Annex 5.2.1

METHOD OF CALCULATION AND DETAILED ACCOUNTING OF THE DIRECT COSTS OF THE SE NRIC ACTIVITY

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I. DIRECT COST CALCULATION METHOD – MINIMUM ACCESS PACKAGE

1. Introduction

The direct cost calculation method – minimum access package (MAP) is in line with the requirements of the national and European legal frameworks related to the railway transport services and to costs incurred for the SE NRIC activities.

1.1. Objectives and scope

- Establishment of main requirements and assumptions regarding the direct cost;
- Determination of the nature of costs for the minimum access package for the activities: Train Traffic and Capacity Management; Railway Track and Facilities, Signalling and Telecommunications, Electricity Distribution.

1.2. Regulatory framework

- Railway Transport Act in force as of January 1, 2002;
- Ordinance No. 41 of 27 June 2001 on the access and use of railway infrastructure;
- 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;
- Directive 2012/34/EU of the European Parliament and the Council of 21 November 2012 establishing a single European railway area.

2. Basic requirements and principles for determining the direct costs

Pursuant to Article 31, Para. 3 of Directive 2012/34/EU of the European Parliament and of the Council, the charges for the minimum access package shall be set at the cost that is directly incurred as a result of operating the train service. For this purpose, Commission Regulation (EU) 2015/909 determines the modalities for the calculation of the costs directly incurred as a result of operating the train service.

2.1. Definitions

Direct costs – the costs, directly incurred as a result of the train service.

Direct costs for the whole network – the calculated difference between the costs for the services for the minimum access package and the costs for the access to the infrastructure, which connects the service facilities, on the one hand, and the impermissible costs stipulated in Article 4 of Commission Regulation (EC) 2015/909, on the other hand.

Direct unit costs – the direct costs per train kilometre passed by the vehicle, gross train ton-kilometre or a combination of them, as well as the direct costs for the use of electric power supply equipment for the supply of traction energy.

2.2. Calculative method for calculation of the direct costs

The present method is elaborated based on the calculative method.

The direct costs for the whole network are calculated as the difference between the costs for the services for the minimum access package and the costs for the access to the infrastructure, which connects the service facilities, on the one hand, and the impermissible costs, on the other hand.

The average direct unit costs for the whole network regarding the use of the railway track are calculated as the direct costs for the whole network related to the use of the railway track are divided by the realized or forecast total train operation of the RUs along the railway infrastructure, set out in train kilometers or gross ton-kilometers.

The average direct unit costs for the whole network regarding the use of the overhead line are calculated as the direct costs for the whole network related to the use of the overhead line are divided by the realized or forecast total electricity used by the RUs, according to the readings of the electric meters in the locomotives, set out in megawatt hours (MWh).

2.3. Requirements and restrictions when determining the direct costs

General requirements

- The direct costs include only those costs that are directly incurred as a result of operating the train service;
- The calculation of the direct costs is made for the whole railway network;
- The direct costs are set out as the difference between the full costs for provision of the services for the minimum access package and for the access to the infrastructure, which connects the service facilities, on one hand, and the non-eligible costs, on the other hand;
- The direct costs shall be based on the costs of the assets from the previous years or when these costs are not available, they shall be based on the actual costs;
- The costs used in the calculations are based on the payments made or forecast by the infrastructure manager;
- For the calculation of the average cost values, the cost values of three consecutive years are used.

Main steps for the calculation and allocation of the direct costs

Calculation of the total costs for the network by cost centres (services);

Determining the permissible costs by cost centres (services);

Determining the direct costs for the minimal access package (MAP) by the SE NRIC activities:

- Train Traffic and Capacity Management Activity (TTCM);
- Railway Track and Facilities Activity (RTF);
- Signalling and Telecommunications Activity (S&T);
- Electricity Distribution Activity (ED).

Costs Eligibility

The infrastructure manager shall not include in the calculation of the direct costs for the whole network the following costs:

a) fixed costs related to the provision of a section of a line that the infrastructure manager shall bear, even in the absence of train traffic;

b) costs that do not relate to payments made by the infrastructure manager. Costs or cost centres that are not directly related to the provision of the minimum access package or to access to infrastructure connecting service facilities;

c) costs for acquisition, selling, dismantling, decontamination, recultivation or lease of land or other fixed assets;

d) fixed costs for the whole network, including costs for salaries and pensions;

e) financing costs;

f) costs related to the technological progress or obsolescence;

g) costs for intangible assets;

h) costs for sensors and equipment for communications and signalling from the path side, if they are not directly related to the operation of the train service;

i) costs for information and costs for communication or telecommunications equipment not located on the path side;

j) costs related to particular cases of force majeure, accidents and interruptions of the service, without prejudice to Article 35 of Directive 2012/34/EU of the European Parliament and of the Council;

k) costs for the power supply equipment for traction electrical power, if they are not directly related to the operation of the train service. The direct costs for the operation of the train services, for which no power supply equipment is used, shall not include costs for the use of such equipment;

l) costs related to the provision of information set out in item 1, letter f) of Annex II to Directive 2012/34/EU of the European Parliament and of the Council, unless they are incurred as a result of operation of the train service;

m) administrative costs made under schemes for differentiation of the charges stipulated in Article 31, Para. 5 and Article 32, Para 4 of Directive 2012/34/EU of the European Parliament and of the Council;

n) the depreciation, which is not set out depending on the actual wear and tear of the infrastructure due to the operation of the train service;

o) the part of the costs for maintenance and renovation of the civil infrastructure, which is not directly related to the operation of the train service.

If the infrastructure manager could measure and prove transparently, decisively and objectively, on the grounds of, inter alia, the best international practice that the costs are directly incurred as a result of the operation of the train service, the infrastructure manager could include in the calculation of its direct costs for the whole network, the following particular costs:

a) costs for the staff who are required to keep open a certain section of a line, if an applicant wants to operate a particular train service, according to the timetable beyond the regular time, when this line is open;

b) the part of the costs for infrastructure, including for switches and crossings, which is subject to wearing and damage resulted from the train service;

c) the part of the costs for renovation and maintenance of the catenary overhead conductor and the auxiliary equipment for the overhead line, which costs are directly incurred as a result of the operation of the train service;

d) the costs for the staff who are required for preparation of the allocation of train routes and of the timetable, to the extent that these costs are directly incurred by the operation of the train service.

3. Assumptions used in the determination and allocation of the costs

3.1. Staff costs

The staff costs are not considered as direct costs in the calculation of the total costs, which should be covered by the charges for the package for minimum access to services.

3.2. Depreciation costs

The direct costs for the minimum access package do not include costs for the depreciation of tracks, marshalling stations and stations, as well as for the depreciation of the overhead line.

3.3. Costs for Train Traffic and Capacity Management Activity

The calculation of the direct costs for the Train Traffic and Capacity Management Activity as costs directly related to the train service includes the following costs in the MAP: consumables, templates and other documents directly related to the train traffic provision; processing of the applications for use of the railway infrastructure capacity and issuance of permit for use of capacity; hardware and specialized software for allocation of capacity and transmission and provision of information about the train traffic; any other information required for the application or execution of the service, for which the capacity is provided.

3.4. Costs for Railway Track and Facilities Activity

As direct costs for Railway Track and Facilities Activity, all costs for maintenance and repair are included as varying depending on the train traffic. These are costs for maintenance and repair of the railway track, switches, bridges and level crossings, as well as for daily preventive mechanized maintenance and repair, including the following items: rails, sleepers, inert materials (ballast, fraction), consumables for repair of the railway track, switches and parts of switches (stock rail, counter rail and intermediate rail, core etc.), lubricators, level-crossing flooring, fixing materials, tunnels, underpasses, culverts, embankments, protective and retaining walls, and others. During the maintenance of the railway track, all or only some of the items of the railway track should be replaced, as depending on the facility. The depreciation costs for the technical maintenance equipment, the acquisition of which is not financed with State funds (capital transfer, European programs, Interdepartmental Commission for Recovery and Assistance) are also included.

The calculation of the direct costs does not include costs for modernization and construction of new facilities and depreciation costs related to them.

3.5. Costs for Signalling and Telecommunications Activity

The calculation of the direct costs for Signalling and Telecommunications Activity includes, as a basis for the calculation of the charges for the minimum access package, the costs related to maintenance and repair of the following: heaters for heating of switches; devices for turnout and support of the switch blades and switch machines (SM); axle counters.

The heaters shall be installed directly on the railway switches by using fastening brackets.

The devices and switch machines turnout and support the switch blades and they are considerably worn out when a train passes. In order to maintain them in a good technical condition providing normal operation of the switches, some costs for materials are incurred – carrying structures, draw-bars and control rods, locking devices, lubricants, railway materials, reduction gearboxes for switch machines etc., fuel for transport vehicles, electricity and costs for outsourced services.

The axle counters, according to Commission Implementing Regulation (EU) 2019/776, are defined as an interoperability constituent. They interact directly with the passing wheels of the rolling stock and can count the number of passed axles, as well as direction, speed, etc. They are mounted directly on the railway track, and are thus directly exposed to all adverse effects of passing railway vehicles (such as vibrations, leaks and oiling, shocks and injuries to the housing from protruding objects, etc.).

The calculation of the direct costs does not include depreciation and staff costs.

3.6. Costs for Electricity Distribution Activity

As direct costs for the Electricity Distribution Activity for inclusion into the minimum access package, the maintenance and repair costs for the overhead line and the costs for the staff related to the operation of the overhead line are included.

The direct costs for the overhead line to the minimum access package for the use of power supply equipment for traction electricity, which are included in the infrastructure charges, are as follows:

- Costs for materials for the overhead line, including the following elements of the overhead line: ropes, insulators, connecting nodes and components, support structures – poles and foundations, cantilevers and their connecting elements, disconnectors and switchboards, section insulators, surge arresters, transformer points of the overhead line, compensation devices for the overhead line, earthing devices, etc.
- Costs for maintenance of the overhead line, which include only costs for materials and outsourced services. During the maintenance of the overhead line, all or only some of the elements of the overhead line should be replaced, as depending on the facility.

II. DETAILED ACCOUNTING OF THE DIRECT COSTS BY ECONOMIC ELEMENTS

DETAILED ACCOUNTING OF THE DIRECT COSTS BY ECONOMIC ELEMENTS for 2024

(All amounts are expressed in BGN thousand.)

PARAMETER	Total direct costs	Including:			
		Materials	Fuel	Electrical energy	Outsourced services
Direct Costs for the Train Traffic and Capacity Management Activity	**70**	59			11
Direct Costs for the Signalling and Telecommunications Activity	**57**	32		14	11
Direct Costs for the Railway Track and Facilities Activity	**37 359**	13 823	4 211	1 980	17 345
Direct costs for the Electricity Distribution Activity	**10 241**	1 546			8 695
Total reported direct costs	**47 727**	**15 460**	**4 211**	**1 994**	**26 062**

DETAILED ACCOUNTING OF THE DIRECT COSTS BY ECONOMIC ELEMENTS for 2025

(All amounts are expressed in BGN thousand.)

PARAMETER	Total direct costs	Including:			
		Materials	Fuel	Electrical energy	Outsourced services
Direct Costs for the Train Traffic and Capacity Management Activity	**143**	66			77
Direct Costs for the Signalling and Telecommunications Activity	**65**	29		15	21
Direct Costs for the Railway Track and Facilities Activity	**39 295**	13 844	3 740	1 992	19 719
Direct costs for the Electricity Distribution Activity	**12 919**	4 607			8 312
Total reported direct costs	**52 422**	**18 546**	**3 740**	**2 007**	**28 129**