li> <li>PROPANE, UN 1978/23 - Class 2</li> <li>DIESEL FUEL (EURO DIESEL), UN 1202/30- Class 9</li> <li>EXPENDED POLYMER PALLETS, UN 2211/90- Class 9</li> <li>PROPYLENE UN 1077/23 - Class 2</li> </ul>
		NIS TNG RC (Branch NIS TNG RC Subotica)	<ul> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>BUTANE, UN 1011/23 - Class 2</li> <li>ISOBUTANE, UN 1969/23 - Class 2</li> <li>PROPANE, UN 1978/23 - Class 2</li> </ul>



42	Surčin	"C - Market" ("Centroprom" lessee Belhatrade)	• MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
72	16203 2	Jakovo – VML / Co-user EURO GAS	• oil and oil derivatives - Class 2 and 3
43	Ćićevac 13313 2	DP for impregnation and wood processing - Ćićevac	• SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise, (e.g. creosote oil) UN 3082/90 - Class 9
44	Crveni Krst	"Jugopetrol", Oil Industry of Serbia	<ul> <li>PETROL, UN 1203/33 - Class 3</li> <li>DIESEL FUEL, UN 1202/30 - Class 3</li> </ul>
	12550 0	NIS TNG RC Niš	• MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
45	Čačak 13060 9	NIS TNG RC Čačak	<ul> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>PROPANE, UN 1978/23 - Class 2</li> <li>BUTANE, UN 1011/23 - Class 2</li> <li>PROPYLENE UN 1077/23 - Class 2</li> <li>HEATING OIL, LIGHT, UN 1202/30 - Class 3</li> </ul>
46	Šabac 16350 1	HK "ZORKA" JSC ("Zorka transport" Šabac)	<ul> <li>SULPHURIC ACID with more than 51% of acid, UN 1830/80 - Class 8</li> <li>SODIUM HYDROXIDE, SOLUTION UN 1824/80 - Class 8</li> <li>MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2</li> <li>LEADSULPHATE, UN 1794/80 - Class 8 (WASTE)</li> <li>PHOSPHORIC ACID, SOLUTION, UN 1805/80 - Class 8</li> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>AMMONIA, WATERLESS, UN 1005/268 -Class 2</li> <li>AMMONIA, SOLUTION, UN 2672/80 - Class 8</li> </ul>
		Oil Factory "Mladost" (JSC "Mladost" Šid)	• METHANOL, UN 1230/336 - Class 3
47	Šid 16516 7	(Hempro - Color doo Šid)	<ul> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50- Class 5.1</li> <li>hazardous material- Class 3</li> <li>XANTHATES, UN 3342 - Class 4.2</li> <li>LIGHTERS OR LIGHTER FLUIDS, UN 1057/23 - Class 2;</li> <li>SAFE MATCHES, UN 1944/40 - Class 4.1;</li> <li>WAX MATCHES, UN 1945/40 - Class 4.1;</li> <li>PARFUME PRODUCTS, UN 1266/33 - Class 3;</li> <li>PARFUME PRODUCTS, UN 1266/30 - Class 3;</li> <li>ETHANOL (ETHYL ALCOHOL) or ETHANOL, SOLUTION (ETHYL ALCOHOL, SOLUTION), UN 1170/30 - Class 3;</li> <li>COLOURS or ADDITIONAL MATERIALS FOR THE COLOURS, UN 1263/33 - Class 3;</li> <li>COLOURS or ADDITIONAL MATERIALS FOR THE COLOURS, UN 1263/30 - Class 3;</li> <li>GLACIAL ACETIC ACID or SOLUTION OF ACETIC ACID UN 2789/83 - Class 8</li> <li>PYRETHRIN BASED INSECTICIDE, POISONOUS, SOLID, UN 3349 - Class 6.1</li> <li>ORGANIC POISONOUS SOLID MATTERS H.Д.H., UN 2811 - Class 6.1</li> <li>TRICHLOROETHYLENE, UN 1710 - Class 6.1</li> <li>SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise, UN 3082/90 - Class 9</li> <li>SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise, UN 3082/90 - Class 9</li> <li>SUBSTANCES THAT ENDANGER ENVIRONMENT, FLUIDAL, if not stated otherwise, UN 3077- Class 9</li> </ul>



		Mlintest Port Holding	AMMONIUM NITRATE FERTILIZERS, UN 2067, Class 5.1
48	Zaječar 14060 8	"Kristal" JSC Industry of glass and crystal	MIXTURE OF GASEOUS HYDROCARBONS TRANSFORMED INTO LIQUID CONDITION, if not stated otherwise, UN 1965/23 - Class 2
49	Sremska Mitrovica 16509 2	RTC "LUKA LEGET"	<ul> <li>Class 2 (gases) and</li> <li>Class 3 (flammable fluid materials)</li> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>Corrosive materials - Class 8</li> <li>CELLULOID, WASTE, UN 2002/40 - Class 4.2</li> <li>Class 9</li> <li>TRICHLOROETHYLENE, UN 1710 - Class 6.1</li> </ul>
		"Agrium d.o.o."	<ul> <li>AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1</li> <li>AMMONIUM NITRATE, UN 1942/50 - Class 5.1</li> <li>DIESEL FUEL or HEATING OIL, LIGHT, UN 1202/30 - Class 3</li> </ul>
50	Valjevo 15251 2	"Pubilk" d.o.o.	• LIGHTERS or LIGHTER FLUID, lighters with flammable gas UN 1057-Class 2
51	Uljma 21007 0	"Igma a.d" (GRANIMPEKS doo)	AMMONIUM NITRATE FERTILIZERS, UN 2067/50 - Class 5.1      AMMONIUM NITRATE, UN 1942/50 - Class 5.1
52	Smederevo 13670 5	"Utva" IBZ Ltd., co-user PETROL LPG Ltd.	• BUTANE, UN 1011/23 - Class 2
53	Odžaci Kalvarija 25401 1	Dijamant JSC, Zrenjanin	• AMMONIUM NITRATE, UN 1942/50 - Class 5.1
54	Zemun 16002 8	"ZMAJ III"	• Gases - Class 2 • Flammable liquids - Class 3

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<sup>\*)</sup> Supervisory station / unmanned service point (loading-unloading location open for forwarding/reception of wagon-load consignments via supervisory station) that respective industrial siding is connected to.

<sup>\*\*)</sup> The closest station open for transportation of goods / service point not open for transportation of goods, respective industrial sidings is connected to.

# \*List of RID goods whichof handling is not possible on an industrial sidings TP "Tehnohemija" DD - Belgrade Dunav station

- HYDROSHLORIC ACID, UN 1789/80 class 8
- IRON (III) CLASS CHLORIDE (FERICHLORIDE), SOLUTION, UN 2582/80 - class 8
- AMMONIA, SOLUTION, UN 2672/80 class 8
- AMONIUM HYDROGEN DIFLUORIDE, SOLUTION, UN 2817/86- class 8
- SULPHURIC ACID, UN 1830/80 class 8
- SULPHURIC ACID, USED, UN 1832/80 class 8
- NITRIC ACID, UN 2031/85 class 8
- NITRIC ACID, UN 2031/80 class 8
- SODIUM HYDROXIDE, SOLUTION, UN 1824/80 class 8
- ACETIC ACID, GLACIAL OR SOLUTION OF GLACIAL ACID, UN 2789/83 class 8
- ACETIC ACID, SOLUTION, UN 2790/80 class 8
- HYPOCHLORITE, SOLUTION, UN 1791/80 class 8
- BISULFITES, WATER SOLUTION, if not stated otherwise, UN 1791/80 class 8
- HYDROGEN PEROXIDE, AQUEOUS SOLUTION, if not stated otherwise, UN 2014/58 class 5
- HYDROGEN PEROXIDE, AQUEOUS SOLUTION, if not stated otherwise, UN 2984/50 class 5
- ALUMINUMBROMIDE, SOLUTION, UN 2580/58 class 8
- ALUMINUM CHLORIDE, SOLUTION, UN 2581/80 class 8
- CHLOROACETIC ACID, SOLUTION, UN 1750/68 - class 6
- CHROMIC ACID, SOLUTION, UN 1755/80 class 8
- POTASSIUM HYDROXIDE, SOLUTION, UN 1814/80 class 8
- FORMIC ACID, UN 1779/83 class 8
- SODIUM SULFITE, HYDRATE, UN 1849/80
- CHROMIUM FLUORIDE, SOLUTION, UN 1757/80- class 8
- PERCHLORATES, INORGANIC, N.O.S., UN 1481/50 class 5
- ANTIMONY PENTAFLUORIDE, UN 1732/86 class 8
- FLUOROBORIC ACID, UN 1775/80 class 8
- PEROXIDES, INORGANIC, N.O.S., UN 1483/50 class 5

- SODIUM ALUMINATE, SOLUTION, UN 1819/80 - class 8
- POTASSIUM CHLORATE, AQUEOUS SOLUTION, UN 2427/50 class 5
- SODIUM CHLORATE, AQUEOUS SOLUTION, UN 2428/50 - class 5
- CALCIUM CHLORATE, AQUEOUS SOLUTION, UN 2429/50 class 5
- PHOSPHORIC ACID, SOLUTION, UN 1805/80-
- DISINFECTANT AGENT, CAUSTIC, LIQUID n.o.s., UN 1903/88 class 8
- DISINFECTANT AGENT, CAUSTIC, LIQUID n.o.s., UN 1903/80 class 8
- CAUSTIC LIQUID SUBSTANCE n.o.s., UN 1760/80 class 8
- CAUSTIC LIQUID SUBSTANCE n.o.s., UN 1760/80 class 8
- FLUOROSILICID ACID, UN 1778/80 class 8
- POISONOUS INORGANIC LIQUID, n.o.s., UN 3287/66 class 6
- CAUSTIC ACID INORGANIC LIQUID, n.o.s., UN 3264/88 class 8
- CAUSTIC ACID INORGANIC LIQUID, n.o.s., UN 3264/80 class 8
- CAUSTIC BASE INORGANIC LIQUID, n.o.s., UN 3266/88 class 8
- CAUSTIC BASE INORGANIC LIQUID, n.o.s., UN 3266/80 class 8
- PERMANGANATES, INORGANIC, AQUEOUS SOLUTIONS, n.o.s., UN 3214/50 class 5
- PERSULFATES, INORGANIC, AQUEOUS SOLUTIONS, n.o.s., UN 3216/50 class 5
- NITRATES, INORGANIC, AQUEOUS SOLUTIONS, n.o.s., UN 3218/50 class 5
- NITRITES, INORGANIC, AQUEOUS SOLUTIONS, n.o.s., UN 3219/50 class 5
- CAUSTIC LIQUID, POISONOUS, n.o.s., UN 2922/86 class 8
- HYDRAZINE, AQUEOUS SOLUTION, UN 2030/86 class 8
- HYDRAZINE, AQUEOUS SOLUTION UN 3293/60 class 6



Appendix 3.8.b 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 prohibitied.

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 IZS' 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 IZS 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 authoried 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 IZS'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 Department for Traffic Operations 6 Nemanjina St., 11000 Belgrade, Serbia Phone/Fax:+381 11 36 18 214 E-mail:sektor.sp@srbrail.rs

The table consists of 8 columns, with the following content:

- column No 1 ,,ordinal No";
- column No 2 "Name of a service point", contains the name and code of the station or transport dispatching point, i.e. the name and code of the unmanned loading point whereby the content in brackets indicates the name and code of its control/supervisory station;
- 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, whichof 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

Tabl	e: List of service points op	ch for transship	Dangerous goo	de		
			Dangerous goo	is s		
	Name of service point	Track	NHM	UN / number for hazards indication	SS	Notes
No				for UNI	Class	
1	2	3	4	5	6	7
	Adrovac 12509 6		3105 20	2067/50	5.1	
1.	(Aleksinac 12510 4)	1	3102 30	1942/50	5.1	
2	Aleksinac	1	3105 20	2067/50	5.1	
2.	12510 4	1	3102 30	1942/50	5.1	
3.	Bagrdan 13303 3	6	3105 20	2067/50	5.1	
3.	(Jagodina 13350 4)	O	3102 30	1942/50	5.1	
4.	Bačka Topola	1, 5, 7	3105 20	2067/50	5.1	
т.	23404 7	1, 3, 7	3102 30	1942/50	5.1	
5.	Bor Freight	1	3105 20	2067/50	5.1	
J.	14305 7	-	3102 30	1942/50	5.1	
6.	Valjevo	II line	3105 20	2067/50	5.1	
<u> </u>	15251 2	11 11110	3102 30	1942/50	5.1	
7.	Velika Plana	1	3105 20	2067/50	5.1	
	13401 5		3102 30	1942/50	5.1	
8.	Vranje	1	3105 20	2067/50	5.1	
	11021 3		3102 30	1942/50	5.1	
9.	Vršac	11, 19	3105 20	2067/50	5.1	
$\vdash$	21009 6	,	3102 30	1942/50	5.1	
10.	Grejač 12513 8	1	3105 20	2067/50	5.1	
$\vdash$	(Aleksinac 12510 4) Žednik 23407 0		3102 30 3105 20	1942/50 2067/50	5.1 5.1	
11.	(Bačka Topola 23404 7)	1, 6a	3103 20	1942/50	5.1	
	Zmajevo 23304 9		3102 30	2067/50	5.1	
12.	(Vrbas 23306 4)	5	3103 20	1942/50	5.1	
	Zrenjanin		3105 20	2067/50	5.1	
13.	22550 8	1, 10	3102 30	1942/50	5.1	
1.	Zrenjanin Factory		3105 20	2067/50	5.1	
14.	22501 1	1	3102 30	1942/50	5.1	
1.5	Jagodina	1 0	3105 20	2067/50	5.1	
15.	13350 4	1, 8	3102 30	1942/50	5.1	
	Kikinda	20, 21	3105 20	2067/50	5.1	
16.	22850 2	40, 41	3102 30	1942/50	5.1	
17.	Kula	1	3105 20	2067/50	5.1	
1/.	24202 4	1	3102 30	1942/50	5.1	
18.	Lapovo	1	3105 20	2067/50	5.1	
10.	13450 2		3102 30	1942/50	5.1	
19.	Lapovo marshalling yard	Station for	3105 20	2067/50	5.1	
17.	13406 4	disinfecting	3102 30	1942/50	5.1	
20.	Leskovac	New track	3105 20	2067/50	5.1	
	11050 2		3102 30	1942/50	5.1	
21.	Lešak	1 short	3105 20	2067/50	5.1	
	12001 4		3102 30	1942/50	5.1	
22.	Mala Krsna	1	3105 20	2067/50	5.1	
	13551 7		3102 30	1942/50	5.1	
23.	Mladenovac	1, 7	3105 20	2067/50	5.1	
	15460 9	÷	3102 30	1942/50	5.1	



			2105.20	2067/50	<i>7</i> 1	
			3105 20	2067/50	5.1	
			3102 30	1942/50	5.1	
		2, 3, 4, 7	2807 00	1830/80	8	
	Novi Cod Marshalling		2806 10	1789/80	8	
24.	Novi Sad Marshalling	Locomotive	2815 12	1824/80	8	
	Yard 16871 6	and freight	2808 00	2031/80	8	
		stations	2809 20	1805/80	8	
			2815 11	1823/80	8	
			2828 90	1791/80	8	
	Ostružnica		3105 20	2067/50	5.1	
25.	16202 4	1	3103 20	1942/50	5.1	
	Palanka		3105 20	2067/50	5.1	
26.	13706 7	1	3103 20	1942/50	5.1	
			3102 30		5.1	
27.	Pančevo varoš	1		2067/50		
	21001 3		3102 30	1942/50	5.1	
28.	Pančevo Glavna 22001 2	20, 21	3105 20	2067/50	5.1	
		· · · , = ÷	3102 30	1942/50	5.1	
29.	Paraćin	1	3105 20	2067/50	5.1	
<i>2</i> ).	13310 8	•	3102 30	1942/50	5.1	
30.	Pirot	1	3105 20	2067/50	5.1	
<i>5</i> 0.	12420 6	1	3102 30	1942/50	5.1	
2.1	Požarevac	1	3105 20	2067/50	5.1	
31.	31. 14550 8	1	3102 30	1942/50	5.1	
			3105 20			
32.	Požega	19	3102 30	2067/50	5.1	
32.	15150 6	17	3102 30	1942/50	5.1	
			3105 20	2067/50	5.1	
33.	Prijepolje Freight 15712	13	3102 30	1942/50	5.1	
33.	3	13	3102 30	1942/30	3.1	
	Dualmuntia		3105 20	2067/50	5.1	
34.	Prokuplje	1		2067/50		
	11106 2	D: 14 1 1	3102 30	1942/50	5.1	
35.	Resavica	Right dead-	3105 20	2067/50	5.1	
	13909 7	end track	3102 30	1942/50	5.1	
36.	Ruma	1, 2	3105 20	2067/50	5.1	
50.	16550 6	-, <b>-</b>	3102 30	1942/50	5.1	
37.	Svilajnac	1	3105 20	2067/50	5.1	
51.	13901 4	1	3102 30	1942/50	5.1	
38.	Senta	1, 10,11	3105 20	2067/50	5.1	
56.	23801 4	1, 10,11	3102 30	1942/50	5.1	
20	Sombor	20. 21	3105 20	2067/50	5.1	
39.	25550 5	20, 21	3102 30	1942/50	5.1	
40	Sremska Mitrovica	1.0	3105 20	2067/50	5.1	
40.	16509 2	1,9	3102 30	1942/50	5.1	
	Stalać		3105 20	2067/50	5.1	
41.	13352 0	1 short track	3102 30	1942/50	5.1	
		1, 33, 34 and				
42.	Subotica	36	3105 20	2067/50	5.1	
⊤∠.	23450 0	freight station	3102 30	1942/50	5.1	
	Ćićevac	neight station	3105 20	2067/50	5.1	
43.		1		2067/50		
	13313 2		3102 30	1942/50	5.1	
44.	Ćuprija	1	3105 20	2067/50	5.1	
	13351 2		3102 30	1942/50	5.1	
45.	Užice Freight	1	3105 20	2067/50	5.1	
	15151 4	_	3102 30	1942/50	5.1	



46.	Čačak	1-dead-end	3105 20	2067/50	5.1	
40.	13060 9	track	3102 30	1942/50	5.1	
47.	Šabac	1,7	3105 20	2067/50	5.1	
47.	16350 1	1,/	3102 30	1942/50	5.1	
48.	Stara Pazova	7	3102 30	1942/50	5.1	
	16503 5					
49.	Kruševac	1	3105 20	2067/50	5.1	
77.	12204 4	1	3102 30	1942/50	5.1	
50.	Vrbas	10,11	3105 20	2067/50	5.1	
30.	23306 4	10,11	3103.20	2007/30	3.1	
51.	Bajmok	1	3105 20	2067/50	5.1	Only for goods
31.	24404 6	1	3102 30	1942/50	5.1	in sacks
52.	Futog	1	3105 20	2067/50	5.1	
32.	24003 6	1	3102 30	2007/30	5.1	



## 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.



## 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 the Republic of Serbia, No 101/2015, 24/16 and 36/17).

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
	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 o 36m and platform bu 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	ombor Braće Miladinom 1		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 има 1 колосек дужине
Zuonionin	Dr Vase	Depot for railbuses	Maintenance of railbuses and replacement of wheel-sets of 711 DMUs	78 m Area: 277 m2 1 canal in the length of 27 m
Zrenjanin	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 stock	Inspections and extraordinary repairs of smaller scope on diesel traction units and DMUs, as well as the	Area: 787 m2 Two tracks in the length of 40 m



		overhauls of freight wagons					
Zaječar	Železnička bb	Workshop for repair of locomotives	Maintenand traction u wagons		of and		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 service facilities and services provided by the Joint Stock Company for Freight Railway Transport "Srbija Kargo", may be found on the web-site: www.srbcargo.rs/usluge.



## 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.

Г	arric.						
	No	Project			Estmated commencement of works (date or quarter)	Duration of works	Works' execution method
	Modernization (construction and reconstruction) of the railway line Belgrade -Subotica -state border (Kelebia)	Stage 1: Belgrade	left	05.07.2018.	464 days	Works are executed with interruption of traffic along the right track during time interval from 10:00 pm to 05:00 am	
		Center (excl.) –Zemun (incl.)	right	Upon completion of reconstruction of the left track Belgrade Center - Zemun	288 days	Works are executed with interruption of traffic along the reconstructed left track during time interval from 10:00 pm to 05:00 am	
		Stage 2:	left	Q2 2019	425 days	Works are executed with interruption of traffic along the right track during time interval from 10:00 pm to 05:00 am	
		Belgrade Center – Stara Pazova	Batajnica (incl.)- Stara Pazova incl.)	right	Upon completion of reconstruction of the left track Batajnica – Stara Pazova	393 days	Works are executed with interruption of traffic along the reconstructed left track during time interval from 10:00 pm to 05:00 am
			Stage 3:  Zemun (excl.)-	right	Upon completion of reconstruction of the entire sections Belgrade Center – Zemun and Batajnica – Stara Pazova	229 days	Works are executed with interruption of traffic along the left track during time interval from 10:00 pm to 05:00 am
		Batajnica (excl.)	left	Upon completion of reconstruction of the right track Zemun -Batajnica	216 days	Works are executed with interruption of traffic along the reconstructed right track during time	



	· · · · · · · · · · · · · · · · · · ·		<u> </u>	interval from 10:00
				pm to 05:00 am
2	Modernization (construction and reconstruction) of the railway line Belgrade –Subotica –state border (Kelebia) section  Stara Pazova- Novi Sad	01.02.2019	Q4 2022	Works are executed on the construction of the tunnel and viaduct, as well as on the new track, with traffic interruption between stations Inđija (incl.) – Novi Sad (excl.)
3	Modernization (construction and reconstruction) of the railway line Belgrade –Subotica –state border (Kelebia) section  Novi Sad - Subotica	IV 2019	33 months	Traffic interruption on the part of the line Belgrade – Subotica – state border between stations Novi Sad (excl.)-Subotica (excl.)
4	Reconstruction of the section tunnel Straževica (entrance) – Jajinci – Mala Krsna (excl.) from km 9+896 to km 67+800 and reconstruction of Mala Krsna station	Q2 2019	450 days	With complete traffic interruption on the respective section. During the execution of works on the reconstruction of Mala Krsna station, traffic towards Radinac and Požarevac from the Velika Plana direction will be enabled.
5	Civil engineering reconstruction of the Niš – Dimitrovgrad railway line, section Sićevo - Dimitrovgrad	Q4 2019	Works are estimated to last for 2 years.	Traffic functioning and works execution will be as agreed with the Contractor (72 hours- the execution of works and 96 hours- traffic functioning)
6	Reconstruction of the section Niš- Brestovac, from km 244+600 (exit from Niš station) to km 267+430 (entrance into Brestovac station)	Q3 2021	Works are estimated to last for 2 years.	
7	Electrification of the Niš – Dimitrovgrad railway line, section Sićevo - Dimitrovgrad	IV 2021.	Contractor will stipulate time schedule. Works are estimated to last for 1,5 years.	Traffic functioning and works execution will be performed alternately during time intervals that are going to be agreed with the Contractor.
8	Regular investment maintenance of the Niš – Crveni Krst– Zaječar – Prahovo port railway	25.02.2019.	Works are estimated to last until the	Works are executed with train teaffic



	line, section Crveni Krst- Zaječar		end of 2019.	closure (except for own needs) on the route Crveni Krst– Zaječar
9	Rehabilitation of the section Senta-Subotica on the railway line Banatsko Miloševo-Senta- Subotica	01.04.2019.	270 days	Passing of freight trains when necessary



Appendix 4.1. request for train path allocation (form)

Application form for train path allocation

, r · · · · · · · · · · · · · · · · · ·						
Railway undertaking - ope	erator:					
Address:						
Contact person:					•1	
Γel.	Fax.			e-ma	11:	
Place and date:						
1. BASIC INFORMAT	ON ON THE DE	OHESTED	TD A INI D	A TLI		
1. DASIC INFORMATI	Train No in	Desired tir		Route		
Train type	the previous timetable	departure	arrival	from	to	via
NOTEG						
NOTES						
2. TRAIN TIMETABLE	E INFORMATIO	N	<del>1</del>			
Stops in service points	Staying time points [min]	in service	Running	calendar		
2 TD A DI DIEODMAT	IOM					
3. TRAIN INFORMAT	ION		1	Drokin	α	
Type of traction, units, serial No of traction traction unit, function in route  Additional 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]	Brakin, Type	Percentage [%]	Maximum train speed [km/h] Type
	1					
					<u> </u>	I.
4. OTHER REQUIREM	IENTS					



Appendix 4.2. Instruction for completion of the Request for train path allocation

LT.	Appendix 4.2. Instruction for completion of the Request for train path allocation				
		Specify train category:  Passenger train (EuroCity, InterCity, express, fast, semi-fast, passenger, cross-border, suburban, train of accompanied motorcars, travel agent's train, empty train);			
	Train type	Freight train (single type of load train, single wagon load train, intermodal train, express, fast, direct, sectional, block train, pick-up goods train, circuit-working train, industrial, military, train with empty wagons, locomotive, test)			
1.	Train No in the previous timetable	Specify the number of the train from the previous timetable, whose path elements match applicant's request (eg. 541, 40760,)			
	Desired time	Specify the desired time of the train departure from the origin station or the time of arrival to the destination station			
	Route	Specify the origin and destination station of the train route and characteristic service point between those two stations which define the train route			
	Stops in service points	Specify all service points where the train needs to stop			
2.	Staying time in service points	Specify the needed staying time in each service point, in minutes			
2.	Running calendar	Specify the days of the train running. For the trains whose running calendar covers several days, indicate the calendar on the entire route. In case a train path for an optional train is requested, indicate "Optional".			
	Type of traction, serial No of traction unit, route	Specify traction type (electric or diesel), serial number of traction (operating) locomotive if there is change of traction on the required route			
	Additional traction units, serial No of traction unit, function in the train, route	Specify number of additional traction units, traction units type (electric or diesel), serial number, position on the train (engine, double heading, banking,) additional traction unit running route			
3.	Series and No of the wagon/motor unit	Specify wagon series (letter designation of wagon series) and number of wagons of the train i.e. series, number and serial number of multiple-unit sets (DMU/EMU)			
	Train mass	Specify weight of all vehicles on the train including weight of operating locomotives			
	Train length	Specify train length in metres without the length of operating locomotives			
	Braking	Braking type: specify braking type (G, P, R, Mg,)			



		Braking percentage: specify braking percentage which has to be considered during timetabling
	Maximum train speed	Specify maximum train speed considering characteristics of vehicles on the train
4.	Other requirements	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, hand-over procedures on border crossings, trains hand-over on mutual confidence, 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.



Appendix 4.3. Deadlines for annual 2018/2019 timetable preparation

Phase	Authority	Deadline
International annual capacity allocation requests	RU	11.12.2017.
Regular deadline for submitting allocation requests for annual train timetable	IM	15.12.2017. – 07.04.2018.
Coordination and harmonization of requests	IM/RU	10.04.2018. – 08.06.2018.
Draft timetable	IM	15.06.2018.
Draft review – remarks, suggestions, proposals and opinions	RU	18.06.2018. – 16.07.2018.
Solving of problems and questions	IM	17.07.2018. – 03.08.2018.
Capacity allocation and contracting	IM / RU	13.08.2018.
Extraordinary requests (remaining capacities)	RU	12.10.2018.
Timetable coming into effect	IM	09.12.2018.



Appendix 4.4. Deadlines for amendments to annual 2018/2019 Timetable

Submission date of requests for amendments to annual timetable	Deadline for capacity allocation	Application date for amendments to annual timetable
10.12.2018.	14.01.2019.	04.02.2019.
18.02.2019.	11.03.2019.	01.04.2019.
22.04.2019.	13.05.2019.	09.06.2019.
15.07.2019.	12.08.2019.	02.09.2019.
26.08.2019.	16.09.2019.	07.10.2019



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-Stara Pazova Šid state border (Tovarnik);
- (Belgrade) Stara Pazova -Novi Sad Subotica state border (Kelebija);
- Belgrade Mladenovac-Lapovo-Niš-Preševo state border (Tabanovci);
- Belgrade Rakovica Jajinci Mala krsna Velika Plana;
- Belgrade Centar Pančevo Varoš (Vršac);
- Belgrade Resnik Požega Belgrade-Stara Pazova Šid state border (Tovarnik);
- (Belgrade) Stara Pazova -Novi Sad Subotica state border (Kelebija);
- Belgrade Mladenovac-Lapovo-Niš-Preševo state border (Tabanovci);
- Belgrade) Rakovica Jajinci Mala krsna Velika Plana;
- Belgrade Centar Pančevo Varoš (Vršac);
- Belgrade Resnik Požega Vrbnica- state border- (Bijelo Polje)- section Resnik- Požega- Užice;
- Inđija Golubinci;
- Novi Sad Novi Sad Marshalling Yard Open line junction Sajlovo;
- Belgrade Centar Novi Belgrade;
- Belgrade Centar 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 Open line junction Savski most Novi Belgrade;
- (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 bridge (Niš Marshalling Yard);
- Mala Krsna − Požarevac − (Bor);
- Pančevo Varoš Pančevo Vojlovica;
- Smederevo Mala Krsna;
- Novi Sad Marshalling yard Open line junction Sajlovo.

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 Annex II of the Traffic Rulebook– Rulebook 2 ("Official Gazette of the Community of Yugoslav Railways", No 3/94, 4/94,5/94,4/96 and 6/03).



Appendix 5.2. Overview of the lines fulfilling the conditions for train running with an engine driver only

List of Serbian Railways Infrastructure lines that do not meet the conditions for operation of traction units with an engine driver only (other lines meet the conditions):

- (Belgrade) - Resnik - Požega- Vrbnica- state border (Bijelo Polje) - Užice - Vrbnica section.



Drimaing rading vising ¥±096

Appendix 5.4. Geometry of pantograph (current collector) TIP POS - 254/III used on IŽS network



## Appendix 6 Register of infrastructure data

	sbutitlA 0 1108121	30						Τ	79,11	84,90	101,57	96,94	100 96	91,7	84,77	81,77	84,66	07 20	83.79	86,71	96,2	84,93		T				T	T	Ι									Τ	Τ	Τ	Τ	Γ	
	Loading gauge	59		H	ŽS-I	ŽS-I	1-87	101	ŽS-I	+	_	ZS-I	+	+	ŽS-I	ŽS-I	ZS-I	1-SZ	ZS-I	ŽS-I	ŽS-I	5	Н	ZS-I	ZS-I	ŽS-I	ŽS-I	ZS-I	100	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	1-SZ	ZS-1	ZS-I	ŽS-I	ŽS-I
resistance of the line [daV]	←	28		H	Ž	-	0 0	+	1 Z	7	$\rightarrow$	2 2	7 2	-	2 Ž	Ž	3	7 0	7 7	2	-	4	П	7 10	- 2	Ž	Ž	7 1	-	2	- 2	- Ž	- 2	14 2	-	4 Ž	-	5 2	7 7	4 2	4 2	_	7 2	5 2
RulinA	→ adays	5 27				5			- 0	0	6	-	9	+	0		-	,	4		4 .	4	Н	-	9 0			t	+	-	0 10	0 10	15	13 15	-	-	5 3	5 1		2	1	4	7 2	-
Ruling	Incline	25 26				5 0	0 0	+		0	8	-	9	3 0	0		1	,	7		4 .	-	+	+	2 5		+	+	0 9	-	6	8	12 0	⊢	-	1 4	2	-	-	3	-	- (*	2	+
[%] uoit	Gradient of the sta	24		0,0		1,0	0,2	1,0	0,0	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	4,9	$\top$	1.5			1	5,5	4	0,6	7,4	17,0	7,2	4,8	3,5	2,3	0,3		1,3	-	1,1	7,0	Г
suibi	Міпітит сигуе га	23				700			10000	_	2500	3000	1	-	-	1300	10000	10000	1		15000	15000			300				300		300	300	300	300			Ц	520	$\perp$	200	800	$\perp$	┖	
	Open for passenge	Н		Ь	Ь	P/F	+	-	P/F	-	-	<u>م</u> م	P/F	-	P/F		۵	1/4	+		P/F	_	Ь	4	Ы	Ь	,	P P	-		P/F	М	Ы	P/F	-	-	-	-	$\rightarrow$	_	۵ ۵		+	-
	Side-/end-loading Occupancy of serv	Н		4	H	S	+	+	So	+	$\rightarrow$	S	S/F D	-	S	$\dashv$	+	+	1		S/E P	+	Е	+	4	Н	+	-	- =	-	S	D	D	S	+	S	$\vdash$	D	+	2	0 =	+	S	-
	Freight car scales	19						ŧ		+				-			+	+	+		Yes			+			+	+	+	F							H		+	†	+	+	F	
nic	Service point code	18		16003	16012	16002	10001	10204	16501	10503	16505	16506	16550	16508	16509	16510	16511	16512	16514	16515	16516	/1691	16104		16103	16102		16101	15401	15408	15402	15403	15404	15405	15406	15407	15460	13701	13702	13703	13704	13706	13707	13401
g the service po	Manner of securing	17		-				-		-	-	-	-	-	-		-	-	1		-		3	e .	-   -		-	ŀ	-		-	-	-	-	-	-	-	-		_	Ī		-	-
noitaluge;	Manner of traffic	16			station distance		automatoc block	block post distance	block post distance	remote control with	two-way distance	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	block post distance	station distance	station distance	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 with AB	RC with AB		RC with AB	RC with AB	RC with AB	RC with AB	RC with AB
V. G	Tracks for the longest trains	15		4		7 i 8	7117	+	415	614	415	415	4 ; 5	415	2 i 3		2 i 3	4:6	614		4 i 5	Tohonous	- (1 abanovce 5	12	5			,	c 1		4	3	1	2	2	4	3	3	,	2		0 (0		4
Direction B→A	permitted train length	14	(Tovarni	059		548	517	700	754	600	749	786	653	922	672		299	(2)	6/0		707	- Pondon	583	615	702		1	130	707		781	710	629	692	189	929	649	838	-	969	707	642	742	998
	acceptance of the longest trains Maximum	13	te horder	3		112	3 314	1	213	213	2 i 3	2 i 3	. : 0	213	115		4 i 5	.:.	613		2 i 3	ototo omo	5	+	4			,	c ! l		4	3	_	2	2	4	3	3	+	2		0 "		3
Direction A→B	permitted train Tracks for	2	MAIN LINES  Pazova - Šid - state horder - (Tovamik)	650		554	+	2		+	+	269	+	731		H	614	,	+		599	Nix Dead	D4   S83   5   583	+	702		+	9	700	_	777	53	59	92	81	299	51	838	-	693	708	47	746	85
pəəds	Left track Maximum	=				5.	08	ó	99		120 6	9	7	7	7		100	1	ń		9	Lonouro	- Lapovo	30	90 70	Ш	70		7		7	7	9	9	99	99	9	8				. 8	1	72
Maximum permitted	Right track	10	de - S		50	ŀ	80	1	50	-	80	120	071	-	20		_	0,0	20		8	08		30	80	-	70		-6			70	2							100				
Viory	Railway line categ	6	Belorade - Stara		D4	D4	7	D3	D3	S	D3	D3	3 2	D3	D3	D3	D3	D3	D3	D3	D3	N lod	D4	D4	D4	D4	D4	D4	4 G	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	D4	7 5	D4	D4	D4
əu	Class of railway li	∞	101		M	Z :	Σ	ΞZ	Z	Z	Σ	ΣZ	Σ	Σ	M	M	∑ :	Σ	Σ	M	Σ.			<b>∑</b>  :	ΣΣ	Σ	M :	Σ	Σ	Σ	Σ	M	M	×	Σ	M	M	×	Σ.	Σ	ΣΣ	Z ×	Σ	Σ
k line	Single/double-trac	7			D	D	2	۵	0	a	D	0	ם	۵	D	D	۵		0	D	0	ر ا			a a	D	D		2 0	S	S	S	S	S	S	S	S	S	S	S C	n v	o so	S	S
Juie	Type of service po	9		-	3			16			_	1	o -	-	-	3	_ ,	E -	3 -	3	- 5	CI	-	_	٥ –	3	9		- (	6	-	1	1	-	-	1	-	-	3	_ ,	e (	7 -	-	-
	Name of service point	5		4+765 NOVI BEOGRAD	7+165 TOŠIN BUNAR	10+704 ZEMUN	UNSKO POLJE	TRAIN RECORDING POINT A		STAKA PAZOVA	JBINCI	PUTINCI KBALIEWCI	A A	ANİ	SREMSKA MITROVICA	ARAK	TINCI	MIN THENCY TER DENTIFY	BAČINCI	RAC	PONDER	STATE BURDER	:DER	TOPCIDER TERETNA	OPEN LINE JUNCTION G RAKOVICA	KNEŽEVAC	OPEN LINE JUNCTION A	0/0	SAVA	RIPANJ KOLONIJA	Z.		Nj TUNEL	A	SOPOT KOSMAJSKI	VLAŠKO POLjE	MLADENOVAC	KOVAČEVAC	RABROVAC	ADAK	AKE	UVAC	APLANA	90+434 VELIKA PLANA
				IVON 297	165 TOŠII	704 ZEMI	13+8/3 ZEMUNSKO	30 TRAIL	143 NOV	744 SLAK		713 PUTINCI	SSS RIMA	119 VOGAN	721 SREM	100 LAĆARAK		200 KUZMIN	100 BAČI	700 GIBARAC	365 ŠID	SIAI		6+421 TOPC	8+533 RAKO	700 KNEŽ	380 OPEN	729 KIJEVO	17+930 PINOS	121 RIPAL	317 RIPAN	760 KLENJE	592 RIPANJ	730 RALJA	508 SOPO	748 VLAŠ	110 MLAI			SSO KUSADAK	70+320 KATARE	564 PALANKA	70 MAL	134 VELI
	Chainage	4		+4						$\perp$		53+713	⊥					24 99+200	$\perp$	L		056+171   65						14:050			36 21+317		32 29+592	38 34+730										
tronsnert	Distance in km	Ц			. 2+400	3+539				1/+901		*8+708	L			4+37		5+124		L	3+665	2+28			1+738	Ш		0+849	3+87	2+191	1+196	3+443	4+832	5+138	8+778	6+240	5+36	9+6+9	2+869	4+625	3+680	4+56	2+006	4+864
Date of handover to public	Right track Left track	1 2		026	15.19		.101.192		10	3105	2009. 1993.	.1928		0 1.12	0				1.21	_		1		_	1884 1834					1	b88	1.6	0.5	0				_	.488	31.6	0.50	0		



	əbutitlA	30			103,9	102,6	105.4	103,4	Τ	107,4			115,3			126,3	T	134 6	134,0	136,4		144, 6		148.5			]	5	172.4	1677	10/,/			184,9				190,5	188,8	188,3
	Loading gauge	59	I-S'	ŻS-I	ŽS-I	ZS-I	ŽS-I	7.S-I	ŽS-I	-	ŽS-I	ŽS-I	Н	ŽS-I	ZS-I	ZS-I	ZS-1	4	4	ZS-I	ŽS-I		ŽS-I	ZS-I	ŽS-I	ŽS-I	ZS-1	1-67	7c.1	ŽC.1	70 I	ZS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	$\perp$
the line [daN]	←	28	Ž	Ž	$\rightarrow$	9	-	0	100	3 Z	Ž	Ž	3 Ž	×Z ×	$\rightarrow$	3 2	7 1	-	4	3 2	-	2 Ž	$\rightarrow$	3 5	-	Ž	$\rightarrow$	7 1/2	1 1/2	+	+	7 1/2	Ž	1 Ž	Ž	Ž	Ž	$\rightarrow$	2 2	6 2
Ruling resistance of	<b>→</b>	27			$\rightarrow$	4	-	4	ļ	4			4		+	2	1	+	4	т	9	4	$\rightarrow$	4 4	-		-	\	1	+	1	1		9				-	2	
Ruling gradient	Incline	25 26			+	4 6	$\rightarrow$	0	+	4			4 3		$\rightarrow$	5	+	+	4	3	5 3	3 2	-	3 2	+		+	2	7	+	+	+		9 9				-	5 2	
		24	Н			3,0		0,0	t	0,0			1,5	T		0,0	+		4,	0.0		4,0		0, 0			9	0,0	9		2,0	t		0,0					5,48	2,86
snip	Minimum curve ra	23	945	1000	700	700	800	1000	006	800	800	008	800	480	400	350	1000	2000	0001	1000	300	299	350	920	200	200	2000	2000	0001	2007	1000	10000	1200	1200	700	700	1500		950	295
r /freighF Fran	Open for passenge	22		$\rightarrow$	$\rightarrow$	P/F	Ę	P/F	I	P/F			P/F		į	P/F		-	F/F	P/F	Ь	P/F	6	P/F			1	F/F	D/E	D/F	1/1	I		P/F				P/F	P/F	P/F
	Оссирансу об зегу	21			+	4	٥	+	+	Ь			Ь		+	Ч	4	+		Ь	D	n	;		+		+		=	+	+	+		Ь				-	Ь	П
moltelq	Freight car scales Side-/end-loading	19 20	Н		S	+		2	+	$\vdash$			S	+	-	S	+		n	S		Н	+	S	+		-	2	0	2 0	2	+	-	S	H			S	S	S/E
- nic	Service point code		13402	13403	13404	13405	13406	13450	13302	13303	13304	13305	13350	13307		13310	13311	13312	13313	13352	12501	12502	12517	12503	12505	12506	12519	12507	12500	12510	12510	12511	12512	12513	12514	12515	12518	12516	12550	12551
g the service po	Manner of securing	17	П		$\perp$	$\Box$	-	-	I	-			1			_	1	-	-	-	-	-					ŀ	1	-		1	Ţ		-				-		-
noitaluge	Manner of traffic 1	16	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	RC with AB	RC with AB	KC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with TWT	RC with TWT	RC with TWT	KC with I W I	DC with TWT	DC with TWT	DCid. TWT	RC with TWT	RC with TWT	RC with TWT	RC with TWT	RC with TWT	RC with TWT	RC with TWT	AB BC:44 TW/T	RC with TWT
B→A	Tracks for acceptance of the longest trains	15			2		9.1	C14	Ī	415			4 i 5			314		9:1	413	2	-	2		2 i 3				213	2:7	2:3	C17			3 i 4				4	3	3
Direction	Maximum permitted train length	14			812		100	/60	l	979			715		000	629		000	070	825	774	612		290			000	200	109	408	420			999				738	799	488
A←A	Tracks for acceptance of the longest trains	13			4			213	İ	2 i 3			2 i 3			516			213	314	2	3 i 4		4 i 5				614	.:1	4 ; 5	7			2 i 3				3	3	3
Direction	Maximum permitted train length	12			855		230	230		710			788		400	702		317	CIO	559	774	648		999				5/4	753	543	2+2			571				744	989	490
pəəds	Left track	11		20			00	Ť	70			100			120	Ť	9	00	Ť	70	,	,			l		3	001			Ť			5	8				2	30
Maximum	Right track	-			100			I	50	_		70		_	120	1	_	20	I	100	37			8	Г				_	Ţ	I				100					30
ory	Railway line categ	6	D4	D4	D4	7	7	2 2	7	D4	D4	D4	D4	D4	7	Q	7	7 2	7	D 5	D4	D4	D4	7 7 7	7	D4	7 2	3 2	5 2	5 2	5 2	2 2	D 4	D4	D4	D4	D4	D4	7 2	D4
əu	Class of railway li	8	M	M	Z :	Z	∑ ;	ΣΣ	Σ	M	M	M	M	$\Sigma$	Σ	Σ .	Σ,	∑ :	Z ;	ΣΣ	M	M	Σ;	Σ	Σ	M	Σ,	2 2	Z	2	2	2 >	Z	M	M	M	M	M	Σ	M
k line	Single/double-trac	7	D	D	D		۵	ء اد		D	D	D	D	D	م	م	م		n i	۵ ۵	s	S	S	N N	۵	D	ء اد					0	D	D	D	D	D	D	S	D
ıni	Type of service po	9	3	3	- 1	7	. 3	- "		-	3	3	1	3	9	_	3		- ,	ر د	2	1	3	7 -	3	3	ε,	٠,	o -		- ,	0 %	3	-	3	3	3	-	- 2	<u>-</u>
	ge Chairmage Name of service point			97+725 NOVO SELO			108+001 LAPOVO MARSHALLING YARD	109+600 LAFOVO 114+100 BRZAN	116+975 MILOŠEVO	120+300 BAGRDAN	126+950 LANIŠTE	131+395 BUKOVČE	135+237 JAGODINA		145+981 OPEN LINE JUNCTION CUPRIJA	152+645 PARACIN	163+670 SIKIRICA/KATAKI	166+600 DRENOVAC	1/1+600 CICE VAC	1/3+600 LUCINA 176+310 STALAC	182+000 STEVANAC	186+486 BRALjINA	190+400 CEROVO/RAŽANj	192+216 STARO TRUBAREVO 194+939 DUNIS	199+193 VITKOVAC		203+500 GORNJI LJUBES	203+617   NOKMAIN	210±480 A DROWAC	214+197 AT EKSINAC	217±468 NOZDINA			222+705 GREJAČ	227+950 SUPOVAČKI MOST	229+309 MEZGRAJA		234+939 TRUPALE	241+005 CRVENI KRST 242+241 HNCTION BOINT 1 2 NIŠ	243+583 NIŠ
	Chainel	7	Ш					$\perp$								4		T	Т						T		$\perp$	$\perp$			1	_					Ш			
	Distance in km	3	3+566	3+725	2+577	6+011	1+688	4+500	2+875	3+325	04999	4+445	3+842	5+463	5+281	6+664	*8+582	2+930	2+000	2+000	2+690	4+486	3+914	2+723	4+254	2+207	2+100	2+11/	2+780	3+717	3+771	1+317	3+285	0+635	5+245	1+359	3+281	2+349	990+9	0+842
public	Left track	2					.488	1.90	0.50	)						1	884	1.6.	3	961'5'82	.,	788	1.60	.50		.0	56 I	.20.	10		I		.4.	881	.60	.£0			03.09.1884.	
Date of handover to	Right track	-	.4	£61	1.20	60	) 1	161	'10	.20	£261.	22.03	1973			4	.961	.20.8	37	881.6.£	Ľ	50		2.0		·t/	881	60	ε0				.8	66 I	.20	67			03.0	03.09 \$881



	əbutitlA	30	183,0	194,1	T		194	T	201.6		211,5	T	0170	211,9	248,2	255		282,6	306.9	0,00	324,4	333,3	Τ	1000	346,7	371.9			397,7	427.2	421,2	7,2,5					148,8	1246	13.4	t,C1	178,6	157,0		135,4	123,4
	Loading gauge	6	ŽS-I	ŽS-I	ŽS-I	ZS-I	ZS-I	1-SZ	ŽS-I	ŽS-I	ŽS-I	ZS-I	7c I	+	ŽS-I	ŽS-I	ŽS-I	ZS-I	1-87 ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	1-57	ZS-1	ŽS-I	ŽS-I	ŽS-I	7.	7.S-I	+	ŽS-I		Ш	ŽS-I	ŽS-I	ZS-I	7c I	75.1	ŽS-I	ŽS-I	ŽS-I	ŽS-I	7 7	1 7
[Mab] snil sdf	← ←	28 2	-	- Ž	Ž×	$\rightarrow$	2 Z	Ž	Ż	Ž	ı Ž	Z	Ž ×	7 / 7	1 Ž	2 Ž	Ž	Z×	7 2	Ž	- Ž	7 Ž	N N	-	4 c	+	Ž	3 Ž	1 Z	7 %	_	15 Ž			$\rightarrow$	$\rightarrow$	6 Z,	Z V	-	_	- Ž	9 Ž	-	5 Z	5 ŽS-I
Ruling resistance of	$\rightarrow$	27 2	-	2	+	+	4	+	2	H	2	+	,	1 4	5	9	+	_	0 00	,	7	7	+	,	- 1	, 9	$\vdash$	5	3	,	+	-		Н	$\rightarrow$	13	=	+	. 0	+	=	2	Н	,	
gradient	Slope	-	-	0	-	-	7	0	0	-	-	0		0	-	-	-	m -	- 0	4	0	7	0	٥,	n r	0 4	4	3	0	7 -	- 0	13			0	7	S	0	, 0		0	6		∞	4
gniluA	Incline	-	1,04	1,58 2	- (	_	0,71 4		1 16	2	2,44 5	7 0	7 1 2	-	2,8 5	4,31 6	_	_	3.7 7		5,45 8		5	_	7 4 40 7	0.92 5	5	7,5 4	2,09	× 0		<u> </u>		4,9	-1		8,0	+	0 0 0		8,7	-		0,8	2,2 0
	Minimum curve ra Gradient of the stat	$\vdash$	8	0 1,	2000		700	0 0000	20000 0.91			1600	0 0	_					300	300			950		400 2,		1		_	- 1	400	300			_	300			300		275 8	ш		350 (	700
		┡		fz.	5		_	+	-	+-	Щ	4	f.	_	$\perp$	Ш	4	4	+	$\perp$	fr.	Ц	4	╣.		$\perp$	H	fr.	4	+	fx			H	4	4		+	+	+	+	Н	$\vdash$	+	Н
	Open for passenger	-	-		4	$\rightarrow$	P P/F	+	U P/F	-	U P/F	+	11 D/E	-	U P/F	$\rightarrow$	$\rightarrow$	_		1	-	U P/F	+	- f	U F	-		P P/F	P/F	-	D P/F	-		ЬР	4	4	U P	-		+	U		$\vdash$		
	Side-/end-loading J	-			+	+	S	+	S	$\vdash$	S	+	+	S	+	S		S/E	+	+	S	_	+	+	N 0	+	$\vdash$	S	+	+	0	+	ł	_	+	7	+	-	+	+	۲	H	H.	+	+
3.1	Freight car scales	⊢			+	+	+	+	+	H	Н	+	+	+	H	Н	+	N N	+	+	$\vdash$	+	+	+		+	Н	Н	+	+	+	+		Н	+	+		+	+	+	+	Н	$\vdash$	+	$\forall$
- DIC	Service point code	18	12301	12302	12304	12303	11001	11002	11004	11005	11006	11007	11009	11050	11010	11011	11012	11013	11015	11029	11016	11017	11018	11030	11010	11021	11022	11023	11024	11025	11020	11028		16103		15602	15603	15604	15605	15606	15607	15608	15616	15609	15611
g the service po	Manner of securing	17	-	-	$\top$	1	-	$^{\dagger}$	-	T	-	$\dagger$	-	- -	-	-	1	- -	- -	+	-	-	†	†.				-	-	+		-		-	-	-	-	-		+	-	-		-	-
noitaluge	Manner of traffic r	16	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	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			AB	AB	RC with AB	RC with AB	BC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB	RC with AB
	Tracks for longest trains	15	-	1			3		2 i 3		2		-	2	-	4			2	1	3	1		,	7 (	213		3	-	-	- "	c	ına	5		4	3	.:	3		2	2		2	3
Direction A←B	permitted train length	14	543	949			109		623		632	+	750	648	069	526		648	708	8	899	965	+	-	623	040		623	603	103	500	600	- Velika Plana	702	1	902	573	100	714	-	613	603		619	617
	acceptance of the longest trains Maximum		_	1		+	4	+	2 i 3		2	+	-	4	H	4	+	+	2	+	3	_	+	+	7 (	+	H	3	_	-	- "	+	- Mala Krsna -	4	+	+	3	-	- "	+	-	2		3	3
Direction A→A	Tracks for	2	0	9.	+		0	+	+		6	+		5 5	9	7	1		٥٥		.2	8	+	1	- 0	0 00		~	9	,		-		2	1	0	5	4	0 -	+	9	9		4	2
pəəds	Maximum permitted train		28	929			009		809		639		773	69	989	537		889	700		572	82			169	648		618	Ā	0.7	610	0	(Beograd) - Rakovica - Jajinci	702		710	643	210	7117		909	969		624	612
permitted	Right track Left track	Н	-					70	2						100	65	50		30			50			75	5	06		9	95		20	) - Ra	08	3	8					50				
Vro	Railway line catego	-	4	74	D4	4	4 2	4 2	D4	D4	D4	D4	2 2	ţ 7	4	D4	4	4 2	4 4	4	4	D4	4	4 3	4 2	t 4	4	4	4 2	4 2	t 2	D4 D4	ograd	74	D4	4	4 2	2 2	1 2	D4	4	D4	D4	4 2	D4
	Class of railway lir	$\vdash$	$\vdash$		× :	$\pm$	+	Σ   Σ	+	$\vdash$	Н	$^{\dagger}$	Z 2	+	×	Н	$\dashv$	+	Z Z	+	$\vdash$	+	+	Σ :	$\top$	T	Н	M	$\top$	$^{+}$	Z >	$^{+}$	1		$\forall$	$\dashv$	_	Z Z	+	× ×	+	H	M :	+	+
и ппе	Single/double-tracl	7	S	S	S	S	S	S 0	2 00	S	S	SO E	0 0	2 00	S	S	S	S	2 0	o so	S	S	S	2 0	n 0	0 00	S	S	S	n 0	0 0	2 00	-	S	S	s	s o	0 0	0 0	2 00	S	S	S	s s	2 00
	Type of service po	9	_	2	+	3	+	+	2 -	3		+	0 0	+	2		3	+	7 0	+	_			+	7 -		3		+	200	+	151			9	_	- ,		7 -		+			_ "	+
,,,,	on colingo 30 cm.T																																												
	Name of service point	5	MEĐUROVO	OTINCE	ČAPLJINAC	MALOSISTE	DOLjEVAC	KOCANE	STOVAC	LIPOVICA	PEČENJEVCE	ZIVKOVO	TRIBOJ LESNOVACINI	LESKOVAC	DORDEVO	GRDELICA	PALOJSKA ROSULJA	PREDEJANE	DZEP MOMIN KAMEN	SELINCE	VLADIČIN HAN	SUVA MORAVA	LEPENICKI MOST	BAL	PRIBOJ VRANJSKI VPANISKA BANIA	Nie Nie Nie Nie Nie Nie Nie Nie Nie Nie	NERADOVAC	FOVAC	BUJANOVAC	OVICA	BUNAKEVAC PR FŠEVO	STATE BORDER		COVICA	3+708 OPEN LINE JUNCTION K1	NCE	BELI POTOK	ri tr		APOVAC		LA IVANČA	BRESTOVI	41+300 MALI POZAREVAC 43+167 DRAŽANI/ŠEPŠIN	ČARI
	Chainage		5+879 249+462 MEE	4+484 253+946 BELOTINCE	255+441	257+010	261+451	7+502 265+261 KOC	267+942		275+564	278+831		287+568		301+863	308+610	312+725	3+215 322+886 MOM	326+338	329+591	334+066	336+135	359+055	2+382 341+437 PKIE 6+578 348+015 VPA	354+206	361+415	365+725	373+692	7+020 380+712 LETOVICA 5+929 396+550 DIIV ABEVIAC		400+452				10+916	16+277	20+330	24717	27+840		36+894		1+700 41+300 MAI 1+867 43+167 DRA	47+771
tronsnert	Distance in km	L	5+	++	± .	+	4	+	4	7+	4+	3+	-   -	4	*	+9	+9	4	to   t	3+	3+	+	5+2	7	+7	5	7+	+4	+ 1	+ 1	t 4	*			3+	*1+581	*5+419	4	5 7	2+2	3+	5+	5+	± ±	4
Date of handover to public	Right track Left track	1 2														888	I													.8	888	I			1.0							·t	7761	.90.	10



	shutitlA	30		108,5	6,86	T	83.0		83.1	1,00			83,6		92,6	8,66	111,4	T	112 2	134.8	133,8	133,9	108,5	79,5	82	82,6	84,5	83,3	83.6	84,2	107,4	9,66	109,4	110,2	1000	108.1	110,3	110,5	113,2	113,2	128
	Loading gauge	59	ŽS-I	ŽS-I	ŽS-I	7.S-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ZS-I	ZS-I	f	ŽS.1	ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ZS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	-S2-	1-07	70.1	ZS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I
resistance of the line [daN]	←	28		7	4	1	5			4			1		$\rightarrow$	$\rightarrow$	4	t	- 1		9	5	-	CI -	Н	$\rightarrow$	9	5	-	4	2		$\rightarrow$	5	, ,	+	3			5	-
gniluA	→	5 27		1	1	1	'	Ш	+	m	L		-	4	-	+	6	-	4	+	2	4	-	· ~	Н	$\vdash$	+	9	-	4	Н		$\vdash$	~	,	+	m	⊢	Ц	$\rightarrow$	9
Ruling	Incline			9 0	0	+	0	Н	+	2 3	H		_	+	+	+	8	+	0	+	5 6	2 3	+	0 1	1	+	+	3	-	4	⊢		$\vdash$	3	,	+	3	+	Н	9	9
[%] noit	ets off to traibert		П	2,0	0,0	Ť	0.7	П	$\top$	1,4		П	9,0	7	9,4	3,7	┪	9	0,0	2.0	1,0	2,0	6	0,4	0,0	0,0	4,5	0,0	0.0	0,0	9,0	Г	0,0	C,	0	0,0	1.0		0,0	3,3	٦
snip	вт эчтиз титіпіМ	23		700	1000		280			700			1000		800	800	700		1000		300	300	200	300	400	400	700	2500	3000	╙		1600		1200	İ					$\perp$	2000
nsr7 Tdgi9r1\ r	Open for passenge	22		_	۵,	4	P/F	Ц	<u>a</u> a	P/F	Ь	Ы	Ы	Д	<u>م</u> ه	٦ ا	P/F	į	P/F P/F	+-	P/F	Д	+	P/F	P/F	Д	-	P/F	P/F	P/F	P/F	Ы	Ь	7/4	D/F	1	P/F		Ε	P/F	╝
	Occupancy of serv			ם	Д	+	Ь	Н	+	D			T	-	D :	+	E	$\vdash$	N D	Δ.	S	Ы	٩	S	ш	E	+	S	Д	S	$\vdash$		Ь	1	0	+	Δ.	Ь	(*)	S	-
taaografa	Freight car scales Side-/end-loading	-		$\dashv$	+	+	+	Н	+	+	H	Н	$\dashv$	+	+	+		Ì	-	+	0.2	+	+	0.1	S/E	_	+	-	0,	0.2	0,2	L		+	+	+	+	$\vdash$	Yes S	0.1	$\dashv$
		T			$\dagger$	t	t	Н	$^{\dagger}$	t			$\forall$	$\dagger$		1	1		$\dagger$	t		$\dagger$	$\dagger$		П	$\dagger$	1	$^{\dagger}$	t	T				$^{\dagger}$	$\dagger$	t	Ť	T	ŕ	1	┨
oin -	Service point code	18	15612	15613	15614	13509	13551		13502	13503	13508	13510	13504	13505	13506	13507	13401		16503	16518	16802	16803	16804	16806	16807	16808	23301	23302	23304	23306	23401	23402	23403	23404	23400	23408	23409	23410	23450	23450	23499
oq əsivrəs ədi g	Manner of securing	17		-	-	-	-	-	$^{\dagger}$	-			-	1		_	_		- -	-	-	-	-		-	_	-		-	-	-		_	+	-	+	-	∞	4	4	$\exists$
noitalugs	Manner of traffic r	16	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	RC with AB		AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	dA.	AB	block post distance	block post distance	block post distance	station distance
	acceptance of the			3	2		4		$\dagger$	2			3		m (	7 .	4	- (Kelebia)	415	1 i 2	2 i 3	112		213	3 i 4	4 i 5		213	3 i 4	3 i 4	3 i 4		112	213	3 ; 4	-	2 i 3			2 i 3	
Direction B→A	permitted train length Tracks for			879	989		633		$^{+}$	545			019		476	586		der	629	803	290	613	- 55	999	718	493		785	812	938	992		959	/95	731	10/	780		507	594	1
	acceptance of the longest trains			3	+		4			2			3	+				a'	213	1 i 2		1 i 2	+	213		4 i 5	+	213	3 i 4	H				213	2;4		2 i 3	H	4	2 i 3	-
Direction A→B	Ltacks for				+	+	7		+				,	4				ad - Subo	7	-	2	-	+	- 2	3	4		2	3	3	3		1	7	,,	9	2		13	2	-
	Maximum permitted train	12		630	602		629			545			809		581	594	785	(Beograd) - Stara Pazova - Novi Sad -	/59	799	599	617	000	658	715	492		772	816	943	764		699	76/	731	101	777		507	594	
permitted speed	Left track	-			80		3	20				100	3					Pazo	100	0	80	í	70	80	85		0	80		09	80					40					20
V10.	Railway line categ	-	D4	D4	4 2	4 2	4	D4	D4 D4	D4	D4	D4	D4	74	D4	D4	74 D4	Stara	נע	D3	D3	D3	2 2	D3	D3	D3	D3	D3	D3	D3	D3	D3	D3	2 2	3 2	2 2	D3	D3	D3	D3	D3
	Class of railway lin	Н	Н		+	Z Z	$^{+}$	Н	MM	+	H	Н	$\forall$	$\pm$	+	$^{\dagger}$	M	grad) -		$^{+}$	Н	$\pm$	$^{+}$	N N	Н	$\forall$	M :	+	t	M	$\vdash$	Н	$\vdash$	$^{+}$	Z Z	$^{+}$	+	$^{+}$	Н	$\dashv$	M
		-	_	_		-	-	_		-	_	_	_						_	-	_	-			_				-	_	_	_	_	-		1		_	_	_	_
k line	Single/double-tracl	7	S	S	S	n v	S	S	S S	S	S	S	S	S	S	SO 0	S	104	0	S	S	S	S C	v v	S	S	S	s s	S	S	S	S	S	20 0	20	ם מ	o w	S	S	S	S
tni	Type of service po	9	3	2	- ,	2 41	-	14	e "		3	3	-	3			-		- -	2	1	- (	m (	7 -	-	_	4	- "	, -	-	-	3	2	- (	s -	- (-	n -	2	-	-	15
pousual	Distance in km Chainage	3 4				2+961 00+3 /U KALJA SMEDEKE VSKA 1+230 67+800 HINCTION POINT I MALA KRSNA		Ш	1+755 14+300 SKOBALj 2+000 17+200 OSIPAONICA		20+100			29+400			4+734 41+679 VELIKA PLANA	ACTOR OF THE PROPERTY.	6+800 42+861 INPITA		4+902 52+952 BEŠKA			3+303 02+334 MAKLO YACKIN YINOGKADI 4+221 66+571 SREMSKI KARLO VCI	5+326 71+897	6+142	3+596 81+635	9+746 91+381 KISAC 6+675 98+056 STEPANOVIĆEVO	_		11+373 128+118 LOVĆENAC	4+702 132+820 MALI IĐOŠ			\$+002 152+800 MALI BEOUKAD \$+018 157+818 ŽEDNIK		167+180		175+650	0+824	82. 8+108 184+582 STATE BORDER
handover to public	_							988	1.2	1.0	I				ŀ	E881	.21	10	.68	881	.21.0	I	23.10.1961.	31.05.1964.					.8	188	.60	.20						05.12.1882.			
Date of	Right track			$\perp$																		23	31														05				



	əbutitlA	30 ₹	188	100,0	Τ		199		207,2	T	235 3	2,00		265		267		286,9		314	T	Τ	341,6		368,5	T	416.5	2,011		450									T	į	17
	Loading gauge	1 6	H	Že I	1-87 ŽS-I	ŽS-I	ŽS-I	ŽS-I	Щ	ZS-I	1-67	+	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I		ŽS-I	ŽS-I	70.1	ŽS-I	╙	ŽS-I	$\perp$	ZS-I	1-87	+	ŽS-I	ŽS-I	ŽS-I		Ш	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	1-57	1-SZ
[Vab] anil adt	← ·	28	H	× T	Z	Ž	4 Ž	Ž	1 Ž	Z×	7 2	Ž	Ž	- Ž	Ž	- Ž	Ž	- Ž	Ž	- Z	7 ×	ŻŻ	- Ž	Ž	- Z	7 ×	7 /	Ž	Ž	ę Ž	- Ž		-	- Ž	Ž	10 Ž	Ž	8 8	Z ×	-	2 2
Ruling resistance of	$\rightarrow$	27 2	r	t	$^{+}$		9	Н	4	4	0 0		t	7		2		9		7	$\dagger$	$^{+}$	7	Н	7	$^{\dagger}$	~		t	10	12					4		-	+	- 1	
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[%] noit	Gradient of the sta	2 5		Ţ	_	L	2,2		2,5		3 00		L	0,0		0,0		4,9	_	0,0			6,39		8,0		×		L	9,5			0,0			$\perp$			$\perp$	_{3	0,0
suib	вт эчтио титіпіМ	73 1/		_	500	200	2	3000		310	300	$\perp$	300	200	450	500	009	497	350	300	400	009	L	300	200	550	3000	$\perp$	500	L	300			300	909		500	4			009
пвтЧ ЧивізпУ т	Open for passenge	22 C	D/F	-	$\perp$	L	P/F	Ц	P/F	1	D/E	+	L	Ь		4		P/F		۵	1	$\perp$	P/F	Ц	P/F	1	P/F	-	L	P/F			-	Ь	Ь	Ь	$\vdash$	+	-	-	P/F
	Occupancy of serv	-	D	_	+		Ь		Ь	+	٥	1	╀	Ь		Ь		Ь		۵.	+	+	Ь	Н	Ь	+	۵	+	-	Е			Ь	n	Ь	Ь		Ь		+	٦ ۵
mattorm	Side-lead-loading	+-	S/F	9	+	+	Н	Н	S	+	+	+	+	H	L	S		S	_	+	+	+	S	Н	S	+	0	1	┝	Yes S/E			Н	-		$\dashv$	$\dashv$	+	+	- 1	X S
	Freight car scales	- 1	$\vdash$	+	+	+	Н	Н	+	+	+	+	+	H	H	Н	Н	H	_	+	+	+	┝	Н	+	+	+	+	+	Y		H	$\exists$			$\dashv$	$\dashv$	+	+	╬	-
oin-	Service point code	S 81	12551	10071	12401		12402		12404	12405	12406	12408	12409	12410	12426	12411	12412	12413	12414	12415	12410	12427	12418	12419	12420	12421	12422	12424	12425	12499	12498		16052	16053	16054	16013	16016	16015	16006	10007	22001
oq əəivrəs ədt g	Manner of securing	N	-	-   -	1		-		-	-	0	\	İ	6		6		9		6	İ		6		9	Ī	9		Ī	9			-	-		-		-			4 4
noitsluge	маппет оf traffic г	16 17		Q.	AB	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	station distance	station distance	station distance	station distance	station distance	station distance	vita)		AB with TWT	AB with TWT	AB with TWT	AB	AB	AB	AB	AB station distance
	acceptance of the longest trains	S 3					3		4	1	,	1		2 i 3		2 i 3		2		2 i 3			2 i 3		2 i 3	1	2;3	2		2		Centar - Pančevo glavna stanica - Vršac - state border - (Stamora Moravita)	3					2	1		213
Direction B→A	permitted train length Tracks for	Н,	(oman)	90			009		009	$\dagger$	100	1		603		614		161		713	1		624		624	$\dagger$	969	2		711		ler - (Stan	400					269		294	+
	mumixsM	N	- (Dragoman	1	╧		9		٥	1	ľ	,	L	9		٥		7			1	$\perp$	٥	Ш	٥	1	ľ	1	L	_		e bore	4			$\perp$		٩	Ľ	1,	٥٧
	Tracks for acceptance of the longest trains	13 Ic	border - (J				3		4		,	1		2 i 3		2 i 3		2		2 i 3			213		2 i 3		2:3	2		2		šac - state	8 i 10					3	,	2 . 1	213
Direction A→B	unguəl	) i	state	t	t			H	+	$\dagger$	$\dagger$		t			Н				$\dagger$	$\dagger$	$^{+}$	H	Н	+	$\dagger$	$\dagger$	+				a - Vr				1		+	$\dagger$	†	$^{+}$
	Maximum permitted train	12 p	05. Nis - Dimitrovgrad - state	1			009		599		524	170		603		614		162		713			624		624		969	200		710		na stanic	364					269	623	0/3	506
permitted speed	Left track	1 = [	Jimit	35	T			20			40		30			20	-				50			30	,			100			80	o glav	70	2	100	201	75		80	3	100
mumixsM	Right track	a 2 .	- SIN	m	$\perp$	_	_			_	1	$\perp$					_			_	_		_	L,	_	_	_	_	_		∞	ınčev	70	_	80	_		_	100	_	
югу	Railway line categ	A O	.c.	7	3 2	D3	D3	D3	D3	D3	3 2	D3	D3	D3	D3	D3	D3	D3	D3	203	3 2	2 2	D3	D3	D3	D3	3 2	D3	D3	D3	D4	r - Pa		D4	D4	D4	D4	D4	7	7 2	7 2
əu	Class of railway lin	) ∞		>	ΞZ	×	M	M	N	Σ :	Ξ	Z	Z	M	M	M	M	M	M	Σ.	۶ ۶	Σ	M	M	Z :	Σ	Σ	Z	×	M	M	Centa		M	M	×	M	Σ	Σ	≅ :	ΣΣ
k line	Single/double-trac	S r	v	2 0	0 00	S	s	s	S	S C	20	o o	S	S	S	S	S	S	S	S	200	0 00	s	s	S	SO O	20	S	S	s	S	106. Beograd		D	D	Ω	D				2 0
tni	Type of service po	Г ο	-		4 %		1	3	_		7 -		, (1)	2	3	-	3	1	3	7 0	,	0 60	2	3	_	ε,	~ -	3	3	-	15	106.	_	7	3	7	3	2	e -	- -	_
	vice point	vice point																																							
	Chainage  Name of service point		0+241 NIŠ	0+736 HINCTION BOINT 4 NIČ	1+766 PALILULSKA RAMPA	3+400 VOJNA BOLNICA	5+461 CELE KULA	6+200 EI NIŠ	10+500 NIŠKA BANJA	14+700 PROSEK	1/+148 SICE VO	23+759 MAJDAN OSTROVICA	29+500 RADOV DOL	31+700 DOLAC	34+300 CRVENI BREG	36+426 CRVENA REKA	39+680 BELANOVAC	44+912 BELA PALANKA	48+500 CRKVICA	53+500 ČIFLIK	50+800 SINJAC	61+900 CRVENČEVO	63+817 STANIČENJE	67+300 SOPOT	72+935 PIROT	76+900 BOZURAT	81+/00 VELINI JOVANOVAC 86+193 SHKOVO	90+500 ČINIGLAVCI	92+700 SREĆKOVAC	97+423 DIMITROVGRAD	103+930 STATE BORDER		0+000 BEOGRAD CENTAR	1+232 KARAĐORĐEV PARK	2+800 VUKOV SPOMENIK	4+688 PANČEVAČKI MOST	7+100 KRNJAČA MOST	8+120 KRNjAČA	9+981 SEBES	12-492 OVCA	19+317 PANCEVO GLAVNA 18+206 PANČEVO VAROŠ
	Distance in km			70770	1+030	1+634	2+061	0+739	4+300	4+200	5+361	1+250	5+741		2+600			5+232			3+300				5+635		4+800			4+723				1+232	1+568	1+888	2+412	1+020	1+861	116+2	*3+007
public	Distance in km	Щ		-	1	<u> </u> -	2-	0					ý	2.	2	2	3	5	3-	ψ.	0	4 6		Ш			4 4	4	2	4	9		.69		ς0°:	4	2-	-	<u> </u>	7	*
Date of handover to	Right track	а –						L	881	90.	10											- L	881	.11.	l							£6	61.	ç0.	23	5.	£61	.11.	.11	11.10.1935	



	əbutitlA	30	104	146	67	66	92	60	101	101	82		105,3	1,1,1	153.3	2	117,9		35,3	93,7	108,5	0	173.6	0,67	145	П		186,4	264	388.5	501		487,1	411,9		352,1				311,6		T	Τ	Τ	363.2
	Loading gauge	Н	IJ	i	}-I	I.	7.	7 7	7 7	1 7	Ţ		)[ 7e 1	+	$\perp$	_	Ш	J-5		4	4	1	1	+	┸	Ц	$\dashv$	4	_	+	╄	ば		Н	Ţ	Н	그	ŽS-I	$\Box$	Н	7	7.	7 7	7 77	╄
[Vab] onil odt]	← eques suibeo I	-	6 ŽS-I	2 ŽS-I	1 ŽS-I	8 ŽS-I	ZS-I	, Z	7.5-1	4 ŽS-I	5 ŽS-I		ž	75.1	9 ŽS-I	+	P. ŽS-I	ŽS-I	5 ŽS-I	$\rightarrow$	4 ŽS-I	ZS-I	1-SZ-1	+	1 ŽS-I	ŽS-I	ŽS-I	l ZS-I	- ZS-I	- ŽS-I	ŻS-I	ŽS-I	16 ŽS-I	16 ŽS	ŽS-I	9 ŽS-I	ŽS-	Ž		8 ŽS-I	Ž	ZS-I	4 ZS-1	ŽS-I	- ŽS-I
Ruling resistance of	$\rightarrow$	$\Box$	6		5 1	2	-	0	$^{+}$	7	3	ł		7.	9	+	1	$\forall$	$\vdash$	$\rightarrow$	9	-	4 4	+	7	Н	+	∞ !	17	91	17	H	10 1	-	_	-	$\dashv$			,	+	+	×	+	v
gradient	Slope	26	3	-	10	∞	ı	1	Ţ	4	5		<	-	00		∞		4	3	4		- (	1	-			-	0	0	_		16	15		∞				9		(		İ	0
gniluA	Incline	$\rightarrow$	8		5,2 4	6,2 3	7,0	0,1	7,0	2,5 7	3,0 3		8,0		1.0		0,0	Н	0,0		1,0		1,0		2,0 7	Н	4	2,3	,2 15	2.5 16		L	1,0 10	2,0 0	_	2,0 0	$\dashv$			7,5 0	4	-	×	+	1.5
[‰] noit	Gradient of the sta		0 1,34					- 1	0,0						┸											Н	- 1					_									+	+	+	+	500
suibi	Minimum curve ra	23	300		Ц	350	4	000	200		1905		300	3	400		400		400	_	450	_	200	$\perp$	500	Ц	$\perp$	_	300	300	300		300	300		500				200		_	1	_	L
	Open for passenge	Н	Ι.	-	P/F		į	F/F	$\downarrow$	P/F			P/F	1	L			Ц		$\rightarrow$	P/F	-	P/F	+	-	Ь	$\rightarrow$	_	<u>a</u> a	+	╀	Ь	l P	-	Ь	Ь	Ь	Ь		P/F		A 6	۵ م	4 4	╄
	Side-\end-loading Occupancy of serv	20 21	S		S	S U	5	2	+	S/E P		1	D 1	+	F	1	S	Н	S	$\dashv$	S	+	2 2	+	S	Н	$\dashv$	S P	<b>D</b>	n			U	S	-	٦			S	S	+	-,	7	+	n
	Freight car scales	19					+	†	+	Yes		ł	+	$^{\dagger}$	t		H	Н	$\forall$	$\dagger$	+	1	+	$^{\dagger}$	+	Н	$\dagger$	$^{\dagger}$	$^{+}$	t	t	T		Н		Н	$\forall$		Yes	Н	+	+	$\dagger$	t	H
oin	Service point code	18	21002	21003	21004	21005	21006	21007	21008	21009	21099		15501	15201	15203	15204	15205	15206	15207	15250	15209	0,000	15260	15211	15212	15214	15215	15251	15101	15102	15103	15104	15105	15106	15109	15107	15116	15113		15150		15111	15110	15115	15108
g the service po	Manner of securin	17	∞	8	5	6	6	,	Ţ	8				1	-		-		-	-	-			-	L	Ц		_	-	-	-		1	-		-				-	-		-	ļ	-
noihsluge:	Manner of traffic	16	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance	station distance		RC with station	ustance no it	KC With station distance	RC with station	distance	RC with station	distance	RC with station	distance	RC with station	distance	RC with station	RC with station	distance	RC with station	distance	RC with station	PC with etation	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	DC with etation	distance
B→A	Tracks for longest trains	15	2 i 3	2 i 3	3 i 4	2 i 3		213	Ī	415		elo Polje)	e 6	-	3		3		3	4	2	,	4 "		3			4	2	8	6		3	9		3			5	3		,	5		3
Direction	Maximum permitted train length	14	699	836	743	799	7/1	600	T	643		order - (Bij	730	222	292		574		594	902	602	(2)	759	100	602			593	520	999	54		552	544		549			649	349			223		563
a←A	Tracks for longest trains	13	2 i 3	2 i 3	3 i 4	2 i 3		612		4 i 5		ica - state b	2	+	3	,	3		3	4	2		4 "	0	3			4	2	3	3		3	9		3			5	3		,	2		3
Direction	Maximum permitted train length	12	663	836	743	799	111	000		643		- Požega - Vrbnica - state border - (Bijelo Polje)	730	124	771		572		594	689	109	(40	649	270	009			596	553	568	543		554	544		551			647	292			554		999
permitted speed	Гей изск	=					9	_		_	80	Resnik - Po	70	T		82	_		06	1	95			_	001						_			50									001		
V10	Railway line categ	9	22	22	)2			7 2	7 2	D2	D2	d) - Re		ţ   Z	14	4	D4	D4	4	4	4	7	4 2	<u> </u>			4	4 2	7 7	14	7	74	D4	D4	4	D4	4	D4		74	4	4 2	4   2	1 2	4
	Class of railway li	Н		Н	M	$\Box$	$\top$	$^{+}$	Z Z	$^{\dagger}$	M	. (Beograd) -		E >	+	+	Н	Н		$\dashv$	$\dashv$	$\pm$	Z Z	$^{+}$	+	Н	$\forall$	× ;	+	+	+	$\vdash$	Н	M		M	M	M		$\neg$	$\forall$	× ;	+	Z Z	H
k line	Single/double-trac	7	S	S	S	S	S	0 0	200	S	S	107. (	0	2 0	o so	S	S	S	S	S	S	S	x 0	0 0	s s	S	S	S	s v	2 S	S	S	S	S	S	S	S	S		S	S	S	200	0 00	S
	Type of service po	9	_	-	1	-	e -	$^{+}$	2 0	+	15		_ -	- "	+	+	H	3	_	_	_	+		- (*	-	3	3	+	7 "	, -	2	3	1	1	3	1	3	3		_	14	+	7 0	0 60	-
	Name of service point	5							II.iMA	v marina o								I																							EGA				
	Сћајпаде		34+007 BANATSKO NOVO SELO	45+855 VLADIMIROVAC	53+554 ALIBUNAR			76+300 VI A IV OV AC	/3+300 VLAJKOVAC 81+797 OPEN LINE II INCTION A LILIMA	_	98+314 STATE BORDER		0+425 RESNIK		15+708 BARAJEVO	17+900 BARAJEVO CENTAR	23+094 VELIKI BORAK			37+262 VREOCI		46+900 KM 46+900 PB	52+600 LAJKOVAC	58+962 SECVAC	67+154 DIVCI	69+243 LUKAVAC KOLUBARSKI	73+700 IVERAK		84+570 VALjEVSKI GRADAC 01+600 I ESK OVICE			107+678 DRENOVAČKI KIK	111+352 RAŽANA		123+400 TUBIĆI	129+842 KALENIĆI	133+600 OTANj	135+800 GLUMAČ	POŽEGA (TERETNA)		142+489 JUNCTION POINT 53 POŽEGA		149+262 UZICI	151+300 ZLARUSA 154+200 BUKOVIČKA RAMPA	156+974 SEVOJNO
		Ц						1	6+497		Ш		.,,,		L					$\perp$			2+/00	1		2+089			6+846		-	4+533	3+674		4+519 17	6+442 13	3+758 1.	2+200 13		4+987			3+662 14		
handover to transport	Right track Left track Distance in km		26.08. 15+801	1896. 11+848	7+.	_	681	_		=	20.07.1858. 15+461			_		.62		.8	1.6	I	07.07.		_		3961			++	+9	2+2	Ę	++	3+	7+	++	Ш		.70.5		++	+	+ 6	+ 0	7	2+



Note that the property is a property in the		Altifude	612,5		531,5	3003	Cinic		447.7		453,2			505,2	561,5	553,7	Γ		109		129,5	I		153.0	171,6		200,1	236,5		241,9	239	216		210,3		187,7			202,4									
		Loading gauge	29	ŽS-I	ŽS-I	ZS-I	ZS-I	ZS-1	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-1	75.1	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ZS-I	1-S2-1	100		ŽS-I	ŽS-I	ŽS-I	ZS-I	75.I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	-S2-	ZS-1
Note   1965	resistance of the line [daV]	←		٠	1	1	Ī		ŀ			18		16	17		İ	4	_	-	∞		-		9 4	,	L	3		1	I	Ī	4		┺	1	,		-	4	6		-		$\rightarrow$	I	1	œ
Part   Part	Ruling		$\rightarrow$	-	$\rightarrow$	$\rightarrow$	+	-	-	+	_	- 2	4	9	1	1	+	+	L	7	Н	$\dashv$	$\rightarrow$	$\rightarrow$	+	-	L	_	Н	$\rightarrow$	+	+	+	-	-	+	-	L	_	$\vdash$	3			4	'	4	4	∞
2. A 1			-	=	_	-	+					ш	$\rightarrow$	-	+	•	+	+	H	Н	Н	$\dashv$	$\rightarrow$	-	+	4	H		$\vdash$	$\rightarrow$	+	+	+	$\vdash$	⊢	7 (	-	H	_	3	-		-	$\dashv$	0	+	+	7
2. The control of the	[%] noit		$\vdash$	1,5						2.0			1	2,0			T	1.5			$\perp$		5,1	2,0	- 1	1	r	2,36					7.1	2.0			7,0			2,4	2,0		4,5				- 1	- 1
State   Column   Co	suibi	Minimum curve ra	23	400	400	350		400	201	400		300		300	300	200		300		350	400		350	400	400			250		550			550	550		300	300		300	375	300		300		300			290
Second Column   Col	nsī4 Ādgiətî\ r	Open for passenge	22	P/F	Ь	Ы	4 6	- a		а	Ь	Ь	7	ط a	P/F	2	-	P/F	Ь	Ь	P/F	Ь	Ы	۵ ۵	1	1	r	P/F	Ы	Ь	Ы	4 0		P/F	Ь	P/F	Ь	Д	P/F	Ь	P/F	Ь	Ь	Ы	Ь	Ы	7	P/F
Compared to the compared to	rice point	Occupancy of serv	$\vdash$	_	Ь	Þ	I	=	=	ם		n		)	Δ	1	I	Þ		Т	Ь		Þ	D f	4		Ь	Ь		D	I	I	Þ	Ы		Ь	ר		Ь	D	Ь		n		Ь	I	- 1	
Column   C	platform		-	S/E	4	4	4	1	╀	Ļ	L	Ц	4	1	v	2	1	Ļ	L	L	S	$\perp$	4	4	4	-	S	S	Ц	4	4	1	1	S	L	S	S	L	S	S	S		S	4	S	4	4	S/E
The control of the		Freight car scales	15	$\dashv$	+	+	+	+	+	╁	$\vdash$	Н	+	+	+	+	+	+	$\vdash$	L	Н	$\dashv$	+	+	+	+	H	H	Н	+	+	+	+	+	╁			├			H			$\dashv$	Н	+	+	_
The control of the	oin-	Service point code	Mainwey line ca   Maximum   Maximu												15708	15722	15709	15710	15718	15711	15712	15719	15713	15714	15715	61.61	13450	13201	13202	13203	13204	13205	13207	13250	13209	13210	13211	13212	13213	13214	13215	13221	13216	13217	13218	13219	13220	13251
1	g the service p	Manner of securing	17	-	-	-	1	-	-	-		-		-	-	1	İ	-		-	-		-		-		-	6		6	İ	1	6	9		6	6		6	6	_		6		6			4
2. 10.21   1.00	norialings	Manner of traffic	16	RC with station	distance	RC with station	distance	RC with station	distance	RC with station	distance	RC with station	usumor.	RC with station	RC with station	distance	RC with station	distance	RC with station	distance	RC with station	distance	kovo)	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			
10   10   10   10   10   10   10   10		acceptance of the	15	3	_	_		"	, «	3		2		_	4	-		3		3	5		3	_ ,	5	17	1	2		3		+		3		2	2		2	2	3		2		2			4
100   100		length	14	552	346	547			536	1	572	553	3		549		307	499		552	969	44			099		722			734	844		558	632		614	620	999		297		746			738			
100   100						1	+	-	1				4			1	+						1	-	+	nković	_		Н			+	+		L			L						4	$\perp$	_	4	_
100   100	a←A	acceptance of the	3   3   3   3   3   3   3   3   3   3												4	-		3		3	5		3	- (	5	Jeneral Ja	213	2		3			6	3		2	2		2	2	3		2		2			4
100   100	Direction	permitted train	2   2   3   3   4   5   5   5   5   5   5   5   5   5												551	100		551		307	495		553	738	247	vo Polie - I	530	099		722			734	844		558	632		614	620	591		297		746			738
100   100			Description   Page												30	_		30		_			50			k - Kose								_			40	_						_				
1-586   10-100   10			W   W   W   W   W   W   W   W   W   W												t 4	.   2	1 4	4	4	4	4	4	4	4 2	4 2			33	33	33	5	2 5	3 53	5	33	33	53	55	33	33	33	33	33	53	55	23	2	33
1-88   10-14-150			1												+	$^{\dagger}$	+	+	T		Н	$\dashv$	$\dashv$	$\top$	+	<u>€</u> .			Н	_	+	+	+	t	t			┢				Н	Н	$\dashv$	H	$\pm$	+	┪
1   1   1   1   1   1   1   1   1   1															+	+	+	$\vdash$	H	_	Н	_	_	-	+		$\vdash$	Г	Н	+	+	+	+	H	H			H						_	Н	+	+	-
Colination   Col	k line	Single/double-trac	S												0 0	2	2 00	S	S	S	S	S	S	S	y o	Labov	S	S	S	S	so o	0	2 0	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
1-86   10-100   10-	tnie	Type of service po	9	-	-	7	m (	<i>v c</i>	1 -	-	3	2	e .	7 ,	n -	٠,	0 "	-	3	-	-	3	2	7 .	- 4	108.	-	-	8	-	m r	2 6	7 -	-	3	-	-	m	-	-	-	3	-	3	-	e (		_
22.12.1929, 03.03.1887, 21.05.1976, 21.05.1976, 03.1976, 0		Distance in km Chainage	2											214+832	225+300	228+300			1	252+616		259+600	_	_		1	0+666[LAPOVO									34+100	39+551	44+600			865+09	62+100	66+335	70+081	73+935	79+100	-	
	public	21.05.1976. pu																.97	.61	.60.	17							٦.	.881	.60	.£0								.62	Z61	71	77						



	Altitude	30		271,4	22.7	4,007	262,7	304,7	343,1		379,8	303	27.2	406,3		416,5	T		441		454		470		491	495	496	497		93,7	85.3		86,6	8,18	868	119,6	118,3	124,6	124.5	127	119,3	113,2	Τ	
	Loading gauge	59	ŽS-I	ŽS-I	1-S2-1	Z-2-1	ZS-I	1-SZ	ŽS-I	ŽS-I	ŽS-I	1-67	ŽS-1	ŽS-I	ŽS-I	ZS-I	ZS-I	7.S-I	ŽS-I	ŽS-I	ŽS-I	ZS-1	7.S-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I		Žei	ŽS-I	ŽS-I	ŽS-I	1-67	ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I	ŽS-I	ŽS-I	ZS-I	r	ŽS-I
resistance of the line [daN]	←	28		1	-	+	1 0	-	,		1	1		S	$\vdash$	9			,		4		4		3	$\rightarrow$	n			v	+			0 4	, -	-	S	4	+	3	$\vdash$	9		10
Ruling	Slope	26 27	$\rightarrow$	9 0	+	0 0	+	7	8	$\vdash$	$\rightarrow$	0 0	-	5	$\vdash$	3	+	+	8	Н	2 8	+	∞		1 7	3 .	0 4	-		-	-	$\mathbb{H}$		0 4	+	9	5	4	+	3 3		9	$\vdash$	10
Ruling gradient	Incline	Н	$\rightarrow$	2	+	+	9 1	-	9	$\vdash$	+	4 4	+	4	$\vdash$	4	$^{+}$	$^{+}$	9	Н	9	$^{+}$	5	+	2	4	m	$\vdash$	1	_	+	$\vdash$	m .	2 0	+	9	3	4	+	3	Н	2	$\vdash$	0
[%] noit	Gradient of the sta	24		0,4	0	0,0	6,7	0,1	7.0		4,1	23	1,1	0,37	П	8,4	Ť	T	0,0	П	0,0	T	0.0		2,0	0,0	0,0	T		0	0.2		0,0	0,4	0,0	0,0	1,3	2,5	3,	2,5		1,0	0,0	0,0
snipi	міпітит сигуе га	23		300	300	200	300	067	300		270	250	007	300		300	300		300		300		300		300	300	300	300		3000	2000		2000	1000	006	3000	3000	1900				610		009
пят Чивіэті\ т	Open for passenge	22		P/F	۵ م	4 6	a a	ч д	P/F	Ь	P/F	P/F D/F	P P	P/F	Ь	P/F	٥	4 4	P/F	Д	P/F	7 0	P/F	Ь	P/F	P/F	P/F	Ь		D/E	P/F		P/F	P/F D/F	P/F	P/F	P/F	D/E	1/1	P/F		P/F	$\vdash$	Ы
	Occupancy of serv	Н	$\vdash$	Д	+	- :			Ь	$\vdash$	Η (	- 0	4	Ь	$\vdash$	H	+	+	Ь	Ц	Д	+	۵	-	D	+	۵.	D		٥	+	$\vdash$	Ε;	-   -		$\vdash$	⊢	=		n		ы	Ы	Д
miotiala	Freight car scales Side-/end-loading	19 20	-	S	- 0	n	+	+	S	Н	S	+	+	S	Н	S	+	+	+	Н	+	+	S	-	S	S	N N	S		Ü	o S	$\perp$	S	V oc C/E		S	S	+	+	$\vdash$	Н	S/E	$\vdash$	Н
	seless ass theirad	_	+	+	$^{+}$	+	$^{+}$	+	$^{+}$	Н	+	$^{+}$	+	t	Н	+	+	$^{+}$	t	Н	+	$\dagger$	$^{+}$	H	Н	+	+		1	+	+	H	+	+>	+	Н	+	+	$^{+}$	$\vdash$	Н	+	$\vdash$	Н
OIC -	Service point code	18		12101	12102	12103	12104	12105	12106	12115	12107	12108	12110	12111	12112	12113	13117	12117	12001	12002	12003	12021	12005	12019	12006	12007	12008	12022		25471	25501		25502	25503	24401	24403	24404	24405	24407	24408	24409	23450	16052	16003
g the service p	Manner of securing	17		6	-	4 -	4 6	2	2	П	6	20	^	S	Н	6	Ť	t	-	Н	-		-	+	-	- ;	=	=		-	· v		S	0 4	· v	S	2	v	,	S		4	-	-
noitaluge	Manner of traffic r	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	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		AB with TWT
	acceptance of the longest trains	15		3	,	7 6	7 0	7	2		ε,	-   -	4	2		2			2		3				3		_	-		3:7	213		213	213	213	213	314	2:3	617	2 i 3		213	516	4
Direction B→A	permitted train length Tracks for	14		631	7.0	171	630	80	586		644	576	0/	212		638	+	+	473		579		576		539	545	040	140	lut)	33	573	H	511	505	524	522	90	213	+	733		594	90	650
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Direction	Maximum permitted train drgth	12		631	7.7.7	171	630	800	586		44	576	0/0	657		638			479		619		587		540	551	630	137	Subotica - Bogojevo - state border	730	513		488	505	524	522	525	719	10	716		594 2 i 3	grad Centar 506	059
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	Altitude	30	T	Τ	Ι		82,6	84,5				102,6	105.5	2			T	Τ	188.8	187,7				Τ			113,2	110,4	105,3	102,6	90,5	85,8	11	1	77	80	82	82	105	70	78,0 80,0	
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miottela	Freight car scales Side-/end-loading I	19 20	-	+	+	┨	- 1.8	5	$\left\{ \right.$		┨	0 000		4	S	Yes	$\dashv$	S	S	Yes		S/E	╁	+	+		S/E	0/	+	$\vdash$	S	Н		X es	+	0,	S	S	S	S	S	
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oin-	Service point code	18	10071	16504	16505		17071	23301				13405	13450		12516	12601		12301	12550	12601		12551					23450	23706	23703	23702	23701	23199	10000	22001	22002	22003	22004	22005	22006	22201	22202	
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noitslugs	Manner of traffic r	16		AB	AB			station block post distance	(paonica)	RC with AB		Total I	station distance			AB	AB	AB		AB		AB	kula)	Q V	dr.		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	
				_	L	Sajlovo		block p	28 - (Osi	RC	- Lapovo	1	statio							$\Box$		_	4 - (Ćele kula	_			statio	statio	statio	statio	statio	Ш,	_L	statio	statio	statio	statio	statio	statio	statio	statio	
A←B	Tracks for acceptance of the longest trains	15	c	2	4 i 5	CTION	::	711	on point		YARD	01:0	9	١.	4	6	-	-	3	6	3 YARD	3	ion point				2 i 3	3 ; 4		2 i 3	3 i 4		- (Jimbolia	415	2 i 3	2 i 3	2 i 3	3 i 4	2 i 3	2 i 3	213	
Direction	permitted train length	14	919	010	749	INE JUN	200	06/	1 - juncti		ALLING	926	563	Međurovo	738	885		543	662	885	(Niš MARSHALLING YARD)	488	2 - junct	Ť		szke)	594	630		757	781		ge-	835	249	473	537	554	534	617	665	
	mumixsM	Н	-	+	$\vdash$	ENL	+	+	point	<u> </u>	IRSH	+	$\perp$	1 '	Н	$\dashv$	+	-NC		Н	ARSE	+	point	+	$\perp$	- (R ö	_	+	$\perp$	╀		H	- state	+	+	-	H	Н	Н	-	+	
B←A	Tracks for acceptance of the longest trains	13	lubinc	2	2 i 3	RD - OF		711	junction		povo M⁄	0:1	5	ING YAI	3	∞		CHALLE	3	∞	- (Niš M	3	junction		INES	e border	2 i 3	3 i 4		2 i 3	3 i 4		Kikinda	415	213	213	2 i 3	3 i 4	2 i 3	2 i 3	213	
Direction	Maximum permitted train length	12	. Indija - Golubino	010	655	Sad - Novi Sad MARSHALLING YARD - OPEN LINE JUNCTION Sajlovo	200	96/	Mala Krsna: (Kolari) - junction point 1 - junction point 28 - (Osipaonica)		JUNCTION Lapovo Varoš - Lapovo MARSHALLING YARD - Lapovo	040	664	MARSHALLING YARD	744	733		580 1		733	LINE JUNCTION most	490	32. Connecting track of the station Nis: (Crveni krst) - junction point 2 - junction point 4		REGIONAL LINES	Subotica - Horgoš - state border - (R öszke)	594	633	200	757	781		7	845	409	473	537	554	534	617	665 253	
permitted	Гей изск	11	12:	100		ARSH		00	a Krsn	08	Lapov	5	2	Niš N	9		30	50	- I	05	JUNG	50	Niš: (C	30	- 2	tica -		- 08			00	A 20	tanica	20		70	T	ш	50 (70)			
mumixsM	Right track	10			_	M pr					NOI	1	_	Trupale - Niš	Ľ	_	$\perp$	$\Box$	?∟				ation						_	_	,		vna si		_	L	L	_	50	_		
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əu	Class of railway lir	∞		M	Σ	i Sad - N	7	Z	track of the station	Σ	128. OPEN LINE JI	7	Σ	12		Σ	Σ	Σ	L		I. Niš - OPEN	Σ	track of	×	IM		,	~ ~	~	~	R		Pančevo	Δ	~ ~	~	~	~	В	~	~ ~	
k line	Single/double-tracl	7		S	S	126. Novi	Ü	o o		S	OPEN	-			L.	S	S	S	L	S	131.	S	ecting	v	2		S	S S	S	S	S	S	202.	n u	0 00	S	S	S	S	S	s s	
tni	Type of service po	9	-	- 6	-	126	4 -	4	127. Deviation	4 4	128.		-		-	-	9	_	-	-		- 9	32. Conn	4 2	t		-	-	- ∞	10	1	15	-	- 9	0 -	-	-	-	-	-	1 2	
pousuen	Distance in km  Chainage  Name of service point	2 3 4 5	ALESA MINIMIA	0+916	3+104		0+056 NOVI SAD 1+040 NOVI SAD MARBEHATI ING VADD	1+970		2+387 2+387 JUNCTION POINT 1 MALA KRSNA	>>	0+000 LAPOVO VAROS		┚		238+177		1+988 241+268 MEDUROVO		2. 3+134 3+233 NIŠ MARSHALLING YARD		2. 3+000 247+632 OPEN LINE JUNCTION MOST	300000000000000000000000000000000000000	6. 0+572 0+572 ITINCTION POINT 4 NIŠ	7/6:0		0+000	2+273	8+250		. ,	*4+524 159+712 STATE BORDER	14+104 baničnyo ci atria	1+463 17+650 OPEN I INF II MCTION 2.				П	4+510 45+835 KOVAČICA		5+668 61+939 TOMASEVAC 2+106 64+045 ORLOVAT STOP	l
Date of handover to public	Right track	-		.12.				.60				1943	.7.41			.24	61			1942.		1942.		01.06.	100			.07	81.1	11.8	1						-1	₽88	1.4	0.60	i	



			81,0	81,0	0,0	78.9	7.6	8,0	80,8	7,5	80,8	80,4	78.9	80.0	80,5			80.4	,	82,0	85,5	84,8	\$ 60	82,5	83,1	83,6	89,6	106.6	108,4	9,601	109,4	113,2	77	77	:	82,6	П	T		81,3	84,9	85.6	85.9	85,7	84,4
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Temp Lauri am	Loading gauge	-	$\rightarrow$	ŽS-I	+	ŽS-I	+	-	ŽS-I	$\vdash$	$\rightarrow$	-S2-	ŽS-I	-	-	ŽS-I	ļ	ŽSI	+	╌	ŽS-I	-	ZS-I	-	-	ŽS-I	ZS-I	-S-Z	+	-	$\rightarrow$	ZS-I	L	ŽS-I		L	ŽS-I	ZS-I	ZS-I	ZS-I	-	+	ŽS-I	ŽS-I	ŽS-I
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[‰] noit	Gradient of the sta			0,0	┸				0,0		- 1	0,0		1			9	0,0			0,0	- 1	0,0					3,0	3.2		- 1	1,0	0.45	500 0.5	3,0	0,0			- 1		0,0			1 1	0,0
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oin-	Service point code	18		22204	22201	06677	22503		22504	22505	22506	22508	22801	22850	22803	22899	00000	22509	22602	22603	22604	22605		23801			23802	23804	23805	23806	23807	23450	21001	10012		16808		23301		24003	24004	24001	25001	25002	25003
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Direction A←B	permitted train length	14		524	585	600	629		647	519	576	15/	2	842	619		a	740	8	23	570	619	+	523			000	876	009		+	594	- (Jabuka) 506		1	493		+		544	624	387		744	457
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g. 11	Tracks for acceptance of the longest trains	13		213	2:3	213	213		2 i 3	2 i 3	213	213	C17	1 i 2	2 i 3		Senta - Subotica	213	017	2 i 3	2	3 i 4		2 i 3				713	2 i 3			2 i 3	nonction 2 i 3	2	i - Bogojevo	415				213	112	213		2 i 3	2 i 3
Direction ⊕A.	Maximum permitted train length	12		524	585	937	629		647	519	576	23/	2	842	619		- 0A2	740	900	523	570	619		523			000	875	009			594	204. Pancevo Varos - Open line junction 2a	200	Novi Sad - Odžaci	492				45 5	710	387		744	457
Maximum permitted speed	Right track Left track	10 11		30 (50)		30 (40)	(01) 00	30	30 (40)	20 (40)	30	20		000	(08) 09		. Banats	(08) 09	(00) 00		(08) 09		60 (75)				000	(05) 07				;	cevo var	- 20	205. Nov		80		09	T			100		
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	e point																									ANCELLED)																			
	Name of service point	5	760 OPEN LINE JUNCTION 1a	75+595 LUKICEVO 84+308 ZBENJANIN FARRIKA	298 ZNENJANIN TABIANA 298 ZRENJANIN	703 ZRENJANIN TERETNA	175 ELEMIR	000 KM 102+000 PB	105+815 MELENCI		524 NOVI BECEJ	13/+138 BANATSKO MILOSEVO POLJE	500 DERIĆ	160+114 KIKINDA	999 BANATSKO VELIKO SELO	123 STATE BORDER	Charles Canada Late of State	0+356 BANATSKU MILUSEVU 5+105 BOČAR	10+700 ESTER	18+063 PADEJ	25+230 OSTOJIĆEVO		187 KM 35+187 PB	0+000 SENTA	391 JUNCTION POINT 23 SENTA	40+759 OPEN LINE JUNCTION SENTA (CANCELLED)	42+293 GORNJI BREG	49+210 BOGARAS 54+223 DOLINE	58+048 OROM	771 GABRIĆ	992 BIKOVO	76+685 SUBOTICA	0+275 PANČEVO VAROŠ	1+539 OPEN LINE JUNCTION 2a		0+401 NOVI SAD	118 BLOCK 3 NOVI SAD	S95 SAJLOVO	000 VETERNIK		III PETROVAC-GLOZAN 542 RAČKI MAGLIĆ	36+092 GAJDOBRA	44+224 PARAGE	47 RATKOVO	59+003 ODžACI
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		Name of service point	5 5	61+240 ODžACI KALVARIJA	03+448 NAKAVUNOVO 72+471 BOCOIEVO SELO	76+685 BOGOJEVO	) At the area of service points Gajdobra, Odžaci and Karavukovo line category A	4+906 SAJI.OVO	6+700 GORNIE SAILOVO	10+148 RIMSKI ŠANČEVI	14+608 OPEN LINE JUNCTION 1	15+751 OPEN LINE JUNCTION 2 (UKINUTO)	20+569 KAC 25+218 BTDISAVA	23+216 BODISA VA 32+224 ŠAJKAŠ	38+394 VILOVO/GARDINOVCI	43+845 LOK	49+432 TITEL	51+132 DONJI TITEL	53+845 KNICANIN 58+175 PERI EZ	55-522 FARKAŽDIN	75+381 ORLOVAT	76+256 ORLOVAT STOP	1-141 NOVI CAD MADGITATI NO VADO	1+141 NOVI SAD MARSHALLING TAKO 1+595 NOVI SAD LOKOTERETNA	2+185 SAJLOVO	75+915 ORL OVAT	76+545 OPEN LINE JUNCTION ORLOVAT	A STATE OF THE STA	0+517 KUMA	11+344 BODANOVCI 16+675 NIKINCI		28+900 KLENAK			32+715 SABAC 32±605 & A B A C ( and l/m)	0+712 OPEN LINE HINCTION 2	1+394 OPEN LINE JUNCTION 3	4+000 MAJUR	7+725 ŠTITAR	14+300 DUBLjE MAČVANSKO	22+031 PETLOVAČA		28+713 PRNjAVOR MAČVANSKI	33+300 PODRINSKO NOVO SELO	35+000 LESNICA 38+000 TADA BSK A STRAŽA	38+300 JADARSKA STRAZA 45+400 LIPNICA
Дюusi	track puon ance in km	Dist		2+237 6		4+214	rea of service point		1+794		Ц		4+818		L	5+451	5+587	1+700	2+713	7+347	6+826	0+875		0+454	*2+048		0+630		10.001	5+331	4+669	7+556	2+473	0+579	0+763	000.10	0+682	2+606	3+725	6+575		П			3+000	005+9



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Ration [‰] Ruling gradient Ruling Instructed of Intelling Intelling Intelling	<b>←</b> →	28 29	ŽS-I	ŽS-I	ŽS-I		+					1 1	- 1				147,4	153.4	1	167,5	- 1	174,8		186,8		1952		202,4						1		237.	1	250,3
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ode - UIC	Service point co	18	16310	16312	16313	16314	01001	16319			13352	12219	12201	12203	12204	12218	12205	12206	12220	12208	12209	12211	12212	12213	12217	12214	13220	13251	10001	13001	13003	13004	13005	13014	13012	13060	13010	13007
or service po	Manner of secur	17	4	4	Ħ.	4	2	Н	_	-	-	Н	+	6	4	,	7	,	1	2	,	2	$^{\dagger}$	2		,		4	,	3	3		3	,	7	m	t	w w
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Direction A←B	յեսել	14	cco	574	9	819			JUNCTIC					412	714		986	309	0.20	602	693	089	$\dagger$	647		657		738	200	509	909		909	500	700	877		615
	longest trains	+	+	H	Н	+	+	Н	LINE —	-	ega	Н	+	+	Н	+	+	+	+		+	Н	+			+		Н	Н	+	+		+	+	$^{+}$	+	╁	Н
V→B	Tracks for acceptance of th	13	C17	2 i 3		314	L				evo - Poz	Ц	1	2	4		2	,,	,	3		3	1	3		,,	,	4	,	~	3		3		213	2		3
Direction	Maximum permitted train length	12	659	574	95	819			LINE JUNCTION 1	1 1 7 7 1 1	211. Stalac - Kraljevo - Pozega 582 4			412	714		286	309	670	602	693	089		647		657		738	207	\$00	909		909	007	700	877		615
permitted	Гей track	=			(08) 09			20	NE 3	3	711.		30 (50)									25 (40)										80						100
mumixaM	Right track	=			_	m m			- OPEN I		H	~I	_	<u></u>		2	مار	<u> ۱</u> ۲	1 2	2	2 2	_	212	1 2	2	2 2	1 2	2	4 4	<del></del>	14	4	414	<del>.</del> T-	+ -		4	
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track line	U-əlduob/əlgni	r 0	o o	S	S	s s	S			S		S	S	o o	S	S	S o	20	S	S	s s	S	S	S	S	s s	S	S	S	N W	S	S	S	N C	n	S	S	s s
inioq s	Type of service	9 -	3 -	-	ε,	- "	9	15	210.	9	-	3	ε, ι	n -	-	3	- ,	n -	3	-	e -	-	с с	, -	3	e -	3	-	14	- «	-	3	Ξ,	ς.	- "	-	8	1 2
tronsnert	Distance in km  Chainage  Name of service	2 3 4 5	2+004 53+400 LOZNICA FABRIKA			3+654 65+354 2+446 67+800	0+882	978. *0+800 0+800 STATE BORDER		0+675 0+675 OPEN LINE JUNCTION 3	0+374 STALAC	1+026 1+400	2+487 3+887 MRZENICA 5+002 0+020 MAY DE ŠANE	2+953	2+636	19+400	1+984 21+384 KOSEVI		33+700		3+402 38+949 TRSTENICKI ODŽACI 3+506 42+455 TRSTENIK	Ш	4+038 53+238 LIPOVA 2+400 55+638 TOMINAC	57+651	2+287 59+938 VRANEŠI			71+621		0+099	2+913 84+441	4+169 88+610	3+650	1,803	1+803 90+303 ZABLACE 2+607 00+000 RATTIGA	-	4+659 110+200	2 2+794 112+994 PRIJEVOR 7+500 120+494 OVČAR BANJA
Date of handover to public	Right track	-				15.05	1950.	09.03.1978.				.60	91.8	0.81							.88	2.19	1.10								.55	61.	60.6	7				11.82



		_		7,867	Т		Т	Т	П	Т	$\top$	П	-	/0,9	85.1			83,0	7	83,0	Т	П	-	7,0/	3,1		175,3	9,5	1:	5,3	Т		12/,0	1	153,0	- -	Т	Т	210,0	,		9,2
	Altitude	30	$\Box$	$\perp$				L	Ц				$\perp$	4	+	$\perp$		Ц					Ц	$\perp$	123,	Ш	4	129,2	4	105,		$\perp$		4	4	1		1	$\perp$	$\perp$		289,2
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resistance of the line [daN]	$\stackrel{\leftarrow}{\rightarrow}$	27 28	$\vdash$	0	+		5 5	$\vdash$	$\mathbb{H}$	-	+		+	+	8	-		7 4	-		7		-	- 10	10 2		$\dashv$	2 10	+	2 10	+	+	7	-	7 -	-	0	1	- 6			- 6
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[%] uoit	Gradient of the sta	24	,	5,5	$\downarrow$				Ш	-				0,0				0,7		0,7	26			0,0	0,0		4,0	0,0		8,5	4		0,0	$\perp$	0,1		1.5	*	0.0			0,0
suib	Міпітит сигуе га	23												183	250			450			350		000	300	800				1	400			450	100	300	2			300			300
r /freighF Fran	Open for passenge	22	Ъ	77	- 4								į	7/F	P/F		Ь	P/F		P/F	P/F	Ы	Д.	۵ م	P/F	Ы	Ы	Ы	77.	۵.	Ы	٠,	ء د	- E	P/F	D 0	4 4	4 4	_	Ы	Ь	P/F
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on-	Service point code	18	13013	13009	13011		15150	FOR I KAFFIC					00000	136/0	13603		13604	13551		13551	14550	14606	14502	14504	14505	14506	14507	14508	14509	14510	14511	14522	14512	14513	14514	14517	14523	14518	14519	14520	14521	14401
g the service po	Manner of securing	17	,	2	Ţ	1	- 5	SED					,	2	-	-		-		_	"	,	9	Ţ	6		∞	4	= <	6	1	_	4 :	- 0	0 0	0	=	1	-		11	-
noitaluge	Manner of traffic 1	16	station distance	station distance	station distance	station distance	station distance	No /2 - junction point No /3 - (Adrani) LINE CLOSED FOR LRAFFIR station distance	station distance	54 - (Dragačevo)			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 A—B	Maximum permitted train fength	14	017	919	T			ion point r		3 - junction				438	743			633	2 - (Vražogrnac)	633	543	2		T	540		533	929	100	604			070	202	000	8		T	562			189
	longest trains		$\forall$	+	$^{+}$	$\vdash$	- .	- Junc	Н	No 5	+	sna	+	+	+	$\vdash$				+	$^{+}$	Н	+	+	+		+	+	+	+	$^{+}$	+	$^{+}$	+	$^{+}$	+	$^{+}$	t	+			_
a←A	Tracks for	13	,	5				t No /2		on point		Mala Kr	·	°				4	JUNCT	4	2				2		2	2	,	e.		ľ	7	,	7 (	1		$\perp$	6			314
Direction	Maximum permitted train length	12	017	919				Banja) - junction point		Požega: (Uziči) - junction point No 53 - junction point No		Smederevo - Mala Krsna	0.00	428	711			629	la Krsna - Bor - OPEN LINE JUNCTION	629	543	2			540		533	929	100	604			270	200	000	00/			562			681
sbeeq beamitted	Left track	11			100		1	ıya) - J		ga: (L	- 05	214. S		70		Г	30		Bor - (	9	2	Γ					(08) 09			Ī								30				
mumixsM	Right track	10			_					Pože			_	_					rsna -		_	ļ.,			T		_						_	_	_	_	_	_	_	_		
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k line	Single/double-trac	7	S	n o	2 00	S	S	n Krai	S	ing tra	S		S	0	0 00	S	S	S	-	so o	2 0	S	S	o o	S	S	S	S	N C	S	S	S C	N O	2 0	0 0	2 0	2 0	o o	o s	S	S	S
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россиял	Distance in km Chainage	3		1+166 128+366 DRAGACEVO	133+700		0+073   136+107 POŽEGA	0+444 JUNCTION POINT 72 KRALiEVO			0+752 0+752 JUNCTION POINT 54 POZEGA		-0+870	2+307 3+350 GODOMIN			0+342 9+466 VRANOVO	1+406 10+872 MALA KRSNA		71+272 MALA KRSNA 10+020 02+2001 :: IBIXEVSVI MOST	87+763			5+342 93+632 BUBUSINAC/BRATINAC 5+168 100+800 BARE/KASIDOL			109+055	116+414		$\perp$		133+900	2+16/ 136+06 / ZVIZD	T	3+896 144+340 KAONA 4+036 148+89 KTIČEVO		┸	159+700			3+940 170+740 BLAGOJEV KAMEN	8+112 178+852 MAJDANPEK
handover to public	Right track Left track	1 2	-	946	1.11	.82				0	25.09. 2001.			.88	81.	11.0	I			.02							.65	61.8	50.2	15						15.05	1050	15.05.	1950.		856 60'6	
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[Vab] enil eds		-	ŽS-I	ZS-I	22 %	- ŽS-I	ŽS	ŽS-I	10 ŽS-I	ŽS-I	$\rightarrow$	15 ZS-I	ZS-I		-	-	_	-	6 ŽS-I		,	ZS-I	75.1	ŽS-I	- ŽS-I	ŽS-I	13 ŽS-I	ŽS-I	ZS-I	-	78.1	1-SZ 0	-	ŽS-I	6 ŽS-I	-	ŽS-I	$\overline{}$	7 ŽS-I	ŽS-I	-	8 ZS-I	ŽS-I
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suib	Міпітит сигуе га	23		350		300						350	250	250	25	25	30					,	720		240		250			050	7	250	i		400				240		300	22	
ns14 Adgiəti\ r	Open for passenge	22	,	4		P/F					$\rightarrow$	P/F	0	4	Ь	P/F	P/F					ŕ	4	I	Ь		P/F			0	4	P/F			Ь				P/F		$\overline{}$	Ь	I
	Occupancy of serv		$\vdash$		+	F	+	L	Þ	Н	$\dashv$	Þ	-	+	+	+	+	L	L		Δ.	+	1	+	ח	$\vdash$	Д	Н	Þ	+		Δ	+	L	D	$\vdash$		$\vdash$	D	$\dashv$	+	۵.	$\perp$
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	selection their a	_	+	+	+	$^{+}$		t	t	Н	+	+	+	$^{\dagger}$	$^{+}$	+					$\forall$	+	$^{+}$	$^{+}$		Н	H	Н	+		$^{+}$	$^{+}$	t	t		H		Н		$\dashv$	+	+	$^{+}$
- nic	Service point code	18	14410	14402	14403	14404	14408	14412	14405	14409	14406	14407	14413	14305	14304	14303	14302				12550	14003	14001	14004	14005	14006	14007	14008	14009	14010	14011	14013	14014	14015	14016	14017	14018	14019	14021	14022	14060	14301	
g the service po	Manner of securing	17	Η.	+	+	-		H	-	Н	+	_	-		+ -		-	_	_		_		+	+	6	Н	6	H	6	7	٥	-	+	H	6	H	$\vdash$	6	9	$\dashv$	4 0	6 -	-
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egulation	Manner of traffic r	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	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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	acceptance of the longest trains	15		213	+	2 i 3						_		2:2	2	2 i 3	2 i 3				3		612		3		1 i 2		213	,	7	2;3			213				2 i 3		112	213	t
Direction B→A	length Tracks for	Н	Н	+	+	+		╀	┞	Н	+	+	+	+	+	+	-	L			$\dashv$	+	+	+	-	Н	Н	Н	+	+	+	+	╀	$\vdash$		H	H	Н	Н	$\dashv$	+	+	+
	permitted train	14		631		538						999	(37	200	436	260	999			ort	662	3	474		470		497		511	503	283	617			650				959		828	819	
	longest trains Maximum	Н	$\vdash$	+	+	+		╁	┝	Н	+	+	+	+	+	+	+	H	H	ovo Po	$\dashv$	+	+	+		Н	-	Н	+	+	+	+	╀	H		H	H	$\vdash$	$\dashv$	$\dashv$	$\pm$	+	+
	acceptance of the Tracks for	13		213		2 i 3						-		0:5	2 2	2 i 3	2 i 3			216. Crveni krst - Zaječar - Prahovo Port	m		213		3		1 i 2		213	c	7	2 ; 3	2		2 i 3				2 i 3		112	213	
Direction A→B	у дабра да	Н	$\vdash$	+	+	+		H	$\vdash$	Н	+	+	+	+	+	+	+			ječar -	$\dashv$	+	+	+		Н	Н	Н	+	$^{+}$	+	+	+	H		H	Н	Н	Н	$\dashv$	+	+	+
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pəəds	mumixsM	_	Ш					L	L										L	eni kr						Ц	Ц						╀	L	$\overline{\perp}$		Н			$\exists$	$\perp$	$\perp$	$\perp$
Maximum permitted	Right track Left track	Н									09									Crv						30 (40)	1								40 (50)					40 (50)	2		
	Railway line categ	ш	C3	3 8	3 8	3 8	C3	S	C3	C3	C3	C	3 3	3 8	3 8	3 8	C3	C3	C3	210		B2	22	B2	B2	_	B2	B2	B2	B2	B2	2 2	B2		B2	B2	B2	B2	B2		B2	5 5	SS
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			DEBE	LESKOVO	JASIKOVO VI AOI E S	VLAOLE	GORNIANE	ŠUŠUI	CEROVO	KRIVI	KRIVI	MALI	BREZONIK	100	3ORSI	ZAGRAĐE	RGOTINA	OPEN	NEAC		CRVE	PANTELEJ	MAIL	ASEN	GRAMADA	HADŽ	SVRLjIG	NIŠEVAC	PALILULA	SVRL	PGOŠTE	KNIA	JORN	JONIE	MINIĆEVO	SELAC	MALI	VRAT	GRLjAN	TIMOK	ZAJEČAR	VRAZ	OPEN
		П	800			-	_	+	_		$\rightarrow$		_				_			[	П	$\neg$	$\top$	$\top$		$\overline{}$				$\neg$	$\neg$	$\top$	$\top$	${}^{+}$		$\overline{}$		$\overline{}$		$\rightarrow$	_		000
	Chainage	4	181+8	187+674	191+800	197+187	200+200	202+300	205+673	207+800	211+800	215+200	217+500	224+350	231+092	238+081	244+699	249+032	250+045		0+957	7+493	20+421	27+453	30+257	32+600	40+018	46+010	49+332	51+692	62+741	68+365	72+105	75+013	81+907	84+459	88+206	96+074	103+046	107+300	1111+606	118+834	121+5
	Distance in km			5+874	0+000		-		3+373		- 1		2+300					4+333	1+013			6+536	6+763	6+808	2+804	2+343	7+418	5+992	3+322	2+360	1+863	5+624	3+740	2+908	6+894	2+552	*3+831	2+868	*7+052	4+254	4+306	7+228	_
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oin-	Service point code	18	14101	14102	14103	14105	14106	14107	14108	14110	14111	14112	14113	14114	14115	141/0					11001	11101	11102	11103	11129	11104	11105	11124	11106	11130	11107	11109	11128	11110	11111	11126	11112		11122	11125	11115	11127	11116	11123	11117	11118	
g the service po	Manner of securing	17	-	6	2 0		6		-	6		İ	6	2	6	2		9	9		-	1	İ	6		1	Ţ	İ	4		=	6	,	11	6		4	0 4	0	İ	6		6		6	1	İ
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Direction	Maximum permitted train length	14	549		364		721		113	547			329	583	613	674	E JUNCTION			olje	109			564					199		585	480	201	583	410						557		565		493		
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mumixeM	Right track	ш	~ .	2	~ [ ~	- l m	m		_	0 00	l m	I	~	<u>~</u>	m /	2 0	_1-1	$\vdash$	—	218	_							.]_	1_				Ι.				Т	_		Ι.					_	_	Ι.
	Railway line categ	Н	C3	$^{\dagger}$	$^{\dagger}$	3 8	Н	H	+	3 8	t	$^{+}$	C3	$\forall$	+	3 8	-0	1	C3	-		E R	t	Н	$\forall$	$^{+}$	$^{+}$	B	H	+	+	. 4	+	$\vdash$	Y Y	+	+	+		+	$\vdash$	$\vdash$	Н	A	+	< <	+
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	Distance in km Chainage Name of service point		124+631	121.202	*2+8/1   131+38/ SOKOLOVICA 4+800   124+106   TABAROWAC	$\perp$	145+656	148+460	151+330	3+362 156+828 ROGLiEVO	160+192	163+608		174+128	182+015	2+565 184+5/8 PKAHOVO PKISLANISTE	103+079	0+000 OPEN LINE JUNCTION 3	т	O TANK NO OF BANK		3+300  SAJINOVAC 1+500	6+597	10+096 ŽITORAĐA		1+700 12+700 RECICA		18+800	22+327	25+014	6+720 31+734 TOPLICKA MALA PLANA 2+766 24+500 IDBESHIZY				3+928 46+646 BARLOVO		2+700 52+000 PEPELJEVAC 1+224 52+234 OBENTINE TINCTION 1	2+955 54+955 OPEN LINE JOINCTION I	59+100	L	62+810	67+325	69+880	73+700	2+195 75+895 KOSANČIĆ IVAN		84+400
transnort	Гей изск	L	<u> </u>	19	• [		Ĺ			1	Γ,	Ľ	1				-	$\vdash$	$\tilde{\dashv}$	-	_	1				1			Ι΄	_	_	+	_	L		1	1		. 4	Ĺ			. 1			1	
Date of handover to public	Right track	-				716	51																	\$76	1.20	.82					1.40		.12		.0	£61	.90	90				·6t	b61.	.05	ŞΙ		



2 The service pd - UIC platform ice point freight Fran substitution and su	Manner of traffic re Manner of securing Service point code Side(end-loading 1 Open for passenger Open for passenger Open for passenger Incline Slope	17 18 19 20 21 22 23 24 25 26 27 28 29		6 11113 S T 2 10 3 12 ŽS-I		9	0			7	station distance 6 13351 S P P/F 8 0 9 - ŽS-1 119,8	station distance S P P/F ZS-I			RAIL WAY LINE OUT OF EXPLOITATION			n m m o o o o o o o o o o o o o o o o o	24313 U 300 2,7 2 5 2 5 ŽS-I	station distance ZS-I 110,3		11 23105 S U ***	S U P/F 300 2,0 4 1 4 1	-	×	station distance 4 ZS-1 78,8			~	station distance   8   2S-1	9 23001 S T P/F 2,0 83,1	ŽS-I	station distance 11 23003 S U P/F 300 3,0 4 0 5 - ŽS-I 79,5	11 23004 S U P/F 300 0,0 3 0 4 -	3 23005 S U P/F 600 0,0 1 0 1 - ŽS-I	11 23006 S U P/F 500 0,0 ŽS-I	station distance station distance P/F 400 0,0 ZS-I 80,2	station distance 11 23012 80.8	111 2001	
Direction A→B Direction Direction A→B	Maximum permitted train length receptance of the longest trains maximum permitted train length length receptance of the length	13 14	ılija - Kastrat	618 2 618 2	220. (Barlovo) - OPEN LINE JUNCTION 1 - Kuršumlija	017	2 018 2	221. Kosovo Polje - Metohija - Peć *)	Kosovo Polje Teretna - OPEN LINE JUNCTION 1 - (Drenica) *)	223. OPEN LINE JUNCTION Cuprija - Cuprija - Paraćin	240 3 i 4 167 2	847 5 892 4	LOCAL LINES	Subotica - Subotica labitka				Subotica bolnica	327 112 327 112		ža - Horgoš	335 2 i 3 335 2 i 3	593 2 i 3 593 2 i 3	304. Novi Sad - Novi Sad ložionica		416 15116 416 15116	NE JUNCTION 3 - OPEN LINE JUNCTION 2 - (Kać) RAILWAY LINE OUT OF EXPLOITATION	306. (Rimski šančevi) - OPEN LINE JUNCTION 1 - OPEN LINE JUNCTION 3 - (Podbara)		307 Rimski Šančevi - Bečei	558 2 i 3 558 2 i 3		112	2 i 3 293	278	2 i 3		_	_	
k line	Type of service po Single/double-tracl Railway line catego Right track	8 9 10 11	219.1	6 S R A 50		-	N		222. Kosovo Polje Teretna -		1 S R D4 50	D4 100	I I		1 S L C3 *)	S L C3	4 4 4 4	302. Sub	1 S L A'		303	-	3 S L A 20		S	1 S L B2 20	305. (Podbara) - OPEN LINE JUNCTION 3 - OPEN LIN	306. (Rimski šančevi) - OPEN LINE JU	_	6 S L C3 307 B	1 1 40	8 S L A 40	1 S L A 20	Г	LA	S L A	N 0	A 1 2 1	1	
	Distance in km Chainage	4	-	2+320 OPEN LINE JUNCTION KASTRAT		53+334 OPEN LINE JUNCTION 1	2+300 53+894 NORSOWILIA 0+469 56+363 END OF LINE			ALONO ODEN TIME HINCERON CURBILA	0+500 0+500 CUPRIJA	6+920 7+420 PARAĆIN		0+000 SITBOTICA	3+708 3+708 SUBOTICA FABRIKA	2+431 6+139 END OF LINE	*) do km 002+330 najveća dopuštena brzina je 20 km/h	1 - 92 CITOCHIOA	2+345 3+600 SUBOTICA BOLNICA	0+400 4+000 KRAJ PRUGE		123+173 KANjiZA		-		2+297 3+418 NOVI SAD LOZIONICA 0+404 2+012 END OF TINE				0+910 0+910 OPEN LINE JUNCTION 3	10+270 RIMSKI ŠANČEVI	6+496 16+766 BAČKI JARAK	2+968 19+734 TEMERIN				7+877 51+901 BACKO GRADISTE 8+400 60+400 BEČET BBEDGBABE		1.5	27310 HidAlliham permitter speed is 40 farm.
Date of handover to public	Right track Left track	Н										٦			.288	I 0	*) do km 0					16.11.	1870.						01.03.	1969.			. (	68	1.70	0.20	,		*) By L.m 035	Berr Own



	Altitude	30	84.2	84.9	84,5	85	87,7	89,2	88.2		$\top$			05.4	1,00				П	137,68	147,72	147,72	T	93.8	81,43	81,43	82,06				81,3	79,6	78.0	78.0	79,0	70	43	77	70	79	79	92	06	101
	Loading gauge	29		ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ZS-1	1		H	ŽS-I	ŽS-I	1-0			ŽS-I		ŽS-I	$\rightarrow$	ŽS-I 1	ŀ	ŽS-I	ŽS-I	I-S.	1-SZ	ŽS-I			H	ŽS-I	1-S2-1	ŽS-I	ŽS-I	ŽS-I	ŽS-I	ŽS-I	1-S2-1	1-67 ŽS-I	ŽS-I	ŽS-I	ZS-I	ŽS-I
resistance of the line [daV]	←	28		2	_	9		3	-	1				4 0				3 2			+	3	t	2	-	7	1				⊢	5	1	-	3	9	2 2			-		9	-	-
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ns17 TreighF Fran	Open for passenger	22	P/F	P/F	P/F	P/F	Ы	P/F	P/F	11		r	Т	-	-					<u>a</u> a	P/F	P/F	D/C	LIL	П	T	T	П			P/F	Ы	$^{\dagger}$	_	Д	P/F	$\forall$	$\dagger$	Ť	Ť	Т	П	1	P/F
ice point	Оссирансу об зегу	21	Ь	-	Т	n		ם:	0			F	n	٥	-			Ь	1	Д	Н	$\Box$	q	4	n	n	D				Ь	D	1	D	n	n	n	$\rightarrow$	) :	+	I	П		Ь
mioitalq	Side-/end-loading I	_	S	S	S	S		-	S S/E			L	Н	0	2	r	)	S		_	Н	4	3	S.		4	S	Н			S	S	1	1	S		$\Box$		y o	0	Ļ	Н	4	ss S/E
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- nic	Service point code	18	23306	24202	24203	24204	24205	24206	25550				25304	25305	70407	CI OSED GO TB AEEE	LUSED FOR IR	24001		16316	16317	16317	71371	16701	16702	16703	16705		s", No. 80/16		22501	22405	22404	22402	21409	21611	21609	20210	21606	21604	21603	21602	21601	21009
od service po	Manner of securing	17	-	∞	∞	2		7	= 4	11			4	= -		E C	INE C	∞		c	4	4	-	6	6	6	9		tte RS		4	=	1	6	4	4	4	_	4 4	+ =	:	=	=	∞
egulation	маппет оf traffic г	16	station distance	station distance	station distance	station distance	station distance	station distance	station distance				station distance	station distance	Stanon distance		3	station distance		station distance	station distance	station distance		station distance	station distance	station distance	station distance	station distance	315. Kikinda - Banatsko Arandelovo LINE CLOSED FOR TRAFFIC TRAFFIC SUSPENDED Approval of the Government of the Republic of Serbia "Official Gazette RS", No. 80/16		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
Р→А	Tracks for longest trains	15	3 i 4	213	2 i 3	2 i 3		2 i 3	2;3	IC	RAFFIC		2 i 3		612				nik Grad		2 i 3			210	2 i 3	213	1 i 2		TRAFFIC epublic of Ser		2 i 3	2		3	2	2 i 3	2 i 3		213	213				4 i 5
Direction	Maximum permitted train length	14	938	464	452	738		625	474	FOR TRAFFIC	D FOR TI		536	503	660				ina - Zvorr		398		- (Bijeljina	390	415	473	591		of the Repu	rkva	633	330	T	301	550	261	160	940	348	293				643
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	Name of service point	5	37+137 VRBAS	KULA	54+971 CRVENKA	SIVAC	65+700 NOVI SIVAC	75+440 KLjAJIČEVO	/9+695 CONOFLJA 89+710 SOMBOR			19+960 BEGINNING OF LINE	BAČ	28+388 DERONjE	NANAVONOVO	-0+103 BEGINNING OF LINE	STARA PALANKA	14+525 GAJDOBRA		68+685 OPEN LINE JUNCTION DONJA BORINA 70+600 RADALi	73+005 ZVORNÍK	75+100 ZVORNIK GRAD	Šī	ADAŠEVCI	12+375 MOROVIC	19+644 VIŠNJIĆEVO	24+187 SREMSKA RAČA NOVA	STATE BORDER			5+812 ZRENJANIN FABRIKA	LAZAREVO	1/+346 ZLATICA 21+601 BANATSKI DESPOTOVAC	SUTJESKA	SEČANj	38+704 BOKA		STARILEC	59+288 VELIKA GREDA 65+006 BANATSKO BI ANDIĞTE	MARGITA		75+790 VRŠAČKI RITOVI	PAVLIS	87+546 VR\$AC
	Chainage	4	37+137	47+653	54+971	62+676	65+700	75+440	89+710			19+960	20+632	28+388	337370	-0+103	2+343	14+525		289+89	73+005	75+100	O.440 ŠTD	4+229	12+375	19+644	24+187	26+052			5+812	14+489	21+601	26+459	32+805	38+704	46+988	51+154	59+288	69+151	72+706	75+790	84+589	87+546
	Distance in km	3		10+516	7+318	7+705	3+024	9+740	10+015				0+672	7+756	70614	000	2+056	12+182		1+915	2+405	2+095		3+789	8+146	7+269	1+059	1+865			ľ	8+677	3+05/	4+858	6+346	5+899	8+284	4+166	8+134	4+145	3+555	3+084	8+799	2+957
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\*)The lines on the territory of Kosovo and Metohijia 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)

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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

Service point		km position of the beginning and the end of platform		Dimensions			
	Location		Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
	M	AIN LINES					
101. Belgrade - Stara P	azova - Šid - state border -	(Tovarnik)					
	next to 1st track	4+798,8-5+273,5	platform	474,70	0,35	5,60	
	between 1st and 2nd track*	4+798,8-5+273,5	platform	474,70	0,35	4,00	
NOVI DECCRAD	between 2nd and 3rd track	4+798,8-5+273,5	platform	474,70	0,35	10,60	
NOVI BEOGRAD	between 3rd and 4th track*	4+798,8-5+273,5	platform	474,70	0,35	4,00	
	between 4th and 5th track	4+798,8-5+273,5	platform	474,70	0,35	10,60	
	next to 5th track	4+798,8-5+273,5	platform	474,70	0,35	5,60	
T.Y. 1	next to right track	7+067,5-7+175	platform	107,50	0,35	3,13	
Tošin bunar	next to left track	7+060-7+170	platform	110,00	0,35	3,13	
	next to 1st track	9+866,5-10+345	platform	478,50	0,40	6,00	
	between 1st and 2nd track	9+952-10+345	platform	393,00	0,85	6,00	
ZEMUN	between 3rd and 4th track	9+952-10+345	platform	393,00	0,85	6,00	
	between 6th and 7th track	9+963,5-10+268	platform	304,00	0,85	6,00	
	between 8th and 9th track	9+890-10+268	platform	378,00	0,85	6,00	
ZEM DIGWO DOLLE	between 1st and 2nd track	13+779-13+998	platform	119,00	0,40	1,60	
ZEMUNSKO POLJE	between 2nd and 3rd track	13+797-13+998	platform	201,00	0,40	1,60	
	between 1st and 2nd track	20+510-20+768	platform	258,00	0,35	1,90	
DATA BUCA	between 2nd and 3rd track	20+543-20+722,5	platform	179,50	0,35	1,90	
BATAJNICA	between 3rd and 4th track	20+598-20+722,5	platform	124,50	0,35	1,60	
	between 4th and 5th track	20+598-20+772,5	platform	124,50	0,35	1,60	
	next to 1st track	27+014,69-27+124,69	platform	110,00	0,35	3,00	
NOVA PAZOVA	between 2nd and 3rd track	27+030-27+280	platform	250,00	0,35	1,60	
	between 4th and 5th track	27+030-27+280	platform	250,00	0,55	7,91	
	next to 1st track	35+003-35+223	platform	220,00	0,55	3,00	
STARA PAZOVA	between 2nd and 3rd track	35+015-35+265	platform	250,00	0,55	3,76	
	between 5th and 6th track	35+015-35+265	platform	250,00	0,55	6,16	
COLUDING	between 2nd and 3rd track	45+767-45+914	platform	147,00	0,35	1,60	
GOLUBINCI	between 3rd and 4th track	45+767-45+914	platform	147,00	0,35	1,60	
DUTING	between 2nd and 3rd track	53+611,93-53+691,91	platform	79,98	0,35	1,60	
PUTINCI	between 3rd and 4th track	53+682-53+747	platform	79,98	0,35	1,60	
Wast's at	next to right track	59+982-60+062	platform	80,00	0,55	4,00	
Kraljevci	next to left track	59+985-60+065	platform	80,00	0,55	4,00	
RUMA	between 2nd and 3rd track	64+733-64+973	platform	240,00	0,35	1,60	



				Dimensions			
Service point	Location the begand the	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
	between 3rd and 4th track	64+733-64+973	platform	240,00	0,35	1,60	
	between 4th and 5th track	64+821-64+937	platform	116,00	0,35	1,60	
VOGANJ	between 2nd and 3rd track	73+368-73+518	Arranged surface	150,00	0,00	2,00	
VOGANI	between 3rd and 4th track	73+368-73+518	Arranged surface	150,00	0,00	2,00	
SREMSKA MITROVICA	between 2nd and 3rd track	81+563-81+763	platform	200,00	0,35	1,60	
SKEWSKA WITKOVICA	between 3rd and 4th track	81+563-81+763	platform	200,00	0,35	1,60	
Laćarak	Between right and left track	86+109-86+159	platform	50,00	0,35	1,60	
MARTINCI	between 2nd and 3rd track	94+059-94+159	platform	100,00	0,35	1,60	
MARTINCI	between 3rd and 4th track	94+131-94+141	platform	10,00	0,35	1,60	
Kuzmin	NONE						
KUKUJEVCI-ERDEVIK	between 2nd and 3rd track	104+935-105+985	platform	50,00	0,45	1,60	
KUKUJEVCI-ERDEVIK	between 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 1st and 2nd track	116+300-116+490	Arranged surface	190,00	0,10	1,60	
ŠID	between 2nd and 3rd track	116+300-116+665	platform	365,00	0,45	1,60	
	between 3rd and 4th track	116+300-116+677	platform	377,00	0,45	1,60	
102. Belgrade - Mladen	ovac - Lapovo - Niš - Prešo	evo - state border	- (Tabanovce)				
	next to 1st track (left)	4+978-5+218,50	platform	240,50	0,30	1,30	
TOPČIDER	next to 3rd track (left)	4+960-5+234	platform	274,00	0,45	1,60	
	between 3rd and 4th track	4+950-253,70	platform	303,7,00	0,45	1,60	
	next to 2nd track on the right	8+460-8+786	platform	326,00	0,55	6,10	
RAKOVICA	between 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10	
	between 5th and 6th track	8+545-8+865	platform	320,00	0,55	6,20	
	next to right track	10+645-10+758	platform	113,00	0,55	1,55	
Kneževac	next to left track	10+645-10+758	platform	113,00	0,55	1,55	
	next to right track	11+626-11+731	platform	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 1st and 2nd track	14+080-14+240	platform	160,00	0,35	1,55	
KLOIVIK	between 3rd and 4th track		platform	-	-		
DINIOCANA		13+943-14+238	piationii	295,00	0,55	6,20	
PINOSAVA	NONE	20,000 20,100	1.46	100.00	1005	1.00	
Ripanj Kolonija	next to the line on the left	20+080-20+180	platform	100,00	0,35	1,00	
RIPANJ	between 1st and 2nd track	21+324,00-21+356,40	platform	32,40	0,35	1,00	
	between 2nd and 3rd track	21+265,70-21+361,20	platform	95,50	0,35	1,55	



		1		Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
	between 3rd and 4th track	21+265,70-21+361,20	platform	95,50	0,35	1,55
WENTE	between 1st and 2nd track	24+743,40-24+804,00	platform	60,60	0,35	1,00
KLENJE	between 2nd and 3rd track	24+743,40-24+804,00	platform	60,60	0,35	1,00
RIPANJ TUNNEL	between 1st and 2nd track	29+565-29+615	platform	50,00	0,40	1,60
D.1771	between 1st and 2nd track	34+695-34+774	platform	79,00	0,40	1,60
RALJA	between 2nd and 3rd track	34+695-34+774	platform	79,00	0,40	1,60
SOPOT KOSMAJSKI	between 2nd and 3rd track	41+454-41+544	platform	90,00	0,40	1,60
VLAŠKO POLJE	between 3rd and 4th track	47+684-47+784	platform	100,00	0,40	1,60
MLADENOVAC	between 2nd and 3rd track	53+052-53+189	platform	187,00	0,40	1,60
KOMA ČEMA C	between 1st and 2nd track	59+954-60+109	platform	155,00	0,40	1,60
KOVAČEVAC	between 2nd and 3rd track	59+907-60+056	platform	149,00	0,40	1,60
Rabrovac	next to the line on the left	62+909-63+045	platform	136,00	0,40	1,60
WHICH DAW	between 1st and 2nd track	67+497-67+650	platform	153,00	0,40	1,60
KUSADAK	between 2nd and 3rd track	67+453-67+600	platform	147,00	0,40	1,60
Ratare	next to the line on the left	70+821-70+931	platform	110,00	0,40	1,60
CLIDOVAC	between 1st and 2nd track	73+941-74+041	platform	100,00	0,50	1,50
GLIBOVAC	between 2nd and 3rd track	73+978-74+078	platform	100,00	0,50	1,50
	between 1st and 2nd track	78+476-78+586	platform	110,00	0,50	1,50
PALANKA	between 2nd and 3rd track	78+476-78+586	platform	110,00	0,50	1,50
	between 3rd and 4th track	78+476-78+586	platform	110,00	0,50	1,50
MALA PLANA	between 2nd and 3rd track	85+505-85+605	platform	100,00	0,50	1,50
	between 1st and 2nd track	90+350-90+400	platform	50,00	0,40	1,60
VELIKA PLANA	between 2nd and 3rd track	90+289-90+430	platform	141,00	0,40	1,60
VELIKA FLANA	between 3rd and 4th track	90+370-90+510	platform	140,00	0,40	1,60
	between 4th and 5th track	90+360-90+464	platform	104,00	0,40	1,60
Ctarra Cala	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
Marra Cala	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 2nd and 3rd track	100+400-100+450	platform	50,00	0,40	1,60
MARKOVAC	between 3rd and 4th track	100+350-100+452	platform	102,00	0,40	1,60
	between 4th and 5th track	100+350-100+448	platform	98,00	0,40	1,60
	next to right track	106+250-106+310	platform	60,00	0,35	1,60
Lapovo Varoš	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



		1		Dimensions		
Service point	Location km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7
	next to left track	108+340-108+390	platform	50,00	0,35	1,60
	between 2nd and 3rd track	109+560-109+680	platform	120,00	0,35	1,60
LAPOVO	between 3rd and 4th 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
D.,	next to right track	114+140-114+190	platform	50,00	0,35	1,60
Brzan	next to left track	114+140-112+190	platform	50,00	0,35	1,60
3.63 V	next to right track	116+940-119+990	platform	50,00	0,35	1,60
Miloševo	next to left track	119+940-119+990	platform	50,00	0,35	1,60
DACDD 431	between 2nd and 3rd track	120+229-120+330	platform	101,00	0,35	1,60
BAGRDAN	between 3rd and 4th track	120+268-120+390	platform	122,00	0,35	1,60
	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. Y	next to right track	131+329-131+379	platform	50,00	0,35	1,60
Bukovče	next to left track	131+329-131+379	platform	50,00	0,35	1,60
	between 2nd and 3rd track	135+122-135+364	platform	242,00	0,20	1,90
JAGODINA	between 3rd and 4th track	135+182-135+416	platform	234,00	0,20	1,90
	between 1st and 2nd track	135+192-135+342	platform	150,00	0,20	1,90
C.1.	next to right track	140+550-140+670	platform	120,00	0,35	3,00
Gilje	next to left track	140+550-140+670	platform	120,00	0,35	3,00
ĆUDDIIA	between 1st and 2nd track	0+516-0+641	platform	125,00	0,20	1,60
ĆUPRIJA	between 2nd and 3rd track	0+516-0+641	platform	115,00	0,30	1,60
DADA ĆDI	between 3rd and 4th track	155+081-155+184	platform	103,00	0,36	1,60
PARAĆIN	between 4th and 5th track	155+065-155+166	platform	101,00	0,20	1,90
Citi D. Cit	next to right track	163+560-163+610	platform	50,00	0,35	1,60
Sikirica - Ratari	next to left track	163+565-163+615	platform	50,00	0,35	1,60
D	next to right track	166+605-166+655	platform	50,00	0,35	1,60
Drenovac	next to left track	166+605-166+655	platform	50,00	0,35	1,60
ÓIÓENAC	between 2nd and 3rd track	171+550-171+640	platform	90,00	0,35	1,60
ĆIĆEVAC	between 3rd and 4th track	171+550-171+640	platform	90,00	0,35	1,60
TYin.a	next to right track	173+625-173+674	platform	49,00	0,35	1,60
Lučina	next to left track	173+625-173+674	platform	49,00	0,35	1,60
	between 2nd and 3rd track	176+222-176+425	platform	203,00	0,28	6,40
STALAĆ	between 4th and 5th track	176+222-176+425	platform	203,00	0,28	1,60
	between 6th and 7th track	176+270-176+378	platform	108,00	0,28	5,30
STEVANAC	NONE	•	•	•	•	•
BRALJINA	between 2nd and 3rd track	186+443-186+563	platform	120,00	0,35	1,60



				Dimensions			
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
	between 3rd and 4th track	186+443-186+563	platform	120,00	0,35	1,60	
Cerovo Ražanj	next to the line on the left	190+320-190+370	platform	50,00	0,35	1,60	
STARO TRUBAREVO	between 1st and 2nd track	192+150-192+220	platform	70,00	0,35	1,60	
ĐUNIS	between 2nd and 3rd track	194+882-195+003	platform	121,00	0,35	1,60	
DUNIS	between 3rd and 4th track	194+882-195+003	platform	121,00	0,35	1,60	
Vitkovac	next to right track	199+160-199+210	platform	50,00	0,35	1,60	
VIIKOVAC	next to left track	199+160-199+210	platform	50,00	0,35	1,60	
Danii Liuhaš	next to right track	201+175-201+225	platform	50,00	0,35	1,60	
Donji Ljubeš	next to left track	201+175-201+225	platform	50,00	0,35	1,60	
Garnii Liubaš	next to right track	203+560-203+610	platform	50,00	0,35	1,60	
Gornji Ljubeš	next to left track	203+560-203+610	platform	50,00	0,35	1,60	
KORMAN	between 2nd and 3rd track	205+565-205+675	platform	110,00	0,35	1,60	
KOKIVIAN	between 3rd and 4th track	205+545-205+665	platform	120,00	0,35	1,60	
Trnjani	next to right track	208+087-208+186	platform	99,00	0,35	1,60	
Tinjam	next to left track	208+087-208+186	platform	99,00	0,35	1,60	
	between 1st and 2nd track	210+432-210+521	platform	89,00	0,35	1,60	
ADROVAC	between 2nd and 3rd track	210+440-210+562	platform	122,00	0,35	1,60	
	next to 1st track	210+445-210+530	platform	85,00	0,28	5,00	
ALEKSINAC	between 2nd and 3rd track	214+067-214+277	platform	210,00	0,35	1,60	
ALEKSINAC	between 3rd and 4th track	214+067-214+277	platform	210,00	0,35	1,60	
Nozrina	next to right track	217+400-217+500	platform	100,00	0,35	1,60	
NOZIMa	next to left track	217+400-217+500	platform	100,00	0,35	1,60	
Lužane	next to right track	218+705-218+790	platform	85,00	0,35	1,60	
Luzane	next to left track	218+708-218+785	platform	77,00	0,35	1,60	
Tešica	next to right track	222+062-222+164	platform	102,00	0,35	1,60	
Testea	next to left track	222+062-222+164	platform	102,00	0,35	1,60	
GREJAČ	between 2nd and 3rd track	224+656-224+758	platform	102,00	0,35	1,60	
GREJAC	between 3rd and 4th track	224+656-224+708	platform	52,00	0,35	1,60	
Supovački Most	next to right track	228+087-228+155	platform	68,00	0,35	1,60	
Supovacki Wost	next to left track	228+091-228+159	platform	68,00	0,35	1,60	
Mezgraja	next to right track	229+306-229+416	platform	110,00	0,35	1,60	
wiczgiaja	next to left track	229+306-229+416	platform	110,00	0,35	1,60	
Vrtičta	next to right track	232+544-232+631	platform	87,00	0,35	1,60	
Vrtište	next to left track	232+544-232+631	platform	87,00	0,35	1,60	
TRUPALE	between 2nd and 3rd track	234+893-234+994	platform	101,00	0,40	1,60	
TRUI ALE	between 4th and 5th track	234+893-234+994	platform	101,00	0,40	1,60	



			Platform/ arranged surface	Dimensions			
Service point	the beg	and the end of		Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
CRVENI KRST	between 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	
	between 2nd and 3rd track	243+410-243+813	platform	403,00	0,40	8,00	
NIŠ	between 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	
MEĐUROVO	NONE	•					
BELOTINCE	between 1st and 2nd track	253+906-253+987	platform	81,00	0,40	1,60	
Čapljinac	next to the line on the left	255+443-255+493	platform	50,00	0,40	1,60	
Malošište	next to the line on the left	257+890-257+940	platform	50,00	0,40	1,60	
DOLIEVA C	between 1st and 2nd track	261+419-261+527	platform	108,00	0,40	1,60	
DOLJEVAC	between 2nd and 3rd track	261+419-261+526	platform	107,00	0,40	1,60	
W.Y	next to the line on the right	263+218-263+263	platform	45,00	0,40	1,10	
Kočane	next to the line on the right	263+274-263+287	platform	13,00	0,40	1,10	
D 1	next to the line on the right	265+833-265+862	platform	29,00	0,40	1,60	
Pukovac	next to the line on the right	265+870-265+897	platform	27,00	0,40	1,60	
BRESTOVAC	between 2nd and 3rd track	267+906-267+971	platform	65,00	0,40	1,60	
т	next to the line on the left	270+819-270+844	platform	25,00	0,40	1,10	
Lipovica	next to the line on the left	270+850-270+887	platform	37,00	0,40	1,10	
PEČENJEVCE	between 2nd and 3rd track	275+522-275+596	platform	74,00	0,40	1,60	
Živkovo	next to the line on the right	278+820-278+865	platform	45,00	0,40	1,10	
Priboj Leskovački	next to the line on the right	280+440-280+480	platform	40,00	0,40	1,00	
VINARCI	NONE	•					
I ECKOVA C	between 1st and 2nd track	287+460-287+679	platform	219,00	0,40	1,60	
LESKOVAC	between 2nd and 3rd track	287+507-287+630	platform	123,00	0,40	1,60	
ĐORĐEVO	NONE	•					
CDDELICA	between 2nd and 3rd track	301+841-301+886	platform	45,00	0,40	1,60	
GRDELICA	between 3rd and 4th track	301+841-301+886	platform	45,00	0,40	1,60	
Palojska Rosulja	next to the line on the left	308+614-308+629	platform	15,00	0,40	1,60	
PREDEJANE	between 1st and 2nd track	312+675-312+750	platform	75,00	0,40	1,60	
DŽEP	between 2nd and 3rd track	319+629-319+710	platform	81,00	0,40	1,60	
MOMIN KAMEN	next to the line on the left	322+900-322+930	platform	30,00	0,40	1,60	
Šelince	NONE	•	•	1	•		
VLADIČIN HAN	between 1st and 2nd track	329+472-329+676	platform	204,00	0,40	1,60	
SUVA MORAVA	next to 1st track	334+043-334+095	platform	52,00	0,40	1,60	
Lepenički most	NONE	•	•		•	•	



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
Stubal	NONE					
PRIBOJ VRANJSKI	NONE					
VRANJSKA BANJA	between 1st and 2nd track	347+958-348-080	platform	122,00	0,40	1,60
AND ANDE	between 1st and 2nd track	354+080-354+260	platform	180,00	0,40	1,60
VRANJE	between 2nd and 3rd track	354+125-354+242	platform	117,00	0,40	1,60
Neradovac	NONE			•	•	
DIGTORIA G	between 1st and 2nd track	365+666-365+768	platform	102,00	0,40	1,60
RISTOVAC	between 2nd and 3rd track	365+666-365+768	platform	102,00	0,40	1,60
BUJANOVAC	between 1st and 2nd track	373+665-373+720	platform	55,00	0,40	1,60
Letovica	NONE			•	•	
BUKAREVAC	NONE					
PREŠEVO	between 1st and 2nd track	392+256-392+357	platform	101,00	0,40	1,60
103. (Belgrade) - Rak	ovica - Jajinci - Mala Krsna	- Velika Plana			•	•
	next to 2nd track on the right	8+460-8+786	platform	326,00	0,55	6,10
RAKOVICA	between 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10
	between 5th and 6th track	8+545-8+865	platform	320,00	0,55	6,20
JAJINCE	NONE					
DELI DOTOV	between 2nd and 3rd track	16+240-16+337	platform	97,00	0,40	1,60
BELI POTOK	between 3rd and 4th track	16+240-16+351	platform	111,00	0,40	1,60
Zuce staj.	next to the line on the right	20+305-20+363	platform	58,00	0,40	1,60
ZUCE	between 1st and 2nd track	21+180-21+287	platform	107,00	0,40	1,60
VDČDI	between 1st and 2nd track	24+824-24+932	platform	108,00	0,40	1,60
VRČIN	between 2nd and 3rd track	24+824-24+934	platform	110,00	0,40	1,60
Kasapovac	next to the line on the left	27+840-27+938	platform	98,00	0,40	1,60
LIPE	between 1st and 2nd track	31+208-31+316	platform	108,00	0,40	1,60
MALA IVANČA	next to 1st track	36+858-36+925	platform	67,00	0,40	1,60
MALATVANCA	between 1st and 2nd track	36+863-36+925	platform	62,00	0,40	1,60
Brestovi	next to the line on the left	39+208-39+305	platform	97,00	0,40	1,60
MALLDOŽADEVAC	between 1st and 2nd track	41+250-41+356	platform	106,00	0,40	1,60
MALI POŽAREVAC	between 2nd and 3rd track	41+250-41+358	platform	108,00	0,40	1,60
Dražanj-Šepšin	next to the line on the right	43+114-43+219	platform	105,00	0,40	1,60
LIMČADI	between 1st and 2nd track	47+730-47+839	platform	109,00	0,40	1,60
UMČARI	between 2nd and 3rd track	47+730-47+837	platform	107,00	0,40	1,60
Živkovac	next to the line on the left	52+290-52+340	platform	50,00	0,40	1,60
VODANJ	between 2nd and 3rd track	55+130-55+229	platform	99,00	0,40	1,60
KOLARI	between 1st and 2nd track	60+558-60+656	platform	98,00	0,40	1,60



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
Ralja Smederevska	next to the line on the left	66+573-66+605	platform	32,00	0,40	1,60
	between 1st and 2nd track	69+030-69+175	platform	145,00	0,40	1,90
MALA KRSNA	between 2nd and 3rd track	69+030-69+175	platform	145,00	0,40	1,90
WALA KKSNA	between 3rd and 4th track	69+042-69+184	platform	142,00	0,40	1,90
	between 4th and 5th track	69+080-69+230	platform	150,00	0,40	1,90
Skobalj	next to the line on the left	71+981-72+015	platform	34,00	0,40	1,60
Osipaonica staj.	next to the line on the left	74+749-74+784	platform	35,00	0,40	1,60
OCIDA ONICA	between 1st and 2nd track	76+168-76+231	platform	63,00	0,40	1,60
OSIPAONICA	between 2nd and 3rd track	76+177-76+229	platform	52,00	0,40	1,60
Lugavčina	next to the line on the right	77+867-77+904	platform	37,00	0,40	1,30
Saraorci	NONE					
LOZOVIK-SARAORCI	between 2nd and 3rd track	82+710-82+812	platform	102,00	0,40	1,60
Miloševac	next to the line on the left	85+500-85+602	platform	50,00	0,40	1,60
KRNJEVO-TRNOVČE	between 2nd and 3rd track	90+248-90+348	platform	100,00	0,40	1,60
VELIKO ORAŠJE	between the plateau in front of the station and 2nd track	94+626,5-94+658,5	platform	32,00	0,40	1,60
	between 2nd and 3rd track	94+586,5-94+689,5	platform	100,00	0,40	1,60
	between 1st and 2nd track	90+350-90+400	platform	50,00	0,40	1,60
VELIKA PLANA	between 2nd and 3rd track	90+289-90+430	platform	141,00	0,40	1,60
VELIKA PLAINA	between 3rd and 4th track	90+370-90+510	platform	140,00	0,40	1,60
	between 4th and 5th track	90+360-90+464	platform	104,00	0,40	1,60
104. (Belgrade) - Stara Pa	azova - Novi Sad - Subot	ica - state border	- (Kelebia)			
	next to 1st track	35+003,51-35+223,51	platform	220,00	0,55	3,00
STARA PAZOVA	between 2nd and 3rd track	35+014,23- 35+264,23	platform	250,00	0,55	3,76
	between 5th and 6th track	35+014,23- 35+264,23	platform	250,00	0,55	6,16
DIDILI	between 1st and 2nd track	42+840-42+970	platform	130,00	0,40	1,60
INĐIJA	between 2nd and 3rd track	42+783-42+928	platform	145,00	0,40	1,60
INĐIJA PUSTARA	NONE	1	L	I		
DEĞWA	between 1st and 2nd track	52+864-53+042	platform	178,00	0,40	1,60
BEŠKA	between 2nd and 3rd track	52+864-53+042	platform	178,00	0,40	1,60
ČORTANOVCI	next to 1st track	56+520-56+557	platform	37,00	0,30	7,00
Čortanovci Dunav	NONE	•	•	•	•	
	next to 1st track	62+338-62+365	platform	27,00	0,25	7,00
KARLOVAČKI VINOGRADI	next to 1st track	62+365-62+449	platform	84,00	0,40	1,60
	between 1st and 2nd track	62+338-62+449	platform	111,00	0,40	1,60



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
CDEMCKI WADI ONGI	between 1st and 2nd track	66+501-66+698	platform	197,00	0,40	1,60
SREMSKI KARLOVCI	between 2nd and 3rd track	66+501-66+700	platform	199,00	0,40	1,60
DETROMADA DIN	between 2nd and 3rd track	71+834-71+986	platform	152,00	0,40	1,60
PETROVARADIN	between 3rd and 4th track	71+822-71+991	platform	169,00	0,40	2,80
	next to 11th track	77+836-77+950	platform	114,00	0,40	3,00
	between 11th and 10th track	77+822-77+950	platform	128,00	0,40	3,72
	between 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 2nd and 4th track	77+843-78+181	platform	338,00	0,40	8,75
	between 12th and 1st 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
SAJLOVO	NONE					
KISAČ	between 1st and 2nd track	91+349-91+414	platform	65,00	0,33	1,40
Stepanovićevo	next to the line on the right	98+040-98+080	platform	40,00	0,35	1,60
ZMAJEVO	between 2nd and 3rd track	103+505-103+570	platform	65,00	0,34	1,40
VRBAS	between 2nd and 3rd track	116+702- 116+770,30	platform	68,00	0,35	1,40
VKBAS	between 3rd and 4th track	116+702- 116+770,30	platform	68,00	0,35	1,40
LOVĆENAC	between 2nd and 3rd track	128+098-128+158	platform	60,00	0,19	1,90
Mali Iđoš	NONE					
MALI IĐOŠ POLJE	NONE					
BAČKA TOPOLA	between 1st and 2nd track	144+096-144+248	platform	152,00	0,15/0,40	1,60
BACKA TOTOLA	between 2nd and 3rd track	144+093-144+241	platform	148,00	0,25	1,60
Mali Belgrade	NONE				_	
ŽEDNIK	between 2nd and 3rd track	157+792-157+862	platform	70,00	0,20	1,90
Verušić	next to to the line on the left	162+950-162+985	platform	35,00	0,30	1,60
NAUMOVIĆEVO	between 1st and 2nd track	166+144-166+214	platform	70,00	0,30	1,60
Aleksandrovo predgrađe	next to to the line on the right	171+938-171+983	arranged surface	45,00	0,05	0,60
	between 1st and 2nd track	176+360-176+414	arranged surface	54,00	0,05	1,70
	between 1st and 2nd track	176+414-176+487	platform	73,00	0,25	1,60
SUBOTICA	between 1st and 2nd track	176+487-176+838	arranged surface	351,00	0,05	1,70
	between 2nd and 3rd track	176+322-176+838	arranged surface	516,00	0,05	1,70
	between 3rd and 4th track	176+335-176+573	arranged surface	238,00	0,05	1,70
105. Niš - Dimitrovgrad -	state border - (Dragoma	nn)				



				Dimensi	Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
	next to 1st track	243+410-243+763	platform	353,00	0,40	5,80	
	between 2nd and 3rd track	243+410-243+813	platform	403,00	0,40	8,00	
NIŠ	between 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	
Dalilulaha manana	next to to the line on the left	1+669-1+769	platform	100,00	0,40	1,60	
Palilulska rampa	next to to the line on the left	1+809-1+875	platform	66,00	0,40	1,60	
Vojna Bolnica	NONE						
ĆELE KULA	between 2nd and 3rd track	5+422-5+502	platform	80,00	0,40	1,60	
EI Niš	NONE			•			
NIŠKA BANJA	between 2nd and 3rd track	10+450-10+558	platform	108,00	0,40	1,60	
	next to to the line on the right	14+712-14+731	platform	19,00	0,40	1,60	
Prosek	next to to the line on the right	14+740-14+770	platform	30,00	0,40	1,60	
SIĆEVO	NONE			•	•	•	
OSTROVICA	between 1st and 2nd track	22+475-22+529	platform	54,00	0,40	1,60	
Majdan Ostrovica	NONE			•	•	•	
Radov Dol	next to to the line on the left	29+494-29+520	platform	26,00	0,40	1,60	
DOLAC	between 2nd and 3rd track	31+640-31+739	platform	79,00	0,40	1,60	
Crveni Breg	next to to the line on the left	34+262-34+292	platform	30,00	0,40	1,60	
CRVENA REKA	between 2nd and 3rd track	36+393-36+451	platform	58,00	0,40	1,60	
Belanovac	next to to the line on the left	39+691-39+761	platform	70,00	0,40	1,60	
BELA PALANKA	between 2nd and 3rd track	44+907-44+977	platform	70,00	0,40	1,60	
Crkvica	NONE			•	•	•	
ČIFLIK	NONE						
Sinjac	NONE						
Đurđevo Polje	NONE						
Crvenčevo	NONE						
STANIČENJE	NONE						
Sopot	NONE						
PURCE	between 1st and 2nd track	72+901-72+989	platform	87,00	0,40	1,60	
PIROT	between 2nd and 3rd track	72+868-73+021	platform	153,00	0,40	1,60	
Božurat	NONE	ı	1		<u> </u>	1	
Veliki Jovanovac	NONE						
SUKOVO	NONE						
Činiglavci	NONE						



				Dimensi	ons	
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
Srećkovac	NONE					
DI WED ON OD 1 D	next to 14th track	97+126-97+267	platform	141,00	0,40	1,60
DIMITROVGRAD	between 1st and 2nd track	97+316-97+717	platform	401,00	0,40	1,60
106. Belgrade Centar - Pa	nnčevo Main Station - Vr	šac - state borde	r - (Stamora M	oravita)		
	next to 3rd track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	between 4th and 5th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
BELGRADE CENTAR	between 6th and 7th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
	between 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	10,00
Karađorđev park	between tracks (next to the left track towards Banat)	1+123-1+215	platform	92,00	0,55	7,00
	between tracks (next to the right track towards Banat)	1+123-1+215	platform	92,00	0,55	7,00
	between tracks	2+754,13-2+829,13	platform	75,00	0,95	18,60
	between tracks (next to the right track towards Banat)	2+785,52-2+860,52	platform	65,00	0,95	3,50
Vukov spomenik	between tracks (next to the right track towards Banat)	2+925,52-3+010,52	platform	85,00	0,95	3,50
	between tracks (next to the left track towards Banat)	2+689,13-2+754,13	platform	65,00	0,95	3,50
	between tracks (next to the left track towards Banat)	2+829,13-2+914,13	platform	85,00	0,95	3,50
	next to 2nd track	4+694-4+845	platform	151,00	0,90	4,94
PANČEVAČKI MOST	next to 1st track	4+590-4+741	platform	151,00	0,90	4,94
	next to the line on the right	10+500-10+600	platform	100,00	0,40	1,60
Krnjača most	between left and right track	7+003,5-7+223,5	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
Kidwhen	next to 1st track	8+182,24-8+402,24	platform	220,00	0,55	3,00
Sebeš	next to the line on the left	9+975,05-10+085,05	platform	100,00	0,60	3,10
	next to the line on the right	9+975,05-10+085,05	platform	100,00	0,60	3,10
OVČA	next to 1st track	12+537,6-12+757,6	platform	220,00	0,55	4,00
OYCA	between 4th and 5th track	12+537,6-12+757,6	platform	220,00	0,55	6,10
	between 1st and 2nd track	15+913-16+033	platform	120,00	0,40	1,60
PANČEVO MAIN STATION	between 1st and 2nd track	16+090-16+210	platform	120,00	0,40	1,60
TANCE TO MAIN STATION	between 2nd and 3rd track	15+913-16+210	platform	297,00	0,40	1,60
	between 3rd and 4th track	15+987-16+137	platform	150,00	0,40	1,60
PANČEVO VAROŠ	between 1st and 2nd track	18+105-18+345	platform	240,00	0,40	1,60
THICE TO THE	next to 1st track	18+131-18+223	station plateau	92,00	0,40	1,60



			surface	Dimensions		
Service point	Location	the beginning and the end of platform		Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
	between 2nd and 3rd track	18+100-18+364	platform	264,00	0,40	1,60
BANATSKO NOVO SELO	between 2nd and 3rd track	33+981-34+035	arranged surface	54,00	0,30	0,50
VLADIMIROVAC	between 1st and 2nd track	45+806-45+906	arranged surface	100,00	0,00	1,30
VLADIMIROVAC	between 2nd and 3rd track	45+806-45+906	arranged surface	100,00	0,00	1,30
A LIDUNIA D	between 1st and 2nd track	53+503-53+603	arranged surface	100,00	0,00	1,30
ALIBUNAR	between 2nd and 3rd track	53+503-53+603	arranged surface	100,00	0,00	1,30
BANATSKI KARLOVAC	between 2nd and 3rd track					
Nikolinci	NONE					
ULJMA	between 2nd and 3rd track					
Vlajkovac	NONE					
VRŠAC	between 1st and 2nd track	82+807,5-82+902,5	platform	95,00	0,40	1,60
VKSAC	between 2nd and 3rd track	82+807,5-82+902,5	platform	95,00	0,40	1,60
107. (Belgrade) - Resnik	- Požega - Vrbnica - state	e border - (Bijelo	Polje)			
RESNIK	next to 1st track	14+080-14+240	arranged surface	160,00	0,55	4,00
	between 1st and 2nd track	14+080-14+240	platform	160,00	0,35	1,55
	between 3rd and 4th track	13+943-14+238	platform	295,00	0,55	6,20
BELA REKA	between 1st and 2nd track	7+538-7+648	platform	110,00	0,35	1,60
Nenadovac	next to the line on the left	12+077-12+127	platform	50,00	0,35	1,60
BARAJEVO	between 2nd and 3rd track	15+654-15+764	platform	110,00	0,35	1,60
Barajevo Centar	next to the line on the left	17+895-18+003	platform	108,00	0,35	1,60
VELIKI BORAK	between 1st and 2nd track	23+039-23+151	platform	112,00	0,35	1,60
Leskovac Kolubarski	next to the line on the right	27+720-27+770	platform	50,00	0,35	1,60
STEPOJEVAC	between 2nd and 3rd track	30+572-30+682	platform	110,00	0,35	1,60
VREOCI	between 2nd and 3rd track	37+150-37+300	platform	150,00	0,35	1,60
VREOCI	between 3rd and 4th track	37+150-37+300	platform	150,00	0,35	1,60
LAZADEWAC	between 1st and 2nd track	45+311-45+462	platform	151,00	0,35	1,60
LAZAREVAC	between 2nd and 3rd track	45+311-45+462	platform	151,00	0,35	1,60
LAIVOVAC	between 1st and 2nd track	52+547-52+697	platform	150,00	0,40	1,60
LAJKOVAC	between 2nd and 3rd track	52+527-52+697	platform	170,00	0,35	1,60
SLOVAC	between 1st and 2nd track	58+899-59+052	platform	153,00	0,35	1,60
DLOVAC	between 2nd and 3rd track	58+899-59+052	platform	153,00	0,35	1,60
Mlađevo	next to the line on the right	63+958-64+035	platform	77,00	0,35	1,60
DIVCI	between 1st and 2nd track	67+043-67+213	platform	170,00	0,35	1,60
DIVCI	between 2nd and 3rd track	67+043-67+213	platform	170,00	0,35	1,60
Lukavac Kolubarski	next to the line on the right	69+165-69+265	platform	100,00	0,35	1,60
Iverak	next to the line on the right	72+725-72+825	platform	100,00	0,35	1,60



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
VALJEVO	next to 1st track	77+550-77+851	platform	301,00	0,35	5,40
VALJEVO	between 2nd and 3rd track	77+562-77+863	platform	301,00	0,35	7,55
VALJEVSKI GRADAC	next to the line on the right	84+560-84+610	platform	50,00	0,35	1,60
Leskovice	next to the line on the left	91+605-91+655	platform	50,00	0,35	1,60
LASTRA	between 2nd and 3rd track	93+985-94+131	platform	146,00	0,35	1,60
SAMARI	between 2nd and 3rd track	103+118-103+168	platform	50,00	0,40	1,60
Drenovački Kik	next to the line on the right	107+700-107+750	platform	50,00	0,40	1,60
RAŽANA	between 3rd and 4th track	111+284-111+430	platform	146,00	0,35	1,60
KOSJERIĆ	between 3rd and 4th track	118+748-118+948	platform	200,00	0,40	1,60
KOSJERIC	between 4th and 5th track	118+748-118+948	platform	200,00	0,40	1,60
Tubići	next to the line on the left	123+446-123+496	platform	50,00	0,35	1,60
KALENIĆI	between 3rd and 4th track	129+772-129+918	platform	146,00	0,35	1,60
Otanj	next to the line on the right	133+600-133+710	platform	110,00	0,40	1,50
Glumač	next to the line on the right	135+807-135+863	platform	56,00	0,40	1,60
POŽEG A	next to 1st track	140+720-140+975	platform	255,00	0,45	10,00
POŽEGA	between 2nd and 3rd track	140+675-140+984	platform	309,00	0,45	6,20
Rasna	next to the line on the right	145+618-145+650	platform	32,00	0,40	1,00
UZIĆI	between 1st and 2nd track	149+125-149+255	platform	130,00	0,40	1,60
UZICI	between 2nd and 3rd track	149+255-149+389	platform	134,00	0,40	1,60
Zlakusa	next to the line on the right	151+536-151+566	platform	30,00	0,40	1,60
Bukovička Rampa	next to the line on the right	154+141-154+161	platform	20,00	0,40	1,60
SEVOJNO	between 1st and 2nd track	156+882-157+082	platform	202,00	0,40	1,60
UŽICE FREIGHT	between 2nd and 3rd track	161+795-161+995	platform	200,00	0,40	1,60
UZICE FREIGHT	between 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
UZICE	between 2nd and 3rd track	163+626-163+881	platform	255,00	0,60	5,10
STAPARI	between 1st and 2nd track	170+590-170+710	platform	120,00	0,40	1,60
Distancyića Dalia	next to the line on the left	173+412-173+425	platform	13,00	0,40	1,60
Ristanovića Polje	next to the line on the right	173+426-173+464	platform	38,00	0,40	1,60
Tripkova	next to the line on the right	176+045-176+095	platform	50,00	0,40	1,60
SUŠICA	between 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 1st and 2nd track	185+181-185+291	platform	110,00	0,40	1,60
	between 2nd and 3rd track	185+181-185+291	platform	110,00	0,40	1,60
ZLATIBOR	between 2nd and 3rd track	193+234-193+404	platform	170,00	0,40	1,60
Ribnica Zlatiborska	next to the line on the left	200+350-200+400	platform	50,00	0,40	1,60



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
JABLANICA	between 3rd and 4th track	204+405-204+550	platform	145,00	0,40	1,60
Goleš	next to the line on the right	211+590-211+616	platform	26,00	0,40	1,00
ŠTRPCI	between 2nd and 3rd track	214-755-214-900	platform	145,00	0,40	1,60
Rača	next to the line on the right	219+515-219+536	platform	21,00	0,40	1,00
DDIDOI	between 2nd and 3rd track	225+227-225+490	platform	263,00	0,50	5,10
PRIBOJ	between 6th and 7th track	225+137-225+237	platform	100,00	0,50	3,00
Poljice	next to the line on the right	228+110-228+190	platform	80,00	0,40	1,60
Pribojska Banja	next to the line on the right	232+867-232+899	platform	32,00	0,40	1,00
BISTRICA NA LIMU	between 2nd and 3rd track	241+208-241+352	platform	144,00	0,40	1,60
Džurovo	next to the line on the right	246+300-246+328	platform	28,00	0,40	1,00
DDITEDOT IE	next to 1st track	252+396-252+705	platform	309,00	0,40	4,60
PRIJEPOLJE	between 2nd and 3rd track	252+396-252+705	platform	309,00	0,40	7,00
PRIJEPOLJE FREIGHT	between 2nd and 3rd track	255+789-255+982	platform	187,00	0,35	1,60
	between 3rd and 4th track	255+789-255+982	platform	187,00	0,35	1,60
Velika Župa	next to the line on the right	259+605-259+624	platform	19,00	0,40	1,00
LUČICE	between 2nd and 3rd track	264+581-264+714	platform	133,00	0,35	1,60
BRODAREVO	between 2nd and 3rd track	273+255-273+404	platform	149,00	0,30	1,60
VDDNICA	between 1st and 2nd track	285+205-285+255	platform	50,00	0,30	1,60
VRBNICA	between 2nd and 3rd track	285+112-285+256	platform	144,00	0,30	1,60
108. Lapovo - Kraljevo	- Lešak - Kosovo Polje - Đ	Deneral Janković	- state border -	(Volkovo	)	
	between 2nd and 3rd track	109+560-109+680	platform	120,00	0,35	1,60
LAPOVO	between 3rd and 4th 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
BATOČINA	between 1st and 2nd track	3+374,7-3+421,9	platform	47,20	0,12	1,30
Gradac	next to the line on the left	8+243,4-8+292,9	platform	49,50	0,30	1,05
BADNJEVAC	between 2nd and 3rd track	12+264,5-12+311,5	platform	47,00	0,14	1,80
Resnik Kragujevački	NONE					
Milatovac	next to the line on the right	18+206,9-18+253,7	platform	46,80	0,33	1,10
Cvetojevac	next to the line on the right	20+381-20+422,2	platform	41,20	0,25	1,20
JOVANOVAC	between 2nd and 3rd track	22+308-22+352	platform	44,00	0,22	1,75
KRAGUJEVAC	between 1st and 2nd track	28+726-28+918,7	platform	192,70	0,24	1,20
MMMOULLYAC	between 2nd and 3rd track	28+752-28+907	platform	155,00	0,24	1,80
Zavod	next to the line on the right	31+280,5-31+288,25	platform	7,75	0,10	0,50
GROŠNICA	between 1st and 2nd track	34+062,8-34+104,3	platform	41,50	0,22	1,50
DRAGOBRAĆA	between 1st and 2nd track	39+529-39+565	platform	36,00	0,20	1,20
Vučkovica	next to the line on the right	44+513-44+538	platform	25,00	0,30	1,20



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
KNIĆ	between 1st and 2nd track	47+560-47+607	platform	47,00	0,30	1,40
GRUŽA	between 1st and 2nd track	53+458-53+505,5	platform	47,50	0,22	1,40
GUBEREVAC	between 1st and 2nd track	60+567-60+614	platform	47,00	0,20	1,55
Tomića Brdo	next to the line on the right	64+795-64+822,5	platform	27,50	0,35	1,00
VITKOVAC	between 1st and 2nd track	66+309-66+353	platform	44,00	0,25	1,25
Milavčići	next to the line on the left	70+141,8-70+172,8	platform	31,00	0,35	1,40
VITANOVAC	between 1st and 2nd track	73+904,3-73+948,7	platform	44,40	0,22	1,40
Šumarice	next to the line on the left	79+111-79+128,4	platform	17,40	0,25	0,50
Sirča	next to the line on the right	82+006-82+069	platform	63,00	0,35	1,90
WD A LIEU O	between 1st and 2nd track	84+649-84+733	platform	84,00	0,33	1,60
KRALJEVO	between 2nd and 3rd track	84+649-84+748	platform	99,00	0,33	1,60
MATARUŠKA BANJA	between 2nd and 3rd track	93+895-93+940	platform	45,00	0,20	1,80
Progorelica	next to the line on the left	97+352-97+386	platform	34,00	0,25	1,40
BOGUTOVAČKA BANJA	between 1st and 2nd track	100+868-100+919	platform	51,00	0,22	1,80
DOBRE STRANE	NONE			II.	1	
POLUMIR	between 1st and 2nd track	118+291-118+344	platform	53,00	0,26	1,50
Pusto Polje	next to the line on the left	123+555-123+589	platform	34,00	0,25	1,00
UŠĆE	between 1st and 2nd track	127+223-127+281	platform	58,00	0,34	1,50
Lozno	next to the line on the right	132+832-132+866	platform	34,00	0,22	0,50
JOŠANIČKA BANJA	between 1st and 2nd track	136+102-136+152	platform	50,00	0,25	1,45
Piskanja	next to the line on the left	138+842-138+884	platform	42,00	0,21	1,00
BRVENIK	between 1st and 2nd track	143+481-143+528	platform	47,00	0,32	1,50
Rvati	next to the line on the left	148+258-148+304	platform	46,00	0,22	1,00
RAŠKA	between 1st and 2nd track	152+236-152+353	platform	117,00	0,32	1,80
Kaznovići	next to the line on the left	157+700-157+740	platform	40,00	0,23	1,00
RUDNICA	between 1st and 2nd track	161+970-162+022	platform	52,00	0,25	1,55
Donje Jarinje	NONE					
Jerina	next to the line on the left	168+865-168+935	arranged surface	70,00	0,20	1,60
I FÖAR	between 1st and 2nd track	172+294-172+394	platform	100,00	0,35	1,60
LEŠAK	between 2nd and 3rd track	172+294-172+394	platform	100,00	0,35	1,60
Dren	NONE	•		•		
LEPOSAVIĆ	between 1st and 2nd track	182+675-182+775	platform	100,00	0,35	1,60
Pridvorica	NONE				•	•
Sočanica	next to the line on the left	190+000-190+040	platform	40,00	0,35	1,00
IBARSKA SLATINA	NONE	-		1	1	II.
Plandište	NONE					



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
BANJSKA	NONE					
Valač	between 1st and 2nd track	208+170-208+230	arranged surface	60,00	0,35	1,00
ZVEČAN	next to 1st track	210+900-211+000	platform	100,00	0,35	1,60
Kosovska Mitrovica North	next to the line on the left	213+390-213+440	platform	50,00	0,35	1,60
109. Subotica - Bogojevo -	- state border - (Erdut)			I.		
BOGOJEVO	NONE					
SONTA	NONE					
PRICEETING	between 1st and 2nd track	58+619-58+649	platform	30,00	0,30	1,55
PRIGREVICA	between 2nd and 3rd track	58+619-58+649	platform	30,00	0,30	1,57
BUKOVAČKI SALAŠI	NONE		1	1	1	
	between 1st and 2nd track	73+417-73+477	platform	60,00	0,31	1,61
	between 1st and 2nd track	73+584-73+612	arranged surface	28,00	0,05	1,50
COMPOR	between 1st and 2nd track	73+673-73+823	arranged surface	150,00	0,05	1,50
SOMBOR	between 2nd and 3rd track	73+417-73+477	platform	60,00	0,38	1,61
	between 2nd and 3rd track	73+584-73+612	arranged surface	28,00	0,05	1,50
	between 3rd and 4th track	73+584-73+701	arranged surface	117,00	0,05	1,50
SVETOZAR MILETIĆ	between 2nd and 3rd track	83+340-83+397	platform	56,70	0,29	1,68
ALEKSA ŠANTIĆ	between 2nd and 3rd track	97+500-97+556	platform	55,61	0,24	1,90
BAJMOK	between 2nd and 3rd track	105+138-105+193	platform	54,62	0,23	1,90
Skenderevo	NONE					
TAVANKUT	between 2nd and 3rd track	115+350-115+399	platform	49,26	0,30	1,80
LJUTOVO	NONE					
ŠEBEŠIĆ	NONE					
Subotica suburbs	next to the line on the left	128+229-128+270	platform	41,00	0,25	1,60
110. Belgrade Centar – No	ovi Beograd					
	next to 3rd track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	between 4th and 5th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
BELGRADE CENTAR	between 6th and 7th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
	between 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	10,00
	next to 1st track	4+798,8-5+273,5	platform	474,70	0,35	5,60
	between 1st and 2nd track*	4+798,8-5+273,5	platform	474,70	0,35	4,00
	between 2nd and 3rd track	4+798,8-5+273,5	platform	474,70	0,35	10,60
NOVI BEOGRAD	between 3rd and 4th track*	4+798,8-5+273,5	platform	474,70	0,35	4,00
	between 4th and 5th track	4+798,8-5+273,5	platform	474,70	0,35	10,60



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
111. Belgrade Centar - C	pen line junction G - (Ra	akovica)				
	next to 3rd track	0+120-0+00-0+300	platform	420,00	0,55	10,00
	between 4th and 5th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
BELGRADE CENTAR	between 6th and 7th track	0+155-0+00-0+300	platform	455,00	0,55	10,00
	between 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	10,00
112. Belgrade Marshallin	ng yard "A" - Ostružnica	ı - Batajnica				
BELGRADE MARSHALLING YARD A	NONE					
OSTRUŽNICA	NONE					
SURČIN	NONE			_		
BATAJNICA	between 1st and 2nd track	20+510-20+768	platform	258,00	0,35	1,90
	between 2nd and 3rd track	20+543-20+722,5	platform	179,50	0,35	1,90
	between 3rd and 4th track	20+598-20+722,5	platform	124,50	0,35	1,60
	between 4th and 5th track	20+598-20+772,5	platform	124,50	0,35	1,60
113. Belgrade Marshallin	ng yard "B" - Ostružnica	l				
BELGRADE MARSHALLING YARD B	NONE					
OSTRUŽNICA	NONE					
114. Belgrade Marshallin	ng yard "A" - Open line j	junction"B" - Op	en line junction	n"K/K1"	- Resnik	
BELGRADE MARSHALLING YARD A	NONE					
RESNIK	between 1st and 2nd track	14+034-14+145	platform	111,00	0,40	1,60
KLOWK	between 3rd and 4th track	13+951-14+246	platform	295,00	0,40	6,30
115. Ostružnica - Open l	ine junction"B" - (Open	line junction"K/I	K1")			
OSTRUŽNICA	NONE					
116. Belgrade Marshallin	ng yard "B" - Open line j	unction"R" - Op	en line junction	n"A" - (R	esnik)	<del></del>
BELGRADE MARSHALLING YARD B	NONE					
117. (Belgrade Marshall	ing yard "B") - Open line	junction"R" - R	akovica			
	next to 2nd track on the right	8+460-8+786	platform	326,00	0,55	6,10
RAKOVICA	between 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10
RAKOVICA		i contract of the contract of	<b> </b>	<del>                                     </del>	1	<b>H</b>
RAKOVICA	between 5th and 6th track	8+545-8+865	platform	320,00	0,55	6,20
RAKOVICA  118. Belgrade Marshallin			•	320,00	0,55	6,20
			•	320,00	0,55	6,20



				Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
	between 3rd and 4th track	8+637-8+868	platform	231,00	0,55	6,10
	between 5th and 6th track	8+545-8+865	platform	320,00	0,55	6,20
119. Belgrade Marshallin	g yard "B" - Open line j	unction"T" - (Ra	akovica)			
BELGRADE MARSHALLING YARD B	NONE					
120. Connecting line in the "K1" - (Jajinci)	e area of Open line junct	tion "K/K1": (O	pen line junctio	on"B") - s	witch "K	C" - switch
121. Topcider - Open line	e junction Savski most - (	Novi Belgrade)				
<u> </u>	next to 1st track (left)	4+978-5+218,50	platform	240,50	0,30	1,30
TOPČIDER	next to 3rd track (left)	4+960-5+234	platform	274,00	0,45	1,60
1	between 3rd and 4th track	4+950-253,70	platform	303,7,00	0,45	1,60
122. Topcder - Belgrade	spoljna - Belgrade Dunav	- Open line jund	ction Pančevač	ki most	•	•
	next to 1st track (left)	4+978-5+218,50	platform	240,50	0,30	1,30
TOPČIDER	next to 3rd track (left)	4+960-5+234	platform	274,00	0,45	1,60
	between 3rd and 4th track	4+950-253,70	platform	303,7,00	0,45	1,60
BELGRADE SPOLJNA	NONE					
BELGRADE DONJI GRAD	NONE					
BELGRADE DUNAV	between 2nd and 3rd track	9+866-10+136	platform	277,00	4,00	7,00
	next to 2nd track	4+694-4+845	platform	151,00	0,90	4,94
PANČEVAČKI MOST	next to 1st track	4+590-4+741	platform	151,00	0,90	4,94
	next to the line on the right	10+500-10+600	platform	100,00	0,40	1,60
123. By-pass line of Belgr donji grad)	ade External station: (T	opcider) - Block	1 "Obala" - l	Block 2 "	Prelaz" -	(Belgrade
124. (Open line junction Dedinje - (Open line junc		line junction Ka	rađorđev park	- Open lii	ne junctio	on
Karađorđev park	between tracks (next to the left track towards Banat)	1+123-1+215	platform	92,00		
Karauoruev park	between tracks (next to the right track towards Banat)	1+123-1+215	platform	92,00		
125. Inđija - Golubinci						T
	between 1st and 2nd track	42+840-42+970	platform	130,00	0,40	1,60
INĐIJA	between 2nd and 3rd track	42+783-42+928	platform	145,00	0,40	1,60
	between 3rd and 4th track	42+783-42+928	platform	145,00	0,40	1,60
Inđija Selo	next to the line on the right	1+540-1+590	platform	50,00	0,35	1,60
GOLUBINCI	between 2nd and 3rd track	45+726-45+876	platform	150,00	0,35	1,60
	between 3rd and 4th track	45+726-45+876	platform	150,00	0,35	1,60
126. Novi Sad - Novi Sad	Marshalling yard - Open	line junction Sa	jlovo			



			Dimensio	ons		
Service point Location the and	beginning the end of	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1 2 3		4	5	6	7	
next to 11th track 77+8	-836-77+950	platform	114,00	0,40	3,00	
between 11th and 10th track 77+8	-822-77+950	platform	128,00	0,40	3,72	
	835-77+887	platform	52,00	0,40	4,20	
NOVI SAD next to 1st track 77+8	-835-78+250	platform	415,00	0,40	4,20-8,90	
between 2nd and 4th track 77+8	-843-78+181	platform	338,00	0,40	8,75	
between 12th and 1st track 78+1	104-78+250	platform	146,00	0,40	8,90	
between 14th and 13th track 78+1	104-78+249	platform	145,00	0,40	6,46	
NOVI SAD MARSHALLING NONE	NONE					
127. By-pass line of Mala Krsna station: (Kolari) – junc	ction points 1	- junction poin	ts 28 - (O	sipaonica	)	
128. Open line junction Lapovo Varoš - Lapovo marsh	nalling yard -	Lapovo				
Lapovo Varoš next to right track 106-	+250-106+310	platform	60,00	0,35	1,60	
next to left track 106-	+250-106+310	platform	60,00	0,35	1,60	
LAPOVO MARSHALLING NONE						
between 2nd and 3rd track 109-	+560-109+680	platform	120,00	0,35	1,60	
LAPOVO between 3rd and 4th 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	
129. Trupale - Niš marshalling yard - Međurovo						
between 2nd and 3rd track 234-	+893-234+994	platform	101,00	0,40	1,60	
TRUPALE between 4th and 5th track 234-	+893-234+994	platform	101,00	0,40	1,60	
NIŠ MARSHALLING YARD next to 1a track 238-	+184-238+263	platform	79,00	0,40	1,60	
between 2nd and 3rd track 243-	+410-243+813	platform	403,00	0,40	1,60	
	+410-243+771	platform	361,00	0,40	1,60	
NIŠ between 1b and 1st track 243-	+669-243+763	platform	94,00	0,40	1,60	
between 1a and turnout track 243-	+683-243+763	platform	80,00	0,40	1,60	
130. Crveni krst - Niš marshalling yard						
CRVENI KRST between 2nd and 3rd track 240-	+842-240+994	platform	152,00	0,40	1,60	
NIŠ MARSHALLING YARD next to 1a track 238-	+184-238+263	platform	79,00	0,40	1,60	
131. Niš - Open line junction bridge - (Niš marshalling	g yard)					
next to 1st track 243-	+410-243+763	platform	353,00	0,40	5,80	
between 2nd and 3rd track 243-	+410-243+813	platform	403,00	0,40	8,00	
3HQ	+410-243+771	platform	361,00	0,40	8,00	
NIŠ between 4th and 5th track 243-						
		platform	120,00	0,40	5,80	



				Dimensi	ons	
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
132. Connecting track of	Niš station: (Crveni krst	) - junction point	s 2 - junction p	oints 4 - (	Ćele kula	)
	REG	IONAL LINES				
201. Subotica - Horgoš - s	tate border - (Röszke)					
	between 1st and 2nd track	176+360-176+414	arranged surface	54,00	0,05	1,70
	between 1st and 2nd track	176+414-176+487	platform	73,00	0,25	1,60
SUBOTICA	between 1st and 2nd track	176+487-176+838	arranged surface	351,00	0,05	1,70
	between 2nd and 3rd track	176+322-176+838	arranged surface	516,00	0,05	1,70
	between 3rd and 4th track	176+335-176+573	arranged surface	238,00	0,05	1,70
Subotica public warehouses	next to the line on the right	2+283-2+392	platform	109,00	0,21	1,60
PALIĆ	between 1st and 2nd track	7+601-7+711	platform	110,00	0,26	1,60
Hajdukovo	next to the line on the left	11+703-11+813	platform	110,00	0,24	1,60
Bački Vinogradi	between 2nd and 3rd track	15+371-15+481	platform	110,00	0,23	1,60
HORGOŠ	between 1st and 2nd track	155+792-155+838	platform	46,00	0,22	1,90
	between 2nd and 3rd track	155+793-155+838	platform	45,00	0,22	1,90
202. Pančevo Main Statio	n - Zrenjanin - Kikinda	- state border - (.	Jimbolia)			1
	between 1st and 2nd track	15+913-16+033	platform	120,00	0,40	1,60
•	between 1st and 2nd track	16+090-16+210	platform	120,00	0,40	1,60
PANČEVO MAIN STATION	between 2nd and 3rd track	15+913-16+210	platform	297,00	0,40	1,60
	between 3rd and 4th track	15+987-16+137	platform	150,00	0,40	1,60
JABUKA	NONE					
KAČAREVO	between 1st and 2nd track	26+784-26+834	platform	50,00	0,40	1,60
CREPAJA	NONE					
DEBELJAČA	NONE					
KOVAČICA	NONE					
UZDIN	NONE					
•	between 1st and 2nd track	61+920-61+970	platform	50,00	0,35	1,60
TOMAŠEVAC	between 2nd and 3rd track	61+920-61+970	platform	50,00	0,35	1,60
ORLOVAT STOP	between 1st and 2nd track	64+025-64+075	platform	50,00	0,35	1,60
LUKIĆEVO	NONE	l.	1	ll.		1
ZRENJANIN PLANT	NONE					
ZRENJANIN	next to 1st track	88+705-88+776	platform	71,00	0,55	1,30
ELEMIR	NONE		•			
MELENCI	NONE					
KUMANE	NONE					
NOVI BEČEJ	NONE					
BANATSKO MILOŠEVO	NONE					



		1 '4' 6		Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
POLJE					'	<u>'</u>
BANATSKO MILOŠEVO	NONE					
Derić	NONE					
KIKINDA	next to 1st track	160+030-160+166	platform	136,00	0,19	3,30-4,40
KIKINDA	between 1st and 2nd track	160+064-160+190	arranged surface	126,00	0,00	1,50
BANATSKO VELIKO SELO	NONE					
203. Banatsko Miloševo -	Senta - Subotica					
BANATSKO MILOŠEVO	NONE					
Bočar	NONE					
Ester	NONE					
PADEJ	NONE					
Ostojićevo	NONE					
ČOKA	NONE					
SENTA	between 1st and 2nd track	102+905-102+950	platform	45,00	0,17	1,90
Gornji Breg	NONE					
BOGARAŠ	NONE					
Doline	NONE					
OROM	NONE					
Gabrić	NONE					
Bikovo	NONE					
	between 1st and 2nd track	176+360-176+414	arranged surface	54,00	0,05	1,70
	between 1st and 2nd track	176+414-176+487	platform	73,00	0,25	1,60
SUBOTICA	between 1st and 2nd track	176+487-176+838	arranged surface	351,00	0,05	1,70
	between 2nd and 3rd track	176+322-176+838	arranged surface	516,00	0,05	1,70
	between 3rd and 4th track	176+335-176+573	arranged surface	238,00	0,05	1,70
204. Pančevo Varoš – Op	en line junction 2a - (Jab	uka)				
	next to 1st track	18+131-18+223	station plateau	92,00	0,40	1,60
PANČEVO VAROŠ	between 1st and 2nd track	18+105-18+345	platform	240,00	0,40	1,60
	between 2nd and 3rd track	18+100-18+364	platform	264,00	0,40	1,60
205. Novi Sad - Odžaci - l	Bogojevo	ı	ı	1	1	l .
	next to 11th track	77+836-77+950	platform	114,00	0,40	3,00
	between 11th and 10th track	77+822-77+950	platform	128,00	0,40	3,72
NOVI SAD	between 10th and 1st track	77+835-77+887	platform	52,00	0,40	4,20
	next to 1st track	77+835-78+250	platform	415,00	0,40	4,20-8,90
	between 2nd and 4th track	77+843-78+181	platform	338,00	0,40	8,75



		Irm nogition of		Dimensi	Dimensions			
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)		
1	2	3	4	5	6	7		
	between 12th and 1st 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							
206. (Novi Sad) - Open lir	ne junction Sajlovo - Rim	ıski šančevi - Orl	ovat stop					
GORNJE SAJLOVO	NONE							
RIMSKI ŠANČEVI	NONE							
KAĆ	NONE							
Budisava	NONE							
ŠAJKAŠ	NONE							
Vilovo-Gardinovci	NONE							
Lok	NONE							
TITEL	NONE							
Donji Titel	NONE							
Donji Titel Knićanin	NONE NONE							
Knićanin	NONE							
Knićanin PERLEZ	NONE NONE							
Knićanin PERLEZ FARKAŽDIN	NONE NONE NONE	64+025-64+075	platform	50,00	0,34	1,60		
Knićanin PERLEZ FARKAŽDIN ORLOVAT	NONE NONE NONE NONE between 1st and 2nd track		platform	50,00	0,34	1,60		
Knićanin PERLEZ FARKAŽDIN ORLOVAT ORLOVAT STOP	NONE NONE NONE NONE between 1st and 2nd track		platform	50,00	0,34	1,60		
Knićanin PERLEZ FARKAŽDIN ORLOVAT ORLOVAT STOP 207. Novi Sad Marshallin NOVI SAD MARSHALLING	NONE NONE NONE NONE between 1st and 2nd track g yard - Sajlovo Open lin NONE		platform	50,00	0,34	1,60		
Knićanin  PERLEZ  FARKAŽDIN  ORLOVAT  ORLOVAT STOP  207. Novi Sad Marshallin  NOVI SAD MARSHALLING YARD	NONE NONE NONE NONE between 1st and 2nd track g yard - Sajlovo Open lin NONE		platform	50,00	0,34	1,60		
Knićanin PERLEZ FARKAŽDIN ORLOVAT ORLOVAT STOP 207. Novi Sad Marshallin NOVI SAD MARSHALLING YARD 208. Orlovat - Open line j	NONE NONE NONE NONE between 1st and 2nd track g yard - Sajlovo Open lin NONE unction 1a - (Lukićevo) NONE	ne junction			0,34	1,60		



		1		Dimensions		
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
	between 3rd and 4th track	64+733-64+973	platform	240,00	0,35	1,60
	between 4th and 5th track	64+821-64+937	platform	116,00	0,35	1,60
BUĐANOVCI	between 1st and 2nd track	11+324-11+355	platform	31,00	0,35	1,60
Nikinci	next to the line on the left	16+657,7-16+688,7	platform	31,00	0,35	1,60
PLATIČEVO	between 1st and 2nd track	21+293-21+323	platform	30,00	0,35	1,60
Klenak	next to the line on the right	28+873,15- 28+904,15	platform	31,00	0,35	1,60
ŠABAC	between 1st and 2nd track	32+684-32+738	platform	54,00	0,40	1,00
Majur	next to the line on the left	3+975-4+025	platform	50,00	0,35	
ŠTITAR	between 1st and 2nd track	7+713,7-7+735,7	platform	22,00	0,35	1,60
Dublje Mačvansko	NONE					
PETLOVAČA	NONE					
Ribari	NONE					
PRNJAVOR MAČVANSKI	NONE					
Podrinsko Novo Selo	NONE					
LEŠNICA	between 1st and 2nd track	34+900-35+025	platform	125,00	0,55	2,40
Jadarska Straža	next to the line on the right	38+860-38+940	platform	80,00	0,35	1,60
Lipnica	NONE					
LOZNICA	NONE					
Loznica factory	NONE					
KOVILJAČA	between 1st and 2nd track	56+170-56+213	platform	43,00	0,35	1,60
Gornja Koviljača	NONE	_				
BRASINA	between 2nd and 3rd track	65+212-65+354	platform	142,00	0,35	3,20
Donja Borina	next to the line on the right	68+650-68+750	platform	100,00	0,35	1,60
210. (Platičevo) - Open l	ine junction 1 - Open line	junction 3 - (Štit	ar)			
211. Stalać - Kraljevo - l	Požega					
	between 2nd and 3rd track	176+222-176+425	platform	203,00	0,28	6,40
STALAĆ	between 4th and 5th track	176+222-176+425	platform	203,00	0,28	1,60
	between 6th and 7th track	176+270-176+378	platform	108,00	0,28	5,30
Mrzenica	next to the line on the right	3+868-3+910	platform	42,00	0,35	2,00
Makrešane	NONE	•	1	1	1	
DEDINA	NONE					
VDUČEVA C	between 2nd and 3rd track	14+451-14+626	platform	175,00	0,35	2,84
KRUŠEVAC	between 3rd and 4th track	14+490,3-14+610,3	platform	120,00	0,35	1,60
Čitluk	NONE	•	1	1	1	1
KOŠEVI	NONE					
Globoder	NONE					



		1		Dimensions			
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
STOPANJA	NONE						
Donja Počekovina	NONE						
POČEKOVINA	NONE						
Trstenički Odžaci	NONE						
TRSTENIK	between 2nd and 3rd track	42+400-42+500	platform	100,00	0,35	1,80	
VRNJAČKA BANJA	between 2nd and 3rd track	49+136-49+241	platform	105,00	0,35	1,60	
Lipova	NONE						
Tominac	NONE						
PODUNAVCI	NONE						
Vraneši	NONE						
Vrba	NONE						
RATINA	NONE						
	between 1st and 2nd track	84+649-84+733	platform	84,00	0,33	1,60	
KRALJEVO	between 2nd and 3rd track	84+649-84+748	platform	99,00	0,33	1,60	
Sirča	next to the line on the left	68+880,7-68+940,4	platform	59,70	0,35	1,60	
ADRANI	between 2nd and 3rd track	78+622,2-78+657,2	platform	35,00	0,35	1,60	
Mrsać	next to the line on the left	81+513-81+553	platform	40,00	0,33	0,50	
SAMAILA	NONE						
Goričani	next to the line on the left	88+610-88+658	platform	48,00	0,37	1,00	
MRŠINCI	between 2nd and 3rd track	92+241-92-279	platform	38,00	0,35	1,00	
Kukići	NONE						
ZABLAĆE	NONE						
Baluga	NONE						
<del>-</del>	next to the 1st track on the left	105+500-105+590	platform	90,00	0,44	6,50	
ČAČAK	between 1st and 2nd track	105+494-105+628	platform	134,00	0,37	1,60	
	between 2nd and 3rd track	105+494-105+615	platform	121,00	0,38	1,60	
Trbušani	next to the line on the left	110+240-110+263	platform	23,00	0,40	1,60	
PRIJEVOR	between 2nd and 3rd track	112+820-113+070	platform	250,00	0,40	1,60	
¥	next to the line on the right	120+450-120+550	platform	100,00	0,40	1,60	
OVČAR BANJA	between 1st and 2nd track	120+450-120+652	platform	202,00	0,35	1,60	
Jelen Do	next to the line on the right	127+180-127+320	platform	50,00	0,40	1,60	
Dragačevo	between 2nd and 3rd track	128+295-128+405	platform	110,00	0,40	1,60	
Gugalj	NONE	1	_		1	1	
Boračko	NONE						
	next to the 1st track	140+720-140+975	platform	2559,00	0,45	10,00	
POŽEGA	between 2nd and 3rd track	146+675-140+984	platform	309,00	0,45	6,20	



		1		Dimensi	ons	
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
212. Connecting line of K (Adrani)	``					
213. Connecting line of P	ožega station: (Uzići) - ju	inction points No	53 - junction p	oints No 3	54 - (Drag	gačevo)
214. Smederevo - Mala K	rsna					
SMEDEREVO	between 1st and 2nd track	0+000-0-103	platform	103,00	0,40	1,60
SIVIEDERE VO	between 2nd and 3rd track	0+000-0-105	platform	105,00	0,40	1,60
Godomin	next to the line on the 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
KADINAC	between 2nd and 3rd track	6+650-6+800	platform	150,00	0,60	6,20
Vranovo	next to the line on the left	9+475-9+537	platform	62,00	0,40	1,90
MALA VDONA	between 1st and 2nd track	69+030-69+175	platform	145,00	0,40	1,90
	between 2nd and 3rd track	69+030-69+175	platform	145,00	0,40	1,90
MALA KRSNA	between 3rd and 4th track	69+042-69+184	platform	142,00	0,40	1,90
	between 4th and 5th track	69+080-69+230	platform	150,00	0,40	1,90
215. Mala Krsna - Bor - G	Open line junction 2 - (V	ražogrnac)		•	1	l
	between 1st and 2nd track	69+030-69+175	platform	145,00	0,40	1,90
	between 2nd and 3rd track	69+030-69+175	platform	145,00	0,40	1,90
MALA KRSNA	between 3rd and 4th track	69+042-69+184	platform	142,00	0,40	1,90
	between 4th and 5th track	69+080-69+230	platform	150,00	0,40	1,90
LJUBIČEVSKI bridge	NONE		1			
LUCIDICE I DIXI DITUEC	NONE					
	between 1st and 2nd track	87+703-87+826	platform	123,00	0,40	1,80
POŽAREVAC		87+703-87+826 87+712-87+816	platform platform	123,00 104,00	0,40	1,80 1,60
	between 1st and 2nd track		-	-	-	-
POŽAREVAC	between 1st and 2nd track between 2nd and 3rd track	87+712-87+816	platform	104,00	0,40	1,60
POŽAREVAC Jugovićevo	between 1st and 2nd track between 2nd and 3rd track next to the line on the left	87+712-87+816 89+078-89+094	platform platform	104,00 16,00	0,40	1,60 1,00
POŽAREVAC  Jugovićevo  Sopot Požarevački	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right	87+712-87+816 89+078-89+094	platform platform	104,00 16,00	0,40	1,60 1,00
POŽAREVAC  Jugovićevo  Sopot Požarevački  BUBUŠINAC-BRATINAC	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right NONE	87+712-87+816 89+078-89+094	platform platform	104,00 16,00	0,40	1,60 1,00
POŽAREVAC  Jugovićevo Sopot Požarevački BUBUŠINAC-BRATINAC Bare-Kasidol	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right NONE NONE	87+712-87+816 89+078-89+094 90+082-90+107	platform platform platform	104,00 16,00 25,00	0,40 0,50 0,40	1,60 1,00 1,60
POŽAREVAC  Jugovićevo Sopot Požarevački BUBUŠINAC-BRATINAC Bare-Kasidol STIG	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right NONE NONE between 1st and 2nd track	87+712-87+816 89+078-89+094 90+082-90+107	platform platform platform	104,00 16,00 25,00	0,40 0,50 0,40	1,60 1,00 1,60
POŽAREVAC  Jugovićevo Sopot Požarevački BUBUŠINAC-BRATINAC Bare-Kasidol STIG Majilovac	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right NONE NONE between 1st and 2nd track NONE	87+712-87+816 89+078-89+094 90+082-90+107	platform platform platform platform	104,00 16,00 25,00	0,40 0,50 0,40	1,60 1,00 1,60
POŽAREVAC  Jugovićevo Sopot Požarevački BUBUŠINAC-BRATINAC Bare-Kasidol STIG Majilovac SIRAKOVO	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right NONE NONE between 1st and 2nd track NONE between 1st and 2nd track	87+712-87+816 89+078-89+094 90+082-90+107 102+693-102+764 109+026-109+079	platform platform platform  platform  platform	104,00 16,00 25,00 71,00	0,40 0,50 0,40 0,40	1,60 1,00 1,60 1,60
POŽAREVAC  Jugovićevo Sopot Požarevački BUBUŠINAC-BRATINAC Bare-Kasidol STIG Majilovac SIRAKOVO LJUBINJE	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right NONE NONE between 1st and 2nd track NONE between 1st and 2nd track between 1st and 2nd track	87+712-87+816 89+078-89+094 90+082-90+107 102+693-102+764 109+026-109+079 116+381-116+444	platform platform platform  platform  platform  platform  platform	104,00 16,00 25,00 71,00 53,00 63,00	0,40 0,50 0,40 0,40 0,40	1,60 1,00 1,60 1,60
POŽAREVAC  Jugovićevo Sopot Požarevački BUBUŠINAC-BRATINAC Bare-Kasidol STIG Majilovac SIRAKOVO LJUBINJE Češljeva Bara	between 1st and 2nd track between 2nd and 3rd track next to the line on the left next to the line on the right NONE NONE between 1st and 2nd track NONE between 1st and 2nd track between 1st and 2nd track	87+712-87+816 89+078-89+094 90+082-90+107 102+693-102+764 109+026-109+079 116+381-116+444 122+138-122+200	platform platform platform  platform  platform  platform  platform  platform	104,00 16,00 25,00 71,00 53,00 63,00 62,00	0,40 0,50 0,40 0,40 0,40 0,40	1,60 1,00 1,60 1,60 1,60 1,60



Kučevska Turija

NONE

NONE

ZVIŽD

		Irm position of	arranged surface	Dimensions		
Service point	Location	km position of the beginning and the end of platform		Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
KAONA	NONE					
KUČEVO	NONE					
Neresnica	NONE					
Neresnica (freight)	NONE					
Voluja	NONE					
BRODICA	between 2nd and 3rd track	164+515-164+576	platform	61,00	0,40	1,60
Bosiljkovac	NONE					
Blagojev Kamen	NONE					
MAJDANPEK	between 2nd and 3rd track	178+769-178+920	platform	151,00	0,35	1,60
Debeli Lug	next to the line on the left	181+300-181+318	platform	18,00	0,35	1,60
LESKOVO	between 2nd and 3rd track	187+660-187+722	platform	62,00	0,35	1,60
Jasikovo	next to the line on the left	191+810-191+890	arranged surface	80,00	0,09	1,60
Vlaole Selo	next to the line on the right	194+740-194+780	arranged surface	40,00	0,20	1,60
VLAOLE	between 2nd and 3rd track	197+163-197+224	platform	61,00	0,35	1,60
Gornjane	next to the line on the right	200+288-200+386	arranged surface	98,00	0,35	1,60
Šušulajka	NONE					
CEROVO	NONE					
Kriveljski most	next to the line on the right	207+905-207+995	arranged surface	90,00	0,35	1,60
Kriveljski potok	next to the line on the left	211+873-211+913	arranged surface	40,00	0,35	1,60
MALI KRIVELJ	between 1st and 2nd track	215+171-215+206	platform	35,00	0,35	1,60
Brezonik	next to the line on the 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
DOK	between 2nd and 3rd track	221+352-221+452	platform	100,00	0,35	1,60
BOR FREIGHT	between 2nd and 3rd track	224+320-224+375	platform	55,00	0,35	1,60
BORSKA SLATINA	NONE					
ZAGRAĐE	NONE					
RGOTINA	between 1st and 2nd track	244+658-244+738	platform	80,00	0,35	1,60
216. Crveni krst - Zaje	čar - Prahovo port					
CRVENI KRST	between 2nd and 3rd track	240+842-240+994	platform	152,00	0,40	1,60
Pantelej	next to the line on the left	7+455-7+507	platform	52,00	0,35	1,60
MATEJEVAC	NONE	1	I	I.		ı
Gornja Vrežina	NONE					
Jasenovik	NONE					
GRAMADA	between 1st and 2nd track	30+232-30+282	platform	50,00	0,35	1,60
Hadžićevo	NONE	-	1	1		
SVRLJIG	between 1st and 2nd track	39+925-40+075	platform	150,00	0,35	1,60



Service point		the beginning and the end of platform		Dimensions		
	Location		Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7
Niševac	next to the line on the right	46+002-46+018	platform	16,00	0,35	1,60
PALILULA	between 1st and 2nd track	49+307-49+357	platform	50,00	0,35	1,60
Svrljiški Miljkovac	NONE					
PODVIS	between 1st and 2nd track	60+853-60+903	platform	50,00	0,35	1,60
Rgošte	NONE				11	
KNJAŽEVAC	between 1st and 2nd track	68+299-68+449	platform	150,00	0,35	1,60
Gornje Zuniče	next to the line on the right	72+080-72+142	platform	62,00	0,35	1,60
Donje Zuniče	next to the line on the right	74+988-75+076	platform	88,00	0,35	1,60
MNIÁRNO	between 1st and 2nd track	81+830-81+930	platform	100,00	0,35	1,60
MINIĆEVO	between 2nd and 3rd track	81+930-81+975	platform	45,00	0,35	1,60
Selačka Reka	next to the line on the right	84+450-84+500	arranged surface	50,00	0,35	1,60
Mali Izvor	next to the line on the right	88+180-88+230	platform	50,00	0,35	1,60
Vratarnica	between 1st and 2nd track	96+048-96+098	platform	50,00	0,35	1,60
GRLJAN	between 1st and 2nd track	102+955-103+105	platform	150,00	0,35	1,60
Timok	next to the line on the left	107+320-107+380	arranged surface	60,00	0,35	1,60
	between 1st and 2nd track	111+622-111+820	platform	198,00	0,35	1,60
ZAJEČAR	between 2nd and 3rd track	111+662-111+815	platform	153,00	0,35	1,60
	between 3rd and 4th track	111+651-111+803	platform	152,00	0,35	1,60
VRAŽOGRNAC	between 1st and 2nd track	118+760-118+910	platform	150,00	0,35	1,60
TRNAVAC	between 1st and 2nd track	124+593-124+668	platform	75,00	0,35	1,60
Čokonjar	next to the line on the left	128+500-128+550	platform	50,00	0,35	1,60
Sokolovica	next to the line on the right	131+100-131+125	platform	25,00	0,35	1,60
TABAKOVAC	between 1st and 2nd track	136+170-136+223	platform	53,00	0,35	1,60
Tabakovačka reka	next to the line on the right	138+740-138+790	platform	50,00	0,35	1,60
BRUSNIK	between 1st and 2nd track	145+616-145+696	platform	80,00	0,35	1,60
Tamnič	next to the line on the right	148+420-148+480	platform	60,00	0,35	1,60
Crnomasnica	next to the line on the right	151+323-151+364	platform	41,00	0,35	1,60
Rajac	next to the line on the right	154+430-154+505	platform	75,00	0,35	1,60
ROGLJEVO	between 1st and 2nd track	156+795-156+875	platform	80,00	0,35	1,60
Veljkovo	NONE					
Mokranja	NONE					
Kobišnica	NONE					
NEGOTIN	between 2nd and 3rd track	174+049-174+199	platform	150,00	0,35	1,60
PRAHOVO	between 2nd and 3rd track	181+974-182+054	platform	80,00	0,35	1,60
		1	I	1	1	1



				Dimensi	Dimensions			
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)		
1	2	3	4	5	6	7		
218. Doljevac - Kastrat -	Kosovo Polje							
DOLJEVAC	between 1st and 2nd track	261+419-261+527	platform	108,00	0,40	1,60		
DOLJEVAC	between 2nd and 3rd track	261+419-261+526	platform	107,00	0,40	1,60		
Šajinovac	NONE			•	•			
Toplički Badnjevac	NONE							
Jasenica	NONE							
ŽITORAĐA	NONE							
Žitorađa Centar	next to the line on the left	10+925-10+977	platform	52,00	0,40	1,60		
Rečica	NONE		1		1	I		
Lukomir	NONE							
Podina	NONE							
Babin Potok	next to the line on the right	18+726-18+774	platform	48,00	0,40	1,60		
PROKUPLJE	between 1st and 2nd track	22+257-22+370	platform	113,00	0,40	1,60		
Gornja Draganja	next to the line on the 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	NONE							
Pepeljevac	NONE							
Open line junction Kastrat	NONE							
Visoka	NONE							
Ljuša	NONE							
RUDARE	NONE							
Dešiška	NONE							
KOSANIČKA RAČA	NONE							
Kosanica	NONE							
KOSANČIĆ IVAN	NONE							
Vasiljevac	NONE							
Merdare	NONE							
219. Kuršumlija - Kastra	at							
KURŠUMLIJA	NONE							
220. (Barlovo) - Open lin		a						
KURŠUMLIJA	NONE	<del></del>						
KUKSUWILIJA	INUINE							



		1 ::: 0		Dimensi	ons	
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)
1	2	3	4	5	6	7

- 221. Kosovo Polje Metohija Peć \*
- 222. Kosovo Polje Freight Open line junction 1 (Drenica) \*

	LO	CAL LINES				
301. Subotica - Subo	otica factory					
302. Subotica - Subo	otica hospital					
	between 1st and 2nd track	176+360-176+414	arranged surface	54,00	0,05	1,70
	between 1st and 2nd track	176+414-176+487	platform	73,00	0,25	1,60
SUBOTICA	between 1st and 2nd track	176+487-176+838	arranged surface	351,00	0,05	1,70
	between 2nd and 3rd track	176+322-176+838	arranged surface	516,00	0,05	1,70
	between 3rd and 4th track	176+335-176+573	arranged surface	238,00	0,05	1,70
303. Kanjiža - Horg	oš			•	•	•
KANJIŽA	between 1st and 2nd track	123+185-123+215	platform	30,00	0,24	1,60
Martonoš	NONE		1			"
HODGOĞ	between 1st and 2nd track	155+792-155+838	platform	46,00	0,22	1,90
HORGOŠ	between 2nd and 3rd track	155+793-155+838	platform	45,00	0,22	1,90
304. Novi Sad - Novi	i Sad ložionica					
	next to 11th track	77+836-77+950	platform	114,00	0,40	3,00
	between 11th and 10th track	77+822-77+950	platform	128,00	0,40	3,72
	between 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 2nd and 4th track	77+843-78+181	platform	338,00	0,40	8,75
	between 12th and 1st 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
305. (Podbara) - Op	en line junction 3 - Open line	junction 2 - (Kać	<u>(</u> )			
306. (Rimski šančev	i) - Open line junction 1 - Ope	n line junction 3	- (Podbara)			
307. Rimski šančevi	- Bečej					
RIMSKI ŠANČEVI	NONE					
Bački Jarak	NONE					
TEMERIN	NONE					
GOSPOĐINCI	NONE					
ŽABALJ	NONE					
ČURUG	NONE					



				Dimensions					
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)			
1	2	3	4	5	6	7			
Bačko Gradište	NONE								
Bečej predgrađe	NONE								
BEČEJ	NONE								
308. Vrbas - Sombor									
VRBAS	between 2nd and 3rd track	116+702-116+770,3	platform	68,00	0,35	1,40			
VKBAS	between 3rd and 4th track	116+702-116+770,3	platform	68,00	0,35	1,40			
KULA	between 2nd and 3rd track	47+626 - 47+667	platform	41,00	0,25	1,52			
CRVENKA	between 1st and 2nd track	54+956 - 54+986	platform	30,00	0,15	1,56			
SIVAC	NONE								
Novi Sivac	NONE								
KLJAJIĆEVO	between 1st and 2nd track	75+417 - 75+456	platform	39,00	0,15	1,38			
Čonoplja	between 1st and 2nd track	79+692 - 79+722	platform	30,00	0,15	1,31			
	between 1st and 2nd track	73+417-73+477	platform	60,00	0,31	1,61			
	between 1st and 2nd track	73+584-73+612	arranged surface	28,00	0,05	1,50			
COMPOR	between 1st and 2nd track	73+673-73+823	arranged surface	150,00	0,05	1,50			
SOMBOR	between 2nd and 3rd track	73+417-73+477	platform	60,00	0,38	1,61			
	between 2nd and 3rd track	73+584-73+612	arranged surface	28,00	0,05	1,50			
	between 3rd and 4th track	73+584-73+701	arranged surface	117,00	0,05	1,50			
309. Petrovaradin – Beoč	in - traffic suspended								
310. Apatin Fabrika - Str	ilić – Sombor - traffic su	spended							
311. Bač – Karavukovo -t	raffic suspended								
KARAVUKOVO	NONE								
312. Bačka Palanka - Gaj	dobra								
GAJDOBRA	NONE								
313. (Brasina) - Open line	junction Donja Borina	- Zvornik Grad							
ZVORNIK GRAD	NONE								
314. Šid - Sremska Rača	Nova - state border - (Bi	jeljina)							
	between 1st and 2nd track	116+300-116+490	arranged surface	190,00	0,10	2,50			
ŠID	between 2nd and 3rd track	116+300-116+665	platform	365,00	0,45	1,60			
	between 3rd and 4th track	116+300-116+677	platform	377,00	0,45	1,60			
Adaševci	NONE								
MOROVIĆ	between 1st and 2nd track	12+360-12+390	platform	30,00	0,35	1,60			
VIŠNJIĆEVO	between 1st and 2nd track	19+633-19+655	platform	22,00	0,35	1,60			
Open line junction Rača	NONE	1	1	ı	1	1			
SREMSKA RAČA NOVA	between 1st and 2nd track	24+169-24+205	platform	36,00	0,35	1,60			



Service point				Dimensions			
	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
315. Kikinda - Banatsko	Aranđelovo- traffic susp	ended					
316. Sečanj - Jaša Tomi	ć - traffic suspended						
317. Zrenjanin Plant - V	ršac - Bela Crkva						
ZRENJANIN PLANT	NONE						
Lazarevo	NONE						
Zlatica	NONE						
Banatski Despotovac	NONE						
SUTJESKA	NONE						
SEČANJ	between 1st and 2nd track	32+780-32+810	platform	30,00	0,35	1,60	
SECANJ	between 2nd and 3rd track	32+810-32-840	platform	30,00	0,35	1,60	
BOKA	between 2nd and 3rd track	38+708-38+738	platform	30,00	0,35	1,60	
KONAK	between 2nd and 3rd track	46+988-47+018	platform	30,00	0,35	1,60	
Stari Lec	next to the line on the left	next to the line on the left NONE					
VELIKA GREDA	NONE						
BANATSKO PLANDIŠTE	NONE						
Margita	NONE						
Laudonovac	NONE						
VRŠAC	between 1st and 2nd track	82+807,5-82+902,5	platform	95,00	0,40	1,60	
VKSAC	between 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						
BELA CRKVA	between 1st and 2nd track	119+067-119+097	platform	30,00	0,40	1,60	
318. Pančevo Varoš - Pa	nčevo Vojlovica				1	ı	
	between 1st and 2nd track	18+105-18+345	platform	240,00	0,40	1,60	
PANČEVO VAROŠ	next to 1st track	18+131-18+223	station plateau	92,00	0,40	1,60	
	between 2nd and 3rd track	18+100-18+364	platform	264,00	0,40	1,60	
Pančevo Strelište	next to the line on the left	1+290-1+400	platform	110,00	0,40	1,60	
DANIČEVO VOJE OVJEA	between 3rd and 4th track	2+632-2+852	platform	220,00	0,40	1,60	
PANČEVO VOJLOVICA	next to 4th track	2+645-2+865	platform	220,00	0,40	1,60	

- 319. (Uljma) Open line junction A Open line junction B (Jasenovo)
- 320. Connecting line of Senta station: (Čoka) junction points 22 junction points 23 (Orom)
- 321. (Požarevac) Open line junction Sopot Požarevački Kostolac- traffic suspended
- 322. Markovac Resavica



		1 ::: 6		Dimensions			
Service point	Location	km position of the beginning and the end of platform	Platform/ arranged surface	Length (m)	Height (m)	Width (m)	
1	2	3	4	5	6	7	
	between 2nd and 3rd track	100+400-100+450	platform	50,00	0,40	1,60	
MARKOVAC	between 3rd and 4th track	100+350-100+452	platform	102,00	0,40	1,60	
	between 4th and 5th track	100+350-100+448	platform	92,00	0,40	1,60	
323. Ovča - Padinska Ske	la- traffic suspended						
324. Metohija - Prizren *							
SHUNTING LINES						-	
401. Bečej – Vrbas - traff	ic suspended						
402. Vršac - Vršac Vašar	ište						
VRŠAC	between 1st and 2nd track	82+807,5-82+902,5	platform	95,00	0,40	1,60	
VRSAC	between 2nd and 3rd track	82+807,5-82+902,5	platform	95,00	0,40	1,60	
403. Alibunar – Seleuš - t	raffic suspended						
404. Vladimirovac – Kovi	n - traffic suspended						
405. Čoka - Novi Kneževa	nc- traffic suspended						
406. Kikinda - Metanolsk	o sirćetni kompleks (km	6+413)					
WWW ID A	next to 1st track	160+030-160+166	platform	136,00	0,19	3,30-4,40	
KIKINDA	between 1st and 2nd track	160+064-160+190	arranged surface	126,00	0,00	1,50	
407. Bogojevo – Dunav ol	pala - traffic suspended						
408. (Sombor) - Open line	e junction Strilić - Bački	breg - traffic sus	pended				
409. Sombor – Riđica - tr	affic suspended						
410. (Višnjićevo) - Open l	ine junction Rača - Sren	ıska Rača - traffi	c suspended				
411. Paraćin - Stari Popo	vac - traffic suspended						
412. Surčin - Jakovo Beči	nen						

## \* not intended for handling of passengers

NONE

413. (Belgrade spoljna) - km 2+290 junction points – Sugar factory- traffic suspended



SURČIN

<sup>\*\*</sup> 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 železnice Srbije"

**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:

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]
	Batajnica	20+700	Nova Pazova	Main: Belgrade - Stara Pazova- Šid - state border- (Tovarnik)	21+410	710
	Ovča	12+555 / 12+653	Pančevo glavna	Main: Belgrade Center – Pančevo Gl Vršac - state border- (Stamora Moravita)	13+550 / 13+647	995
Ä	Jajince	10+988	Beli Potok (Mala Krsna)	Main: (Belgrade) - Rakovica - Jajinci – Mala Krsna – Velika Plana	12+045	1057
BELGRADE	Resnik	14+059	Pinosava (Mladenovac)	Main: Belgrade - Mladenovac - Niš - Preševo- state border- (Tabanovce)	14+848	789
BEL	Resnik	0+000	Bela Reka (Valjevo)	Main: (Belgrade) - Resnik - Požega - Vrbnica - state border- (Bijepo Polje)	0+825	825
	Naumovićevo	167+180	Žednik (Vrbas)	Main: (Belgrade) - Stara Pazova- Novi Sad - Subotica - state border- (Kelebia)	166+376	804
	Palić	7+657	Bački vinogradi (Horgoš)	Regional: Subotica - Horgoš - state border- (Roszke)	8+549	892
	Subotica	76+685	Orom (Senta)	Regional: Banatsko Miloševo - Senta - Subotica	75+016	1669
TICA	Subotica freight	75+861	Orom (Senta)	Regional: Banatsko Miloševo - Senta - Subotica	75+016	845
SUBOTICA	Šebešić	123+761	Tavankut (Sombor)	Main: Subotica - Bogojevo - state border- (Erdut)	122+915	846
	Sajlovo junction and junction point	3+595	Futog (Bogojevo)	Regional: Novi Sad - Odžaci - Bogojevo	3+890	295
	Sajlovo junction and junction point	81+635	Kisač (Vrbas)	Main: (Belgrade) - Stara Pazova- Novi Sad - Subotica - state border- (Kelebia)	82+007	372
AD (	Sajlovo junction and junction point	3+595	Rimski Šančevi (Orlovat)	Regional: (Novi Sad) - Sajlovo junction - Rimski Šančevi – Orlovat Stop	3+959	364
NOVI SAD	Petrovaradin	71+897	Sremski Karlovci (Inđija)	Main: (Belgrade) - Stara Pazova- Novi Sad - Subotica - state border- (Kelebia)	71+109	788
	Lapovo varoš	106+302	Markovac (Velika Plana)	Main: Belgrade - Mladenovac - Niš - Preševo- state border- (Tabanovce)	105+710	592
000	Lapovo	109+597	Bagrdan (Stalać)	Main: Belgrade - Mladenovac - Niš - Preševo- state border- (Tabanovce)	110+540	943
LAPOVO	Batočina	3+405	Badnjevac (Kragujevac)	Main: Lapovo - Kraljevo - Lešak - Kosovo Polje - Đeneral Janković - state border- (Volkovo)	4+419	1014
	Trupale	234+939	Grejač (Stalać)	Main: Belgrade - Mladenovac - Niš - Preševo- state border- (Tabanovce)	233+934	1005
	Crveni Krst	0+000	Matejevac (Zaječar)	Regional: Crveni krst - Zaječar – Prahovo port	(0+957=3+455) 3+736	1238
	Međurovo	249+462	Doljevac	Main: Belgrade - Mladenovac - Niš - Preševo- state border- (Tabanovce)	250+323	861
NIŠ	Ćele Kula	5+461	Niška Banja (Pirot)	Main: Niš - Dimitrovgrad - state border- (Dragoman)	6+320	859
	Pančevo glavna	16+069	Ovča (Beograd)	Main: Belgrade Center – Pančevo Gl Vršac - state border- (Stamora Moravita)	14+878	1191
PANČEVO	Pančevo varoš	18+206	Banatsko Novo Selo (Vršac)	Main: Belgrade Center – Pančevo Gl Vršac - state border- (Stamora Moravita)	19+242	1036
PAN	Open line junction 2a	17+659	Jabuka (Zrenjanin)	Regional: Pančevo Gl Zrenjanin - Kikinda - state border- (Jimbolia)	18+160	501

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