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REPORT

This chapter provides information about traffic developments at borders and the modal split in trans-Alpine traffic and in the ports of Antwerp, Rotterdam and Genoa as well as about the most recent KPIs on capacity management and operations. The KPIs have been coordinated with external stakeholders like RUs and MoTs and are the same for all RFCs.

The progress on the four core objectives, that were defined in the Implementation Plan Update 2023 is monitored in the following Performance Report under the related KPI category.

MARKET **DEVELOPMENT KPIs**

This part of the Performance Report gives information on the development of the KPI number of trains per border on RFC Rhine-Alpine, the modal split of rail in selected ports and in trans-alpine freight traffic. The information on the number of trains is provided by the IMs and is mainly related to the border points on the Corridor. Regarding the modal split, existing information from different sources is compiled in this report. The Market development KPI "Ratio of the Capacity Allocated

KPI NUMBER OF TRAINS PER BORDER



CORE OBJECTIVE 1: KPI NUMBER OF TRAINS PER BORDER							
BORDER CROSSING	NL – DE	NL – BE	BE – DE	DE – CH	CH – IT		
AVERAGE 5 YEARS & GOAL FOR 2025	45,590	1,877	21,594	50,585	45,754		
2024 FIGURES	42,734	1,757	21,491	44,276	41.488		
DEVIATION IN %	- 6.3%	-6,4%	-0,5%	-12.5%	-9.3%		

For this existing KPI, RFC Rhine-Alpine aims to stabilize the number of trains per border on the Corridor (regrouped per country) at the respective average of the 5-year timespan 2018 - 2022. This core objective was set in 2023 while keeping in mind the increase in TCRs on the Corridor lines in

by the C-OSS and the Total Allocated Capacity" is included under the part "Capacity Management KPIs", p.30.

KPI NUMBER OF TRAINS PER BORDER

The KPI Number of trains per border is heavily influenced by the overall economic situation. Consequently, together with a high level of construction works on the Corridor lines, a significant decline in the number of cross-border freight trains on all borders was noticed, except on the border between the Netherlands and Belgium (see also 38-39). The general evolution in 2024 for the entire Corridor, compared to 2023, was a decrease in traffic of 5.90%.

the upcoming years and the economic growth of the Corridor regions. In 2024, none of the borders on RFC Rhine-Alpine met the target set for 2025, with economic stagnation and increased construction volumes being the main reasons for the decline in cross-border traffic.

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Disclaimer: The Bad Bentheim border point (NL - DE) is included to have a full picture of the traffic between the Netherlands and Germany to take into account re-routed trains due to works between Emmerich and Oberhausen, even though this border point is not part of the Corridor.

MONTHLY NUMBER OF TRAINS PER BORDER

Number of commercial freight trains crossing selected border points





RheinCargo train on the Frick – Hornussen route in Switzerland.

BORDER CROSSINGS NL - DE

At the border points between the Netherlands and Germany, traffic volumes went down by 7.5% in 2024, compared to 2023. The decrease in the number of freight trains at the Dutch-German border crossings is mainly due to the diminishing number of coal trains. Demand for coal in Germany is still going down (closure of coal-based power plants). In most other freight segments (such as intermodal, dry bulk, wet bulk) the number of trains can be considered as stable.

BORDER CROSSING NL - BE

In 2024 volumes rose by 16.4% in comparison to 2023. This is mainly due to the increased traffic to and from Terneuzen (part of North Sea Port).

BORDER CROSSING BE - DE

At the border point Montzen - Aachen-West, traffic decreased by 3.3% in 2024 compared to 2023. This is due to a general downturn in the economy, a line closure in June, the ICM case in July in Aachen and the ICM case near Dorsfeld between Aachen and Cologne from the 22nd of November until the 23rd of December 2024.

BORDER CROSSING DE - CH

Compared to 2023, traffic at the Basel border point decreased by 6.7% in 2024. This negative trend in train numbers is attributable to two factors: firstly, the poor economic development in the eurozone and, secondly, the infrastructure problems on the access routes to Switzerland, which are making a further shift to rail transport more difficult.

Economic losses in the energy-intensive industries (steel, chemicals) as well as the automotive and

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mechanical engineering sectors are leading to declines in international transit traffic, as these industrial products are primarily transported by rail. Weakening export figures are reducing international transit traffic, which is also affecting Switzerland's cross-border train numbers. Despite falling transport volumes, the modal split in Switzerland has remained almost constant, meaning that the Swiss market is more likely to be affected by generally weak economic developments rather than by problems in individual transport sectors. Increased construction volumes and longer line closures (Rastatt summer 2024) lead to rerouting of freight traffic with decreasing train path availability.

BORDER CROSSINGS CH - IT

In 2024 the overall evolution, compared to 2023 was a decrease in traffic of 5.4%. The reduction in traffic for the whole of 2024 is entirely linked to the decrease in freight traffic to Luino.

MODAL SPLIT OF TRANS-ALPINE FREIGHT TRANSPORT AND IN SELECTED PORTS

The rail freight volume across the Swiss Alpine crossings Gotthard and Simplon in 2024 totaled 25.7 million tons, marking a 3.7% (976,000 tons) decline compared to the previous year. This continued the downward trend in rail freight observed since 2022.

2024 saw significant disruptions due to construction work. On the southern routes, key closures included the Luino line (Gotthard axis to Busto Arsizio/Gallarate) from January 7-28, TABLE OF CONTENTS

interruptions on the Simplon axis (Domodossola-Milan) between June and September, and a full closure of the Simplon section (Iselle di Trasquera-Domodossola) from August 9-30.

On the northern routes, the total closure of the Karlsruhe-Basel line (Rheintal route) near Rastatt (August 9-29) caused major detours, with limited options for large-profile unaccompanied combined transport (e.g., semi-trailers).

In Switzerland, operational challenges persisted, including reduced capacity at the Gotthard Base Tunnel until September and single-track operations on the Bözberg line between March and November, further affecting the Gotthard route.

These disruptions, combined with limited rerouting options, significantly impacted rail freight efficiency and contributed to the continued decline in volumes.

MODAL SPLIT OF TRANS-ALPINE FREIGHT **TRANSPORT 2022-2024**



PORT OF ROTTERDAM

In 2023, the total throughput of containers decreased: in tonnes by 6.8% (to 130.1 million tonnes) and in TEUs by 7.0% (to 13.4 million TEU). The decline that started in 2022 has continued in 2023. The main reasons for the decrease of freight transport are decrease in coal transport, lower consumption and production in Europe and the loss of volumes to and from Russia due to the sanctions. The change in the modal split is

not only due to the many infrastructure works in the Netherlands and Germany, but also to the lower cost of road transport and the increased cost of rail transport.

PORT OF ANTWERP¹

In 2023, there was a slight decrease in the market share of rail regarding the transportation of maritime containers from 7.6% to 7.3%. This is related to the geopolitical situation, leading to a general slowdown of the economy and hence less demand. Also, numerous infrastructure works, especially in Germany, impacted the hinterland traffic.

PORT OF GENOA

After four consecutive years of increase (from 2019), traffic by rail to and from the port of Genoa registered a setback in 2023 with a reduction of 6.5 percentage points compared to 2022, reaching about 8,640 trains moved in a year and returning to the 2021 levels.

At the same time the gateway volumes continue to remain above 2 million TEU despite a 3.9% reduction compared to 2022 and, in general, the port's overall throughput (including transhipment) is still below the levels reached during the pre-pandemic period.

In terms of rail volumes (TEU) the performance was also negative with a reduction of 6.3% compared to 2022 with a total of almost 340,000 TEUs shipped by rail in Genoa during 2023, with the modal split stopped at 15.6%, decreasing from the previous year.

¹Despite the merger of the ports of Antwerp and Zeebrugge into the unified port company, Port of Antwerp - Bruges in April 2022, the figures relate only to the Port of Antwerp.

MODAL SPLIT IN PORTS 2021 - 2023



RAIL Road

Definition: modal split [%] of freight traffic at the Ports of Rotterdam, Antwerp and Genoa; the modal split is calcula-ted for hinterland container traffic on the basis of TEUs.

As the information is usually not available for the previous year when the Annual Report is compiled, only the development for the ports up to 2023 is shown.



Inland Waterway Vessel - Duisport.





Aerial View of the Port of Rotterdam.

OPERATIONS KPIs

This part of the Performance Report gives information on the general development of punctuality of freight traffic on RFC Rhine-Alpine, the number of trains and train kilometres on RFC Rhine-Alpine as well as the planned and actual dwell time in border sections.

PUNCTUALITY REPORT 2024

Punctuality calculation is performed using the Train Information System (TIS) data by comparing the timetable delivered to TIS and the running time in operations at defined measuring points. On the Customer Information Platform (CIP), RFC Rhine-Alpine publishes on a monthly basis the Train performance report management summary, with punctuality figures, number of trains and distribution of delay reasons.

The RFCs agreed on considering international freight trains on the Corridors as punctual when they are not more than 30 minutes delayed. Other international Working Groups set a 15-minute threshold. For this reason, both figures are shown as an overall punctuality KPI for RFC Entry and RFC Exit. To understand the graphs correctly, it is necessary to know that RFC Entry is defined as the location where the train first enters an RFC line (first point on the train run belonging to the RFC). RFC Exit indi-

PUNCTUALITY DEVELOPMENT 2021 - 2024



RFC ENTRY - 30 MIN-THRESHOLD
RFC ENTRY - 15 MIN-THRESHOLD

cates the location where the train exits the RFC line the last time (last point of the train run belonging to the RFC).

In 2024, the overall RFC punctuality slightly improved compared to 2023 but is still on a low level. The exit punctuality (30min threshold) increased from 50% to 51% in 2024, with simultaneously decreasing train numbers in the course of the year. Capacity bottlenecks are still the main cause of delays in freight transport on RFC Rhine-Alpine. These were exacerbated by an extraordinarily high volume of construction works and the resulting diversions. Due to the expected high level of construction activity, a significant improvement of punctuality on the Corridor lines is not to be expected in the coming years. In addition, the expected increase in extreme weather conditions due to climate change have to be mentioned, which are already affecting the reliability of rail freight transport today. An example was the extreme rainfall in southern Germany and Switzerland in early June 2024, which resulted in flooding at Lake Constance and the Rhine. Three weeks later, there were yet again extreme amounts of rainfall, causing further flooding in Switzerland.



RFC EXIT - 30 MIN-THRESHOLD RFC EXIT - 15 MIN-THRESHOLD

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RFC ENTRY AND EXIT PUNCTUALITY PER DIRECTION IN 2024 (30' THRESHOLD):



KPI RFC ENTRY AND EXIT PUNCTUALITY IN 2024



MONTHLY RFC ENTRY PUNCUTALITY PER DIRECTION



MONTHLY RFC EXIT PUNCTUALITY PER DIRECTION



CORE OBJECTIVE 2: DELTA REC ENTRY AND EXIT PUNCTUALITY						
2021	2022	2023	2024	2025		
66	64	65	66			
52	48	50	51			
-14	-16	-15	-15	-16		
	DELTA RFC EN 2021 66 52 -14	2021 2022 66 64 52 48 -14 -16	2021 2022 2023 66 64 65 52 48 50 -14 -16 -15	2021 2022 2023 2024 66 64 65 66 52 48 50 51 -14 -16 -15 -15		

It is the goal of RFC Rhine-Alpine to improve performance, mainly punctuality and reliability, on the Corridor. Thus, the delta between Entry and Exit Punctuality was chosen to show the performance on the Corridor lines.

The target is to keep the delta of Entry and Exit Punctuality (30 min threshold) stable at 16% in 2025. This takes into account the

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current and expected capacity limits on the Corridor lines due to major construction works in the upcoming years.

In 2024, the delta between Entry and Exit punctuality on the Corridor lines was -15%; hence the target level defined in the core objective for 2025 was already met in 2024.



TOTAL NUMBER OF DELAY MINUTES REPORTED TO TIS FOR BOTH DIRECTIONS

minutes reported by the IMs to TIS for both directions. previous reasons, e.g., delayed circulation of another

IM delay reasons: e.g., timetable planning, dispatching errors, infrastructure failures, temporary goods are also displayed here. capacity restrictions (as far as not considered in timetable), unplanned works.

RU/others' delay reasons: e.g., train preparation, train formation by RU, rostering/re-rostering, rolling stock failures, loading irregularities, RU staff. RU/others' delay reasons also include delays caused by terminals (loading, unloading) or other parties (e.g., truck drivers) before handing the train over to the RUs.

The graph above shows the total number of delay Secondary delays: delays indirectly caused by the train and the resulting track occupation or conflicts within nodes. Incidents with trains/dangerous

> External reasons: delays which are out of the influence of IMs and RUs, e.g., weather conditions, natural events, authorities.



Construction works on the Riedbahn in autumn 2024.

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MAIN FACTORS **AFFECTING OVERALL** PUNCTUALITY

THE NETHERLANDS

During 2024 there were again some longer periods of total closure of the German railway line between Emmerich and Oberhausen. During these periods freight trains from and to Germany had to run via the border stations Oldenzaal (Bentheimroute) and Venlo (Brabantroute). These are both routes with not only freight traffic but also with heavy passenger traffic. Punctuality of the freight trains running via these routes is always lower as on the dedicated freight line "Betuweroute". During these rerouting periods there were regular problems with the capacity in the yard Venlo and the German yard Viersen, where trains in the direction Ruhr area have to change direction.

BELGIUM

Most delays on the Infrabel network were caused by single incidents: delays from the neighbouring IMs and incidents involving a person. Despite multiple measures being implemented to prevent the last one, these incidents still cause a lot of delays, but less than compared to 2023.

Other causes with a big impact on the punctuality figures were a fire in a signal box and some cases of infrastructure breakdown.

Due to the better communication regarding the rules of exceptional transport with DB InfraGO, this no longer popped up as a major incident in 2024 as opposed to 2023.



GERMANY

The refurbishment of the German rail network as part of DB InfraGO's high-performance network program picked up speed in 2024 with the construction measures on the Emmerich - Oberhausen section and on the Riedbahn. The associated capacity restrictions have also had a negative impact on operating quality.

Other factors that reduced the quality of operations in 2024 were the GDL trade union strikes at the beginning of the year and the ICM cases in Aachen and Dorsfeld.

SWITZERLAND



Following the derailment of a freight train in the Gotthard Base Tunnel (GBT) on 10 August 2023. the tunnel was fully reopened to traffic in September 2024. Despite this period of restricted traffic, the base tunnel achieved a high-capacity utilisation and showed excellent operational stability.

The average punctuality of freight trains on the Swiss section of RFC Rhine-Alpine in 2024 was over 70%. This demonstrates the high production quality and performance of the rail network.

Within the BLS Network on the Lötschbera-Axis no relevant incidents occurred in 2024. Despite many TCR's the operational quality in the past year has been very high - stringent (re-)planning and close cooperation with the RUs made this possible. Passenger punctuality on BLS operated lines reached 95.6% (thresh-old 3') and this had also positive effect on freight traffic. In N-S direction transit freight trains entered with 61% punctuality (threshold 30') into the BLS Network and left with 59% - reflecting a loss of 2%. In S-N direction entry punctuality was 48%, exit punctuality 60% which means a significant punctuality gain of 12%.

ITALY



transports were cancelled due to the disturbed circulation. The event lasted from 13/09 to 21/09.



Derailment of a freight train at Triplo Bivio Seveso in Italy.

Disconnection of the Milan hub from the railway traffic management system:

The event completely affected the day of 10/06starting from 12:20. The entire train circulation management system of the Milan hub was disconnected. It was therefore impossible for the operators on duty to regularly manage the



Repairing the tracks damaged by a derailment between Parma and Sant'llario.

railway circulation of any segment. Freight traffic almost completely stopped to allow the circulation of the minimum passenger services for the day of 10/06.

Laveno - Luino Line Interruption Interruption of the Laveno – Luino line from 26/08 to 28/08 following checks on underpass work.

Derailment between Parma and Sant'llario Another event, not linked to the jurisdiction of Milan but linked to the territory of Bologna, which however had a very important impact, was the derailment of a freight train between Parma and Sant'llario on 11/07. The incident caused damage to the railway infrastructure with the consequent need to restore it. Operations ended on 09/08. Freight traffic was significantly slowed down due to the limited capacity (during the daytime slot reserved for passenger trains) which required the rescheduling of freight transport on alternative lines and/or in different time slots from those originally scheduled.



A freight train runs on the Riedbahn one day after the reopening in December 2024.

KPI TRAIN KILOMETERS ON RFC RHINE-ALPINE *

BORDER	AVG. PLANNED DWELL (MIN.)	AVG. REAL DWELL (MIN.)
AACHEN-WEST - MONTZEN	69	90
BASEL BADISCHER BF. – BASEL SBB PB/RB	54	62
BRIG – DOMO II	186	180
BRIG – DOMODOSSOLA	97	117
CHIASSO SM – BIVIO PC ROSALES	83	75
EMMERICH – ZEVENAAR OOST	8	10
KALDENKIRCHEN – VENLO	37	46
RANZO – S. ABBONDIO – LUINO	68	71
** ZELZATE- SAS VAN GENT	1	0

* Due to a system error, the data collected in 2024 is not reliable

For Zelzate – Sas van Gent ** ** measured only on the Belgian side

NUMBER OF TRAINS ON BEC BHINE-ALPINE

100,725

A new RFC train definition was introduced by the RFC Network in 2024, which should lead to a more precise allocation of individual trains to individual corridors, especially on overlapping borders. As this KPI is heavily dependent on the allocation to specific corridors, there was too much numerical distortion here in the past, which stood in the way of publication.

KPI DWELL TIME IN BORDER SECTIONS (PLANNED AND ACTUAL)

Planned dwell in a single point is calculated as difference between scheduled departure from point and scheduled arrival to point. For each train, the planned dwell times at all relevant measuring points are summed up. The KPI provides the average planned dwell of all international freight trains crossing the border, including the train with zero planned dwell, with the data deriving from TIS. The border Sas van Gent – Zelzate, is published for the first time in 2024 on RFC Rhine-Alpine.

Generally, the figures substantiate the known bottlenecks within the Corridor, where planned dwell times are not sufficient to buffer operational restrictions and missing capacity in neighbouring networks and nodes.

TRAIN KILOMETERS ON RFC RHINE-ALPINE

51,092,424

This KPI is calculated as the sum of real distances between origin and destination of all trains crossing a border along the RFC. This KPI is published for the first time for the year 2024.

THE RFC TRAIN DEFINITION

A train is classified as an RFC train if it is a freight train, crosses at least one international border, and operates entirely or partially on a section of an RFC network. If an already identified RFC train travels 300 km or more within the network of another RFC without crossing its border, it remains assigned to the original RFC corridor. Specific assignment rules apply to overlapping sections of RFC corridors: trains operating on fully overlapped sections are assigned to all involved corridors, though the respective RFCs may apply additional criteria to assign the train to a single corridor. If a train operates only partially in overlapping sections, it is assigned to the RFC if it crosses one border along the RFC and runs at least one section exclusively within a single RFC. Additionally, 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.



CAPACITY **MANAGEMENT KPIs**

This part of the Performance Report presents details on the development of the Pre-arranged Paths (PaPs) and Reserve Capacity (RC) offered on RFC Rhine-Alpine.

KPI VOLUME OF OFFERED. REQUESTED AND PRE-BOOKED CAPACITY

This KPI shows the development of offered, requested and pre-booked PaPs for the 2020 - 2025 (TT). Generally, the offered PaPs are planned for operation on seven days a week, yet some connections might have a lower availability (e.g., 4 or 5 running days), or a given PaP might not be available on some days throughout the year due to TCRs.

These cut out days led to a decrease in the volume of offered PaP-km. For TT2025, 17 million PaP-km were offered. The volume of requested capacity (PaPs) was 7.3 million PaPkm and decreased by 24% compared to the previous year. 43% of the freight capacity was requested for TT2025. Due to conflicts between some requests, it was only possible to allocate 90% of the requested capacity as PaPs. This led to a volume of pre-booked capacity of 6.6 million PaP-km. The remaining 10% were answered with tailor-made paths. In addition to

the requests for PaPs, a high amount of connected feeder and outflow paths was requested and allocated.

A reserve capacity of 1,65 million path-km was offered for TT2024. As in previous years, no requests were received. For TT2025, the offer remains nearly on the same level at 1,71 million path-km.

KPI RATIO OF PRE-BOOKED CAPACITY

This KPI shows the ratio of the volume of prebooked capacity (at X-7.5) to the volume of offered capacity (PaPs). For TT2025 the ratio is 39% compared to 49.70% for TT2024.

KPI NUMBER OF REQUESTS INCLUDING NUMBER OF CONFLICTS AT X-8

This KPI shows the number of conflicting and clean requests (i.e., dossiers) made by the applicants in the Path Coordination System (PCS). The number of requested dossiers for TT2025 decreased by 33% compared to the previous year. There were 28 conflicting PaP requests. All applicants that could not receive a PaP after the conflict solving process were answered with a tailor-made path offer (see graph on page 33).

CORE OBJECTIVE 3: RATIO OF PAP CAPACITY OFFERED AND FINAL TIMETABLE OFFER						
	TT 2021	TT 2022	TT 2023	TT 2024	TT 2025	TT 2026
VOLUME OF OFFERED PRE-ARRANGED PATHS (X-11) IN MILLION PATH-KM	17.6	18.2	18.1	16.7	17.0	
FINAL TIMETABLE OFFER (X-3) IN MILLION PATH-KM	4.1	5.0	6.9	8.3	6.6	
RATIO	23.30%	27.47%	38.12%	49.70%	39%	35%

It is the objective of RFC Rhine-Alpine to publish a PaP offer (at X-11) on all principal Corridor lines crossing a border that fits the needs of the customers in the best possible way. The quality of the initial PaP offer (at X-11) can best be derived through comparison to the Final timetable offer (at X-3), which is closest to the actual train run. The aim is to stabilize the ratio at 35% until TT2026

For TT2025, the volume of offered PaPs (X-11) was 17 million path-km and the final timetable offer (at X-31 was 6.6 million path-km, resulting in a ratio of 39%. Compared to the previous timetable year, this is a decrease of 10.7%, but still above the target of 35% for TT2026

KPI VOLUME OF OFFERED, REQUESTED AND PRE-BOOKED CAPACITY

This KPI shows the volume of PaPs in the phases of PaP publication (X-11), PaP requesting (X-8) and PaP pre-allocation (X-7.5) in million path-km per year.



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PaP Capacity Offer (X-11)

7.3 M km PaP Capacity Requests (X-8) 6.6 M km

PaP Capacity Pre-allocated (X-7.5)





18.1 M km PaP Capacity Offer (X-11)

7.8 M km PaP Capacity Requests [X-8]

6.9 M km PaP Capacity Pre-allocated (X-7.5)

0.9 M km Tailor-made



17.6 M km PaP Capacity Offer (X-11)

5.2 M km PaP Capacity Requests (X-8)

4.2 M km PaP Capacity Pre-allocated (X-7.5)

1.0 M km Tailor-made

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Freight train on the right bank of the Rhine opposite Oberwesel in Germany.

KPI RATIO OF THE CAPACITY ALLOCATED BY THE C-OSS AND THE TOTAL ALLOCATED CAPACITY

The KPI Ratio of the capacity allocated by the C-OSS and the total allocated capacity is calculated with data provided by the IMs and the C-OSS of RFC Rhine-Alpine, both after the finalisation of the allocation process. At every border where PaP capacity is offered by the C-OSS, the number of crossing trains, which have been allocated via PaPs in PCS (including feeder/outflow and tailor-made paths), is compared to the number of international freight trains, which were requested via PCS or national systems and allocated by the IMs along the Corridor. The shift of the offered capacity between the axis through Switzerland due to TCRs led to a change in the ratio of capacity allocated compared to the previous years. In relation with the decreased amount of requested capacity, the numbers of allocated capacity per border changes intensively for e.g. Luino & Domo II.

KPI RATIO OF CAPACITY ALLOCATED BY C-OSS AND THE TOTAL ALLOCATED CAPACITY



This KPI shows the ratio of trains which were allocated by the C-OSS as PaPs compared to trains which were requested via PCS or national systems and allocated by the IMs.



KPI NUMBER OF REQUESTS INCLUDING NUMBER OF CONFLICTS AT X-8

This KPI shows the total number of requests and the number of clean dossiers (multiple path requests placed in PCS which referred to the same PaP on RFC Rhine-Alpine).





Emergency maintenance on a special rail switch at the Kijfhoek marshalling yard.

KPI Average Planned Speed of PaPs The KPI Average Planned Speed of PaPs shows the average of the planned commercial speed of the PaPs in km/h for selected connections (see also Core objective 4 below). The KPI is calculated by dividing the length of the PaP by the planned travel time. Thus, the average planned speed of PaPs also includes necessary stops on the route, as well as parts with restricted speed (e.g., cities). On RFC Rhine-Alpine, it is constantly adjusted from year-to-year to better fit the needs of IMs and applicants respectively, for instance taking

into account necessary stops for train drivers or

CORE OBJECTIVE 4: KPI AVERAGE PLANNED SPEED OF PAPS FOR TT2025							
AVERAGE PLANNED SPEED OF PAPS ON RFC RHINE-ALPINE IN KM/H	LENGTH OF THE STRETCH IN KM	TT 2023	TT 2024	TT 2025	TT 2026	GOAL TT 2026	
MAASVLAKTE — OBERHAUSEN STERKRADE	228.1 KM	70.8	71.5	71.3	72.71	71.5	
Y. SCHIJN — DORSFELD	211.3 KM	46.1	45.7	46.6	47.67	45.7	
BASEL SBB RB — NOVARA B. TO	339.5 KM	39.6	42.1	37.3	42.53	42.1	
TROISDORF — BASEL SBB RB	509.0 KM	61.3	62.7	62.3	60.72	62.7	
KARLSRUHE GBF — GALLARATE	519.4 KM	51	50.8	50.7	51.06	50.8	
MAASVLAKTE — MILANO SM	1,148.3 KM	53.9	56.2	56.2	55.79	56.2	
Y. SCHIJN — MILANO SM	1,092.9 KM	50.5	52.5	51.0	50,25	52.5	
BASEL SBB RB — MILANO SM	330.3 KM	47.8	49.0	47.1	48.28	49	
BASEL SBB RB — CHIASSO SM	274.0KM	58.6	57.9	58.1	58.79	57.9	

The goal is to keep the average planned speed of PaPs per selected O/D on the level of TT2024 until TT2026 (published in 2025), as the current values reflect years of adapting to enable smooth running of trains on the Corridor lines. The biggest decrease for the O/DTroisdorf-Basel due to the high volume of TCRs in Germany during the timetable year. Overall, the average planned speed of PaPs was stable for TT2026 despite

necessary waiting times at borders on that O/Drelation. Thus, increasing the speed of a PaP does not directly lead to better quality. The PaPs running on the respective O/D have to cover the whole section to be included into the calculation. At some borders, a longer stopping time is caused by e.g., customs handling or the applicants' desired change of operation. This leads to a lower average speed than at borders without dwelling time. The selected O/Ds serve as examples. Further connected O/Ds would show hardly any difference regarding planned speed (e. g. Amsterdam instead of Maasvlakte).

the expected TCRs on Corridor lines. The target set for TT2026 was met on all O/Ds except Troisdorf -Basel SBB RB, Maasvlakte - Milano SM, Y. Schijn -Milano SM and Basel SBB RB - Milano SM. The main reason for the failure to achieve the targets set for these O/Ds are adjustments to the PaPs in northern Italy in order to guarantee greater stability of the products on offer.

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