Annex 5.2.1

METHOD OF CALCULATION AND DETAILED ACCOUNTING OF THE DIRECT COST 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; Permanent Way and Facilities, Signalling and Telecommunications, Electricity Distribution.

1.2 Regulations

Railway Transport Act in force as of 1 January 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 of the Council of 21 November 2012 establishing a single European railway area.

2. Main requirements to the direct costs and principles of their estimation

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 - calculated difference between the cost of the services of the minimal access package and costs of 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 of train-kilometre passed by the vehicle, gross train ton kilometre or a combination of them, as well as the direct costs for use of electric power supply equipment for traction energy.

2.2 Calculative method for calculation of the direct access

The present method is elaborated based on a calculative method.

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

The average direct unit costs for the whole network regarding the use of the permanent way are calculated as the direct costs for the whole network related to the use of the permanent way 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 cost for the whole network regarding the use of the overhead contact line are calculated as the direct cost for the whole network related to the use of the overhead contact 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 cost

General requirements

- The direct costs include only costs, incurred directly as a result of operating the train service;
- The calculation of the direct cost 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 of the minimum access package and for the access to the infrastructure connecting 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 for calculations, are based on the payments made or forecast by the infrastructure manager;
- For calculation of the average cost values the cost values of three consecutive years are used.

Main steps for calculation and allocation of the direct cost

Calculation of the direct 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);
- Permanent Way and Facilities Activity (PWF);
- Signalling and Telecommunication Activity (ST);
- Electricity Distribution Activity (ED).

Costs Eligibility

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

a) direct costs related to the provision of a line section, which shall be made by the infrastructure manager even without train traffic;

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

c) costs for acquisition, sale, cleaning, decontamination, recultivation or leasing of land or fixed assets;

d) fixed costs for the whole network, including personnel and pension costs;

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 telecommunication 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/EC 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 of the train services, for which no power supply is used, do 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/EC of the European Parliament and of the Council, unless they are related to the execution of the train service;

m) administrative costs made under schemes for differentiation of the charges stipulated in Article 31(5) and Article 32(4) of Directive 2012/34/EC 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 operating of the train service, the infrastructure manager could include in the calculation of its direct cost for the whole network the following particular costs:

a) costs for staff, needed for maintenance of a particular line section open, if an applicant wants to operate a particular train service according to the timetable beyond the time when this line is open;

b) the part of the infrastructure costs, including 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 auxiliary equipment for the overhead contact line, which are directly incurred as a result of the operation of the train service;

d) the costs for the staff needed for preparation of the allocation of train routes and timetables to the extent they are directly caused by the operation of the train service.

3. Assumptions with 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 depreciation costs of tracks, marshalling stations and stations as well as depreciation of the overhead line.

3.3 Costs forTrain Traffic and Capacity Management Activity

The calculation of the direct costs of 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, needed for application or execution of the service, for which the capacity is provided.

3.4 Costsfor Permanent Way and Facilities

As direct costs for Permanent Way 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 mechanical 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 etc. During the maintenance of the railway track all or only some of the items of the railway track are replaced as depending on the facility. Also, depreciation costs of the technical maintenance equipment, which acquisition is not financed with State funds (capital transfer, European programs, Inter-institution Commission for restoration and support) are included.

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

3.5 Costs forSignalling and Telecommunication Activity

The calculation of the direct cost for Signalling and Telecommunication Activity includes as grounds for calculation of the charges for the minimum access package the costs related to maintenance and repair of: heaters for heating switches; devices for turning and holding the switch blades and switch machines (SM); axle counters.

The heaters are installed directly on the switches by means of fixing clamps.

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 of 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 of subcontractors.

Axle counters according to 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, direction, speed, etc. They are mounted directly on the railway track and thus are directly exposed to all adverse effects of passing railway vehicles (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 of the overhead line and the costs for the staff related to the operation of the overhead line are included.

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

- Costs of materials for the overhead contact line, including the following elements of the overhead contact line: ropes, insulators, connecting nodes and details, support structures – poles and foundations, cantilevers and their connecting parts, disconnectors and switchboards, section insulators, surge arresters, transformer points of the overhead contact line, compensators for the overhead contact line, earthing devices etc.
- Costs for maintenance of the overhead contact line, including only costs of materials and subcontractors. In case of maintenance of the overhead contact line all or only some of the elements of the overhead contact line depending on the facility are replaced.

II. DETAILED ACCOUNTING OF THE DIRECT COST BY ECONOMIC ELEMENTS

DETAILED ACCOUNTING OF THE DIRECT COST BY ECONOMIC ELEMENTS for 2023

(All amounts are expressed in BGN thousand.)

PARAMETER	Total direct costs	Including:			
		Materials	Fuel	Electrical energy	Subcontractors
Direct Costs of the Train Traffic and Capacity Management Activity	**124**	48			76
Direct Costs for Signalling and Telecommunication Activity	**87**	36		15	36
Direct Costs for Permanent Way and Facilities Activity	**46,702**	16,771	4,245	2,423	23,263
Direct costs for the Electricity Distribution Activity	**15,619**	4,160			11,459
Total reported direct costs	**62,532**	**21,015**	**4,245**	**2,438**	**34,834**