



RFC North Sea – Baltic Performance Monitoring Report 2025





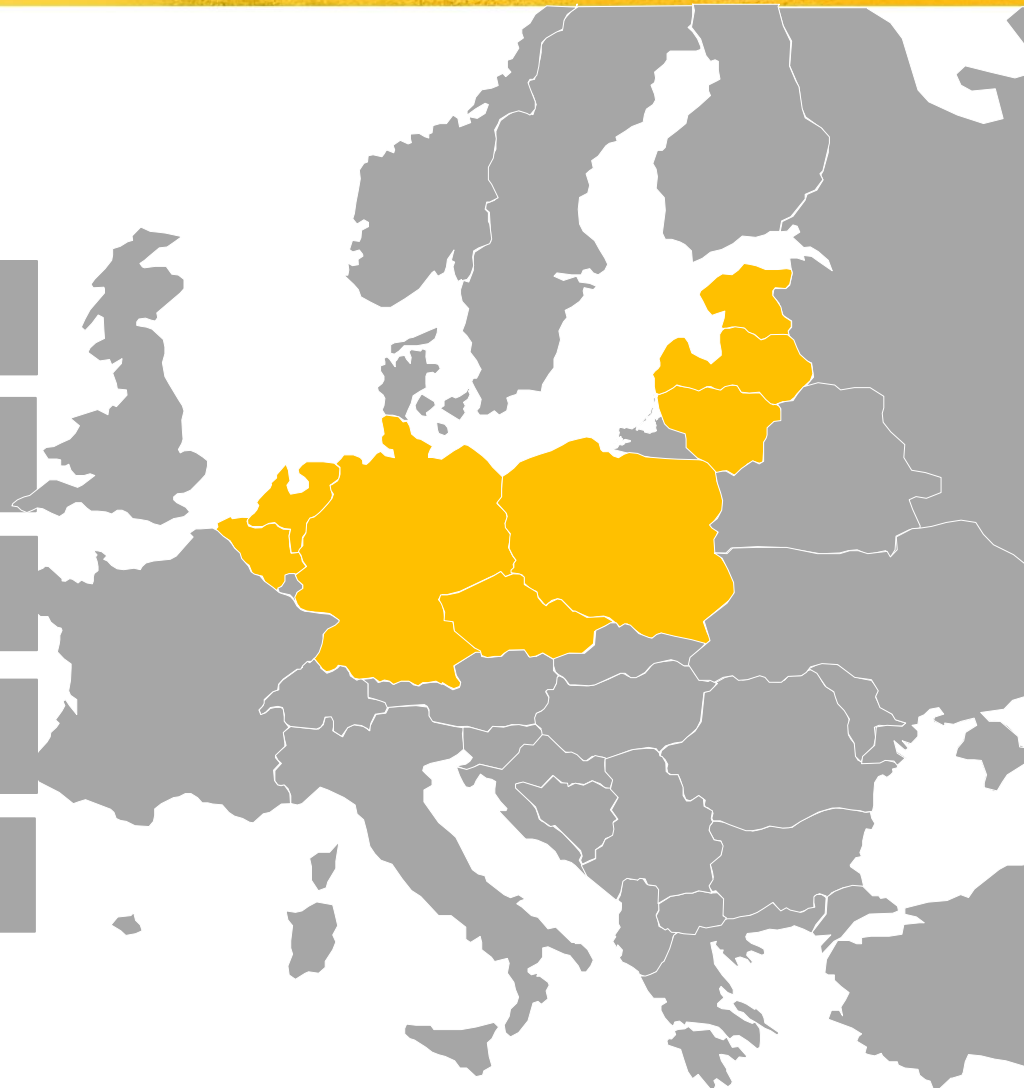
Introduction

Performance Indicators

KPIs for Operations

KPIs for Capacity Management

KPIs for Market Development





Introduction

- A set of commonly applicable KPIs has been agreed by all Rail Freight Corridors. The KPIs, their definition and source of data are described in the RNE guidelines for KPIs of Rail Freight Corridors.
- The results can be found in this Performance Monitoring Report, by which all our stakeholders are informed about the progress of the corridor on a yearly basis and on the RNE website ([RFC KPIs - RNE – RailNetEurope | Association For Facilitating Traffic On European Rail Infrastructure](#)). Some of the KPIs are also published in the Annual Report.
- Capacity Management KPIs are also described in the Framework for Capacity Allocation on the Rail Freight Corridor North Sea–Baltic approved by the Executive Board.
- In 2025 there is no reporting on the RFC NS-B objectives as the targets set in the Implementation Plan update 2023 ended in 2024.



Introduction

Performance Indicators

KPIs for Operations

KPIs for Capacity Management

KPIs for Market Development





Performance Indicators

The KPIs in this Performance Monitoring Report were chosen based on the following parameters:

- Measurability: performance should be measurable with the tools and resources available on the Corridor;
- Clarity: KPIs should be understandable to the public it is designed for;
- Comparability: KPIs should be comparable across time and region;
- Relevance and empowerment: KPIs should provide information on which project decisions can be based.

To be able to easily understand the figures in this report, a clear explanation is provided on how the calculation was made and what is measured for each indicator.

➤ The indicators can be divided into three business fields:

- Operations
- Capacity Management
- Market Development



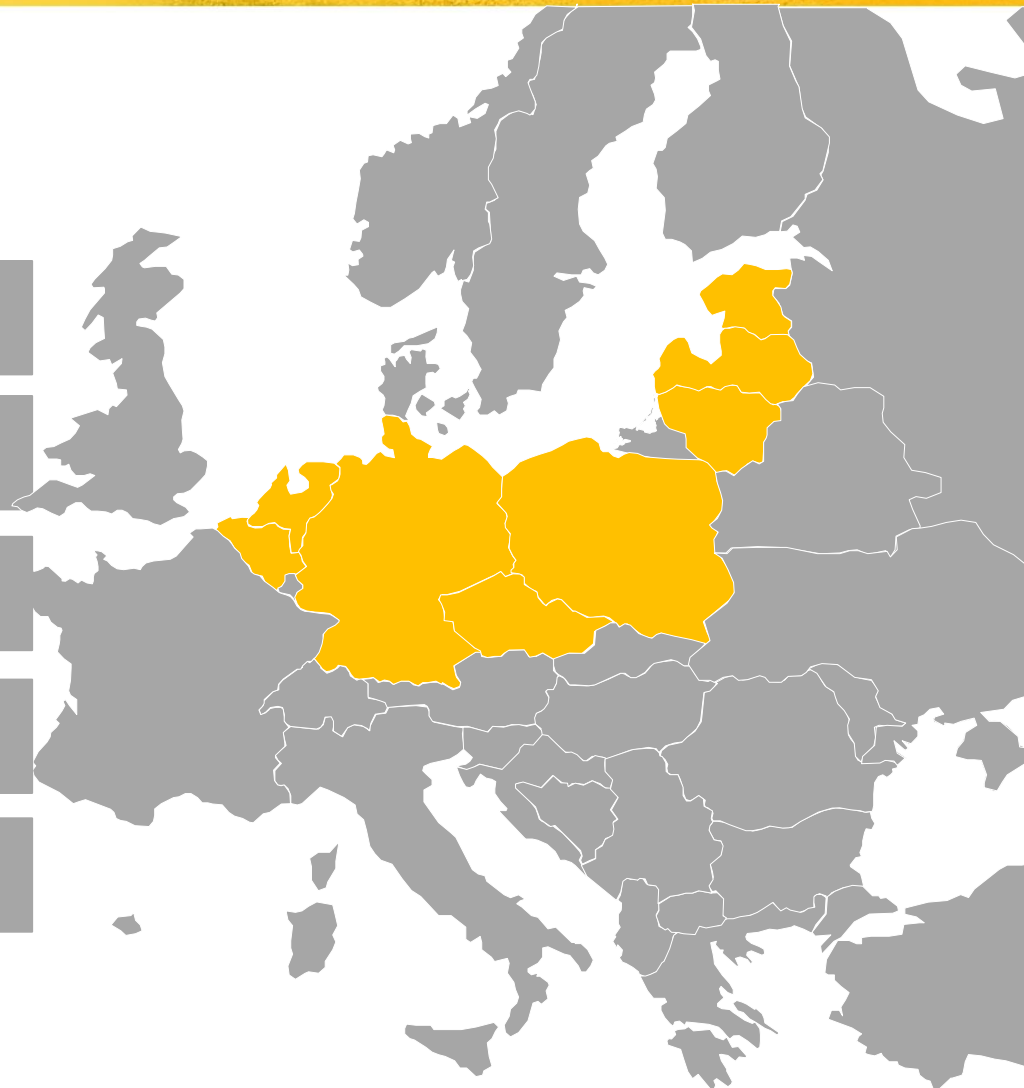
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Performance Indicators

KPIs for Operations

KPIs for Capacity Management

KPIs for Market Development





KPIs for Operations

In the category Operations the following KPIs are published:

KPI 01: Number of trains on RFC North Sea-Baltic

KPI 02: Punctuality

KPI 03: Train kilometers of trains on RFC North Sea-Baltic

KPI 04: Dwell times in border sections

More explanations can be found on the following slides, and more details are given per KPI.

In 2025, the trains on the Corridor are calculated using the same RFC train definition that was established in 2024.

KPIs for Operations

Definition of a Corridor train:

The following criteria must be met for a train to be considered as a corridor train:

- Is a freight train;
- Crossing at least one international border;
- Operating fully or partially on an RFC network section;
- Already identified RFC train running ≥ 300 km within the network of a different RFC without crossing its border is still classified as an RFC train of that corridor;
- Trains on fully overlapping sections are assigned to all corridors involved. However, the RFC's concerned may apply additional criteria to assign a train to a single RFC based on the specific situation
- Trains running partly on overlapping sections have two specific rules:
 - If a train crosses one border along the RFC and runs at least one section exclusively within a single RFC, it is assigned to that RFC
 - If a train operates on an overlapping section but there is at least one corridor that can also cover the previous or following non-overlapping section, the train will be assigned to that corridor(s) only

The data used to calculate the KPI Operations comes from the international Train Information System (TIS) database, managed by RailNetEurope (RNE).

The WG PM&O is aware there are issues with the data in TIS due mainly to IM/RU operational behaviour and data quality issues.

Please note, this information is relevant for all graphs and data published for KPI Operations for RFC North Sea-Baltic:

1. Estonia and Latvia were not yet using TIS in 2025 and their international trains are not included in the figures.



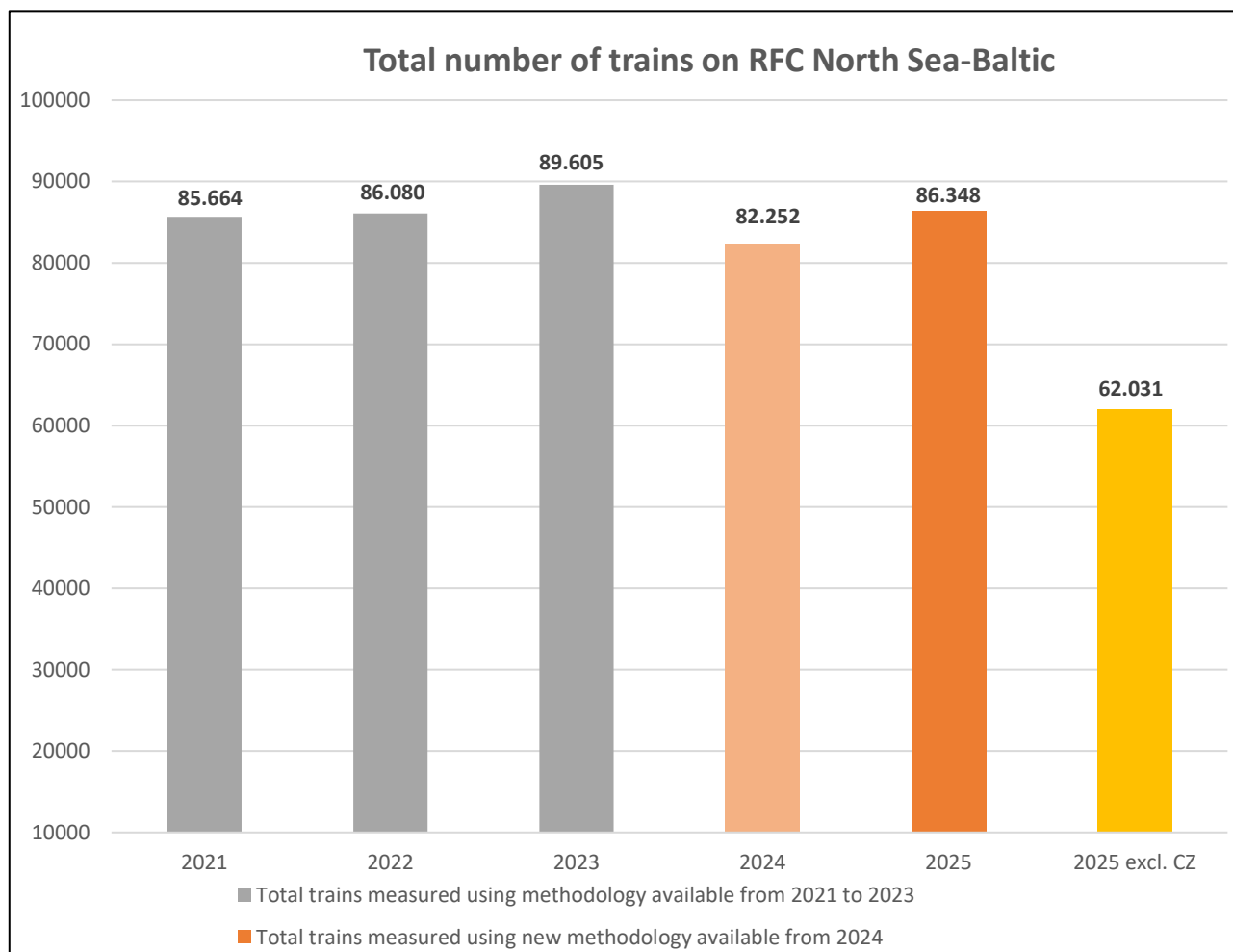
KPI 01: Number of trains on RFC North Sea-Baltic

KPI 01 displays the number of freight trains that cross at least one international border and operate on designated RFC NS-B lines. Trains that pass more than one border are counted only once and to do this each train receives a unique identifier.

The border locations on the NS-B network considered for this KPI are as follows:

- Montzen – Aachen
- Essen – Roosendaal
- Zelzate - Sas van Gent
- Zevenaar-Oost – Emmerich
- Oldenzaal - Bad Bentheim
- Frankfurt (Oder) Oderbrücke - Rzepin
- Horka- Węgliniec
- Bad Schandau - Děčín
- Trakiszki - Mockava

KPI 01: Number of trains on RFC North Sea-Baltic

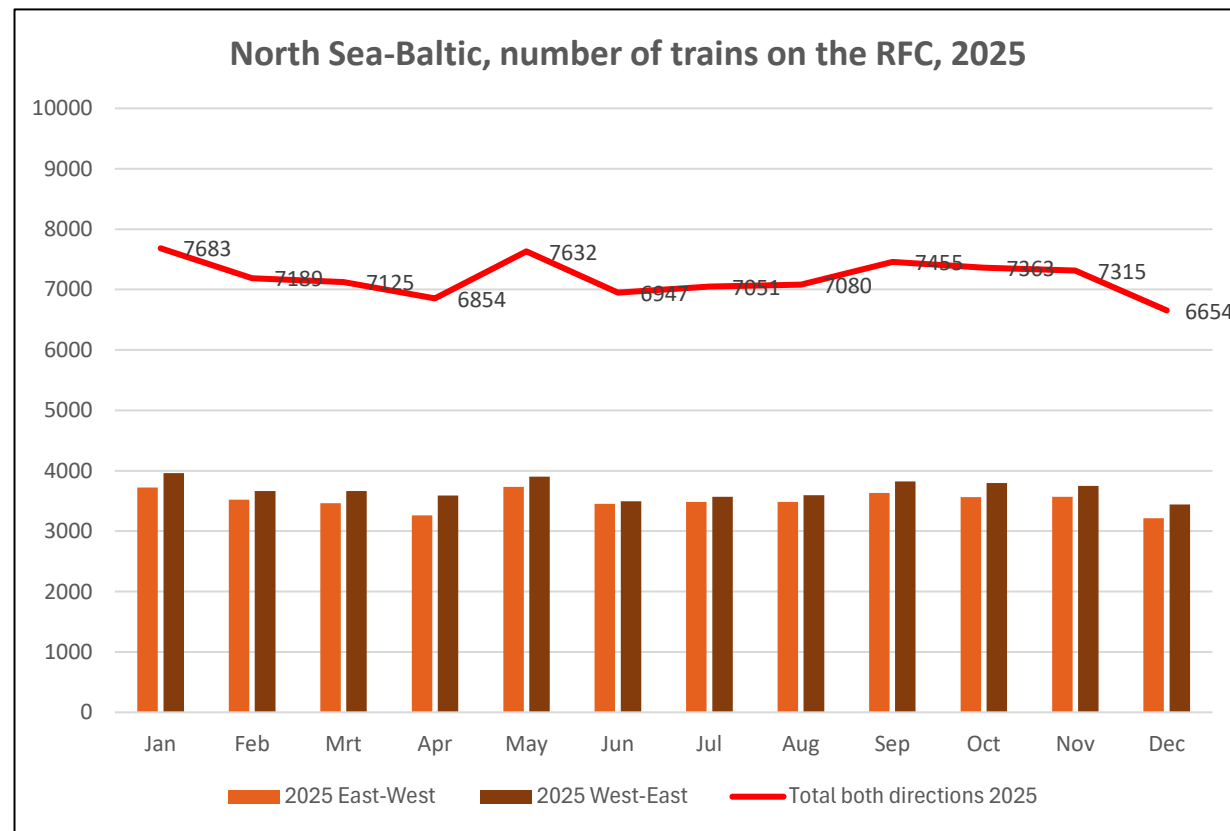


General evolution of the corridor traffic:

- The graph gives an overview of the total number of trains for the last 5 years.
- Total amount of trains for 2025 is 86.348.
 - Total amount of trains excluding CZ is 62.031
- In 2025, a full year of data is available for Lithuania compared to only 8 months in 2024.

The Working Group members have seen that for 2025 the graph and the figures from TIS show(s) an increase, however when looking at the national figures at borders there is in general a decrease mainly in the western part of the Corridor. Deeper analysis shows that there are issues with unlinked trains, leading to double counting, and this issue is significantly higher in 2025 than it was in 2024.

KPI 01: Number of trains on RFC North Sea-Baltic



This graph gives an overview of the number of trains in 2025, monthly, per direction.

Factors impacting the totals can be explained by the following:

Decreases :

- Re-routing and limited capacity due to extensive works and diversions on the Corridor during the whole year, but mainly in the periods April, July-August and October.
- Line closures at Frankfurt (Oder) Oderbrücke in April.
- Ad-hoc closures due to derailments in Frankfurt in August.

Increases:

- Large rises in the totals can be explained by the end dates of major construction works. For example, in May the traffic increased at Zevenaar-Oost/Emmerich when compared to April (works) and again in September after the works occurred in July/August.

General:

- In 2025 there were no major natural incidents affecting the traffic/figures.

KPI 02: Punctuality

KPI 02 shows the average punctuality of trains running on the Corridor, measured at:

- RFC Entry (first point in the train run, which belongs to chosen RFC)
- RFC Exit (last point in the train run, which belongs to chosen RFC)

or origin/destination, if this is a point on the Corridor.

The graphs shown in the Punctuality slides in the Performance Report show the punctuality measured at RFC Entry/Exit and are based on TIS data.

A corridor train is considered punctual when it has a delay of 30 minutes or less ($\leq 30\text{min}$).

For KPI reporting purposes punctuality is also measured at a delay of 15 minutes or less ($\leq 15\text{min}$).

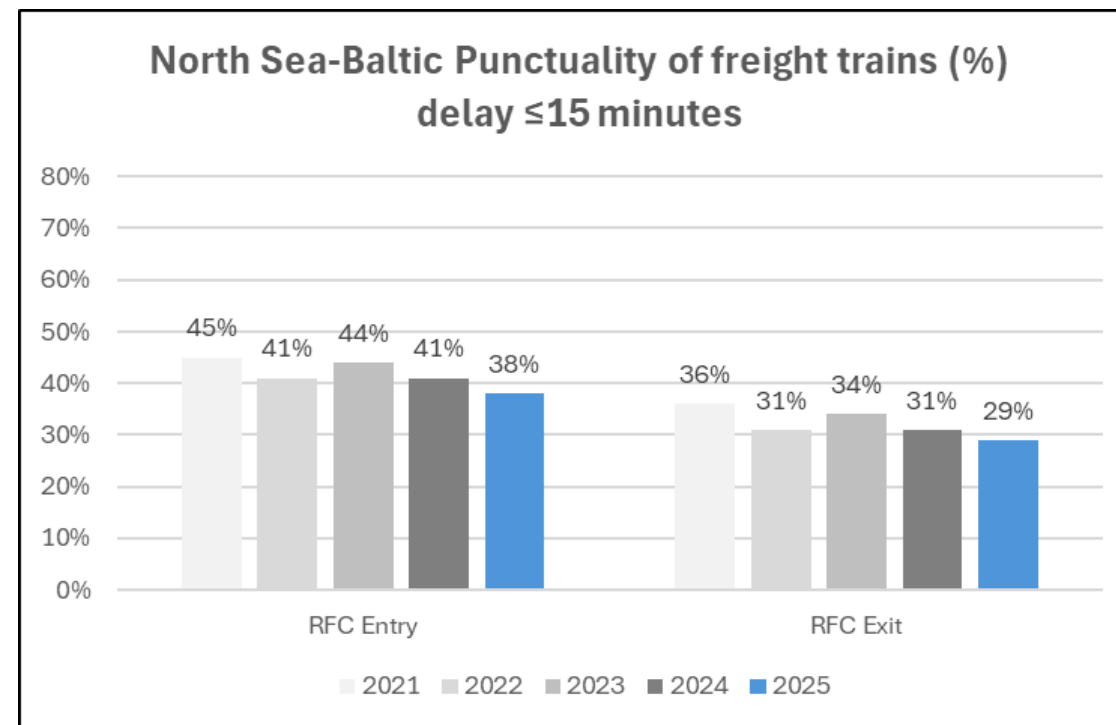
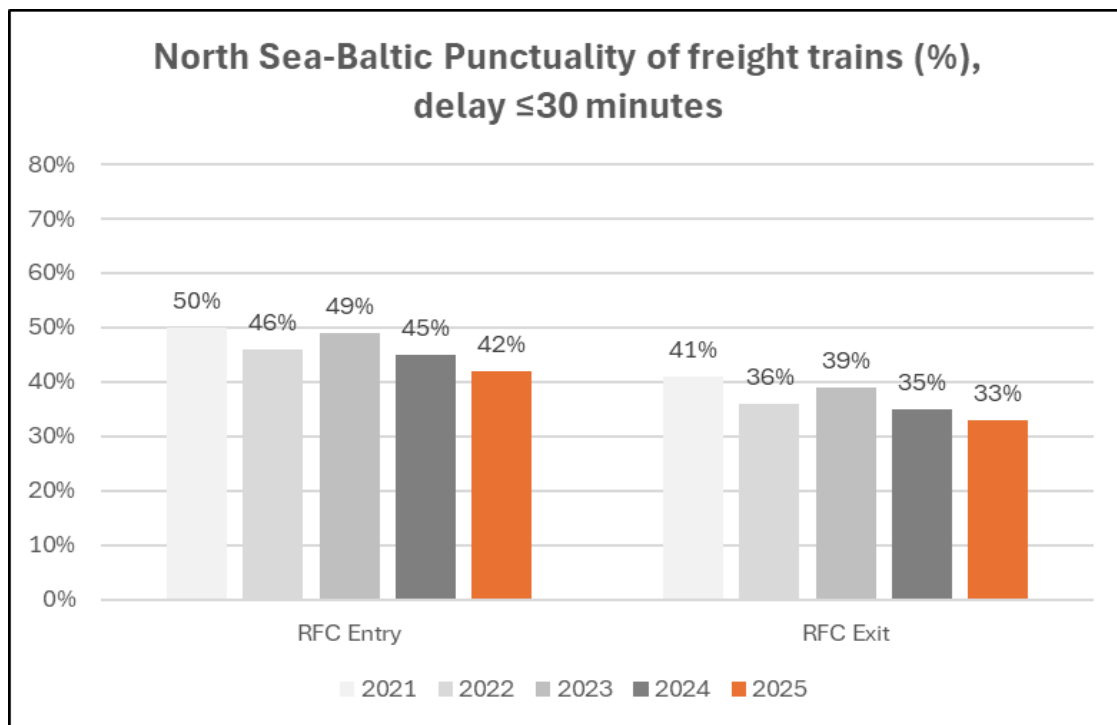
Measurement of punctuality is based on the following train information in TIS:

- International freight train;
- At least one running advice in the whole train run.

Monthly train punctuality reports are generated from TIS data at RNE and are published on the RFC North Sea-Baltic website. Monitoring and follow-up of the punctuality reports is done by the Working Group Performance Management and Operations, during their regular meetings.

Punctuality issues are discussed bilaterally with the WG and corridor users, on a case-by-case basis.

KPI 02 Punctuality – RFC Entry and Exit

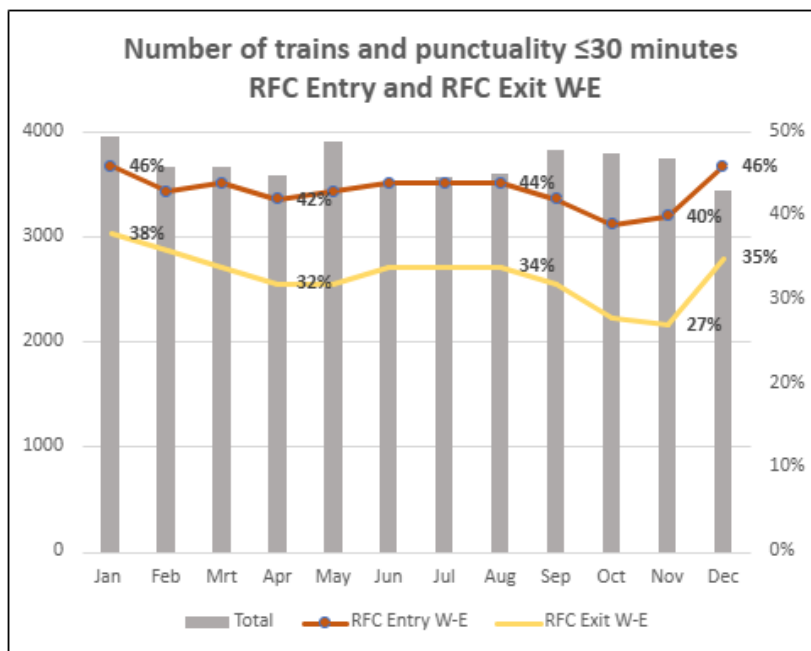


Only the punctuality threshold ≤30 minutes is considered in detail in the Performance Report 2025

The 2025 figures show a decrease of 3% for RFC Entry and 2% for RFC Exit punctuality, compared to 2024.

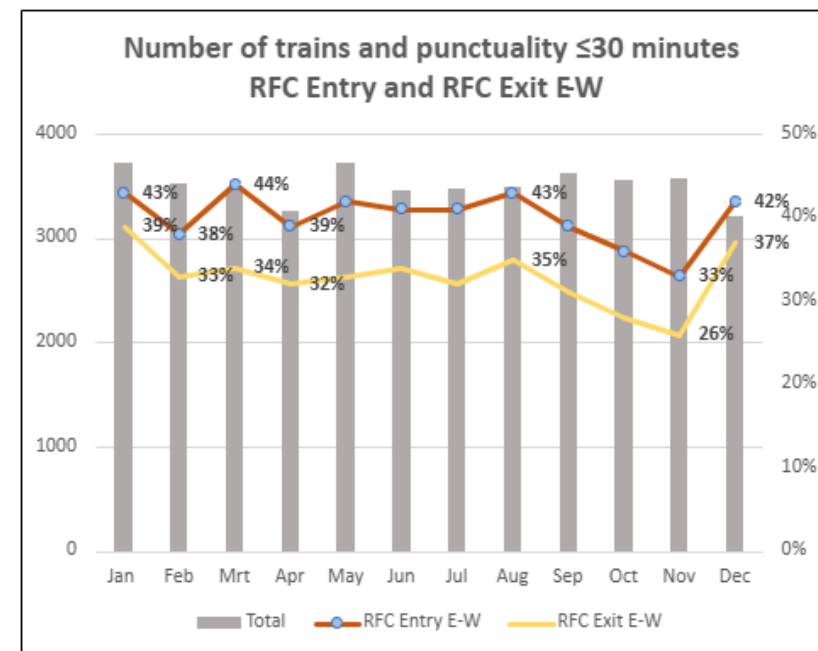
- The delta (difference of punctuality between RFC Entry and RFC Exit) is 9%. This is better than in 2024 (10%)
- The overall punctuality on the Corridor is 38%, compared to 40% in 2024.

KPI 02 Punctuality – RFC Entry and Exit, per month, per direction



2025 West-East
 RFC Entry punctuality avg. 43%
 RFC Exit punctuality avg. 33%
 Delta W-E (difference from RFC Entry and RFC Exit) is 10%

- In Q1 and Q2 the punctuality decreased slightly each month. Q2 lowest is in May
- In Q3 stable up to September.
- Q4, further decrease with the year's lowest punctuality in November but recovering strongly in December.

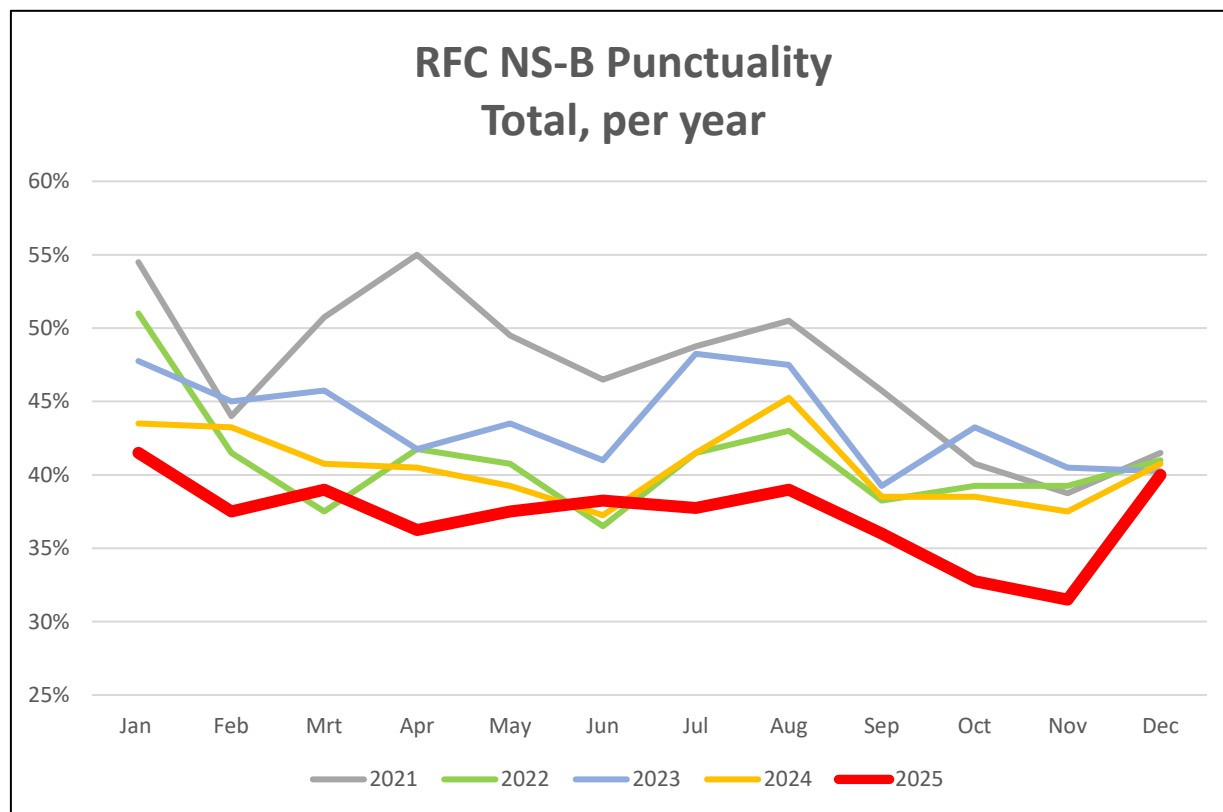


2025 East-West
 RFC Entry punctuality avg. 40%
 RFC Exit punctuality avg. 33%
 Delta E-W (difference from RFC Entry and RFC Exit) is 7%

- Q1 the punctuality fluctuated
- Q2 and Q3, the punctuality was stable, decreasing in September
- Q4, a further decrease, lowest punctuality in November but recovering strongly in December.

KPI 02 Punctuality

Graph shows total average punctuality



Total over a 5-year period, general trend:

Comparison 2025 to 2024

- Lower punctuality in general, also when compared to the other years
- Fluctuation in Jan to Apr, stable from May to Aug
- From Aug to Nov the punctuality dropped steadily

General observations:

- 2021-2024, fluctuations over the whole year
- 2025, steady performance from May to Aug



KPI 03 Train kilometers of trains on RFC North Sea-Baltic

Train kilometers of all international trains on RFC NS-B are calculated as the sum of distances between origin and destination:

Direction	Trains	Kilometers
East-West	42.101	18.197.990
West-East	44.247	19.330.412
Total	86.348	37.528.402



KPI 04: Dwell Times at Border Sections

KPI 04 shows the average planned and actual (real) dwell of all trains crossing predefined pair(s) of locations in the border area (approx. 20km range both sides of the border).

The border areas shown in the KPI are of countries that are connected to the RFC.

- These points are measured using the Report Management Tool (TIS)
- The new RFC train definition (used from 2024) has no impact on this KPI Dwell times at Border Sections as it measures all trains which are crossing the predefined border-pairs
- Border-crossings involving third countries that are not members of the RFC are not published in the KPI

Avg. planned dwell (min.) is the average planned dwell time of all planned arrival/departure trains running within the measuring points. Only trains with a planned dwell equal or bigger than 1 minute are considered. Avg. actual (real) dwell is measured using the same criteria.

The following trains are excluded from both calculations: run through; starting or ending their run at the border (origin/destination); those not having a departure or arrival in actual plan timetable at the border or trains that stop at the border but do not show an arrival or departure in TIS and trains that have a missing timetable.

Dwell time at the predefined pair(s) of locations at the border are also shown in more detail in the Performance Report.

KPI 04: Dwell Times at Border Sections

Border pairs *	Avg. Planned Dwell (mins)	Avg. Clean Dwell (mins)
Aachen-West - Montzen	87	110
Bad Bentheim - Oldenzaal	20	17
Bad Schandau - Decin	79	83
Emmerich - Zevenaar Oost	14	12
Essen - Roosendaal	5	4
Frankfurt (Oder) Oderbrücke- Rzepin	69	127
Horka Gbf - Wegliniec	49	90
Trakiszki - Mockava	141	120
Zelzate - Sas van Gent **	0	0

Please note:

* Borders between Lithuania and Latvia and between Latvia and Estonia are not shown in 2025 as there is no TIS data available

** Zelzate-Sas van Gent, TIS data is only measured on the Belgian side and therefore there is no dwell-time measurement at this time

- Dwell time is the average stopping time of international trains crossing the border in the main measuring points (where border crossing related procedures usually occurs). The border dwell time is calculated by summing up the time stopped at the relevant stopping points
- Clean Dwell is the average real stopping time at the border main measuring point where the border crossing procedures usually occur and is actual (real) dwell time but not including any time spent at the station due to early arrival



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KPIs for Capacity Management

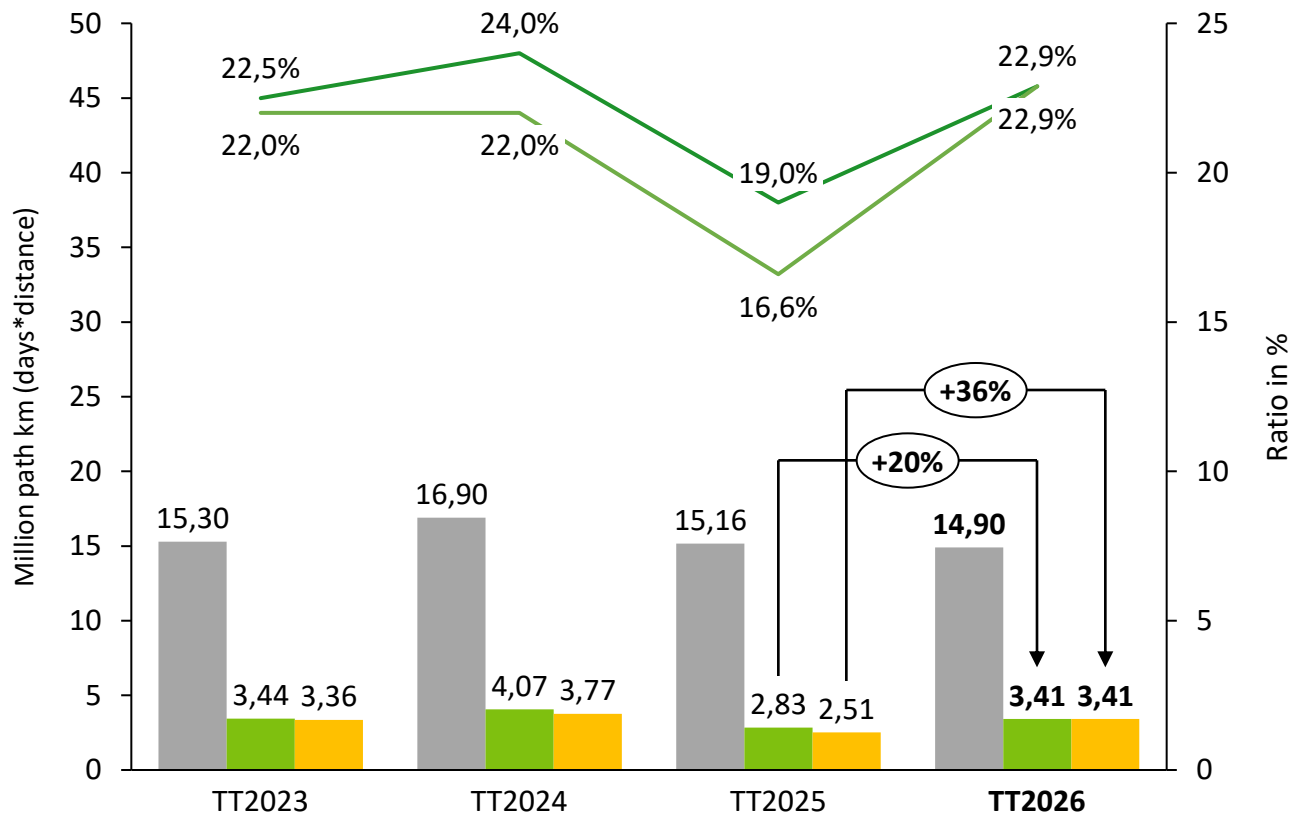
- To monitor the performance on the corridor regarding capacity, a number of KPIs are described on the following slides which will provide insight into the capacity that has been offered, requested, allocated and monitored by the C-OSS:
- KPIs for Capacity Management (TT2026 published in 2025):
 - KPI 01: Volume of offered capacity (PaPs)
 - KPI 02: Volume of requested capacity (PaPs)
 - KPI 03: Volume of pre-booked capacity (PaPs)
 - KPI 04: Ratio of pre-booked capacity (PaPs)
 - KPI 05: Number of requests (PaPs)
 - KPI 06: Number of conflicts (PaPs)
- KPIs for Capacity Management (for TT2026):
 - KPI 07: Average planned speed of PaPs
- KPIs for Capacity Management (TT2025 published in 2024):
 - KPI 08: Volume of offered capacity (RC), Volume of requested capacity (RC), Number of requests (RC)
- Most of these KPIs stem from the Framework for Capacity Allocation (FCA). Others were commonly agreed and are described in the RNE KPI guidelines.

KPI 01: Volume of offered capacity (PaPs)

KPI 02: Volume of requested capacity (PaPs)

KPI 03: Volume of pre-booked capacity (PaPs)

KPI 04: Ratio of pre-booked capacity (PaPs)



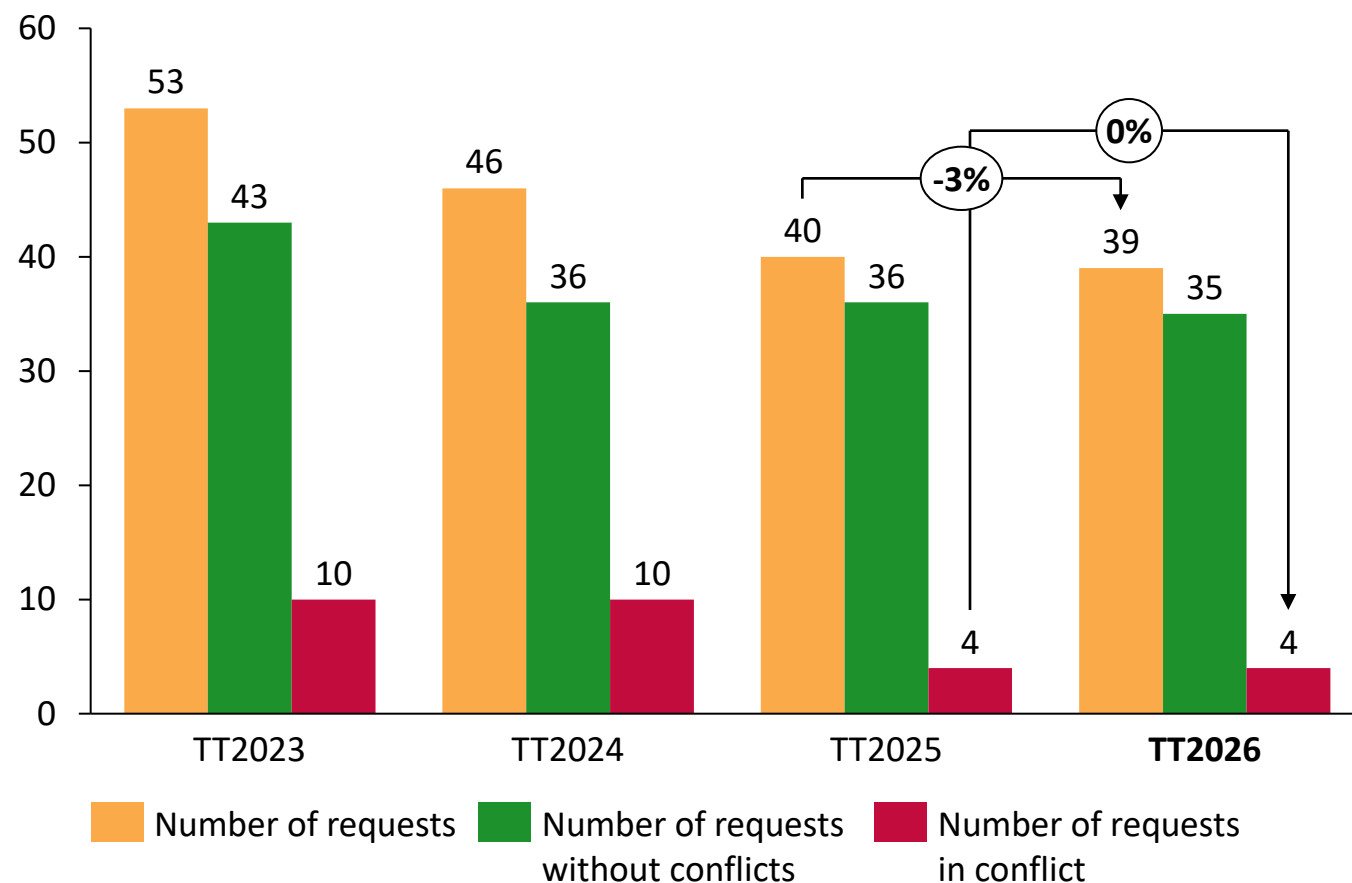
- Both the PaP capacity requested and pre-booked increased by more than 20% in comparison to TT2025 and are almost back to the levels of TT2024. Only one dossier with 1.042 path km was allocated as Tailor-Made. Without path sections on SŽCZ network, the volume of PaP capacity pre-booked would be at 2,5 mio path km.
- Compared to the PaP capacity offered, the volumes of PaP capacity requested and pre-booked have both increased to a ratio of 22,9%.
- Applicants were most interested in paths including TCRs. Besides a stable demand for harmonized PaPs (HaPs) with RFC ScanMed, the section between Roosendaal and the port of Antwerp was highly asked for.



KPI 05: Number of requests (PaPs)

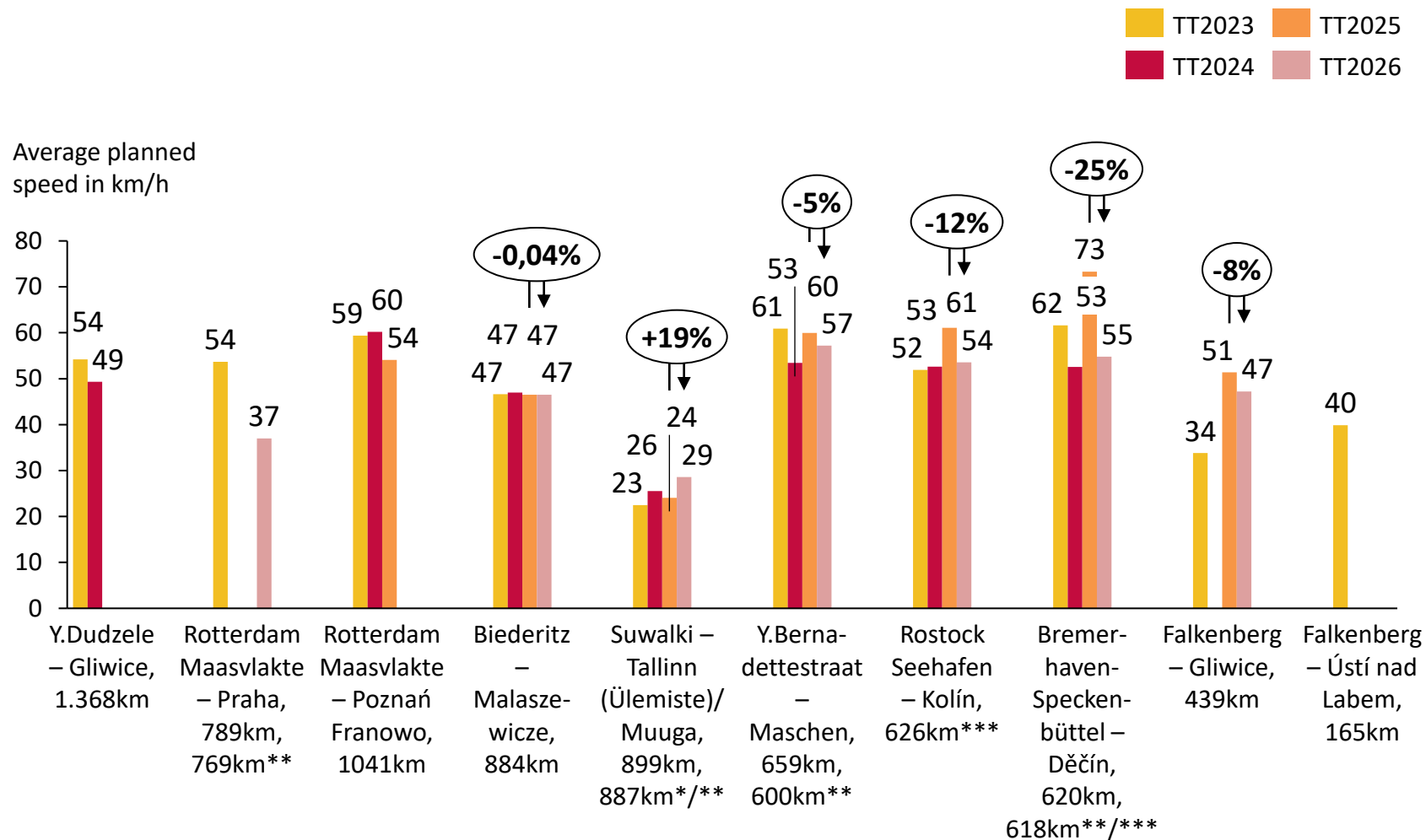
KPI 06: Number of conflicts (PaPs)

requests



- The number of requests for TT2026 decreased slightly compared to the number of requests for TT2025; the conflicts stayed stable but involve more RFCs
- Applicants tried to secure capacity through PaPs amidst a high number of TCRs.
- The 4 conflicting dossiers showed a high demand for the section Roosendaal/Essen – Y.Schijn with 2 dossiers on RFC North-Sea Baltic and 2 dossiers on RFC North Sea-Mediterranean with multi-corridor involvement.

KPI 07: Average planned speed of PaPs



- This performance indicator shows the average of the planned speed of the PaPs on the Origin/Destination pair concerned per direction.
- O/D pairs with data gaps were not offered as PaPs in the respective TT period.
- With a longer distance to Muuga on the section Suwalki – Tallinn the average speed increased.
- 4 times more PaP sections were used in TT2026 for the calculation of Y. Bernadettestraat – Maschen which made the average speed result TT2026 more precise.
- TCRs decreased the speed for Bremerhaven-Speckenbüttel – Děčín.
- A shorter commercial stop reduced the speed for Falkenberg – Gliwice.

The KPI values include stopping times for selected O-D. * Suwalki – Tallinn (Ülemiste) includes the reloading time (~ 6 hours) in Palemonas. As of TT2026, calculation to/from Muuga. ** Two distances for W-E, E-W direction, varying per TT. *** SZCZ sections published by RFC Rhine-Danube as of TT2026

KPI 08: Volume of offered capacity (RC), Volume of requested capacity (RC), Number of requests (RC)

- Reserve Capacity for ad-hoc requests has been published by the C-OSS in October 2024, for the TT2025 starting in December 2024.
- Reserve Capacity is offered as a flexible approach, in the form of capacity slots per day and direction, requested until 30 days before the running day.
- The volume of offered Reserve Capacity for TT2025 decreased compared to the previous year due to a higher amount of TCRs.
- No Reserve Capacity was requested for TT2025.

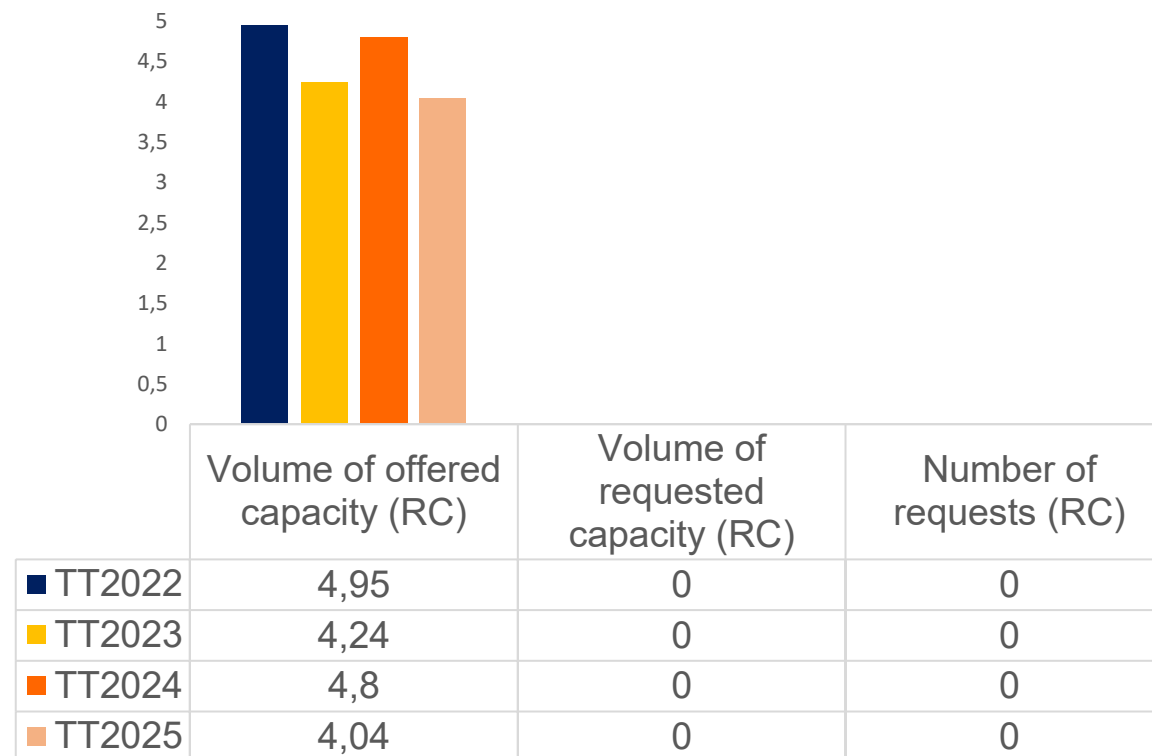


Figure Volume: Million path km (days*distance)



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KPIs for Market Development

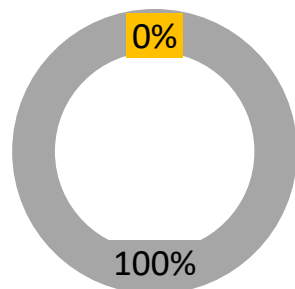
- In the category “Market Development” the following KPIs are published:
 - KPI 01: Ratio of the capacity allocated by the C-OSS to total allocated capacity
 - KPI 02: Number of trains per border

KPI 01: Ratio of the capacity allocated by the C-OSS to total allocated capacity

- On the next slides KPI Ratio of the capacity allocated by the C-OSS to total allocated capacity for TT2026 is presented.
- This KPI displays the number of train runs allocated in the yearly timetable by the C-OSS per RFC border/the total number of allocated international freight train runs in the yearly timetable per RFC border. Source of data is PCS for RFC capacity and national IMs' tools for total allocated capacity.

KPI 01: Ratio of the capacity allocated by the C-OSS to total allocated capacity

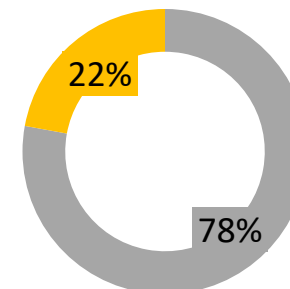
**Montzen Frontière /
Aachen Grenze**



■ % Total allocated capacity IM (incl. RFC RALP)
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total (incl. RFC RALP)	C-OSS RFC NSB
23.176	0

**Oldenzaal Grens /
Bad Bentheim Grenze**

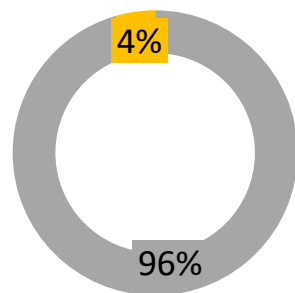


■ % Total allocated capacity IM
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total	C-OSS RFC NSB
6.577	1.455

KPI 01: Ratio of the capacity allocated by the C-OSS to total allocated capacity

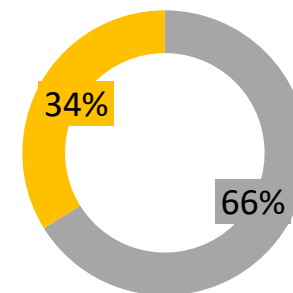
**Zevenaar Grens /
Emmerich**



■ % Total allocated capacity IM (incl. RFC RALP)
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total (incl. RFC RALP)	C-OSS RFC NSB
19.310	861

**Roosendaal Grens /
Essen-Grens**

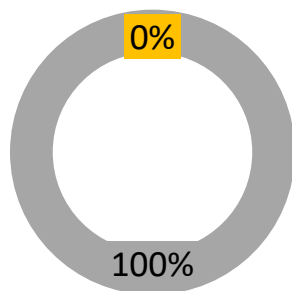


■ % Total allocated capacity IM (incl. RFC NSM)
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total (incl. RFC NSM)	C-OSS RFC NSB
7.206	2.441

KPI 01: Ratio of the capacity allocated by the C-OSS to total allocated capacity

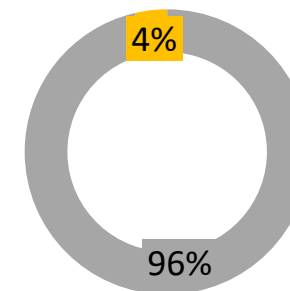
Horka / Bielawa Dolna (Gr)



■ % Total allocated capacity IM
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total	C-OSS RFC NSB
5.075*	0

Frankfurt Oderbrücke / Kunowice (Gr)



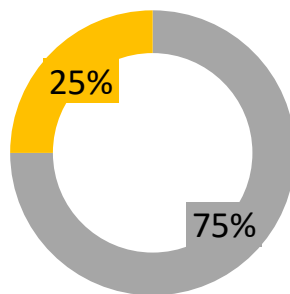
■ % Total allocated capacity IM
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total	C-OSS RFC NSB
6.945*	254

*Data provided by PLK SA, previous years by DB InfraGO AG

KPI 01: Ratio of the capacity allocated by the C-OSS to total allocated capacity

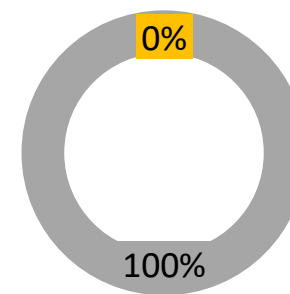
**Trakiszki (Gr) /
Mockava Pasienis**



■ % Total allocated capacity IM
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total	C-OSS RFC NSB
2.911	728

**Joniškis Pasienis /
Meitene-eksp.**



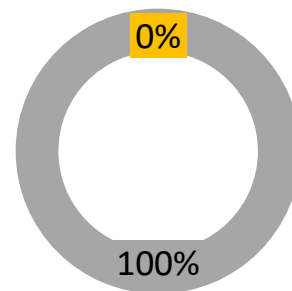
■ % Total allocated capacity IM
■ % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total	C-OSS RFC NSB
728	0



KPI 01: Ratio of the capacity allocated by the C-OSS to total allocated capacity

Lugaži-eksp. (State border) /
Valga state border



- % Total allocated capacity IM
- % Total allocated capacity RFC NSB

Number of allocated international freight trains	
Total	C-OSS RFC NSB
646	0

KPI 02: Number of trains per border

This KPI presents the number of all freight trains crossing selected border points of the Corridor.

Trains that pass more than one border are counted at each border. The new methodology, used from 2024, has no impact on this KPI as all trains are considered for calculation. The source of the 2025 data is the IM's national tools.

Border pairs taken into consideration for this KPI are:

North Sea-Baltic		Number of trains		
Border countries	Border pairs	Total trains 2025	Total trains 2024	difference % 2025 to 2024
BE-DE	Montzen-Aachen	20703	21491	-3,7%
NL-BE	Essen-Roosendaal	5728	6040	-5,2%
	Zelzate-Sas van Gent	1688	1757	-3,9%
NL-DE	Zevenaar-Emmerich	11955	20465	-41,6%
	Oldenzaal-Bad Bentheim	7869	6433	22,3%
	Venlo-Kaldenkirchen*	20926	15836	32,1%
DE-PL	Frankfurt(Oder)Oderbrücke-Rzepin	15938	17469	-8,8%
	Horka -Wegliniec	11400	11221	1,6%
DE-CZ	Bad Schandau-Decin	27992	30733	-9,1%
PL-LT	Trakiszkki-Mockava	2411	2324	3,7%
LT-LV	Meitene-Joniskis	595	550	7,6%
	Kurcums-Turmantas	8	9	-12,5%
LV-EE	Lugazi-Valga	627	516	21,7%

*Venlo- Kaldenkirchen borders are measured for this KPI as North Sea-Baltic trains can be re-routed using this border- pair

KPI 02: Total number of trains per border

Per bordering countries 2025 compared to 2024, and previous years (5-year period)

Border crossing	Total NL-DE	difference	Total NL-BE	diff.	Total BE-DE	diff.	Total DE-CZ	diff.	Total DE-PL	diff.	Total PL-LT	diff.	Total LT-LV	diff.	Total LT-EE	diff.
2021 *	46.175		8.523**		23.446		28.737		27.355		1.239		1.035		1.597	
2022	49.572	7,4%	8.465 **	-0,5%	21.777	-7,1%	26.675	-8%	27.528	0,5%	1.666	3,4%	891	-14%	830	-48%
2023	46.187	-6,8%	8.230	-2,8%	22.232	2,1%	27.447	-2,8%	26.129	-5,1%	2.350	2,9%	628	-3%	506	-39%
2024	42.734	-7,5%	7.797	-5,3%	21.491	-3,3%	30.733	12,0%	28.690	9,8%	2.324	-1,0%	559	-11%	516	-1,9%
2025	40.750	-4,6%	7.416	-4,9%	20.703	-3,7%	27.922	-9,1%	27.338	-4,7%	2.411	3,7%	603	7,9%	627	21,7%

* 2021: Figures shown for 2021 are of train totals only as the differences with the previous year 2020 are not available (data source: RNE KPI Report)

** 2021 & 2022: Figures do not include Sas van Gent-Zelzate, (added to the Corridor from 2023)

KPI 02: Number of trains per border

2025 information, traffic compared to 2024:

- **For the Dutch/German borders there is an overall decrease of -4,6%**

At the Zevenaar Oost-Emmerich border there is a large decrease of traffic caused by major works in Germany between Emmerich and Oberhausen.

For Venlo-Kaldenkirchen and Bad Bentheim-Oldenzaal there is an increase, but this is mainly due to the re-routing of traffic due to works.

Overall, for the Dutch/German borders there is also a decrease in traffic due to the fall in volume of coal transport by rail and the use of less wagonload trains as well as several activist-blockades that took place in the Rotterdam harbour.

- **For the Dutch/Belgian borders there is an overall decrease of -4,9%**

At the Roosendaal-Essen border there is a decrease that can be partly explained by the conversion of trains which used wagonload train transport in the past and are now using block-train transport. Also, wagonload trains are running directly from Belgium to Germany using the Montzenroute.

For the border Sas van Gent-Zelzate, there is a decrease. Overall, despite the increase in demand in transport there is a reduction in traffic, and this can be partially due to the use of block-train instead of wagonload transport.

- **For the Belgian/German border there is a decrease of -3,7%**

The decrease at the Montzen-Aachen border can largely be explained by the geopolitical situation that led to high electricity prices and low economic growth. Especially the industrial sectors that historically relied on rail, such as automotive, chemistry etc. are shrinking and logistics providers are repositioning towards smaller clients with modest volumes, who often prefer transport by truck or ship.

- **For the German/Czech border there is a decrease of -9,1%**

This decrease at the Bad Schandau-Děčín border is due mainly to various construction projects and prolonged total closures of the line in 2025, where trains were re-routed, as well as the economic-market situation.

KPI 02: Number of trains per border

2025 information, traffic compared to 2024:

- **For the Polish/German borders the traffic decreased overall by -4,7%**

At the border Frankfurt(Oder) Oderbrücke-Rzepin there is a decrease and at Horka-Wegliniec an increase.

The decrease is due mainly to construction works, infrastructure limitations and accidents - (derailments). During the scheduled closures in March/April and again in October 2025, trains were diverted via Horka which explains the slight increase at this border (re-routing).

- **For the Lithuanian/Polish border there is an increase in train totals of +3,7%**

Traffic has slightly increased at the Trakiszki-Mockava border compared to 2024, but this is mainly due to data now being available for the whole year compared to only 8 months in 2024 (LT joined TIS in April 2024). Also, the volume of oil transport has risen (see Latvia and Estonia).

- **For the Latvian/Lithuanian borders there is an increase overall of +7,9%**

At Meitene-Joniskis, traffic increased and this is mainly due to a higher volume of oil transport from Lithuania to Estonia, via Latvia. Kurcums-Turmantas totals decreased to 8 trains, from 9 trains in 2024.

- **For the Estonian/Latvian border there is an increase of +21,7%**

The volume of freight traffic at the Valga-Lugazi border station increased by 21 % compared to 2024. This is due mainly to a higher volume of oil transport from Mazheikai refinery in Lithuania via Latvia to Estonia.

Overall, after a drastic fall in the period 2022 to 2024, the rail freight market stabilized in Estonia last year and the heavy losses in East-West transit (due to the aggression from Russia in Ukraine) have been modestly replaced by a small increase in North-South traffic within the EU member states. Latvia also recognises a similar trend.