

APPROVED
by the Executive Board of the
Joint Stock Company LatRailNet
in a meeting held on the 30 June 2017,
min. no. JALP-1.2/31-2017
in Riga

REGULATIONS

30 June 2017

No. JALP-7.6/01-2017

The Charging Scheme

Issued under Article 11(1) and
Article 13.² of the Railway Law

I. General issues

1. These regulations (hereinafter referred to as the Scheme) lay down the procedure how the charging body sets charges for the minimum access package mentioned in Article 12.¹ of the Railway Law and for the access to the public-use railway infrastructure (hereinafter referred to as the railway infrastructure) connecting service facilities (hereinafter referred to as the infrastructure charges) according to the limits of the provided service volume reported in the actual edition of the railway infrastructure network statement.

(Amended by regulations of 30.09.2019.)

2. Following terms are used in the Scheme:

2.1. **activity** – one of several operations or the only operation that is necessary in order to provide service groups referred to in Paragraph 6 of the Scheme;

2.2. **assets register** – a register, developed and maintained by the infrastructure manager according to the fourth part of Article 10.¹ of the Railway Law, of its assets and the assets it is responsible for;

(Amended by regulations of 29.04.2019.)

2.3. **costs of performing the essential functions** – the amount of funding that is necessary in order to provide the essential functions (decision-making on capacity and train path allocation, including both the definition and the assessment of availability and the assignment of individual train paths; and decision-making on infrastructure charging, including determination and collection of the infrastructure charges) required by the charging body, taking into account the general financial and personnel management principles of the infrastructure manager's concern;

2.4. **performance indicators** – quantitative indicators that can be used in order to plan, determine and measure activity performance on the basis of efficient, transparent and non-discriminatory principles;

2.5. **contractual agreement** – an agreement concluded between the Ministry of Transport and the infrastructure manager in accordance with Article 10.² of the Railway Law;

2.5.¹ **Economic European Area (hereinafter referred to as EEA)** – is a free trade area consisting of the European Union countries and three European Trade Association countries (Iceland, Liechtenstein and Norway), that are formed the internal market with uniform organization rules;

(Amended by regulations of 30.09.2019.)

2.6. **railroad yard** – a station where wagons or other rolling stock are assembled and coupled with one or more means of traction, and are assigned a train number;

2.7. **infrastructure charge differentiation tools** – the differentiation tools referred to in the fifth, sixth, ninth, tenth, eleventh, fourteenth and fifteenth chapters of this Scheme which provide a different charging level under different market conditions, depending on the railway infrastructure service quality, utilization rate and other features;

(Amended by regulations of 29.04.2019.)

2.8. **infrastructure manager** – the manager of the railway infrastructure – State Joint Company “Latvijas dzelzceļš” (hereinafter referred to also as LDZ);

(Amended by regulations of 30.09.2019.)

2.9. **through rate offer** – transport services provided under uniform payment conditions throughout the respective logistic chain;

(Amended by regulations of 29.04.2019.)

2.9.¹ **method of cost allocation** – the method developed by the infrastructure manager for allocating costs to various service categories provided to railway undertakings according to the provisions of the fifth part of Article 10.¹ of the Railway Law;

(Amended by regulations of 29.04.2019.)

2.10. **cost element** – a set of homogeneous costs that describe the impact of the production factor on full costs, such as payroll and social contributions, materials, fuel, electricity, other costs;

2.11. **cost group** – the costs of providing an activity;

2.12. **cost driver** – a factor linking cost elements with services based on a causal relationship (number of services provided or consumption of resources, etc.);

2.13. **pick-up train** – a train dispatched from railroad yards to intermediate stations or to the sidings of nearby sections; or accepted to railroad yards from intermediate stations or from sidings of nearby sections;

2.14. **capacity allocation plan** – a document approved by the capacity allocation body that reflects its decision on the allocation of railway infrastructure capacity, indicating the number of

train paths assigned to the applicants, as well as the estimated train departure or arrival time, if such are indicated in the application;

2.15. **capacity allocation body** – the performer of the essential functions of the infrastructure manager declared in the railway infrastructure network statement, that in accordance with the Railway Law is responsible for the allocation of infrastructure capacity and the assignment of the train paths;

2.16. **charging body** – the performer of the essential functions of the infrastructure manager declared in the railway infrastructure network statement, that in accordance with the Railway Law is responsible for the infrastructure charging;

2.16.¹ **irregular traffic** – transportation according to special schedule where train paths are assigned within the process of operational capacity allocation;

(Amended by regulations of 30.09.2019.)

2.17. **service groups** – the volume of train services specified by the charging body, depending on the train service impact to the railway infrastructure when determining the average direct unit cost¹;

2.18. **current values** – the value of assets in the primary accounting system;

2.19. **reference period** – a calendar period equivalent to the length of the programming period prior to the programming period where the infrastructure manager has access to transparent, robust and objectively measurable data;

2.20. **full costs** – the part of total infrastructure manager's costs that is attributed to the minimum access package and to the access to the railway infrastructure connecting service facilities in accordance with the method of cost allocation;

(Amended by regulations of 29.04.2019.)

2.21. **programming period** – a period that is analyzed when making a decision on infrastructure charges;

2.22. **primary accounting system** – the infrastructure manager's accounting system and related management accounting systems;

2.23. **Implementing regulation** – Commission implementing regulation (EU) 2015/909 of 12 June 2015 on the modalities for the calculation of the cost that is directly incurred as a result of operating the train service;

2.24. **regulatory body** – the authority that carries out regulatory functions in the field of railways in accordance with the Railway Law – the State Railway Administration;

2.24.¹ **regular traffic** – transportation according to the schedule in agreement with the annual working timetable;

(Amended by regulations of 30.09.2019.)

2.24.² **reserved train path** – a train path with set regularity of train movements and train

¹ hereinafter referred in accordance to implementing Regulation

movement schedule for which the applicant has made a railway infrastructure capacity assurance payment;

(Amended by regulations of 30.09.2019.)

2.25. collecting trains – trains dispatched from railroad yards to intermediate stations to forward and collect loaded and empty wagons;

2.25.¹ international 1520 traffic – train traffic services related to freight transportation from or to the third countries where the railway network gauge is 1520 millimeters, in accordance with the exception provided by the ninth part of Article 11.¹ of the Railway Law;

(Amended by regulations of 29.04.2019.)

2.25.² network performance scheme – JSC LatRailNet regulations No. JALP-7.6/03-2017 “The public-use railway infrastructure network performance scheme” of 30 June 2017;

(Amended by regulations of 29.04.2019.)

2.26. processing station – a station where wagons are accepted to the railway network or removed from the railway network;

2.27. historical values – asset values determined on the basis of the amount paid by the infrastructure manager and recorded in the primary accounting system at the time of acquisition of the assets. Upon a reduction of liability (if all or part of the liability of the infrastructure manager is taken over by another entity), the infrastructure manager has to reduce the value of the assets and the corresponding direct costs on a network-wide basis accordingly;

2.28. overhead costs – costs that cannot be attributed to a specific activity, based on the principles of causality.

3. The Scheme is applied to the infrastructure manager, applicants, all railway undertakings and performers of individual technological processes (upon an assignment by a railway undertaking, the infrastructure manager, an operator of a service facility, a consignor or consignee) that are granted the rights to access the railway infrastructure in accordance with Article 5.¹ of the Railway Law.

4. The charging body sets the infrastructure charges in accordance with the direct cost of the service groups within the meaning of the Implementing regulations, levies mark-ups, if the market can bear this, and provides differentiation so that different railway undertakings providing comparable services in similar market segments are subjected to equivalent and non-discriminatory infrastructure charges.

5. The charging body determines the direct costs² without prejudice to the provisions on the balance between income and expenditure of the infrastructure manager as set forth in Article 9(4) of the Railway Law.

II. Assumptions for calculating infrastructure charges

6. The infrastructure manager, in accordance with the method of cost allocation, from its total costs allocates the full costs necessary to ensure common access rights throughout the railway infrastructure to the minimum access package and to the access to railway infrastructure connecting service facilities (hereinafter marked as **PI**)³. The infrastructure manager allocates PI to the following service groups _{gr} using the cost drivers referred to in Annex 1:

6.1. **pas** – minimum access package for providing passenger traffic which includes the railway infrastructure that provides the acceptance, handling and dispatching of passenger trains;

6.2. **krav** – minimum access package for providing freight traffic which includes the railway infrastructure that provides the acceptance, handling and dispatching of freight trains, as well as an access to the railway infrastructure connecting service facilities where freight trains are assembled or disassembled and where rolling stock is transferred for loading, unloading or to the related sidings.⁴

(Amended by regulations of 29.04.2019.)

7. If the charging body finds and justifies to the regulatory body that the values or parameters referred to in Article 5(2) of the Implementing regulation are significantly different in different parts of the infrastructure manager's railway network, the infrastructure manager provides the information for the calculation of the infrastructure charges referred to in Paragraph 16 for each such part of the railway network separately and indicates drivers for their allocation or alignment.

8. For the service groups referred to in Paragraph 6 of the Scheme, the infrastructure manager allocates the costs of railway infrastructure maintenance⁵ and renewal⁶ in accordance with their functional significance in compliance with the Railway Law, the Railway Technical Operation Rules, the indicative railway infrastructure development Strategy approved by the Cabinet of

² hereinafter referred in accordance to implementing Regulation

³ the method for designations used in this Scheme is provided in Annex 7

⁴ payment conditions for the access to the railway infrastructure connecting service facilities where train suspension and wagon collection takes place according to the railway network performance scheme

⁵ hereinafter „maintenance” means a technological process that the infrastructure manager carries out in order to maintain the condition and capability of the existing infrastructure. The concept is equal to “*maintenance*” used in the Railway Law and in the Commission Implementing Regulation (EU) 2015/1100 of July 7, 2015 on the reporting obligations of the Member States in the framework of rail market monitoring.

⁶ hereinafter „renewal” means a technological process on a major substitution work on the existing infrastructure which does not change its overall performance. Renewal costs are recorded in full in the primary accounting system when the project is delivered and are written off gradually.

Ministers, the infrastructure manager's business plan (including investment and financial programs) and contractual agreement conditions.

9. If specified in the contractual agreement, the charging body either applies the incentives for the infrastructure manager to reduce the costs of railway infrastructure maintenance and renewal, as well as the level of infrastructure charges, with due regard to safety and to maintaining and improving the quality of the infrastructure service or applies the costs of efficient service provision for the purposes of calculation.

10. The charging body for charging purposes uses documentation issued by the infrastructure manager in accordance with the second part of Article 5 of the Railway Law regarding the use of railway infrastructure which is publicly available on the infrastructure manager's website on the internet at the time of charging.

(Amended by regulations of 29.04.2019.)

11. The charging body for charging purposes uses the infrastructure manager's asset register accompanied by the details of expenditure on renewal and upgrading of the railway infrastructure to assess the financing necessary to repair or replace the assets included therein.

12. The infrastructure manager, in accordance with the requirements of the Implementing regulation, provides information on assets in historic values or, where such values are not available or where current values are lower, in current values.

13. Only the costs made or forecasted by the infrastructure manager can be used for the calculation of the infrastructure charges. Costs or asset values that are financed by the state, a municipality, a foreign country, the European Union, other international organizations or institutions, are excluded from the calculation. The infrastructure manager may adjust normalization coefficients indicated in Annex 2 to relate the expenses of the reference period to the programming period.

14. The infrastructure manager can provide estimated, current or replacement values of costs for the infrastructure charging needs if they can be transparently, robustly and objectively measured in accordance with the qualitative parameters referred to in Paragraph 21 of the Scheme, and the following planning assumptions are respected:

14.1. the seasonal, technological and cyclical fluctuations of the programmed performance indicators;

14.2. the direct costs of maintenance and renewal on a network-wide basis correspond to the qualitative parameters set for the railway infrastructure in the contractual agreement;

14.3. the costs of risk management of activities that are not related to operating the train service (changes in external temperature above or below the forecasted values; cracks and defects in materials; natural corrosion, destruction of constructive materials or degradation by gravity), of

unforecasted impacts of natural processes (earthquakes, landslides, water leaks, geological fractures, windstorms, snowstorms etc.), as well as of human factors (construction and operating staff errors, third parties' intentional or unintentional activity, etc.) are excluded from the composition of the full costs;

(Amended by regulations of 29.04.2019.)

14.4. no non-related to the infrastructure charges costs are incurred as a result of maintenance or renewal to the public, railway undertakings, applicants or railway infrastructure final consumers;

14.5. the stages of the railway infrastructure object lifecycle (postcreation, postmodernization, supposed for closure, etc.) are observed.

15. Efficient, transparent and non-discriminatory principles are adhered to if after consulting the applicants and the infrastructure manager, charging body, within the time limit indicated in the Scheme, develops and publishes on its website on the internet the quantitative criteria that can be assessed, predicted, controlled and influenced by the persons to whom they are applied to and which are used to bring the Scheme closer to the optimal use of the railway infrastructure in accordance with the legislation referred to in Paragraph 8 of the Scheme.

III. Information for calculating the infrastructure charges

16. The charging body, in order to decide on the infrastructure charges for a programming period, requires from the infrastructure manager information as follows:

16.1. a detailed description of the cost allocation method;

(Amended by regulations of 29.04.2019.)

16.2. actual full railway infrastructure maintenance costs in the reference period, following the structure of the cost groups referred to in Annex 1 of the Scheme;

16.3. the forecasted full railway infrastructure maintenance costs in the programming period, following the structure of the cost groups referred to in Annex 1 to the Scheme and indicating the payments or allocated funds for the infrastructure services, for maintenance and renewal, as well as for dealing with existing maintenance and renewal backlogs foreseen in the contractual agreement (if any);

(Amended by regulations of 29.04.2019.)

16.4. costs that according to the Implementing regulation are considered ineligible (subject to the explanations set forth in Paragraph 17 of the Scheme) within the costs referred to in Sub-paragraphs 16.2, 16.3. and 16.8. of the Scheme, that are allocated to the cost groups using cost drivers referred to in Annex 1;

16.5. the analysis created by the infrastructure manager for the actual (or assessed, if historical data is not available) maintenance and renewal activities referred to in Sub-paragraph 17(1) of the Scheme and their costs at railway sections where the train movement has not taken place for at

least two years. The information about attributable part of these activities to traffic if the volume of these activities changes partly, depending on the volume of operating trains;

16.6. the costs of backlogged maintenance (provided by the contractual agreement) of assets which will be phased out of use and, therefore, trigger different financial flows in the programming period, as well as the amount of previous maintenance and renewal backlog, indicating its reasons;

16.7. the terms of the contractual agreement, if they concern this Scheme, the amount of eligible costs or incentives to reduce the costs or the infrastructure charge level;

16.8. detailed information on the costs of renewal of the railway infrastructure in the programming and reference periods included in the infrastructure manager's assets register as well as the calculation of the value of assets, as referred to in Paragraph 12 of the Scheme, if it is necessary to ensure compliance with the Implementation regulation;

16.9. the forecasted performance indicators provided by the Scheme for the programming period, noting the differences (if any) compared to the volumes agreed in the contractual agreement, as well as actual performance indicators in the reference period;

16.10. the information necessary to assess the relevance and level of the markups;

16.11. the information necessary for the calculation of the infrastructure manager's profit margin:

16.11.1. **r_a** – actual infrastructure manager's average weighted long-term loan rate for the reference period;

(Amended by regulations of 29.04.2019.)

16.11.2. **E** – the value of the equity at the end of the reference period;

(Amended by regulations of 29.04.2019.)

16.11.3. **D** – the value of the borrowed capital at the end of the reference period;

(Amended by regulations of 29.04.2019.)

16.12. a capacity-enhancement plan, if any;

16.13. the distribution of **PI_{gr}** values by cost elements in the programming and reference periods as well as the explanation of the normalization coefficients used and events that create or explain deviations between the information provided for the programming and reference periods;

16.14. the payroll directly related to the provision of a train service on a specific section of the railway infrastructure if the applicant in the programming period requests it outside the working hours stated in the contractual agreement;

16.15. the information that is necessary for the charging body in case of the application of charge differentiation tools:

16.15.1. the information on the impact of the application of a charge differentiation tool on the performance indicators and infrastructure manager's costs in the programming period or in the period specified by the charging body;

16.15.2. the information on the planned changes in the performance of railway infrastructure in the programming period or in the period specified by the charging body, when it is planned to apply a charge differentiation tool;

16.15.3. other additional information that may be relevant for decision-making on the application of a specific charge differentiation tool;

16.16. other additional information and documents explaining and justifying the information listed in Paragraph 16 of the Scheme and which is required by the charging body for decision-making on infrastructure charges for the programming period.

16.17. the information and documents explaining the information about the limits of the service volume in the programming period included in the actual edition of the railway infrastructure network statement or explaining the deviations from it.

(Amended by regulations of 30.09.2019.)

17. When determining the ineligible costs referred to in Sub-paragraph 16(4) of the Scheme, it should be assumed that:

17.1. the costs which the infrastructure manager must bear even in the absence of train movements (including those referred to in parts (h), (k), (l), (n) and (o) of Article 4(1) of the Implementing regulation) are maintenance and renewal costs on a network-wide basis according to their actual (or forecasted, if historical data is not available) amount in sections of the railway infrastructure where the train movement has not taken place for at least two years⁷;

17.2. the costs that do not relate to the payments made by the infrastructure manager are the costs covered by financing that the infrastructure manager does not have to repay (European Union funds, state co-financing, donations, etc.);

17.3. the costs or cost centers that are not directly linked to the provision of the minimum access package or to access to the railway infrastructure connecting service facilities are the costs incurred by the infrastructure manager providing other services and providing other business activities;

17.4. the costs of land acquisition are the costs of land acquisition, as well as the payments of taxes and levies for the land owned;

17.5. the costs of fixed asset acquisition are determined in accordance with the assets accounting policy of the infrastructure manager;

17.6. the costs of fixed asset selling include the write-down of the residual value of fixed assets, as well as the costs incurred in the sale of fixed assets, such as valuation services, the supply of sold fixed assets to the buyer;

17.7. the costs of fixed asset dismantling are the costs of dismantling the railway infrastructure elements;

17.8. the recultivation costs are the costs of land recultivating after the dismantling of the railway infrastructure elements;

⁷ information on the train movement as referred to in this paragraph is derived from the capacity allocation plan. It is considered that the train movement at the railway infrastructure line no longer occurs if railway undertakings aren't using the allocated railway infrastructure capacity at least during the current period (year) of capacity allocation, nor have applied for the next period.

17.9. the renting costs are lease payments for the railway infrastructure objects not owned by the infrastructure manager that are managed and used by the infrastructure manager to provide the services referred to in Paragraph 6 of the Scheme, except maintenance and renewal costs for the leased railway infrastructure objects. The costs of renting machinery and tools related to the maintenance and renewal of the railway infrastructure are attributed to the relevant activities;

(Amended by regulations of 29.04.2019.)

17.10. the network-wide overhead costs are administrative costs of the infrastructure manager, which according to the method for cost allocation are attributed to the overhead costs of the services referred to in Paragraph 6 of the Scheme;

(Amended by regulations of 29.04.2019.)

17.11. the financing costs are actual costs incurred by the infrastructure manager to attract funds (interest payments), as well as costs associated with fluctuations of exchange rates;

17.12. the costs related to technological progress or obsolescence are the value of the fixed assets written-down due to obsolescence as a result of depreciation or redemption;

17.13. the costs of intangible assets are costs of using licenses and trademarks;

17.14. the costs of information, non-track side located communication equipment or telecommunication equipment are costs of information technology and data transmission associated with the maintenance and renewal of the railway infrastructure and with the train movement;

17.15. the costs related to individual incidences of force majeure, accidents and service disruptions, among other are costs associated with the payment of a penalty and the liquidation of accidents;

17.16. the depreciation which is not determined on the basis of real wear and tear of the infrastructure due to the train service operation is the depreciation of railway infrastructure elements calculated in or outside of the accounting, considering the principle that the fixed asset depreciates irrespective to the physical degradation caused by train traffic. The depreciation of fixed assets that are not railway infrastructure elements but are related to the maintenance and renewal of the railway infrastructure are attributed to the relevant activities.

18. The charging body, in order to decide on the infrastructure charges for a programming period infrastructure charge, requires information from the applicants as follows:

18.1. the information about the impact of the railway infrastructure management principles (provided by the contractual agreement) and the capacity-enhancement plan on applicants' costs, if the capacity allocation body has reported that a part of infrastructure is congested, and a relevant capacity-enhancement plan has been developed;

(Amended by regulations of 29.04.2019.)

18.2. the completed questionnaires for evaluation of market conditions of transport services and evaluation of the performance indicators in the programming period;

18.3. the proposals for specific provisions (if railway undertakings provide services under public or local government contracts in accordance with the Railway Law) to ensure the benefits of the services to the final consumer;

18.4. the information that is necessary for the application of charge differentiation tools and assessment of their impact on the applicant's performance indicators in the programming period or in the period specified by the charging body;

18.5. other additional information and documents explaining and justifying the information listed in Paragraph 18 of the Scheme and which is required by the charging body for decision-making on infrastructure charges for the programming period.

19. The charging body, in order to decide on the infrastructure charges for a programming period, may request additional information from independent experts to assess transport service market conditions or to verify the compliance of the information with the parameters referred to in Paragraph 21 of the Scheme.

20. The charging body when requesting information:

20.1. observes the principle of equality – requires homogeneous data in the same way from all data holders;

20.2. verifies the relevance of the requested data with the information referred to in Paragraph 8;

20.3. provides data comparability with other time periods (including data seasonal and other fluctuations) and industries;

20.4. gives a reasonable time for data preparation and, if necessary, for clarifying.

21. The charging body determines whether the information provided is transparent, robust, and objective, regarding the following parameters:

21.1. completeness of data (transparency) – the amount of data submitted corresponds to the requested amount, the data structure corresponds to the requested structure, deviations are explained;

21.2. data reliability and consistency (robustness) – the data submitted interact with each other and with information held by the charging body;

21.3. data quality (objectiveness) – the data submitted correspond to the criteria for the optimal use of the railway infrastructure in accordance with the provisions of Paragraph 8 of the Scheme.

22. If the submitted data does not comply with the provisions of Paragraph 21 of the Scheme, the charging body requires the submitter of the relevant data to clarify the information. If the repeatedly requested information has not been submitted within the deadline set by the charging

body or not submitted in accordance with Paragraph 21 of the Scheme, the charging body notifies the regulatory body for taking a decision.

22.¹ The charging body determines the charges for performing the essential functions of the infrastructure manager and attributes these charges to the service of performing the essential functions provided for railway undertakings and applicants in accordance with the principles provided by Annex 8.

(Amended by regulations of 29.04.2019.)

22.² If the charging body, according to the information mentioned in Subparagraph 16.17, has taken a decision on the service volume that is different from the limits of the service volume set in the actual edition of the railway infrastructure network statement, it provides information about the service volume limits included in the infrastructure charges and the reasons for their differences in its decision on infrastructure charging.

(Amended by regulations of 30.09.2019.)

IV. Calculation of direct costs

23. The charging body calculates average direct unit costs for freight traffic **TI_{param krav}** as a combination of four parameters:

23.1. **TI_{ceļ uztur krav}** – the average direct maintenance and train operating costs of the railway infrastructure providing the minimum access package for one train km travelled in the programming period within freight traffic:

$$\mathbf{TI_{ceļ\ uztur\ krav} = KTI_{ceļ\ uztur\ krav} / DR_{ceļ\ uztur\ krav},\ where}$$

KTI_{ceļ uztur krav} – the network-wide direct maintenance and train operating costs of the railway infrastructure providing the minimum access package in the programming period within freight traffic;

DR_{ceļ uztur krav} – the performance indicator of the number of train km in the programming period within freight traffic.

23.2. **TI_{mez uztur krav}** – the average direct maintenance and train operating costs of the railway infrastructure providing access to the railway infrastructure connecting service facilities for providing the railway transportation of one wagon within freight traffic:

$$\mathbf{TI_{mez\ uztur\ krav} = KTI_{mez\ uztur\ krav} / DR_{mez\ uztur\ krav},\ where}$$

KTI_{mez uztur krav} – the network-wide direct maintenance and train operating costs of the railway infrastructure providing access to the railway infrastructure

connecting service facilities in the programming period within freight traffic;

DR *mez uztur krav* – the performance indicator of the number of wagons used in railway transportation in the programming period within freight traffic, including:

- 1) within international 1520 traffic: the number of wagons moved through stations Kārsava, Zilupe and Indra and accepted in the final processing station in transit traffic;
- 2) within domestic railway traffic in the territory of the Republic of Latvia: the total number of wagons registered in/as parts of collecting and pick-up train sets;
- 3) within the freight transportation from and to European Union countries crossing the territory of the Republic of Latvia: the number of wagons accepted in the final processing station in transit traffic;

23.3. **TI** *atj krav* – the average direct renewal costs of the railway infrastructure for one gross tonne km travelled in the programming period within freight traffic:

$$\mathbf{TI}_{atj\text{ krav}} = \mathbf{KTI}_{atj\text{ krav}} / \mathbf{DR}_{atj\text{ krav}}, \text{ where}$$

KTI *atj krav* – the network-wide direct renewal costs of the railway infrastructure in the programming period within freight traffic;

DR *atj krav* – the performance indicator of the number of gross tonne km in the programming period within freight traffic.

23.4. **TI** *bfv krav* – the direct costs of performing the essential functions of the infrastructure manager for one assigned freight train path within freight traffic.

(Amended by regulations of 29.04.2019.)

24. The charging body calculates the average direct unit costs for passenger traffic as a combination of four parameters:

24.1. **TI** *ceļ uztur pas* – the average direct maintenance and train operating costs of the railway infrastructure providing the minimum access package for one train km travelled in the programming period within passenger traffic:

$$\mathbf{TI}_{ceļ\text{ uztur pas}} = \mathbf{KTI}_{ceļ\text{ uztur pas}} / \mathbf{DR}_{ceļ\text{ uztur pas}}, \text{ where}$$

KTI *ceļ uztur pas* – the network-wide direct maintenance and train operating costs of the

railway infrastructure providing the minimum access package in the programming period within passenger traffic⁸;

DR _{ceļ uztur pas} – the performance indicator of the number of train km in the programming period within passenger traffic;

24.2. **TI** _{atj pas} – the average direct renewal costs of the railway infrastructure for one gross tonne km travelled in the programming period within passenger traffic:

$$\mathbf{TI}_{\text{atj pas}} = \mathbf{KTI}_{\text{atj pas}} / \mathbf{DR}_{\text{atj pas}}, \text{ where}$$

KTI _{atj pas} – the network-wide direct renewal costs of the railway infrastructure in the programming period within passenger traffic;

DR _{atj pas} – the performance indicator of the number of gross tonne km in the programming period within passenger traffic;

24.3. **TI** _{bfv pas} – the direct costs of performing the essential functions of the infrastructure manager for one assigned freight train path within passenger traffic;

24.4. **TI** _{elektr pas} – the average direct operating, maintenance and renewal costs of traction electrical supply equipment of the railway infrastructure for one train km travelled in the programming period within passenger traffic (calculated only for passenger trains that use electric traction);

$$\mathbf{TI}_{\text{elektr pas}} = \mathbf{KTI}_{\text{elektr pas}} / \mathbf{DR}_{\text{elektr pas}}, \text{ where}$$

KTI _{elektr pas} – the network-wide direct operating, maintenance and renewal costs of traction electrical supply equipment of the railway infrastructure in the programming period within passenger traffic;

DR _{elektr pas} – the performance indicator of the train km in transportation with trains that use electric traction in the programming period within passenger traffic.

(Amended by regulations of 29.04.2019.)

25. The network-wide direct costs of the railway infrastructure **KTI** _{gr} are calculated as the difference between the full costs **PI** _{param gr} of each parameter **param** of service groups **gr** referred to in Paragraph 6 of the Scheme and the costs **NI** _{param gr} included in each **PI** _{param gr} cost parameter, which according to the Implementing regulation are considered ineligible:

$$\mathbf{KTI}_{\text{ceļ uztur gr}} = \mathbf{PI}_{\text{ceļ uztur gr}} - \mathbf{NI}_{\text{ceļ uztur gr}};$$

⁸ in the value of **KTI** _{ceļ uztur pas} including costs that are incurred by the passenger traffic in the sections of the railway lines where the access connecting infrastructure to the service facilities is provided

$$\mathbf{KTI}_{\text{mez uztur krav}} = \mathbf{PI}_{\text{mez uztur krav}} - \mathbf{NI}_{\text{mez uztur krav}};$$

$$\mathbf{KTI}_{\text{atj gr}} = \mathbf{PI}_{\text{atj gr}} - \mathbf{NI}_{\text{atj gr}};$$

$$\mathbf{KTI}_{\text{elektr pas}} = \mathbf{PI}_{\text{elektr pas}} - \mathbf{NI}_{\text{elektr pas}}.$$

(Amended by regulations of 29.04.2019.)

26. The direct costs of performing the essential functions of the infrastructure manager $\mathbf{TI}_{\text{bfv gr}}$ are calculated as the increase of work intensity in order to assign an unplanned or unforeseen additional train path, and they are expressed as a percentage (not more than 200% in total) of the rate of pay and social insurance additions of particular employees of the capacity allocation body, according to the report on overtime work amount submitted by the capacity allocation body and observing the restrictions provided by the third part of Article 131 of the Railway Law:

$$\mathbf{TI}_{\text{bfv gr}} = \Delta \mathbf{PI}_{\text{bfv gr}} / \Delta \mathbf{DR}_{\text{bfv gr}}.$$

(Amended by regulations of 29.04.2019.)

V. Additional charge which reflects the scarcity of railway infrastructure capacity

27. The charging body decides to add a charge which reflects the scarcity of railway infrastructure capacity to the value $\mathbf{M}_{\text{param gr s}}$, in a specified part of the railway infrastructure during congestion periods by setting the scarcity charge $\mathbf{M}_{\text{pārslodz param gr s}}$ (hereinafter – scarcity charge) if:

27.1. in the case referred to in Article 27(9) of the Railway Law, the capacity allocation body has notified the known applicants, railway undertakings and the infrastructure manager that over the course of coordination and consultation with applicants it has not been possible to meet the railway infrastructure capacity requests adequately;

27.2. a railway infrastructure capacity-enhancement plan is produced and the activities covered therein are executed or an authorization for the application of scarcity charges is received from the regulatory body in the case when the railway infrastructure capacity-enhancement plan cannot be executed due to the reasons that cannot be affected or the alternatives available are not economically or financially viable;

27.3. the full maintenance and renewal costs are reduced by the cost values incurred by the infrastructure manager upon its proposal to change the train path in a planned or other way. This condition does not apply if the infrastructure manager has reimbursed these additional costs for the railway undertakings or the train path change has resulted from coordination in accordance with regulations of the Cabinet of Ministers No. 472 of July 15, 2016 on the Capacity Allocation Regulations.

28. The scarcity charge does not apply if the capacity allocation body overcomes the reasons of the railway infrastructure congestion during the train path assignment process in accordance

with the scheme for the allocation of the public-use railway infrastructure capacity issued by the capacity allocation body.

29. The scarcity charge $M_{\text{pārsłodz param gr s}}$ for a particular part of the railway infrastructure during the period of congestion is determined in accordance with the following formula:

$$M_{\text{pārsłodz param gr s}} = M_{\text{param gr s}} + (\Delta PI_{\text{pārsłodz param gr}} / DR_{\text{pārsłodz param gr}}), \text{ where}$$

- $M_{\text{pārsłodz param gr s}}$ – the scarcity charge for a particular part of the railway infrastructure for a specific charging parameter within a specific market segment of a relevant service group over the congestion period;
- $M_{\text{param gr s}}$ – the value of the charge for a specific charging parameter within a specific market segment of a relevant service group;
- $\Delta PI_{\text{pārsłodz param gr}}$ – changes in the full costs in the relevant programming period caused by the maintenance costs associated with the capacity-enhancement plan and the costs of attracting borrowed capital for long-term investments foreseen by the infrastructure manager;
- $DR_{\text{pārsłodz param gr}}$ – the performance indicator for evaluating a particular cost parameter of a relevant service group for a particular part of the railway infrastructure over a congestion period.

(Amended by regulations of 29.04.2019.)

VI. Charge differentiation due to the environmental effects caused by the operation of the train

30. The value of the charge for a specific charging parameter within a specific market segment of a relevant service group $M_{\text{param gr s}}$ can be changed by setting the environmental charge $M_{\text{vide param gr s}}$ in order to take into account the costs of the environmental impact of train traffic. The decision on the environmental charge is made in accordance with user-oriented performance targets in environmental protection foreseen in the contractual agreement, the decision of the Cabinet of Ministers (referred to in Article 11(11) of the Railway Law) on the order for the assignation of compensation, its value and payment conditions, as well as the railway environment policy and its action program issued by the regulatory body.

VII. Market segmentation and mark-ups

31. The charging body applies mark-ups to the market segments indicated in the list of market segments included in Annex 5 to the Scheme.

(Amended by regulations of 29.04.2019.)

32. The charging body evaluates the relevance of the mark-ups to the market segments specified in Article 11.¹ (2) of the Railway Law and also assesses the need for further distinguishing of market segments according to commodity or passengers transported, if:

32.1. applicants in the railway infrastructure capacity applications specify specific conditions of utilization of the railway infrastructure that allow them to adapt to the final customers' preferences (obtaining additional competitive advantages) or to their technological failures that causes the infrastructure manager costs which would otherwise be eliminated and not included in the services referred to in Paragraph 6 of the Scheme (the segmentation based on the impact of different types of utilization of the railway infrastructure on the cost of railway infrastructure);

32.2. based on criteria described in Annex 3 to the Scheme, it can be concluded that the infrastructure manager's services referred to in Paragraph 6 of the Scheme to improve the criteria of final customers' preferences compared to competing modes of transport and infrastructure networks (railway undertakings' productivity-based segmentation);

32.3. environmental, accident and infrastructure costs that are not paid by competing modes of transport can be observed and there is a decision of the Cabinet of Ministers referred to in the eleventh part of Article 11 of the Railway Law on the assignation of compensation, its value and payment conditions (state decision-based segmentation).

(Amended by regulations of 29.04.2019.)

33. Applicants and the infrastructure manager by X-4 deadline may provide to the charging body evidence that:

33.1. within the current market segments, the criteria laid down in Annex 3 for the foreseen market conditions in the programming period are not equivalent for different types of utilization of the railway infrastructure;

33.2. the market cannot bear the existing charge (segmentation based on the charge impact to the competitiveness of the final services);

33.3. there are market segments in which railway undertakings are not currently operating but may provide services during the programming period.

(Amended by regulations of 29.04.2019.)

34. The criteria for market segmentation based on efficient, transparent and non-discriminatory principles are laid down in Annex 3.

If, in accordance with Paragraphs 32 and 33 of the Scheme, the charging body determines that it is necessary to amend the list of market segments included in Annex 5 to the Scheme, the charging body publishes those amendments as well as the amendments to Annex 3 containing the

quantitative criteria for the determination of mark-ups in particular market segments on its website by X-3 deadline and submits the information to the infrastructure manager for publication in the railway infrastructure network statement.

(Amended by regulations of 29.04.2019.)

35. The level of mark-up $\mathbf{MU}_{\text{param gr } s}$ within a specific market segment s is defined as the difference between each parameter's param adjusted full cost of providing the minimum access package as well as an access to the railway infrastructure connecting service facilities $\mathbf{PI}_{\text{param gr}}$ and the network-wide direct costs $\mathbf{KTI}_{\text{param gr}}$, divided by the relevant performance indicator $\mathbf{DR}_{\text{param gr}}$ and multiplying this division by the market valuation ratio \mathbf{mcb}_s :

$$\mathbf{MU}_{\text{param gr } s} = ((\mathbf{PI}_{\text{param gr}}' - \mathbf{KTI}_{\text{param gr}}) / \mathbf{DR}_{\text{param gr}}) \times \mathbf{mcb}_s, \text{ where}$$

$\mathbf{PI}_{\text{param gr}}'$ – the adjusted full cost value of a relevant service group for a specific cost parameter, where the infrastructure manager's financing costs are replaced with a reasonable profit margin in accordance with Sub-paragraph 35.1 of the Scheme

\mathbf{mcb}_s – a ratio characterizing the allowable level of mark-ups in market conditions of a particular market segment;

35.1. the charging body, when setting the adjusted $\mathbf{PI}_{\text{param gr}}'$ value, replaces the infrastructure manager's financing costs $\mathbf{F}_{\text{param gr}}$ with reasonable profit margin $\mathbf{P}_{\text{param gr}}$ according to the following formula:

$$\mathbf{PI}_{\text{param gr}}' = \mathbf{PI}_{\text{param gr}} - \mathbf{F}_{\text{param gr}} + \mathbf{P}_{\text{param gr}}, \text{ where}$$

$\mathbf{F}_{\text{param gr}}$ – costs mentioned in Paragraph 17.11. of the Scheme;

$\mathbf{P}_{\text{param gr}}$ – the infrastructure manager's reasonable profit margin;

35.2. the valuation criteria and values of the ratio \mathbf{mcb}_s , that characterizes the allowable level of mark-ups in the given market situation in the particular market segment, are laid down in Annex 3, and the charging body, based on efficient, transparent and non-discriminatory principles, publishes them on its website two months before the decision on the charge level. The value of the ratio for a particular market segment is determined as the maximum value from the valuation criteria \mathbf{C}_s , \mathbf{V}_s and \mathbf{S}_s , where

- C_s** – a valuation criteria characterizing the impact of different types of utilization of the railway infrastructure on the costs of railway infrastructure within a particular market segment;
- V_s** – a valuation criteria that characterizes the productivity achieved by railway undertakings within a particular market segment;
- S_s** – a valuation criteria that characterizes the optimal railway competitiveness within a particular market segment.

(Amended by regulations of 29.04.2019.)

36. The infrastructure manager's reasonable profit margin which provides the infrastructure manager's income from investments made and interest on loans, is calculated in accordance with the following formula:

$$P_{\text{param gr}} = RAB_{\text{param gr}} \times wacc, \text{ where}$$

- RAB_{param gr}** – the value of asset register at the end of the reference period⁹;
- Wacc** – the percentage of weighted average cost of capital.

(Amended by regulations of 29.04.2019.)

37. Weighted average cost of capital is calculated in accordance with the following formula:

$$wacc = r_e \times E / (E + D) + r_d \times D / (E + D), \text{ where}$$

- wacc** – weighted average cost of capital;
- r_e** – return on equity, which consists of two components ($r_f + r_c$), where
- r_f** – risk-free rate – the average arithmetic interest rate of government long-term securities of the highest credit rating countries of the Organization for Economic Co-operation and Development (OECD), using the latest OECD report on government long-term bond rates;
- r_c** – pure premium, which includes a risk assessment of the country and of the industry. The country's risk is assessed as the difference between the latest 10-year bonds of the Republic of Latvia and the risk-free rate. If the actual weighted average long-term loan rates of the infrastructure manager in the reference period does not exceed the latest 10-year Latvian government bond rate, the industry's risk assessment values are

⁹ to allocate **RAB_{param gr}** to service groups, performance indicator of the relevant parameter is taken into account

not included in the calculation;

- r_d** – the actual weighted average long-term loan rates of the infrastructure manager;
- E** – the value of the equity at the end of the reference period;
- D** – the value of the borrowed capital at the end of the reference period.

(Amended by regulations of 29.04.2019.)

VIII. Charges for international 1520 traffic

(Amended by regulations of 29.04.2019.)

38. In order to obtain full cost recovery of the costs incurred, the charging body sets higher charges **M_{param 1520}** relevant to services within international 1520 traffic. Charging rules and conditions within international 1520 traffic are included in Annex 6.

(Amended by regulations of 29.04.2019.)

IX. Charges in case of specific investment projects

39. The charging body may set higher charges **M_{infpr param gr s}** in case of specific investment projects that are not mentioned in the contractual agreement but increase efficiency or cost-effectiveness of applicants and if it could not otherwise be or have been achieved (hereinafter – project charges)

40. Project charges **M_{infpr param gr s}** are determined based on efficient, transparent and non-discriminatory principles, criteria of which the charging body publishes on its website within three months from the moment when the decision to start a particular investment project is taken, and calculates according to the following formula:

$$\mathbf{M_{infpr\ param\ gr\ s}} = \mathbf{M_{param\ gr\ s}} + \Delta \mathbf{PI_{infpr\ param\ gr}} / \mathbf{DR_{infpr\ param\ gr}}, \text{ where}$$

- M_{infpr param gr s}** – the project charge regarding specific investment project for a particular part of the railway infrastructure for a specific charging parameter within a specific market segment of a relevant service group;
- M_{param gr s}** – the value of the charge for a specific charging parameter within a specific market segment of a relevant service group;
- ΔPI_{infpr param gr}** – the changes in the full costs caused by the specific investment project (e.g. the amortization of the part of the long-term investment in the programming period that does not exceed the efficiency of the applicant's savings);

DR_{infpr param gr} – the performance indicator for evaluating a particular cost parameter in the relevant service group for a given part of the railway infrastructure where the specific investment project is executed.

(Amended by regulations of 29.04.2019.)

X. Discounts

41. The charging body may levy a volume discount to a specific market segment **A_{apj param gr s}** if, during the programming period, the volume of traffic for a specific market segment exceeds the forecasted train km considered when determining the current charge. The volume discount for a specific charging parameter within a specific market segment of the relevant service group **A_{apj param gr s}** is determined on the level of relevant mark-up **MU_{param gr s}**.

42. A charging body may levy a network loading optimization discount **A_{opt nosl param gr s}** for a particular charging parameter in the relevant service group within a specific market segment for a specific part of the railway infrastructure where, after approving the capacity allocation plan, it is stated that the demand for the railway infrastructure capacity does not reach the optimal load and where, based on efficient, transparent and non-discriminatory principles, it can be established that the discount can stimulate the usage of the railway infrastructure capacity. Network loading optimization discount **A_{opt nosl param gr s}** is calculated according to the following formula:

$$A_{opt\ nosl\ param\ gr\ s} = \frac{\left((\Delta DR_{opt\ nosl\ param\ gr\ s} * M_{param\ gr\ s}) - KTI_{opt\ nosl\ param\ gr\ s} \right)}{\Delta DR_{opt\ nosl\ param\ gr\ s}}, \text{ kur}$$

A_{opt nosl param gr s} – a network loading optimization discount for a particular charging parameter in the relevant service group within a specific market segment for a specific part of the railway infrastructure;

M_{param gr s} – the value of the charge for a specific charging parameter within a specific market segment of the relevant service group, determined by the charging body, in a specific part of the railway infrastructure where it can be stated that the discount can stimulate the usage of the railway infrastructure capacity;

KTI_{opt nosl param gr s} – the network-wide direct costs within a specific market segment of the relevant service group that are relevant to the forecasted increase of the performance indicator **Δ DR_{opt nosl param gr s}** expected as a result of levying the network loading optimization discount;

ΔDR *opt nosl param gr s* – the forecasted increase of the performance indicator in the relevant service group within a specific market segment for a specific part of the railway infrastructure expected as a result of levying the network loading optimization discount.

XI. Network performance supporting charges

43. The charging body applies penalties **M** *sankc param gr s* for actions which disrupt the operation of the railway network, compensations **M** *komp param gr s* to those who suffer losses from disruptions and bonuses **M** *prēm param gr s*, if a delay exceeds the allowable delay limit specified in Paragraph 8 of the public-use railway infrastructure network performance scheme and if delays have caused the delays of other railway undertakings' trains:

43.1. for delays mentioned in paragraphs 8.1.1. and 8.2.1.2. – 5 minutes;

43.2. for delays mentioned in paragraphs 8.2.2. and 8.2.2;

43.3. for delays mentioned in paragraph 8.2.1.1. – 15 minutes.

44. The infrastructure manager records the information about the delays and their causes set in the railway network performance scheme but does not calculate payments for them.

(Amended by regulations of 30.09.2019.)

XII. Charges for capacity used for railway infrastructure maintenance

45. Charges are not applied to infrastructure manager's designated trains and rolling stock that are not involved in freight or passenger transportation by rail, but are related to the prevention or elimination of the consequences of disruption, the maintenance of the railway infrastructure, the performance of all repair operations, if the provisions of the scheme for the allocation of railway infrastructure capacity regarding maintenance notices are complied, or otherwise the conditions are applied according to the railway network performance scheme.

(Amended by regulations of 29.04.2019.)

XIII. Charges for capacity used for railway technological processes

46. Charges for railway infrastructure capacity used by the rolling stock and trains of railway undertakings' and performers of individual technological processes (which operate upon an assignment by a railway undertaking, the infrastructure manager, an operator of a service facility, a consignor or consignee and which are granted access to the railway infrastructure by the agreement with the infrastructure manager) that are not involved in transportation of railway freight or passengers by railway but provide technological processes (construction, renewal and

maintenance of railway infrastructure equipment, modernization and repairs of railway rolling stock, preparation of trains and locomotives for transportation, locomotive movements, etc.) $M_{tehp\text{r gr}}$ are determined by the direct unit maintenance cost $TI_{ce\text{l uztur gr}}$ level.

XIV. Charge for capacity that is allocated, but not used

47. The charging body determines the charge $M_{rezer\text{ bfv gr}}$ for the part of the railway infrastructure capacity that is allocated in the capacity allocation plan, inclusive of that which is not used (the application assurance payment) at the level of the full unit cost of performing the essential functions of the infrastructure manager:

$$M_{rezer\text{ bfv krav}} = PI_{bfv\text{ krav}} / DR_{bfv\text{ krav}}, \text{ where}$$

$PI_{bfv\text{ krav}}$ — the full unit cost of performing the essential functions of the infrastructure manager in the programming period within freight traffic;

$DR_{bfv\text{ krav}}$ — the performance indicator of the number of train paths assigned in the capacity allocation plan in the capacity allocation centers of Riga, Daugavpils and Jelgava regions in every route of railway lines determined in Annex 3 of the capacity Allocation Scheme in the programming period within freight traffic.

(Amended by regulations of 30.09.2019.)

$$M_{rezer\text{ bfv pas}} = PI_{bfv\text{ pas}} / DR_{bfv\text{ pas}}, \text{ where:}$$

$PI_{bfv\text{ pas}}$ — the full unit cost of performing the essential functions of the infrastructure manager in the programming period within passenger traffic;

$DR_{bfv\text{ pas}}$ — the performance indicator of the number of assigned trains in the capacity allocation plan in every route in the programming period in passenger traffic.

(Amended by regulations of 17.06.2019.)

XV. Railway infrastructure capacity assurance charges

48. If, based on the through rate offer criterion mentioned in Annex 3 of the Scheme or on the volume elasticity for evaluating value J_s declared by applicants, market segments are separated and used for performing transportation on pre-assigned train paths, the charging body may determine a railway infrastructure capacity assurance charges $M_{rezer\text{ gr s}}$. In every one of these

market segments the railway infrastructure capacity assurance charges $M_{rezer\ gr\ s}$ are set as a combination/sum of all charging parameters of the relevant segment $M_{param\ gr\ s}$, which is expressed as the average charge for a performance indicator unit of 1 train km in the relevant segment, according to the following formula:

$$M_{rezer\ gr\ s} = M_{cel\ uztur\ gr\ s} + (M_{mez\ uztur\ gr\ s} \times DR_{mez\ uztur\ gr\ s} + M_{atj\ gr\ s} \times DR_{atj\ uztur\ gr\ s}) / DR_{cel\ uztur\ gr\ s}, \text{ where}$$

- | | |
|----------------------------|--|
| $M_{rezer\ gr\ s}$ – | the amount of the railway infrastructure capacity assurance charge determined by the charging body in a particular market segment where the transportation is performed using pre-assigned train paths. |
| $M_{cel\ uztur\ gr\ s}$ – | the amount of the charging parameter for railway infrastructure maintenance and train operation determined by the charging body in a particular market segment where the transportation is performed using pre-assigned train paths; |
| $M_{mez\ uztur\ gr\ s}$ – | the amount of the charging parameter for the railway infrastructure, that provides access to the railway infrastructure connecting service facilities, maintenance and train operation determined by the charging body in a particular market segment where the transportation is performed using pre-assigned train paths; |
| $M_{atj\ gr\ s}$ – | the amount of the charging parameter for railway infrastructure renewal determined by the charging body in a particular market segment where the transportation is performed using pre-assigned train paths; |
| $DR_{atj\ gr\ s}$ – | the forecasted performance indicator corresponding to the performance indicator $DR_{cel\ uztur\ gr\ s}$ of the number of gross tonne km in the programming period in a particular market segment where the transportation is performed using pre-assigned train paths, which has been taken into account when setting the relevant amount of the existing mark-up $MU_{atj\ gr\ s}$; |
| $DR_{mez\ uztur\ gr\ s}$ – | the forecasted performance indicator corresponding to the performance indicator $DR_{cel\ uztur\ gr\ s}$ of the number wagons used in railway traffic in the programming period in a particular market segment where the transportation is performed using pre-assigned train paths, which has been taken into account when setting the relevant amount of the existing mark-up $MU_{mez\ uztur\ gr\ s}$; |
| $DR_{cel\ uztur\ gr\ s}$ – | the forecasted performance indicator of the number train km in the programming period in a particular market segment where the |

transportation is performed using pre-assigned train paths, which has been taken into account when setting the relevant amount of the existing mark-up $\text{MU}_{\text{ceļ uztur gr s}}$;

The charging body sets and publishes on its website on the internet the charge $\text{M}_{\text{rezer gr s}}$ for those market segments where the transportation in the programming period is performed using pre-assigned train paths.

(Amended by regulations of 30.09.2019.)

48.¹ The charging body sets and publishes on its website on the internet the average direct unit costs of all charging parameters for the performance indicator unit of 1 train km in the relevant market segment for applicant's trains of specific service group in the market segments provided by Paragraph 48 of the Charging Scheme where the transportation is performed using pre-assigned train paths - $\text{TI}_{\text{rezer gr s}}$ and it is calculated according to the following formula:

$$\text{TI}_{\text{rezer gr s}} = \text{TI}_{\text{ceļ uztur gr}} + (\text{TI}_{\text{mez uztur gr}} \times \text{DR}_{\text{mez uztur gr s}} + \text{TI}_{\text{atj gr}} \times \text{DR}_{\text{atj uzt gr s}}) / \text{DR}_{\text{ceļ uztur gr s}}, \text{ where}$$

$\text{TI}_{\text{mez uztur g}}$ –	the average direct unit costs of all charging parameters for the performance indicator unit of 1 train km in the relevant market segment of a specific service group in a particular market segment where the transportation is performed using pre-assigned train paths (<i>euro</i> per train km, value added tax not included);
$\text{TI}_{\text{ceļ uzt gr}}$ –	the average direct costs of the railway infrastructure that provides access to the railway infrastructure connecting service facilities maintenance and train control for one train km travelled in the programming period in freight traffic;
$\text{TI}_{\text{mez uzt gr}}$ –	the average direct costs of the railway infrastructure that provides access to the railway infrastructure connecting service facilities maintenance and train control for providing transportation of one wagon used in railway traffic in freight traffic;
$\text{TI}_{\text{atj gr}}$ –	the average direct costs of the railway infrastructure renewal for one gross tonne km travelled in the programming period in freight traffic;
$\text{DR}_{\text{atj gr s}}$ –	the forecasted performance indicator corresponding to the performance indicator $\text{DR}_{\text{ceļ uztur gr s}}$ of the number of gross tonne km in the programming period in a particular market segment where the transportation is performed using pre-assigned train paths, which has been taken into account when setting the relevant amount of the

	existing mark-up $MU_{atj\ gr\ s}$;
$DR_{mez\ uztur\ gr\ s}$ –	the forecasted performance indicator corresponding to the performance indicator $DR_{cel\ uztur\ gr\ s}$ of the number wagons used in railway traffic in the programming period in a particular market segment where the transportation is performed using pre-assigned train paths, which has been taken into account when setting the relevant amount of the existing mark-up $MU_{mez\ uztur\ gr\ s}$;
$DR_{cel\ uztur\ gr\ s}$ –	the forecasted performance indicator of the number train km in the programming period in a particular market segment where the transportation is performed using pre-assigned train paths, which has been taken into account when setting the relevant amount of the existing mark-up $MU_{cel\ uztur\ gr\ s}$;

(Amended by regulations of 30.09.2019.)

XVI. Charge for the operation of train services which cross more than one infrastructure network of the railway system within the European Union

49. If the charging body cooperates with another railway infrastructure manager, to coordinate the charging for the operation of train services which cross more than one infrastructure network of the railway system within the European Union, it publishes related information on the website which is jointly established by the respective charging bodies (infrastructure managers).

(Amended by regulations of 29.04.2019.)

XVII. Calculation of the charge values

50. The charging body calculates the values of the charges for each specific charging parameter $param$ of the relevant service group gr within a specific market segment s by adding a mark-up of each specific charging parameter within a specific market segment s to the direct unit costs:

$$M_{param\ gr\ s} = TI_{param\ gr} + MU_{param\ gr\ s}.$$

51. The differentiated charges mentioned in Chapters five, six, nine, ten, eleven, fourteen and fifteen do not add to the value of the charge, but are applied in accordance with the collection scheme or with the decision taken by the charging body. The charges mentioned in Chapters twelve and thirteenth do not add to the value of the charge but are applied in accordance with the collection scheme or with the decision taken by the charging body.

XVIII. Closing questions

52. The Scheme is graphically presented in Annex 4.

53. The abbreviations used in the Scheme and in its calculation formulas are indicated in Annex 7 of the Scheme.

54. The charging body publishes the Scheme on its website and submits it to the infrastructure manager for inclusion in the railway infrastructure network statement. The charging body publishes Annex 6 to the Scheme regarding the charge calculation and payment conditions within international 1520 traffic on its website on the Internet at least two months before the corresponding infrastructure charge enters force and it is not included in the railway infrastructure network statement.

(Amended by regulations of 29.04.2019.)

55. The Scheme enters into force upon its publication in the railway infrastructure network statement.

56. Paragraph excluded from the Scheme.

(Amended by regulations of 30.09.2019.)

57. If the charging body cannot balance the programmed costs of the infrastructure manager with the revenue from the calculated charges, it notifies the Ministry of Transport.

58. Complaints concerning the Scheme, its separately published Annexes and amendments may be submitted to the regulatory body by the owner of the railway infrastructure, the infrastructure manager, the applicant or the railway undertaking not later than one month from the date of their publication.

JSC LatRailNet
Director of Legal and
Administrative Affairs

J.Šulcs

Cost drivers used for the allocation of activity costs to the service groups

Cost centers, cost elements and costs of the infrastructure objects that are related to a specific service group primarily are allocated to the relevant service and activity group according to the method of cost allocation; however, in the other cases, according to the cost driver defined in the table. Overhead costs related to a specific activity are driven to the specific activity according to the method of cost allocation, however, in the other cases, according to the cost driver defined in the table. Determination of cost group borders for the points of splitting, switching and stopping is based on technological documents, for example, station technical activity acts (TAA).

The activity cost groups and the relevant cost drivers for the allocation of costs to the service groups are listed in the tables:

No.	Activity cost groups	Cost drivers used for the allocation of activity costs to the service groups
1.	PI cel �z�tur – full railway infrastructure maintenance and overhead costs	–
1.1.	maintenance and train operating costs of railway infrastructure that provides a minimum access package	–
1.1.1.	maintenance of tracks, civil infrastructure and related fixed installations and security objects used for train acceptance, handling and dispatching	gross tonne km (in general), train km (for railway tracks of accepting and dispatching in stations serving mixed traffic)
1.1.2.	maintenance of electrical supply cable lines and electricity distribution equipment for providing train acceptance, handling and dispatching	train km
1.1.3.	maintenance of fixed installations of automatic train control systems used for train acceptance, handling and dispatching	train km
1.1.4.	maintenance of fixed installations used for the transmission of information and communication in the train acceptance, handling and dispatching process	train km
1.1.5.	Provision of train and traction vehicle movement organization and coordination process	train km
1.1.6.	Maintenance of buildings and structures used for the activities that provide a minimum access package	train km
1.1.7.	Maintenance and train operating overhead costs of railway infrastructure that provide a minimum access package	train km
1.2.	overhead costs	–
1.2.1.	Eligible costs for the administration of the sector according to legislation	train km or other unit according to legislation
1.2.2.	Infrastructure manager’s costs related to the implementation of the decision of the regulatory body referred to in part eight of Article 7. ¹ of the Railway Law	train km or other unit according to legislation
1.2.3.	The part of total infrastructure manager’s overhead costs that is attributed to a minimum access package and to an access to the railway infrastructure connecting service facilities in accordance with the method of cost allocation to the various categories of services	train km

No.	Activity cost groups	Cost drivers used for the allocation of activity costs to the service groups
2.	PI_{mez uztur} – maintenance and train operating costs of railway infrastructure that provides access to the railway infrastructure connecting service facilities	–
2.1.	maintenance of tracks, civil infrastructure and related fixed installations and security objects where freight train sets are assembled/disassembles as well as the rolling stock is transferred for loading, unloading or to related sidings	for freight services
2.2.	maintenance of electrical supply cable lines and electricity distribution equipment for providing assembling and disassembling of freight trains as well as transferring the rolling stock for loading, and unloading or to related sidings	for freight services
2.3.	maintenance of fixed installations of automatic train control systems used in objects where freight train sets are assembled/disassembled as well as the rolling stock is transferred for loading, unloading or to related sidings	for freight services
2.4.	maintenance of fixed installations used for the transmission of information and communication during the process where trainsets are assembled/disassembled as well as the rolling stock is transferred for loading, unloading or to related sidings	for freight services
2.5.	maintenance of buildings and structures used for the activities where freight train sets are assembled/disassembled as well as the rolling stock is transferred for loading, unloading or to related sidings	for freight services
2.6.	maintenance of buildings and structures used for the activities where freight train sets are assembled/disassembled as well as the rolling stock is transferred for loading, unloading or to related sidings	for freight services
3.	PI_{atj} – renewal costs of railway infrastructure that provides a minimum access package and an access to the railway infrastructure connecting service facilities	–
3.1.	renewal of tracks, civil infrastructure and related fixed installations and security objects	KTI_{atj gr} – gross tonne km NI_{atj gr} – train km
3.2.	renewal of electrical supply cable lines and electricity distribution equipment	train km
3.3.	renewal of fixed installations of automatic train control systems	train km
3.4.	renewal of fixed installations of automatic train control systems used in objects where freight train sets are assembled/disassembled as well as the rolling stock is transferred for loading, unloading or to related sidings	for freight services
3.5.	renewal of fixed installations used for the transmission of information and communication in the train traffic	train km
3.6.	renewal of buildings and structures that provide a minimum access package and an access to the railway infrastructure connecting service facilities	train km
4.	PI_{elektr} – traction electrical supply equipment costs (elektr)	–
4.1.	traction electrical supply equipment maintenance costs	for trains using electric traction
4.2.	traction electrical supply equipment renewal costs	for trains using electric traction

(Amended by regulations of 29.04.2019.)

Normalization coefficients

Cost elements	Normalization coefficients
Payrolls	Output-dependent premiums
	Consumer price index
	Assessment of the causes of structural changes and other identified facts
Social contributions	Payroll influencing values
	Tax rates
Materials, fuel, electricity	Producer price index or tariff rates
	Assessment of the causes of modernization work and other identified facts
Other costs	Producer price index
	Assessment of the causes of other identified facts

Market segmentation and mark-up determination criteria for the programming period after 1 July 2019

I. The segmentation and criteria based on the impact of different types of utilization of the railway infrastructure on the cost of railway infrastructure

The charging body sets valuation criteria that characterize the impact of different types of utilization of the railway infrastructure on the cost of railway infrastructure in a specific market segment - C_s , taking into account the significance of the deviations from the full costs of services, comparing scenarios where one of the existing market segments is divided into smaller segments or the same market segment is not divided:

$C_s = 0$, in cases where different influence of the criterion cannot be observed, or

$$C_s = \Delta PI_{\text{param gr s'}} / \Delta PI_{\text{param gr s''}}, \text{ where}$$

$\Delta PI_{\text{param gr s'}}$ and $\Delta PI_{\text{param gr s''}}$ – the difference between the two potential costs, if it is divided into market segments.

Criterion	Designation of the criterion	evaluated pair of services		determined value of the criterion
		justification of valuation of the criterion		
Impact on specialized infrastructure	spec infra	utilization of specialized railway infrastructure for specific type of services	utilization of specialized railway infrastructure for specific type of different services	$C_{\text{spec infra}} = 0$
		the increase of maintenance, renewal or operating costs of the infrastructure manager		no specialized infrastructure
Impact on annual working timetable	vile kust	combined transportation	direct train traffic	$C_{\text{vile kust}} = 0$
		specific departure or arrival times within combined transportation increase train operating costs		no registered coordination procedures
impact on railway infrastructure	tehnisk norm	technical specifications of trains correspond to the specifications indicated in the railway infrastructure network statement	technical specifications of trains do not correspond to the specifications indicated in the railway infrastructure network statement	$C_{\text{tehnisk norm}} = 0$
		technical specifications are different from those indicated in the railway infrastructure network statement and increase / decrease maintenance, renewal or operating costs of the infrastructure manager		the different technical specifications of trains are taken into account in cost allocation
impact on environment	vide	trains that transport dangerous cargo	other freight trains	$C_{\text{vide}} = 0$
		as a result of applicants' transportation, differing environment protection and safety costs are incurred		distinctive environment protection and safety costs are not observed
impact on traffic	tehnol norm	trains transporting all wagons from one point to one destination	trains that consist of wagons that are separate freight units and are coupled and uncoupled en route	$C_{\text{tehnol norm}} = 0$
		technical specifications are different from those indicated in the railway infrastructure network statement and increase / decrease maintenance, renewal or operating costs of the infrastructure manager		no applications submitted with differing technological specifications

II. The segmentation and criteria based on the increase of the productivity achieved by railway undertakings

The charging body sets the valuation criterion that characterizes the increase of the productivity achieved by railway undertakings in a specific market segment – V_s , taking into account the significance of the changes of the applicant's income fluctuations, that are incurred by differing quality of infrastructure services, comparing scenarios where one of the existing market segments is divided into smaller segments or the same market segment is not divided:

$V_s = 0$, in cases where different influence of the criterion cannot be observed, or

$$V_s = \Delta I_{s'} / \Delta I_{s''}, \text{ where}$$

$\Delta I_{s'}$ un $\Delta I_{s''}$ – the changes of the applicant's income using the two potential services, if it is divided into market segments.

Criterion	Designation of the criterion	the evaluated pair of services		the determined value of the criterion
		the justification of valuation of the criterion		
train priority	prior	domestic transportation	international transportation	$V_{prior\ s} = 0$
		priority given to a transportation service improves the provided service in comparison with competing transport modes		no registered train coordination procedures
service consumer density	intens	urban or regional passenger transportation	interurban passenger transportation	$V_{intens\ s} = 0$
		train crosses railway infrastructure sections with differing service consumer density (population or loading/unloading volume)		increase in productivity is not established/confirmed
through rate offer	integrat ed	regular train traffic services	irregular train traffic services	$V_{integrat\ ed\ s} = 0$
		transportation services are provided in accordance with uniform payment conditions throughout the logistics chain		no agreement on uniform charging schemes

III. The segmentation and criteria based on the impact of the allowable markup value on the competitiveness of the final services

The charging body sets valuation criteria for optimal railway competitiveness in a specific market segment – S_s , choosing from values R_s and J_s , in accordance with the planning document referred to in Paragraph 8 of the Scheme and the goals of the State Transport Policy, as well as experts' assessment based on the following procedure:

1. the charging body establishes, by an order, an expert group, which includes at least three independent experts (eg. representatives of the relevant industry associations or competent scientific institutions) for every existing market segment and market segments concerning which applicants or the infrastructure manager have provided evidence in accordance with the provisions of Paragraph 33 of the Scheme;

2. the charging body requires from the experts:

2.1. the forecasts necessary for assessment of the value J_s – the potential transportation volume in a given market segment, expressed in gross tonne km;

2.2. the forecasts necessary for assessment of the value R_s for the following competitiveness factors:

2.2.1. in market segments of the service group referred to in Subparagraph 6.1 of the Scheme:

total population of the inhabited stopping points on the route;

- administrative significance of the inhabited stopping points on the route;
- passengers' purchasing power;
- railway transportation prices compared to other railway undertakings on the route;
- quality of the railway transportation service compared to the transportation price;
- competition within the industry;
- compatibility with other modes of transport and/or access to the destination of passengers;
- marketing activities of other transport service operators;
- other factors indicated by railway undertakings or the infrastructure manager in their evidence;

2.2.2. in market segments of the service group referred to in Subparagraph 6.2 of the Scheme:

– total costs of cargo recipients (offering to assess the route as a whole, including other members of the supply chain (costs of foreign railways and connected inland modes of transport, port tariffs and maritime costs));

- transportation time;
- competition within the industry;
- competition among modes of transport;
- cooperation among logistic chain members;
- world demand on transported cargo;
- political relations;
- marketing activities of other transport service operators
- other factors indicated by railway undertakings or the infrastructure manager in their evidence

2.3. The experts assess competitiveness factors R_s on the grounds of two attributes – reference and programming periods:

2.3.1. The valuation of the significance of a competitiveness factor v_{ij} (j- expert's i-valuation of the criterion significance) from 0 to 1 in terms of the potential volume forecasted by the experts referred to in Subparagraph 2.1:

valuation of the significance of a market segment competitiveness factor		Explanation
0,0	insignificant factor	The factor does not affect the conditions of the transport services market in the relevant market segment
0,1 to 0,9	significant factor	The factor influences transport services market conditions in the relevant market segment - the higher the rating, the more significant impact
1,0	direct correlation	The factor directly affects the market conditions of transport services in the relevant market segment

2.3.2. The valuation of the development of a competitiveness factor k_{ij} (j- expert's i-valuation of the criterion development) from 0 to 1 in terms of the potential volume forecasted by the experts referred to in Subparagraph 2.1:

valuation of the development of a market segment competitiveness factor	Explanation
0,0	factor development in the relevant market sector is assessed as maximum
0,1 to 0,9	factor development in the relevant market sector is comparable with competing modes of transport and transport corridors - the higher the assessment, the more positive factor development is expected
1,0	expected factor development in the relevant market sector is assessed as maximum positive

3. the charging body summarizes the expert assessment and performs the evaluation of the reliability of the data, as well as determines if an expert's assessment of criteria listed in Subparagraphs 2.1. or 2.2 of Annex 3 to this Scheme is significantly different from the point of view of other experts, then the expert is requested to justify their opinion. The charging body may exclude qualitatively or statistically unfounded expert's opinion;

4. having validated experts' assessments according to Paragraph 3 of Annex 3 to the Scheme, the remaining assessments are multiplied by the normalized valuation of the significance of the relevant factor and the average normalized values are obtained for reference and programming periods:

$$R_{p\ddot{a}rskat\ s} = ANP_{v\ ij\ p\ddot{a}rskat\ s} \times \bar{k}_{ij\ p\ddot{a}rskat\ s} / m_s, \text{ where}$$

$ANP_{v\ ij\ p\ddot{a}rskat\ s}$ — normalized average j-expert's i-valuation of criterion significance for a specific market segment in the reference period;

$\bar{k}_{ij\ p\ddot{a}rskat\ s}$ — average j-expert's valuation of i-criterion for a specific segment in the reference period;

$$R_{pl\ddot{a}n\ s} = ANP_{v\ ij\ pl\ddot{a}n\ s} \times \bar{k}_{ij\ pl\ddot{a}n\ s} / m_s, \text{ where}$$

ANP $v_{ij\text{plāns}}$ – normalized average j-expert's i-valuation of criterion significance for a specific market segment in the programming period;

$\bar{k}_{ij\text{plāns}}$ – average j-expert's valuation of i-criterion for a specific segment in the programming period;

5. the value of valuation criterion **R**_s, that characterizes the impact of the allowable railway infrastructure charge markup value on the competitiveness of the final services is obtained as a ratio between the programming and reference periods and it is indicated in Paragraph 9 of this Annex;

6. in cases if the experts indicate potential increase of value **J**_s in any of the segments, then the charging body sends a request to evaluate the elasticity of transportation volume in the specific market segment in relation to the total payment of potentially determined railway infrastructure charges for one train km according to the assumptions of the charging body about the technical specifications of trains, informing them about experts' considerations:

Planned transportation volume in relation to the determined railway infrastructure charges	M _{s 1} = TI _s	M _{s 2} = ...	M _{s 3} = ...	M _{s 4} = ...	M _{s 5} = PI _s
	charge at the level of direct cost	intermediate values	intermediate values	intermediate values	charge at the level of full cost
DR _{param gr s}	<i>applicant's elasticity valuation</i>	<i>applicant's elasticity valuation</i>	<i>applicant's elasticity valuation</i>	<i>applicant's elasticity valuation</i>	<i>applicant's elasticity valuation</i>

7. the value of **J**_s is obtained by choosing it in accordance with the maximum value of the multiplication of potential transportation volume and the charge determined for a specific market segment (**DR**_{param gr s} × **M**_s);

8. the values of criteria **R**_s un **J**_s are expressed in decimal numbers and rounded to 2 decimal places, decreasing them to 1, if higher.

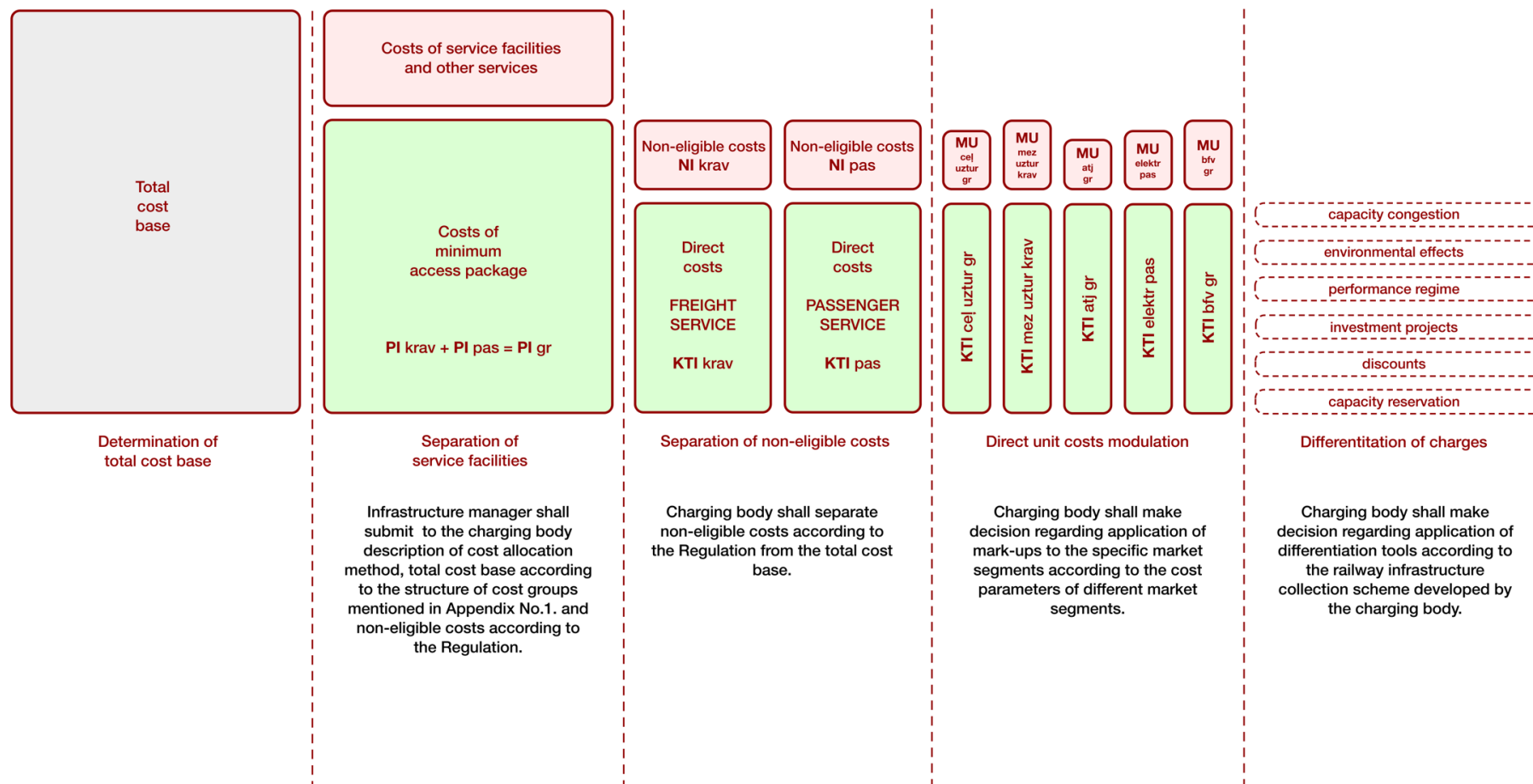
9. the valuation and the procedure of valuation of criterion **R**_s, that characterizes the impact of the allowable railway infrastructure charge markup value on the competitiveness of the final services, in reference and programming periods is presented in the tables:

Comparable parameters		Competitiveness factors							
		Total population of the inhabited stopping points on the route	Administrative significance of the inhabited stopping points on the route	- Passengers' purchasing power	Railway transportation prices compared to other operators on the route	Quality of the railway transportation service compared to the transportation price	The competition within the industry	Compatibility with other modes of transport and/or access to the destination of passengers	Marketing activities of other transport service operators
Passenger transportation services within the framework of the public service contract									
normalized significance valuation	2018	0,17	0,09	0,15	0,15	0,15	0,09	0,15	0,05
	2019	0,16	0,09	0,14	0,15	0,15	0,08	0,16	0,06
development valuation	2018	0,60	0,43	0,52	0,77	0,50	0,27	0,48	0,35
	2019	0,57	0,43	0,57	0,48	0,75	0,38	0,73	0,47
R = 0,52	2018	0,10	0,04	0,08	0,12	0,07	0,02	0,07	0,02
R = 0,57	2019	0,09	0,04	0,08	0,07	0,11	0,03	0,12	0,03
R _{sab pak pas} = 1,10									
Other passenger transportation services (t.i. commercial domestic and international transportation)									
normalized significance valuation	2018	0,16	0,09	0,15	0,16	0,16	0,10	0,11	0,09
	2019	0,15	0,09	0,14	0,17	0,15	0,09	0,11	0,09
development valuation	2018	0,63	0,46	0,61	0,61	0,49	0,30	0,56	0,33
	2019	0,59	0,46	0,61	0,64	0,53	0,36	0,73	0,41
R = 0,52	2018	0,10	0,04	0,09	0,10	0,08	0,03	0,06	0,03
R = 0,56	2019	0,09	0,04	0,09	0,11	0,08	0,03	0,08	0,04
R _{citi pas} = 1,08									

Comparable parameters		Competitiveness factors							
		Total costs of cargo recipients	Transportation time	Competition within the industry	Competition among the modes of transport	Cooperation among the logic chain members	World demand on transported cargo	Political relations	Marketing activities of other transport service operators
Domestic freight transportation with collecting trains and pick-up trains									
normalized significance valuation	2018	0,18	0,12	0,09	0,15	0,13	0,15	0,09	0,08
	2019	0,17	0,12	0,10	0,15	0,14	0,15	0,09	0,08
development valuation	2018	0,42	0,37	0,33	0,35	0,50	0,47	0,70	0,40
	2019	0,50	0,43	0,40	0,43	0,55	0,52	0,67	0,42
R = 0,44	2018	0,08	0,04	0,03	0,05	0,06	0,07	0,07	0,03
R = 0,49	2019	0,09	0,05	0,04	0,06	0,08	0,08	0,06	0,03
R_{sviv krav} = 1,11									
Domestic freight transportation with collecting trains and pick-up trains: regular transportation / irregular transportation									
normalized significance valuation	regular	0,17	0,13	0,10	0,14	0,15	0,16	0,09	0,07
	irregular	0,18	0,11	0,10	0,15	0,13	0,16	0,09	0,08
development valuation	regular	0,55	0,42	0,37	0,40	0,60	0,57	0,68	0,40
	irregular	0,50	0,47	0,47	0,43	0,53	0,52	0,62	0,40
R = 0,50	regular	0,09	0,05	0,03	0,06	0,09	0,09	0,06	0,03
R = 0,49	irregular	0,09	0,05	0,05	0,06	0,07	0,08	0,05	0,03
R_{reg sviv krav} = 1,14									
R_{nereg sviv krav} = 1,11									
Other freight transportation, excluding international 1520 traffic (t.i. domestic freight transportation and within European Economic Area)									
normalized significance valuation	2018	0,18	0,12	0,11	0,13	0,15	0,13	0,09	0,09
	2019	0,18	0,13	0,11	0,12	0,15	0,13	0,08	0,09
development valuation	2018	0,48	0,40	0,42	0,42	0,55	0,52	0,57	0,40
	2019	0,50	0,43	0,48	0,45	0,55	0,53	0,58	0,40
R = 0,47	2018	0,09	0,05	0,05	0,05	0,08	0,07	0,05	0,04
R = 0,49	2019	0,09	0,05	0,06	0,06	0,08	0,07	0,05	0,04
R_{citi krav} = 1,04									
Other freight transportation, excluding international 1520 traffic: regular transportation / irregular transportation									
normalized significance valuation	regular	0,18	0,15	0,12	0,10	0,15	0,14	0,08	0,09
	irregular	0,19	0,13	0,12	0,12	0,15	0,13	0,08	0,09
development valuation	regular	0,53	0,47	0,45	0,37	0,53	0,57	0,55	0,33
	irregular	0,48	0,43	0,45	0,45	0,53	0,52	0,58	0,38
R = 0,49	regular	0,10	0,07	0,05	0,04	0,08	0,08	0,04	0,03
R = 0,48	irregular	0,09	0,06	0,05	0,05	0,08	0,07	0,05	0,03
R_{reg citi krav} = 1,04									
R_{nereg citi krav} = 1,02									

(Amended by regulations of 29.04.2019.)

Graphical representation of the Scheme



List of railway transportation market segments

Name of market segment	Market segment s designation	Market segment determination features		
		in freight traffic - train index		Other special market determination features
		first group	third group	
		in passenger traffic - train route		
		initial station	final station	
In broad-gauge part of the railway network				
passenger services within the framework of a public service contract	sab pak pas	initial station of the route in LDZ network	final station of the route in LDZ network	applicants providing public passenger transportation services within the meaning of Regulation (EC) No.1370/2007 of the European Parliament and of the Council of 23 October 2007
other passenger transportation	citi pas	initial station of the route in LDZ network or outside it	final station of the route in LDZ network or outside it	applicants are assigned specific train path in the annual capacity allocation plan or train paths are assigned for ad-hoc trains
regular traffic domestic freight transportation with collecting and pick-up trains using pre-assigned train paths	reg sviv krav	dispatching station in LDZ network	accepting station in LDZ network	freight operations with cargo of EEA origin, operations with other groups of wagon cargo are allowed if the train index of the train is not changed
irregular traffic domestic freight transportation with collecting and pick-up trains	nereg sviv krav	dispatching station in LDZ network	accepting station in LDZ network	segment is used for regular traffic domestic freight transportation with collecting and pick-up trains, if the railway infrastructure capacity assurance payment is not made, for freight operations with cargo of EEA origin, freight operations with other groups of freight cargo in processing stations are allowed if the train index of the train is not changed payment of the capacity assurance payment is payed
container freight domestic transportation and within European Economic Area using pre-assigned train paths	kontein krav	dispatching station in LDZ network or outside it (within EEA)	accepting station in LDZ network or outside it (within EEA)	freight operations with cargo of EEA origin without coupling and uncoupling wagons in LDZ network processing stations
other freight transportation, excluding international 1520 traffic using pre-assigned train paths	citi krav	dispatching station in LDZ network or outside it (within EEA)	accepting station in LDZ network or outside it (within EEA)	freight operations with cargo of EEA origin, operations with other groups of wagon cargo in LDZ network processing stations are allowed if the train index of the train is not changed

Name of market segment	Market segment s designation	Market segment determination features		Other special market segment determination features
		in freight traffic - train index		
		first group	third group	
		in passenger traffic - train route		
		initial station	final station	
In the narrow-gauge part of the railway network				
passenger services within the framework of a public service contract	sab pak pas	initial station of the route in the narrow-gauge part of LDZ network	final station of the route in the narrow-gauge part of LDZ network	applicants providing public passenger transportation services within the meaning of Regulation (EC) No.1370/2007 of the European Parliament and of the Council of 23 October 2007
other passenger transportation	citi pas	initial station of the route in the narrow-gauge part of LDZ network	final station of the route in the narrow-gauge part of LDZ network	applicants are assigned specific train path in the annual capacity allocation plan or train paths are assigned for ad-hoc trains

(Amended by regulations of 30.09.2019.)

Charging and payment conditions within international 1520 traffic

1. The charging body calculates average direct unit costs **TI**₁₅₂₀ within international 1520 traffic as a combination of three parameters:

1.1. **TI**_{ceļ uztur 1520} – the average direct maintenance, renewal and train operating costs of the railway infrastructure providing the minimum access package for one train km travelled in the programming period within international 1520 traffic:

$$\mathbf{TI}_{\text{ceļ uztur 1520}} = (\mathbf{KTI}_{\text{ceļ uztur 1520}} + \mathbf{KTI}_{\text{atj 1520}}) / \mathbf{DR}_{\text{ceļ uztur 1520}}, \text{ where:}$$

KTI_{ceļ uztur 1520} – the network-wide direct maintenance and train operating costs of the railway infrastructure providing the minimum access package in the programming period within international 1520 traffic;

KTI_{atj krav 1520} – the network-wide direct renewal costs of the railway infrastructure in the programming period within international 1520 traffic;

DR_{ceļ uztur 1520} – the performance indicator or the number of train km in the programming period within international 1520 traffic;

1.2. **TI**_{mez uztur 1520} – the average direct maintenance and train operating costs of the railway infrastructure providing access to the railway infrastructure connecting service facilities for providing the railway transportation of one train within international 1520 traffic in the programming period:

$$\mathbf{TI}_{\text{mez uztur 1520}} = \mathbf{KTI}_{\text{mez uztur 1520}} / \mathbf{DR}_{\text{mez uztur 1520}}, \text{ where}$$

KTI_{mez uztur 1520} – the network-wide direct maintenance and train operating costs of the railway infrastructure providing access to the railway infrastructure connecting service facilities for providing the railway transportation within international 1520 traffic in the programming period;

DR_{mez uztur 1520} – the performance indicator of the doubled number (for traffic in even and odd directions¹⁰⁾ of actually dispatched trains from the places crossing the national border¹¹ as well as bordering stations (Meitene and Lugazi) and the number of actually accepted trains in the final processing station in transit traffic within international 1520 traffic in the programming period;

(Amended by regulations of 30.09.2019.)

¹⁰ within the meaning of regulation of the Cabinet of Ministers No. 724 of August 3, 2010 on the railway technical operations regulations

¹¹ according to Paragraph 3.2.7. of the railway infrastructure network statement of 2019/2020, the places crossing the national border are Rezekne freight station on the national border with the Russian Federation and Daugavpils freight station on the national border with the Republic of Belarus (regarding only the commodities transported in a freight train)

1.3. the direct costs of performing the essential functions of the infrastructure manager for one train path within international 1520 traffic $TI_{bfv\ 1520}$ are determined at the amount of the value $TI_{bfv\ krav}$ according to the provisions of Paragraph 26 of the Scheme.

2. The charging body calculates the network-wide direct costs of railway infrastructure $KTI_{param\ 1520}$ in the programming period within international 1520 traffic for every cost parameter $cel\ uztur$, $mez\ uztur$ and atj it is calculates as a multiplication of the average direct cost of these parameters with the relevant performance indicator of train km, number of wagons and gross tonne km within international 1520 traffic:

$$KTI_{cel\ uztur\ 1520} = TI_{cel\ uztur\ krav} \times DR_{cel\ uztur\ 1520} ;$$

$$KTI_{mez\ uztur\ 1520} = TI_{mez\ uztur} \times DR_{param\ 1520} ;$$

$$KTI_{atj\ 1520} = TI_{atj\ krav} \times DR_{atj\ 1520} .$$

3. Applicants and the infrastructure manager not later than four month before the deadline of the publication of the railway infrastructure charges within international 1520 traffic, can submit the evidence to the charging body; and the charging body accordingly assesses the necessity for the division of the international 1520 traffic services into smaller market segments in line with the criteria listed in Annex 3 to the Scheme, taking into account the following considerations:

3.1. in existing market segments in the market conditions forecasted for the programming period the criteria listed in Annex 3 are not equal for different kinds of railway infrastructure utilization;

3.2. the market conditions do not provide for covering the existing infrastructure charges;

3.3. specific market segments exist where railway undertakings are not operating at the given moment but can provide services in the programming period.

4. The level of mark-up in international 1520 traffic $MU_{param\ 1520\ s}$ within a specific market segment s is defined as the difference between each parameter's $param$ adjusted full cost value of a specific parameter within international 1520 traffic $PI_{param\ 1520}$, where the infrastructure manager's financing costs are replaced with a reasonable profit margin as provided by Sub-paragraph 35.1 of the Scheme, and the network-wide direct costs $KTI_{param\ 1520}$, divided by the relevant performance indicator within international 1520 traffic $DR_{param\ 1520}$ and multiplying this division by the market valuation ratio $mcb_{1520\ s}$ criteria of which the charging body publishes on its website on the internet two months before the decision on the railway infrastructure charging within international 1520 traffic is taken:

$$MP_{param\ 1520\ s} = ((PI_{param\ 1520}' - KTI_{param\ 1520}) / DR_{param\ 1520}) \times mcb_{1520\ s} , \text{ where:}$$

$PI_{param\ 1520}'$ – the adjusted cost value of a specific cost parameter within international 1520 traffic, where financing costs of the infrastructure manager are substituted by a reasonable profit

margin following the principle stated in the Subparagraph 35.1. of the Scheme;

- $mcb_{1520\ s}$** – a ratio characterizing the allowable level of mark-ups in the given market situation in the specific market segment within international 1520 traffic, which is determined as the maximum value from the valuation criteria C_s , V_s and S_s , where
- $C_{1520\ s}$** – a valuation criteria characterizing the impact of different types of utilization of the railway infrastructure on the costs of railway infrastructure within a specific market segment;
- $V_{1520\ s}$** – a valuation criteria that characterizes the increase of productivity achieved by railway undertakings within a specific market segment;
- $S_{1520\ s}$** – a valuation criteria that characterizes the optimal railway competitiveness within a specific market segment.

5. The charging body calculates the charges for every cost parameter $param$ in a specific market segment s within international 1520 traffic by adding markups of every parameter in a specific market segment s to the average direct cost value:

$$M_{ceļ\ uztur\ 1520\ s} = TI_{ceļ\ uztur\ 1520} + MP_{ceļ\ uztur\ 1520\ s};$$

$$M_{mez\ uztur\ 1520\ s} = TI_{mez\ uztur\ 1520} + MP_{mez\ uztur\ 1520\ s}.$$

6. The amount of charge $M_{mez\ uztur\ 1520\ s}$ is divided between the railway undertaking performing transportation in border regions (national border – Zilupe – Rezekne, national border – Karsava – Rezekne, national border – Indra – Daugavpils, national border - Kurcums - Daugavpils, national border - Eglaine - Daugavpils) and the first railway undertaking that continues the movement from stations Rezekne and Daugavpils, observing the proportion which is determined by the charging body as a ratio between the total number of train km in these border regions in the reference period and the total number of train km in the other parts of the railway infrastructure network within international 1520 traffic in the reference period and is published on the website of the charging body on the internet.

If a railway undertaking has made payments for the doubled number (for traffic in even and odd directions¹²) of freight trains actually dispatched from the places crossing the national border, as well as border stations (Meitene and Lugazi) in a market segment within international 1520 traffic, but in LDZ railway network a part of dispatched wagons have been given to be used by a different railway undertaking, then railway undertakings settle the payments with each other, observing $DR_{mez\ uztur\ 1520\ s}$ proportion for one wagon determined by the charging body as an inverse ratio between the performance indicator of number of trains in the programming period $DR_{mez\ uztur\ 1520\ s}$ and the number of wagons corresponding to this performance indicator. $DR_{mez\ uztur\ 1520\ s}$ proportion for one wagon is determined by the charging body and it is published on its website on the internet;

¹² within the meaning of regulation of the Cabinet of Ministers No. 724 of August 3, 2010 on the railway technical operations regulations

(Amended by regulations of 30.09.2019.)

7. The charging body determines the charge $M_{rezer\ bf\ v\ 1520}$ for the part of the railway infrastructure capacity that is allocated in the capacity allocation plan, inclusive of that which is not used (the application assurance payment) at the level of the value of $M_{rezer\ bf\ v\ krav}$ according to the provisions of Paragraph 47 of the Scheme.

(Amended by regulations of 17.06.2019.)

8. The criteria for market segmentation and determining markups for the programming period after 1 July 2019:

8.1. the segmentation criteria based on the impact of different types of utilization of the railway infrastructure on the cost of railway infrastructure:

The charging body sets valuation criteria that characterize the impact of different types of utilization of the railway infrastructure on the cost of railway infrastructure in a specific market segment - C_s , taking into account the significance of the deviations from the full costs of services, comparing scenarios where one of the existing market segments is divided into smaller segments or the same market segment is not divided:

$C_s = 0$, in cases where different influence of the criterion cannot be observed, or

$$C_s = \Delta PI_{param\ 1520\ s'} / \Delta PI_{param\ 1520\ s''}, \text{ where}$$

$\Delta PI_{param\ 1520\ s'}$ un $\Delta PI_{param\ 1520\ s''}$ – the changes of full costs of the two potential services, if it is divided into market segments

Criterion	Designatio n of the criterion	evaluated pair of services		determined value of the criterion
		justification of valuation of the criterion		
Impact on specialized infrastructure	spec infra	utilization of specialized railway infrastructure for specific type of services	utilization of specialized railway infrastructure for specific type of different services	$C_{spec\ infra\ s} = 0$
		the increase of maintenance, renewal or operating costs of the infrastructure manager		no specialized infrastructure
Impact on annual working timetable	vile kust	combined transportation	direct train traffic	$C_{vile\ kust\ s} = 0$
		specific departure or arrival times within combined transportation increase train operating costs		coordination procedures are not registered
impact on railway infrastructure	tehnisk norm	technical specifications of trains correspond to the specifications indicated in the railway infrastructure network statement	technical specifications of trains do not correspond to the specifications indicated in the railway infrastructure network statement	$C_{tehnisk\ norm\ s} = 0$
		technical specifications are different from those indicated in the railway infrastructure network statement and increase / decrease maintenance, renewal or operating costs of the infrastructure manager		the different technical specifications of trains are taken into account in cost allocation
impact on environment	vide	trains that transport dangerous cargo	other freight trains	$C_{vide\ s} = 0$
		as a result of applicants' transportation, differing environment protection and safety costs are incurred		distinctive environment protection and safety costs are not observed
impact on traffic	tehnol norm	trains transporting all wagons from one point to one destination	trains that consist of wagons that are separate freight units and are coupled and uncoupled en route	$C_{tehnol\ norm\ s} = 0$

normalized significance valuation	regular	0,16	0,13	0,10	0,11	0,14	0,14	0,14	0,08
	irregular	0,14	0,12	0,11	0,10	0,14	0,15	0,17	0,07
	lightweight	0,16	0,13	0,10	0,10	0,14	0,14	0,15	0,08
development valuation	regular	0,77	0,70	0,65	0,65	0,77	0,75	0,73	0,53
	irregular	0,75	0,57	0,67	0,67	0,70	0,70	0,73	0,50
	lightweight	0,73	0,57	0,60	0,60	0,70	0,68	0,72	0,50
R = 0,71	regular	0,12	0,09	0,07	0,07	0,11	0,10	0,10	0,04
R = 0,68	irregular	0,11	0,07	0,07	0,07	0,09	0,11	0,12	0,03
R = 0,65	lightweight	0,11	0,07	0,06	0,06	0,10	0,09	0,11	0,04
R_{reg 1520} = 1,04 R_{nereg 1520} = 1,00 R_{vieglsv 1520} = 0,96									

9. The charging body applies markups **MP_{param 1520 s}** within international 1520 traffic in the following market segments:

Name of market segment	Market segment s designation	Market segment determination features		Other special market segment determination features
		in freight traffic - train index		
		first group	third group	
International 1520 traffic				
regular traffic freight transportation within international 1520 traffic using pre-assigned train paths	reg 1520	dispatching station outside EEA	in-port accepting station in LDZ network, accepting station in LDZ railway network or outside it (within EEA)	for freight transportation from or to the third countries with railway gauge of 1520mm without processing, coupling and uncoupling of wagons in stations, the train is listed in the list of international container trains.
		in-port dispatching station in LDZ railway network, dispatching station in LDZ railway network or outside it (within EEA)	accepting station outside EEA	
		dispatching station outside EEA	accepting station outside EEA	
other freight transportation within international 1520 traffic	citi 1520	dispatching station outside EEA	in-port accepting station in LDZ network, accepting station in LDZ railway network or outside it (within EEA)	for freight transportation from or to the third countries with railway gauge of 1520mm coupling of wagons of other groups at the processing, coupling or uncoupling station is allowed, if the train index is not changed.
		in-port dispatching station in LDZ railway network, dispatching station in LDZ railway network or outside it (within EEA)	accepting station outside EEA	
		dispatching station outside EEA	accepting station outside EEA	

(Amended by regulations of 30.09.2019.)

10. The charging body has identified a potential market segment (lightweight freight transportation services within international 1520 traffic using pre-assigned train paths - **vieglsv 1520**)¹³ within international 1520 traffic **citi 1520** in a market segment with a different value of the competitiveness valuation criterion a **R_s**, where a different markup amount may be determined, if the capacity allocation body receives applicant's request for assigning two-way train paths and accordingly the valuation of criteria **C_s** un **V_s** is

¹³ Full train sets (at least 54 wagons), where the neto weight of every wagon does not exceed 23 tonnes

performed; until then, such services remain as a component **citi 1520** market segment and, therefore, the amount of markup **MP param 1520 citi 1520** is determined by **citi 1520**.

11. In general, the payment conditions within international 1520 traffic are applied as provided by the Collection Scheme, replacing the tertiary indexes **krav** or **gr** for railway undertakings', applicants' and performers of individual technological processes' payment amount indicators with index **1520**, except the payment referred to in Paragraph 6 of the Charging Scheme which is defined according to Paragraph 12 of Annex 6 to the Scheme.

12. The infrastructure manager uses the following formula for applying the payment for the minimum access package for providing international 1520 traffic including all railway infrastructure for providing train acceptance, handling and dispatching, as well as the access to the railway infrastructure connecting service facilities where freight trains are assembled and disassembled, and rolling stock is transferred for loading, unloading or to related sidings:

$$\mathbf{KM}_{1520\text{ s}} = \mathbf{M}_{\text{cel uztur 1520 s}} \times \mathbf{DR}_{\text{cel uztur 1520 s}} + \mathbf{M}_{\text{mez uztur 1520 s}} \times \mathbf{DR}_{\text{mez uztur 1520 s}} + \mathbf{N},$$

where

KM **1520 s** – the payment to be made by a railway undertaking for the railway infrastructure within international 1520 traffic in a specific market segment (*euro*);

M **cel uztur 1520 s** – the value of the charge of railway infrastructure maintenance, renewal and train operating charging parameter for the minimum access package including all railway infrastructure for providing train acceptance, handling and dispatching, as well as the access to the railway infrastructure connecting service facilities where freight trains are assembled and disassembled, and rolling stock is transferred for loading, unloading or to related sidings in a specific market segment within international 1520 traffic determined by the charging body (*euro* per one train km, value added tax excluded);

DR **cel uztur 1520 s** – the number of train km actually travelled by the railway undertaking's freight trains in a specific market segment within international 1520 traffic in the relevant invoicing period;

M **mez uztur 1520 s** – the value of the charge of the maintenance and train operating charging parameter for providing access to the railway infrastructure connecting service facilities where freight trains are assembled and disassembled, and rolling stock is transferred for loading, unloading to related sidings in a specific market segment within international 1520 traffic determined by the charging body (*euro* per one train, value added tax excluded);

DR mez uztur 1520 s – the doubled number of actually dispatched railway undertaking's freight trains from the places crossing the national border¹⁴, as well as border stations (Meitene and Lugazi) in a specific market segment within international 1520 traffic and the number of actually accepted trains in the final processing station in terrestrial transit traffic in the relevant invoicing period;

N – fees and taxes to be paid by the railway undertaking in accordance with the legislation in force in the Republic of Latvia (*euro*).

(Amended by regulations of 30.09.2019.)

DR mez uztur 1520 s – the doubled number (for transporting loaded and unloaded wagons) of actually dispatched railway undertaking's trains within international 1520 traffic in the relevant reference period from the places crossing the national border¹⁵ and bordering stations (Meitene un Lugaži) in marine transit and import traffic or in terrestrial transit traffic the performance indicator of the number of actually accepted trains in the final processing station;

(Amended by regulations of 17.06.2019.)

N – fees and taxes to be paid by the railway undertaking in accordance with the legislation in force in the Republic of Latvia (*euro*).

(Amended by regulations of 29.04.2019.)

13. If according to Paragraph 8 of this Annex, market segments are separated, based on the through rate offer criterion or on the volume elasticity for valuation of value **J_s** declared by applicants, where the transportation is performed using pre-assigned train paths, the charging body may determine railway infrastructure capacity assurance payments **M_{rezer 1520 s}** in these segments. In each of these market segments, railway infrastructure capacity assurance payments **M_{rezer 1520 s}** are set as the combination of all parameter charges **M_{param 1520 s}** which is expressed as an average charge of performance indicator of one train km in the relevant market segment in accordance with the following formula:

$$\mathbf{M}_{\text{rezer 1520 s}} = \mathbf{M}_{\text{ceļ uztur 1520 s}} + (\mathbf{M}_{\text{mez uztur 1520 s}} \times \mathbf{DR}_{\text{mez uztur 1520 s}}) / \mathbf{DR}_{\text{ceļ uztur 1520 s}},$$

where

¹⁴ according to Paragraph 3.2.7. of the railway infrastructure network statement of 2019/2020, the places crossing the national border are Rezekne freight station on the national border with the Russian Federation and Daugavpils freight station on the national border with the Republic of Belarus (regarding only the commodities transported in a freight train)

¹⁵ according to Paragraph 3.2.7. of the railway infrastructure network statement of 2019/2020, the places crossing the national border are Rezekne freight station on the national border with the Russian Federation and Daugavpils freight station on the national border with the Republic of Belarus (regarding only the commodities transported in a freight train)

M <small>rezer 1520 s</small>	– the amount of railway infrastructure capacity assurance payments within international 1520 traffic in a specific market segment where the transportation is performed using pre-assigned train paths;
M <small>ceļ uztur 1520 s</small>	– the charge amount of the maintenance, train operating and renewal charging parameter of the railway infrastructure within international 1520 traffic in a specific market segment where the transportation is performed using pre-assigned train paths;
M <small>mez uztur 1520 s</small>	– the charge amount of the maintenance and train operating charging parameter of the railway infrastructure providing access to the railway infrastructure connecting service facilities within international 1520 traffic in a specific market segment where the transportation is performed using pre-assigned train paths;
DR <small>mez uztur 1520 s</small>	– the performance indicator corresponding to performance indicator DR <small>ceļ uztur 1520 s</small> of the doubled number (for traffic in even and odd directions ¹⁶) of actually dispatched freight trains from the places crossing the national border ¹⁷ , as well as border stations (Meitene and Lugazi) and forecasted performance indicator of the number of actually accepted trains in the final processing station in terrestrial transit traffic in the relevant programming period within international 1520 traffic in a specific market segment where the transportation is performed using pre-assigned train paths, which is taken into account when determining the relevant amount of markup MP <small>mez uztur 1520 s</small> in force;
DR <small>ceļ uztur 1520 s</small>	– the forecasted performance indicator of the number of train km in the programming period within international 1520 traffic in a specific market segment where the transportation is performed using pre-assigned train paths, which is taken into account when determining the relevant amount of markup MU <small>ceļ uztur 1520 s</small> in force;

The charging body determines the amount of charge **M** rezer 1520 s for those market segments where the transportation in the programming period is performed using pre-assigned train paths.

(Amended by regulations of 30.09.2019.)

¹⁶ within the meaning of regulation of the Cabinet of Ministers No. 724 of August 3, 2010 on the railway technical operations regulations

¹⁷ according to Paragraph 3.2.7. of the railway infrastructure network statement of 2019/2020, the places crossing the national border are Rezekne freight station on the national border with the Russian Federation and Daugavpils freight station on the national border with the Republic of Belarus (regarding only the commodities transported in a freight train)

The method of designation used in the Scheme

1. For indicating costs and their deviations the following designations are used in the Scheme:

1.1. **PI** – the full costs of the infrastructure manager: the full costs of the railway infrastructure which are necessary to ensure common access rights throughout the railway infrastructure and which are allocated by the infrastructure manager in accordance with the cost allocation method from its total costs to different service categories provided to railway undertakings for the provision of the minimum access package and the access to railway infrastructure connecting service facilities;

1.2. **PI'** – the adjusted **PI** value, where the infrastructure manager's financing costs are replaced with a reasonable profit margin in accordance with Sub-paragraph 35.1 of the Scheme;

1.3. **ΔPI** – changes in the full costs in the relevant programming period caused by the application of a differentiation instrument or the division of a market segment;

1.4. **NI** – the ineligible costs of the infrastructure manager: the ineligible cost of the railway infrastructure within the meaning of Regulation considering the explanations in Paragraph 17.

1.5. **KTI** – the direct costs of the infrastructure manager: the network-wide direct costs of the railway infrastructure within the meaning of Regulation;

1.6. **TI** – the average direct unit costs;

1.7. **F** – the railway infrastructure financing costs or the actual costs of the infrastructure manager for attracting financial means (interest payments), as well as costs that are related to the losses due to currency fluctuations;

1.8. the designations of the costs and their deviations are elaborated by indices in the following order (see example 1):

1.8.1. the primary index indicates the designation of the applicable differentiation instrument (are indicated only for **ΔPI** marker):

pārsłodz – differentiation instrument related to the capacity enhancement plan;

infpr – differentiation instrument related to a specific investment project;

the primary index is not applied to other cost markers;

1.8.2. the secondary index indicates the designation of a cost parameter according to the activities referred to in Annex 1 to the Scheme and the activity of the performer of the essential functions:

ceļ uztur – the maintenance and train operating of the railway infrastructure;

mez uztur – the maintenance and train operating of the railway infrastructure providing access to railway infrastructure connecting service facilities;

atj – the renewal of the railway infrastructure;

- elektr** – the maintenance and renewal of traction electrical supply equipment;
- bfv** – the performing of the infrastructure manager’s essential functions;
- param** – any of the above-mentioned cost parameters;

1.8.3. the tertiary index indicates the designation of the relevant service group referred to in Subparagraphs 6.1 and 6.2 of the Scheme or of the international 1520 traffic:

- pas** – provision of passenger traffic according to Subparagraph 6.1 of the Scheme;
- krav** – provision of freight transportation according to Subparagraph 6.2 of the Scheme;
- 1520** – provision of international 1520 traffic;
- gr** – any of the above-mentioned service groups.

Example 1:

NI_{ceļ uztur krav} – ineligible costs (NI) of maintenance and train operating of the railway infrastructure for providing freight transportation

ΔPI_{infpr ceļ uztur krav} – the changes of the direct maintenance and train operating costs of the railway infrastructure related to a specific investment project in freight traffic

2. For indicating performance indicators and their deviations the following designations are used in the Scheme:

- 2.1. **DR** – performance indicator;
- 2.2. **ΔDR** – the changes of the performance indicator that are caused by the application of a differentiation instrument;

2.3. the designations of the performance indicators and their deviations are elaborated by indices in the following order (see example 2):

2.3.1. the primary index indicates the designation of the applicable differentiation instrument causing the changes of performance indicator:

- pārsloz** – in a part of the railway infrastructure over the period of congestion;
 - infpr** – in a part of the railway infrastructure where a specific investment project is being carried out;
 - opt nosl** – as a result of the application of network the loading optimization discount
- the primary index is not applied to other performance indicators;

2.3.2. the secondary index indicates the designation of the related cost parameter characterized by the relevant performance indicator according to the activities referred to in Annex 1 to the Scheme and the activity of the performer of the essential functions:

ceļ uztur – for driving the maintenance and train operating costs of the railway infrastructure for the performance indicator of train km;

mez uztur – for driving the maintenance and train operating costs of the railway infrastructure providing access to railway infrastructure connecting service facilities for the performance indicator of the number of wagons used in railway traffic;

atj – for driving the renewal costs of the railway infrastructure for the performance indicator of gross tonne km;

elekt – for driving the costs of using, maintenance and renewal of traction electrical supply equipment for the performance indicator of the train km for trains that use electric traction;

bfcv – for driving the costs of performing the essential functions of the infrastructure manager for the performance indicator of the number of assigned train paths;

param – any of the above-mentioned indicators;

2.3.3. the tertiary index indicates the designation of the related service group referred to in Subparagraphs 6.1 and 6.2 of the Scheme or of the international 1520 traffic characterized by the relevant performance indicator:

pas – for provision of passenger traffic according to Subparagraph 6.1 of the Scheme;

krav – for provision of freight transportation according to Subparagraph 6.2 of the Scheme;

1520 – for provision of international 1520 traffic;

gr – for any of the above-mentioned service groups.

Example 2:

DR ceļ uztur krav – the performance indicator of train km for driving of the maintenance and train operating costs of the railway infrastructure within freight traffic

DR pārslodz ceļ uztur krav – the performance indicator of train km for driving of the maintenance and train operating costs of the railway infrastructure within freight traffic in a specific part of the railway infrastructure over the period of congestion

3. For indicating infrastructure charges, charge mark-ups, higher charges and differentiated charges the following designations are used in the Scheme:

3.1. **M** – the value of the charge set by the charging body;

3.2. **MU** – the value of the charge mark-up set by the charging body;

3.3. **MP** – the value of a higher charge within international 1520 traffic set by the charging body;

3.4. **A** – the amount of the discount set by the charging body;

3.5. the designations of infrastructure charges, charge mark-ups, higher charges and differentiated charges are elaborated by indices in the following order (see example 3):

3.5.1. by the primary index the designation of the applicable differentiation instrument influencing the amount of the charge, is identified, for example:

pārslodz – congestion charge;

vide – environment charge;

infpr – project charge;

sankc/komp/prēm – penalties (for actions which disrupt the operation of the railway network), compensations and bonuses (charge reductions to applicants) as interpreted by the railway network performance scheme;

tehpr – the charge for the capacity that is used for providing technological processes;

rezer – the charge for the part of the railway infrastructure capacity that is allocated in the capacity allocation plan, inclusive of that which is not used (application assurance payment);

apj – volume discount;

opt nosl – network loading optimization discount;

the primary index is not used for designation of other charges, charge mark-ups, charge increases and charge differentiation;

(Amended by regulations of 17.06.2019.)

3.5.2. the secondary index indicates the designation of the related cost parameter characterized by the relevant infrastructure charges, charge mark-ups, higher charges or differentiated charges according to the activities referred to in Annex 1 to the Scheme and the activity of the performer of the essential functions:

ceļ uztur – for charges, charge mark-ups, higher charges or differentiated charges for the maintenance and train operating of the railway infrastructure;

mez uztur – for charges, charge mark-ups, higher charges or differentiated charges for the maintenance and train operating of the railway infrastructure providing access to railway infrastructure connecting service facilities;

atj – for charges, charge mark-ups, higher charges or differentiated charges for the renewal of the railway infrastructure;

elektr – for charges, charge mark-ups or differentiated charges for the use, maintenance and renewal of traction electrical supply equipment;

bfv – for charges or differentiated charges for performing the essential functions of the infrastructure manager;

param – for charges, charge mark-ups, higher charges or differentiated charges of any of the above-mentioned parameters;

3.5.3. the tertiary index indicates the designation of the related service group referred to in Subparagraphs 6.1 and 6.2 of the Scheme or of the international 1520 traffic relevant to the

respective infrastructure charges, charge mark-ups, higher charges or differentiated charges:

pas – for provision of passenger traffic according to Subparagraph 6.1 of the Scheme;

krav – for provision of freight transportation according to Subparagraph 6.2 of the Scheme;

1520 – for provision of international 1520 traffic;

gr – for any of the above-mentioned service groups.

3.5.4. the quaternary index indicates the designation of the market segment referred to in Annex 5 to the Scheme relevant to the respective infrastructure charges, charge mark-ups, higher charges or differentiated charges:

sab pak pas – passenger transportation services within the framework of the public service contract;

citi pas – other passenger transportation services;

reg sviv krav – regular traffic domestic freight transportation with collecting and pick-up trains using pre-assigned train paths;

nereg sviv krav – irregular traffic domestic freight transportation with collecting and pick-up trains;

kontein krav – domestic container freight transportation and within European Economic Area, using pre-assigned train paths;

citi krav – other freight transportation, excluding international 1520 traffic, using pre-assigned train paths;

s 1520 – any of the segments within international 1520 traffic;

s – any of the above mentioned or new market segment.

Example 3:

M_{cel uztur krav s} – the charge value set by the charging body of the charging parameter for maintenance and train operating in a specific market segment within freight traffic

A_{apj atj pas sab pak pas} – the amount of volume discount set by the charging body for the charge of railway infrastructure renewal parameter within passenger traffic in the market segment of the services provided within the framework of the public service contract

4. For indicating the indicators intended for calculating the infrastructure manager's reasonable profit margin the following designations are used in the Scheme:

4.1. **P** – the infrastructure manager's reasonable profit margin;

4.2. **RAB** – the value of the infrastructure manager's assets register;

4.3. **wacc** – weighted average cost of infrastructure manager's capital as a percentage;

- 4.4. r_e – return on equity;
- 4.5. r_f – risk-free rate – the average arithmetic interest rate of government long-term securities of the highest credit rating countries of the Organization for Economic Co-operation and Development (OECD), using the latest OECD report on government long-term bond rates;
- 4.6. r_c – pure premium, which includes a risk assessment of the country and of the industry;
- 4.7. r_d – the actual weighted average long-term loan rate of the infrastructure manager
- 4.8. E – the value of the equity at the end of the reference period;
- 4.9. D – the value of the borrowed capital at the end of the reference period;
- 4.10. the designations of charges, mark-ups, increased charges and differentiated charges are elaborated by indices in the following order (see example 4):
- 4.10.1. the primary index indicates the designation of the cost parameter related to the applicable reasonable profit margin according to the activities referred to in Annex 1 to the Scheme and the activity of the performer of the essential functions:
- $ce|uztur$ – for the infrastructure manager's reasonable profit margin for the cost parameter of maintenance and train operating of the railway infrastructure;
- $mezuztur$ – for the infrastructure manager's reasonable profit margin for the cost parameter of maintenance and train operating of the railway infrastructure providing access to railway infrastructure connecting service facilities;
- atj – for the infrastructure manager's reasonable profit margin for the cost parameter of renewal of the railway infrastructure;
- $elektr$ – for the infrastructure manager's reasonable profit margin for the cost parameter of the using, maintenance and renewal of traction electrical supply equipment;
- bfv – for the infrastructure manager's reasonable profit margin for the cost parameter of performing the essential functions of the infrastructure manager;
- $param$ – for the infrastructure manager's reasonable profit margin for any of the above-mentioned parameters;
- 4.10.2. the secondary index indicates the designation of the related service group referred to in Subparagraphs 6.1 and 6.2 of the Scheme or of the international 1520 traffic relevant to the respective infrastructure manager's reasonable profit margin:
- pas – for provision of passenger traffic according to Subparagraph 6.1 of the Scheme;
- $krav$ – for provision of freight transportation according to Subparagraph 6.2 of the Scheme;
- 1520 – for provision of international 1520 traffic;
- gr – for any of the above-mentioned service groups.

Example 4:

P cel uztur krav – the profit margin for the charging parameter of the maintenance and train operating of the railway infrastructure within freight traffic

5. For indicating the allowable level of mark-ups and higher charges in a market situation the following designations are used in the Scheme:

5.1. **mcb** – a ratio characterizing the allowable level of mark-ups or higher charges in market conditions of a specific market segment and which is determined as the maximum value of the value of the valuation criteria **C**, **V** and **S**;

5.2. **C** – a valuation criterion characterizing the impact of different types of utilization of the railway infrastructure on the costs of railway infrastructure within a specific market segment;

5.3. **V** – a valuation criterion that characterizes the productivity achieved by railway undertakings within a specific market segment;

5.4. **S** – a valuation criterion that characterizes the optimal railway competitiveness within a particular market segment which consists of criteria **J** and **R**;

5.5. **J** – a valuation criterion that characterizes the demand for the railway infrastructure capacity in a specific market segment;

5.6. **R** – a valuation criterion that characterizes the impact of the allowable level of mark-ups and higher charges on the competitiveness of the final service of a specific market segment

5.7. the indicators characterizing the allowable level of mark-ups and higher charges in a market situation are elaborated by indices in the following order:

5.7.1. the primary index, if necessary, indicates the reference or programming period relevant to the respective valuation criterion;

5.7.2. the secondary index indicates the designation of the valuation criterion of market segmentation according to Annex 3 to the Scheme:

spec infra – a valuation criterion that characterizes the impact on specialized infrastructure;

vile kust – a valuation criterion that characterizes the impact on annual working timetable;

tehnisk norm – a valuation criterion that characterizes the impact on railway infrastructure;

vide – a valuation criterion that characterizes the impact on environment;

tehnol norm – a valuation criterion that characterizes the impact on traffic;

prior – a valuation criterion that characterizes train priority;

intens – a valuation criterion that characterizes consumer intensity;

integr pied – a valuation criterion that characterizes through rate offer;

5.7.3. the tertiary index indicates the designation of the market segment referred to in Annex 5 to the Scheme relevant to the respective valuation criterion:

sab pak pas – passenger transportation services within the framework of the public service contract;

citi pas – other passenger transportation services;

reg sviv krav – regular traffic domestic freight transportation with collecting and pick-up trains using pre-assigned train paths;

nereg sviv krav – irregular traffic domestic freight transportation with collecting and pick-up trains;

kontein krav – domestic container freight transportation and within European Economic Area, using pre-assigned train paths;

citi krav – other freight transportation, excluding international 1520 traffic, using pre-assigned train paths;

s 1520 – any of the segments within international 1520 traffic;

s – any of the above mentioned or new market segment.

6. The publication deadlines are indicated in the Scheme as a time deviation from the deadline of the publication of the railway network performance statement (see example 5) using the following designations:

6.1. **X** – the deadline of the publication of the railway network performance statement;

6.2. **± n m** – a deviation from the deadline of the publication of the railway network performance statement in months, where n is the number of months;

6.3. **± z d** – a deviation from the deadline of the publication of the railway network performance statement in days where z is the number of days.

Example 5:

X - 4m – four months before the deadline of the publication of the railway network performance statement

7. Other designations can be used in the Scheme if their legend is included in the base text.

(Amended by regulations of 29.04.2019.)

Principles of the procedure of allocating the costs of performing the essential functions

1. The record of the costs of the performer of the essential functions of the infrastructure manager and their allocation to specific service groups referred to in Subparagraphs 6.1 or 6.2 is executed in the enterprise resource planning system (SAP).

2. The costs are recorded into cost centers and other cost accumulation objects in a way that allows the allocation of the costs to the service groups referred to in Subparagraphs 6.1 or 6.2.

3. The record of the costs is executed according to the requirements related to the direct and ineligible costs within the meaning of Regulation.

4. The costs of the services are calculated from the financial data in the budget of the performer of the essential functions of the infrastructure manager for the relevant programming period, as well as the information about the volume of the services requested by railway undertakings and applicants and the number of assigned and actually used train paths.

5. In order to allocate costs to the service groups referred to in Subparagraphs 6.1 or 6.2 the operating costs from the primary recording system are used that are divided into production and overall costs:

5.1. production costs include costs related to the provision of operation of the regional capacity allocation centers. Within the primary record of production costs, they are allocated to the freight traffic service group directly;

5.2. overall costs include costs related to the provision of the railway infrastructure capacity allocation process, as well as costs of making decisions on infrastructure charging and of analytical information necessary for making these decisions, administrative and other undivided costs.

6. The charging body adjusts the value of the full costs of performing the essential functions PI_{bfv} by adding a reasonable profit margin P_{bfv} , that is calculated taking into account the ratio of the infrastructure manager's reasonable profit margin to the value of full costs of the service groups referred to in Subparagraphs 6.1 or 6.2 PI , and which covers the project financing costs of the performer of the essential functions and balances the fluctuations that may occur in the programming period due to the general financial and personnel management¹⁸ decisions made by the concern.

¹⁸ within the meaning of Article 13. ¹ of the Railway Law

7. Within the primary record overall costs are allocated to the service groups referred to in Subparagraphs 6.1 or 6.2 using the relevant cost driver - the number of assigned train paths in the programming period.

8. The direct unit costs of an additional train path that occur if the volume of the services planned in the programming period is exceeded (if the number of actually assigned train paths to applicant's trains in a specific service group during the capacity allocation period exceeds the planned number) are calculated in accordance with the following principles:

8.1. the costs of capacity allocation for an additional train path outside the capacity allocation plan include specific costs of wages of the employees of the capacity allocation body including social insurance payments that are determined in accordance with the amount of effort devoted and the increase of work intensity for allocating one unit of additional train path.

8.2. the increase of work intensity for allocating one additional train path is characterized by the amount of unplanned and unforeseen effort, which does not correspond to the determined wages of the specific employees of the performer of the essential functions of the infrastructure manager or the agreed workload, and which is determined as a percentage (not more than 200% in total) of the wage rate including social insurance payments of the specific employees based on the report on the amount of overtime related to the allocation of additional train paths filed by the capacity allocation director of the performer of the essential functions of the infrastructure manager.

9. The costs of performing the essential functions can be transferred once a calendar year or in cases when the decisions on infrastructure charges or the amendments to the Scheme, the Collection Scheme, network Performance Scheme or capacity Allocation Scheme are taken by the performer of the essential functions.

(Amended by regulations of 29.04.2019.)