

Performance scheme – Model description

1. Introduction

The performance scheme (PS) has been developed by Infrabel (infrastructure manager – IM) and applies to both railway undertakings (RUs) and Infrabel, in accordance with Article 23 of the Railway Codex.

The performance scheme applicable to the Belgian railway network is based on a bilateral model in which the individual performance of each railway undertaking (RU(i)) is compared with the performance of the infrastructure manager in relation to that same railway undertaking (IM/RU(i)).



The data used in this performance scheme, the calculation method, and the rules for paying penalties are described in this appendix.

2. Data taken into account

For all data described in this point, the values proper to the railway undertaking – when acting on its own account – must be supplemented by the values relating to its activities as a designated railway undertaking, if it acts on behalf of a non-railway undertaking applicant.

2.1 Minutes of delay

The ‘minutes of delay’ taken into account in the calculation method of the performance scheme are:

- For RU(i) : the total number of minutes of delay recorded in a report and caused by the RU(i) during a calendar year.
- For the IM/RU(i): the total number of minutes of delay recorded in a report and caused by the IM to RU(i) during a calendar year.

2.2 Actual train kilometres

The ‘actual train kilometres’ are those travelled by all RU(i) trains on the Belgian railway network during a calendar year.

2.3 Maximum financial impact (= maximum penalty)

The ‘maximum financial impact’ of year (y) is determined based on the RU(i) user charge due for year (y-1), i.e.:

- For RU(i) : 0.4 % of the user charge due by RU(i) in year (y-1)
- For IM/RU(i) : 0.4 % of the user charge due by RU(i) in year (y-1)

3. Calculation method

3.1 Measuring the performance indicator

The ‘performance indicator’ for a month is measured by a ratio whose numerator is the number of minutes of delay in that month and whose denominator is the total number of actual train kilometres in that month, divided by one hundred, i.e.:

- For RU(i) :
$$\frac{\sum \text{minutes of delay RU(i)}}{\sum \text{trkm RU(i)} / 100}$$
- For IM/RU(i) :
$$\frac{\sum \text{minutes of delay IM/RU(i)}}{\sum \text{trkm SO(i)} / 100}$$

3.2 Determining the performance threshold

The performance threshold for month (x) of year (y) is determined based on the median of the performance indicators for month (x) of the five years preceding year (y).

3.3 Determining the maximum deviation of the performance indicator from the performance threshold

The ‘maximum deviation’ of the performance indicator for month (x) of year (y) relative to the performance threshold for month (x) of year (y) is determined by applying a ‘maximum variation percentage’ to the performance threshold for month (x) of year (y). This percentage is determined for each party by comparing the difference between the performance threshold for month (x) of year (y) and the highest performance indicator for month (x) in the five years preceding year (y).

In other words, a maximum variation percentage:

- for RU(i):

$$\frac{\text{The highest performance indicator RU(i) of month (x) during the years [(y-5) ;(y-1)] – the performance threshold RU(i) of month (x) of year (y)}}{\text{the performance threshold RU(i) of month (x) of year (y)}}$$
- for IM/RU(i):

$$\frac{\text{The highest performance indicator IM/RU(i) of month (x) during the years [(y-5) ;(y-1)] – the performance threshold IM/RU(i) of month (x) of year (y)}}{\text{the performance threshold IM/RU(i) of month (x) of year (y)}}$$

or a maximum deviation for year (Y):

- for RU(i) :

$$(1 + \text{maximum variation percentage RU(i) of month (x) of year (y)}) * \text{performance threshold RU(i) of month (x) of year (y)}$$
- for IM/RU(i) :

$$(1 + \text{maximum variation percentage IM/RU(i) of month (x) of year (y)}) * \text{performance threshold IM/RU(i) of month (x) of year (y)}$$

3.4 Calculating the penalty

The penalty is calculated monthly and the penalty for a calendar year is the sum of the penalties obtained for each month of that same year.

For the monthly calculation of the penalty, the maximum financial impact of year (y) is divided by twelve and multiplied by a ratio that allows the performance per month to be measured. The numerator of this ratio is the difference between the performance indicator for month (x) of year (y) and the performance threshold for month (x) of year (y), and the denominator is the difference between the maximum deviation for month (x) of year (y) and the performance threshold for month (x) of year (y).

In other words, the monthly calculation of the penalty:

- for RU (i) :

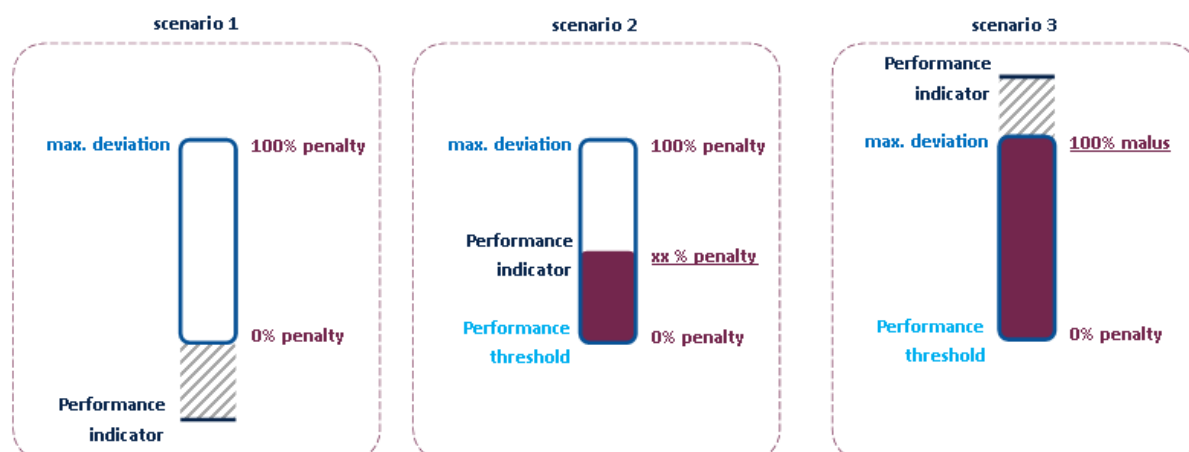
$$\frac{\text{maximum financial impact RU(i) year (Y)}}{12} * \frac{\text{performance indicator RU(i) for month (x) of year (y)} - \text{performance threshold RU(i) for month (x) of year (y)}}{\text{maximum deviation RU(i) for month (x) of year (y)} - \text{performance threshold RU(i) for month (x) of year (y)}}$$

- for IM/RU (i) :

$$\frac{\text{maximum financial impact IM/RU(i) year (y)}}{12} * \frac{\text{performance indicator IM/RU(i) for month (x) of year (y)} - \text{performance threshold IM/RU(i) for month (x) of year (y)}}{\text{maximum deviation IM/RU(i) for month (x) of year (y)} - \text{performance threshold IM/RU(i) for month (x) of year (y)}}$$

To maintain the incentive nature of the PS throughout the calendar year, a monthly cap applies in accordance with these rules:

- if the result of the monthly calculation of the penalty is negative, the result is reduced to zero (scenario 1)
- if the result of the monthly calculation is between zero and one twelfth of the maximum financial impact for the year (y), the penalty thus calculated shall be the result for the month in question (scenario 2)
- if the result of the monthly calculation of the penalty is higher than one twelfth of the maximum financial impact of the year (y) , the result is capped at one twelfth of the maximum financial impact of the year (y) (scenario 3).



4. Rules for paying the annual penalties

If, at the end of year (y), only one party has a penalty, that party shall pay the penalty to the other party.

Once each party has a penalty, the payment shall be made in accordance with the following rules:

If penalty RU(i) > penalty IM/RU(i)	RU(i) pays the IM the difference between its penalty and the IM's penalty.
If penalty RU(i) < penalty IM/RU(i)	The IM pays RU(i) the difference between its penalty and RU(i)'s penalty.
If penalty RU(i) = penalty IM/RU(i)	No payment

5. The case of railway undertakings whose history covers fewer years than the number of calendar years taken into account to determine the performance threshold

As soon as a new railway undertaking gets access to the Belgian rail network, the data that is taken into account in the performance scheme is collected.

However, a transitional system must be introduced to determine the performance threshold.

For each railway undertaking whose history covers fewer years than the number of calendar years taken into account to determine the performance threshold (a calendar year is considered complete if the data taken into account in the performance scheme is recorded from January 1 to December 31 of that year), the threshold is determined as follows:

- during year (y) – the year in which the railway undertaking gets access to the Belgian rail network: no penalty is calculated.
- Over the course of the next three years, i.e. year (y+1) to year (y+3):
 - o **The reference period** taken into account to determine the performance threshold is the quarter corresponding to the month (x) in the previous calendar year; the calendar year is divided into quarters (January-March, April-June, July-September, October-December)
 - o **The performance threshold** is calculated based on the median of all months in the reference period
 - o **The maximum deviation** is determined based on the difference between the worst performance of the reference period and the performance threshold
 - o **The PS performance** is calculated as soon as the performance of a month (x) of the year (y+1) can be compared with the corresponding quarter in the year (y), i.e. when data could be collected for all months of a quarter of the year (y).
- For year (y+4):
 - o **The reference period** taken into account to determine the performance threshold consists of the values for the month (x) in the three calendar years preceding the year (y+4)
 - o **The performance threshold** is calculated based on the median of all months in the reference period
 - o **The maximum deviation** is determined based on the difference between the worst performance of the reference period and the performance threshold

- **The PS performance** is calculated for each month of the year (y+4).
- For year (y+5):
 - **The reference period** taken into account to determine the performance threshold consists of the values for the month (x) in the four calendar years preceding the year (y+5)
 - **The performance threshold** is calculated based on the median of all months in the reference period
 - **The maximum deviation** is determined based on the difference between the worst performance of the reference period and the performance threshold
 - **The PS performance** is calculated for each month of the year (y+5).

Criteria for drafting a report

(Summary of Appendix II.2 of Infrabel's performance contract - Royal Decree of 26 December 2022 *approving the performance contract concluded between the State and the public limited company Infrabel*)

A report shall be drafted if an incident has led to:

- a delay of 20 minutes or more for a passenger train
- a cumulative delay of 40 minutes or more for multiple passenger trains
- a delay of 60 minutes or more for a fast freight train
- a delay of 120 minutes or more for a slow freight train
- a cumulative delay of 90 minutes or more for multiple freight trains
- the (complete or partial) cancellation of a passenger train or a freight train.