

2nd edition, August 2002

Translation

O

Performance costing methods for hauled passenger stock in international service

Méthode de calcul des coûts des prestations du matériel remorqué à voyageurs en service international
Berechnungsmethode für die Kosten der Leistungen der Reisezugwagen im internationalen Verkehr



UNION INTERNATIONALE DES CHEMINS DE FER
INTERNATIONALER EISENBAHNVERBAND
INTERNATIONAL UNION OF RAILWAYS

Leaflet to be classified in Volume :

III - Finance, Accountancy, Costs, Statistics

Application :

With effect from 1 December 2001

All members of the International Union of Railways being also members of RIC

Record of updates

1st edition, January 1984 with its amendment

2nd edition, August 2002 modification of calculation system

The person responsible for this leaflet is named in the UIC Code

Contents

Summary	1
1 - General	2
1.1 - General principles.....	2
1.2 - Timescale for calculation	2
1.3 - Comparison between actual costs and rates applied	2
1.4 - Currency to be used for the calculations	3
2 - Costing method.....	4
2.1 - Costs to be taken into consideration.....	4
2.1.1 - Maintenance costs	4
2.1.2 - Interest and depreciation costs	4
2.2 - Indexation of the costs.....	5
3 - Calculation of coach-kilometre costs for RIC passenger stock	6
3.1 - Vehicles other than car-carrying wagons.....	6
3.1.1 - Vehicles concerned.....	6
3.1.2 - Data to be supplied	6
3.1.3 - Determination of the cost per kv	6
3.2 - Car-carrying wagons.....	8
3.2.1 - Vehicles concerned.....	8
3.2.2 - Determination of the annual average distance worked	8
3.2.3 - Determination of the kv cost	9
Appendix A - Programme of work to be done	11
Appendix B - Annual interest and depreciation as a function of vehicle age.....	12
Appendix C - Specimen theoretical calculation of the mean cost per kv for four groups of RIC vehicles	14
Appendix D - List of categories and groups of passenger vehicles with their service life	15
Appendix E - Questionnaire related to data of coach-kilometres for passenger vehicles other than car-carrying wagons.....	16

Appendix F - Questionnaire related to data of car-carrying wagons running in international trains	17
Appendix G - Credits for RIC vehicles (kv) for services provided during the last timetable year.....	18
List of abbreviations	19
Bibliography	20

Summary

This leaflet sets out the rules governing calculation of the coach-kilometre costs of passenger stock used under the terms of the Agreement covering the exchange and use of coaches in international traffic (RIC). The results of this calculation are used to set the fees charged for services provided by RIC vehicles to enable payment in kind, compilation of statements of accounts, and financial settlement.

1 - General

1.1 - General principles

This leaflet describes the methodology for calculating the coach-kilometre (kv) costs of RIC passenger vehicles.

The figures resulting from these calculations shall be taken as the basis for setting the hire-cost rates to be used when paying for services provided between railway undertakings (hereafter referred to as RUs) party to the RIC (agreement concerning the exchange and use of coaches in international traffic).

The basic calculations (year Y - 1) of the mean kv costs and of mean costs for car-carrying wagons running in international passenger trains (RIC) shall be made by the RUs whose vehicles are used by other RUs.

The costs take account of the impact of vehicle productivity and renovation.

Vehicle costing shall be carried out when payment for services provided is not governed by specific agreements; the costs shall be calculated for each group of RIC vehicles specified by the RIC and listed in Appendix D - page 15.

The figures obtained from these calculations for the RUs shall be weighted for each group of vehicles (see Appendix D) by the Chairman of the "Cost Evaluation Methodology" Working Party of the Economics, Finance and Environment Committee (hereafter referred to as the "CWPM" (see List of abbreviations - page 19)).

NB : The groups of vehicles to be taken into account shall be notified by the RIC authorities.
The groups listed in appendix refer to the current situation, which is subject to modification.

1.2 - Timescale for calculation

The calculation shall be done each year.

The costing operation for RIC vehicles performed at the end of year Y (year of calculation) shall be based on statistical data and the average economic conditions from year Y - 1 (previous year). The costs obtained are then indexed to the level of the economic conditions forecast for year Y + 1.

The timetable laid down for drawing up the questionnaires and compiling the reports is given in Appendix A - page 11. The dates given should be regarded as mandatory. As its annual meeting in January of year Y + 1, the Working Party concerned shall examine the quality of the data supplied by the RUs and decide on the data to be used for the final costing.

In their replies, The RUs shall justify any significant changes between the actual costs of the last two years.

1.3 - Comparison between actual costs and rates applied

For each calculation, a comparison shall be made between the actual costs and the rates applied.

1.4 - Currency to be used for the calculations

The economic data shall be sent to the CWPM in the national currency, using questionnaires, specimens of which are given in Appendices **E - page 16** and **F - page 17**.

The other calculations, to be done by the CWPM, shall be expressed in euro.

These calculations shall be based on the average rates of exchange advised by the BCC for the year in question.

The rates shall be used to at least 3 significant figures.

2 - Costing method

2.1 - Costs to be taken into consideration

The annual costs to be taken into consideration are those borne by the RU that owns the vehicles when these vehicles are worked on other railways' lines.

These costs include:

- the cost of maintenance, which is based on the service life and mean annual distance worked,
- interest and depreciation costs as a function of service life.

With reference to *UIC Leaflet 374*, the costs to be considered are those in levels 0 to 3.

2.1.1 - Maintenance costs

Maintenance costs include:

2.1.1.1 - regular maintenance costs (levels 0 and 1 of *UIC Leaflet 374*)

These are the average annual costs corresponding to a normal maintenance process during the vehicle's service life.

2.1.1.2 - routine repair costs (levels 0 and 1 of *UIC Leaflet 374*)

These are the costs of routine repairs except those which, under the terms of the RIC Regulations, are to be borne by an RU other than the owning RU. It is generally accepted that these costs are based on the mean annual distance worked.

Maintenance and depreciation costs for buildings, workshops and plant associated with the rolling stock shall be added directly to vehicle maintenance costs if they are not already included in the overheads.

2.1.1.3 - overheads (level 2 and 3 of *UIC Leaflet 374*)

These are calculated as a percentage of the regular maintenance costs and routine repair costs, based on the average percentage of overheads specific to the RU concerned.

2.1.2 - Interest and depreciation costs

For a vehicle, where:

- l : is its replacement value (*UIC Leaflet 390-1*)
- i : is the interest rate
- n : is its service life
- a : is the age of the vehicle in the previous year ($Y - 1$), rounded to the nearest whole number.
If the vehicle has been modernised, this age shall be determined as from the year it entered service for the first time.