

Easier, faster, safer



**Annual Performance Report**  
**2022**

# CONTENT

## 1. Introduction

## 2. Choosing performance indicators

## 3. Capacity Management

- 3.1. Volume of offered capacity (PaPs)
- 3.2. Volume of requested capacity (PaPs)
- 3.3. Volume of pre-booked capacity (PaPs)
- 3.4. Number of requests (PaPs)
- 3.5. Volume of offered capacity (RC)
- 3.6. Volume of requested capacity (RC)
- 3.7. Number of requests (RC)
- 3.8. Number of conflicts (PaPs)
- 3.9. Ratio of published/ requested/ pre-booked capacity capacity (PaPs)
- 3.10. Ratio of pre-booked capacity (PaPs)
- 3.11. Average planned speed of PaPs

## 4. Operations

- 4.1. Corridor Punctuality at Origin and Destination
- 4.2. RFC Punctuality
- 4.3. Number of trains crossing a border along the RFC

## 5. Market development

- 5.1. Number of trains per border
- 5.2. Ratio of capacity allocated by the C-OSS and the total allocated capacity

# 1. INTRODUCTION



Article 19.2 of Regulation EU 913/2010 requires the Management Board of the RFCs to monitor the performance of rail freight services on the freight corridor and publish the results of this monitoring once a year.

This annual publication is based on the RNE Guidelines "Key Performance Indicators" of the Rail Freight Corridors". These KPI's enables to follow the overall performance of the Corridor.

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

## **The indicators are divided into three business fields.**

- The capacity management
- The operations
- The market development

These KPI's are commonly applicable to all RFC's and were developed by a joint RNE/RFC project team

## 2.

# CHOOSING PERFORMANCE INDICATORS

The KPIs and Measure Datas in this performance monitoring report were chosen on the basis of the following parameters:

- **Measurability: performance should be measurable with the tools\* and resources available on the corridor**
- **Clarity: KPI/MD should be understandable to the public it is designed for**
- **Comparability: KPI/MD should be comparable across time and region**
- **Relevance and empowerment: KPI/MD should provide information on which project decisions can be based**

*\* The data are provided by RNE's PCS and TIS, while the data processing tool is OAS. If the necessary data are not available in RNE's IT tools, the RFC collects the data via their IMs from national tools.*

### 3. CAPACITY MANAGEMENT



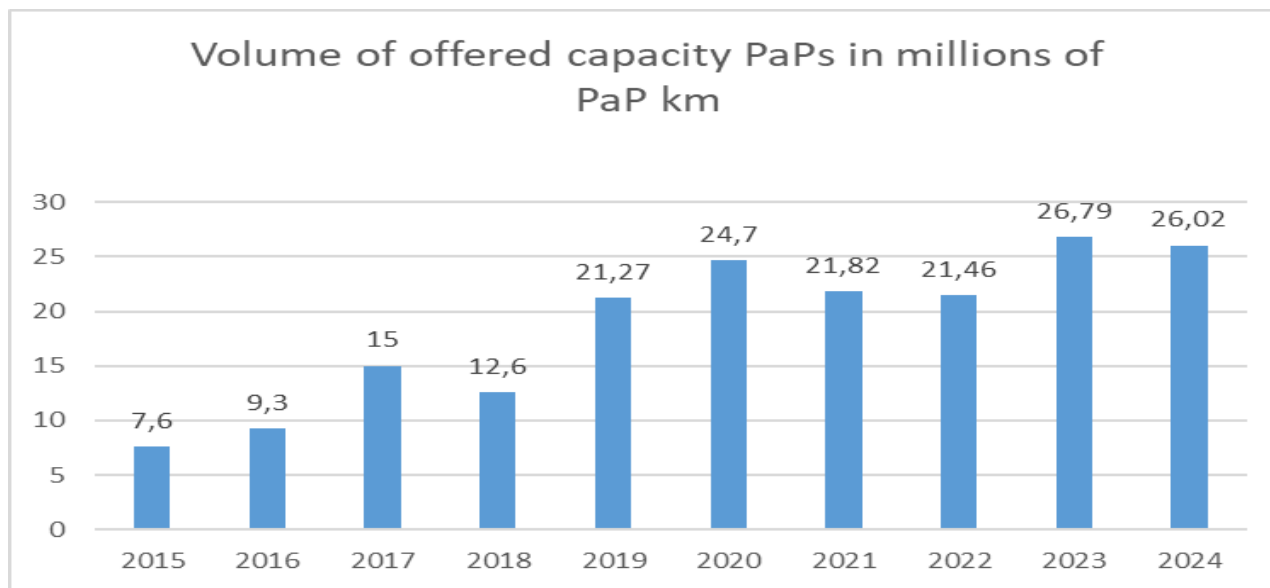
The following pages will provide insight into the capacity that has been published by the C-OSS of the Corridor, and the requests that have been received & booked for this capacity.

Capacity on the Corridor is published under the form of PaPs and Reserve Capacity (or RP-Rolling Planning in the frame of the TTR Pilot Amsterdam-Brussels), via the online platform PCS. Only requests that have been placed via this tool can be taken into account.

## 3.1. Volume of offered capacity (PaPs)

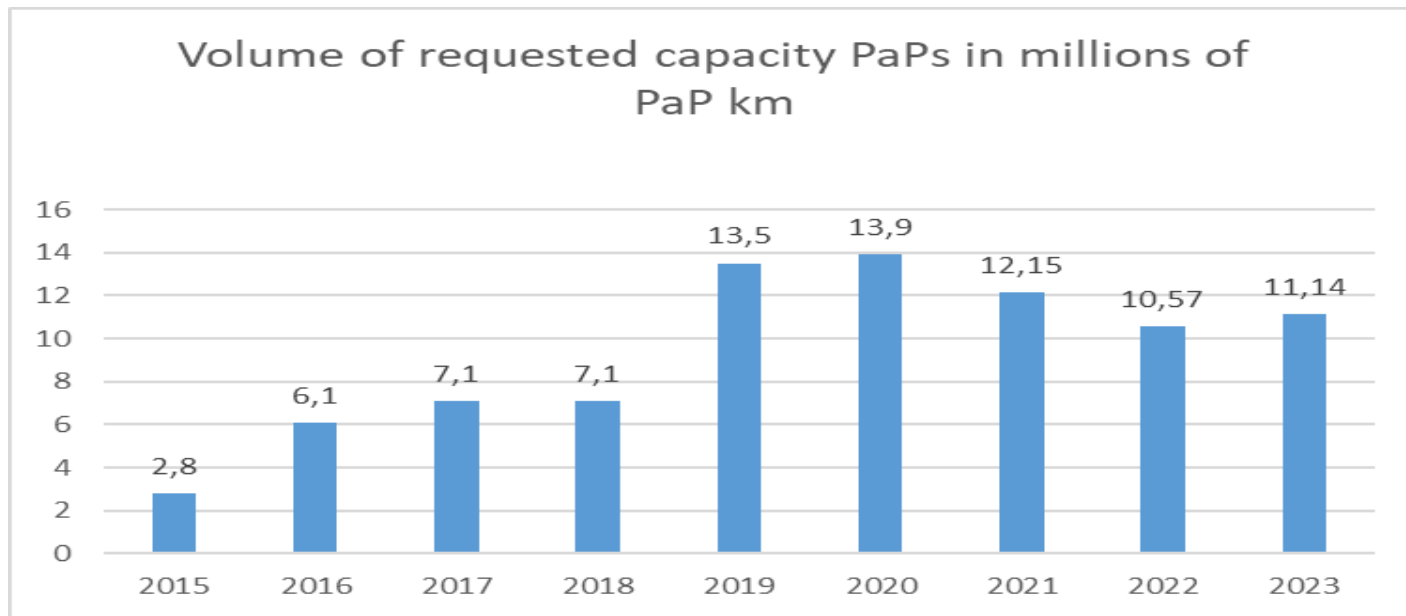
This graph displays the volume of PaPs that have been published by the RFC C-OSS in January 2014 to 2023 for the timetables 2015 to 2024.

A total of **26,02 million KMs** were published as PaPs for TT2024  
(-3% compared to TT2023)



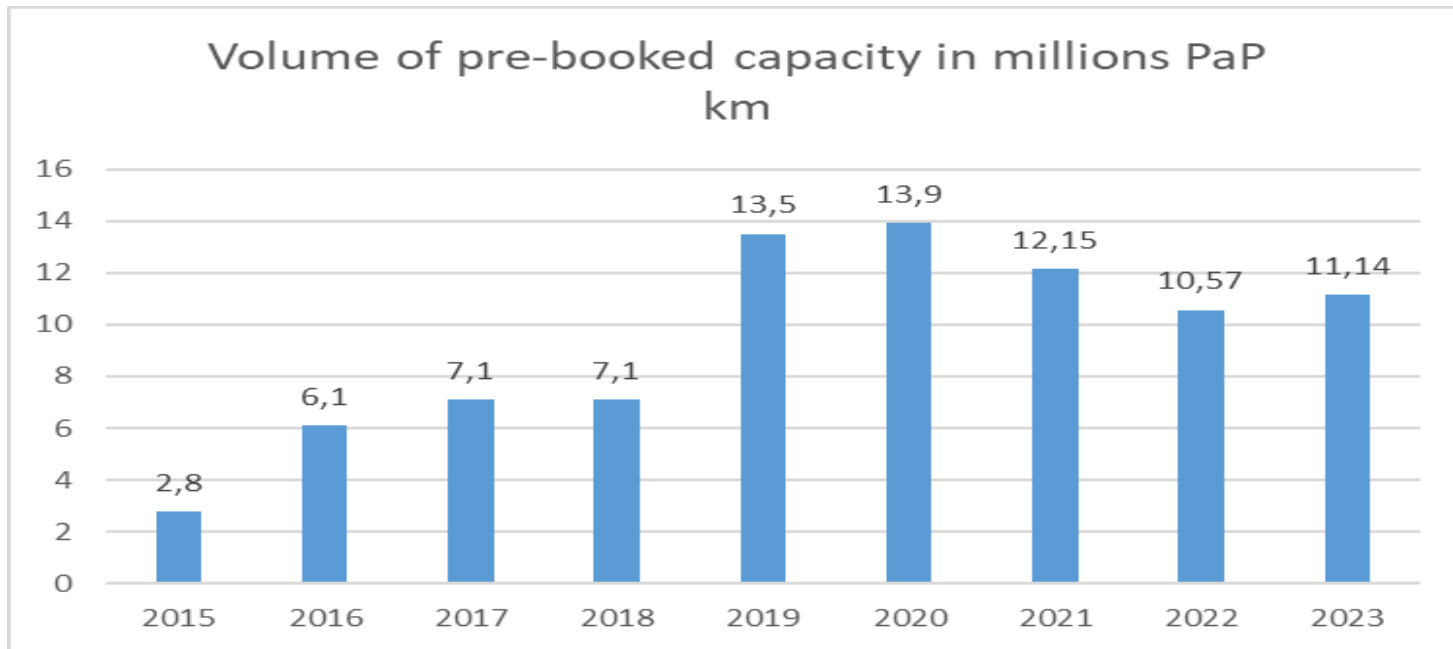
## 3.2. Volume of requested capacity (PaPs)

This KPI displays all the volume of requested PaPs (KMs per year) that have been received by the C-OSS of the Corridor for the annual timetables 2015 to 2023. Feeder and outflow sections as well as overlapping sections (with other RFCs) are not included. Measured at the deadline for submitting path requests = X-8



### 3.3. Volume of pre-booked capacity (PaPs)

This KPI displays the volume of pre-booked capacity (PaPs in KM per year-by the C-OSS of the Corridor for the annual timetables 2015 to 2023 during the pre-booking phase at X-7,5

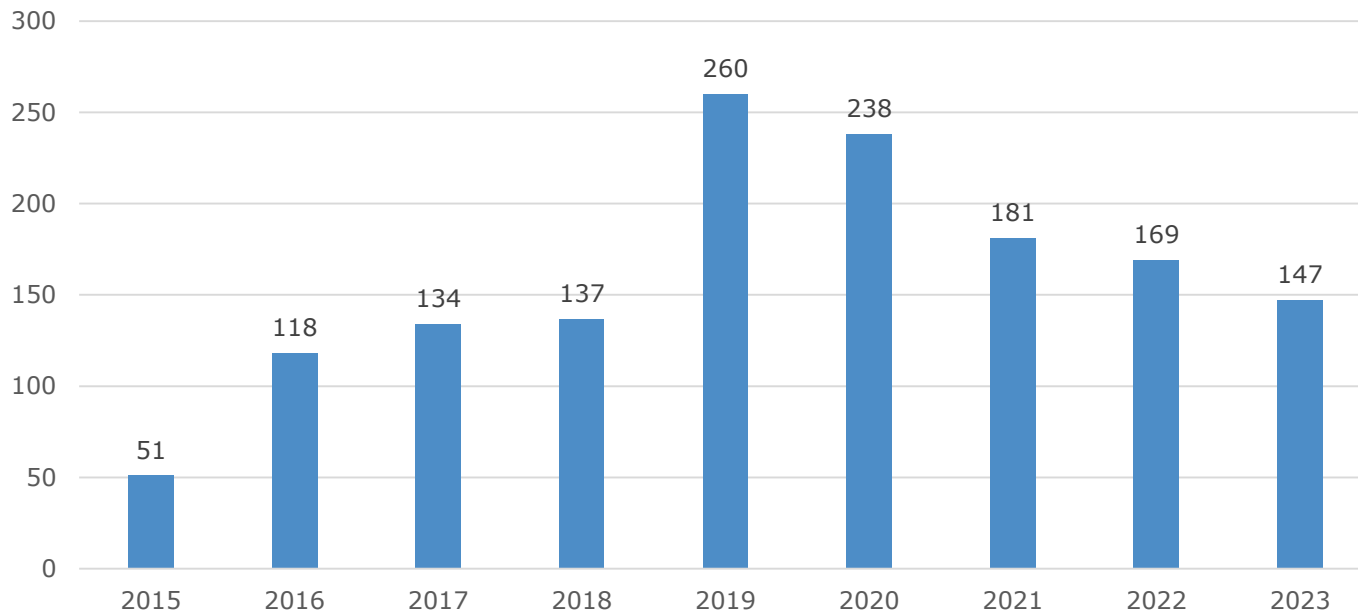




## 3.4. Number of requests (PaPs)

This KPI displays the number of PaPs requests that have been received by the C-OSS of the Corridor for the annual timetables 2015 to 2023 = number of PCS dossiers submitted at the deadline for submitting path requests in the annual timetable process.

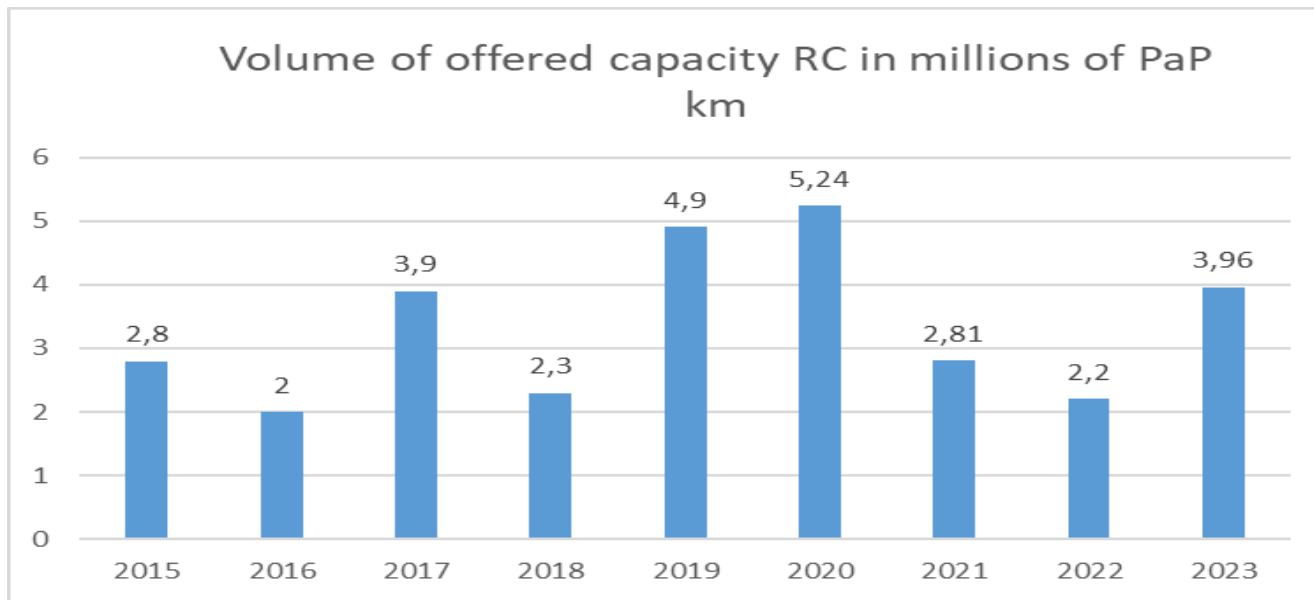
Number of PaP requests



## 3.5. Volume of offered capacity (RC)

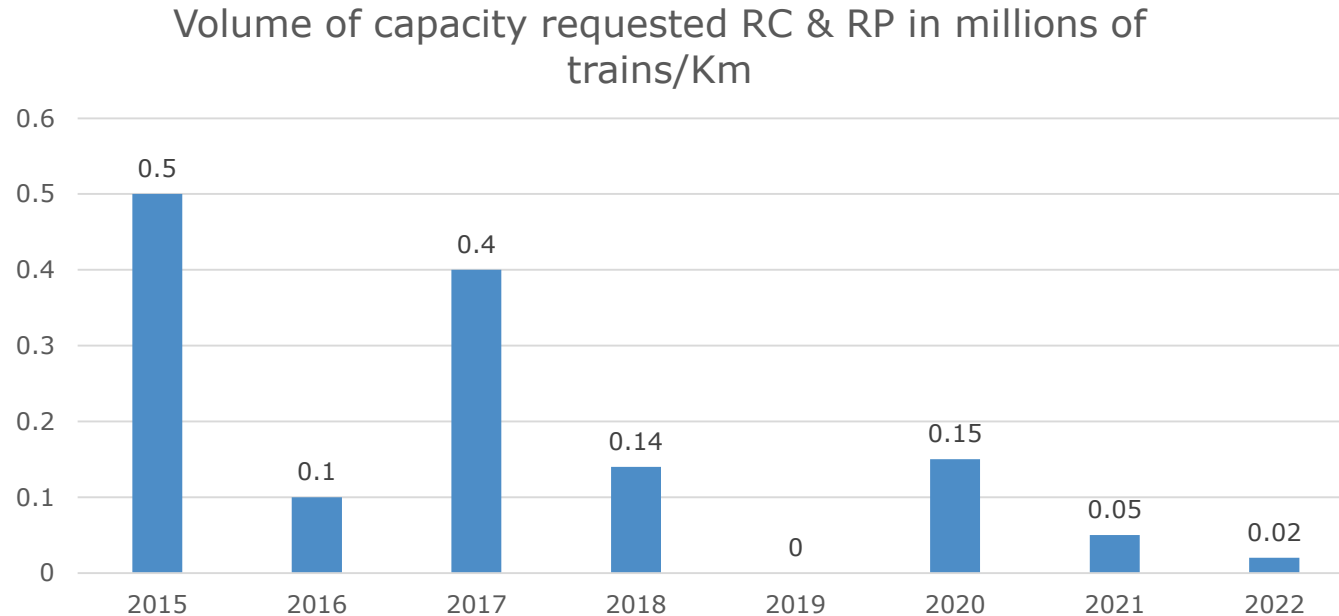
This graph displays the volume of Reserve Capacity that has been published by the RFC C-OSS in October 2014 to 2022 for the timetables 2015 to 2023

A total of **3,96 million KMs** were published as Reserve Capacity & Rolling Planning for TT2023  
(+80% compared to TT2022)



## 3.6. Volume of requested capacity (Reserve Capacity & Rolling Planning)

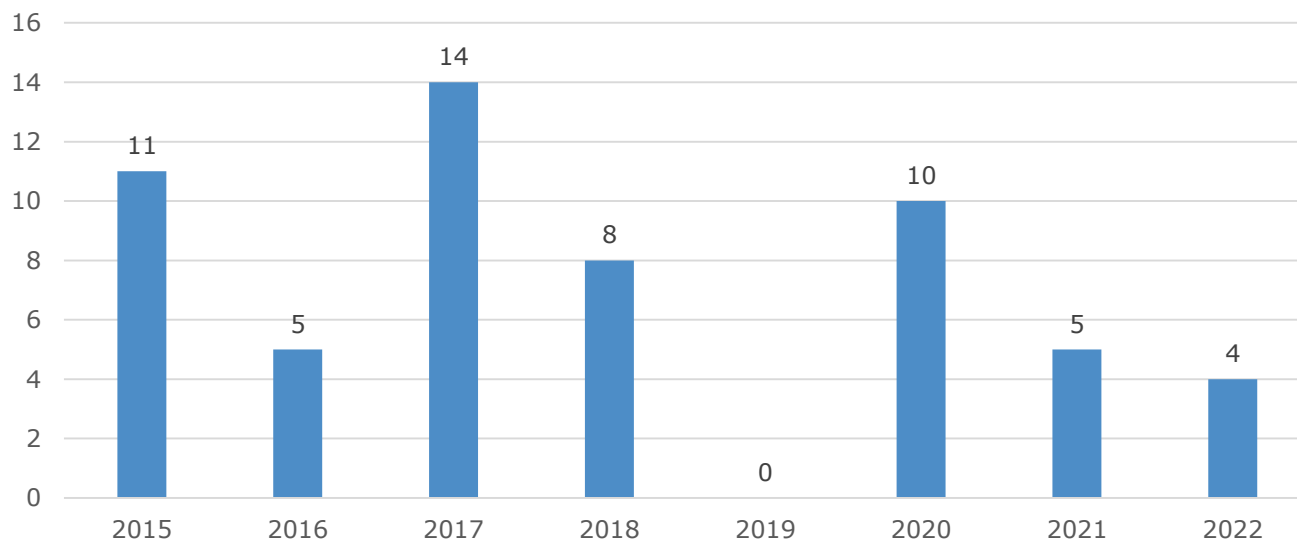
This KPI displays all the requests for Reserve Capacity & Rolling Planning (KMs per year) that have been received by the C-OSS of the Corridor for the annual timetables 2015 to 2022. The ordered Rolling Planning in the frame of the Amsterdam – Brussels TTR Pilot is mentioned.



## 3.7. Number of requests (Reserve Capacity & Rolling Planning)

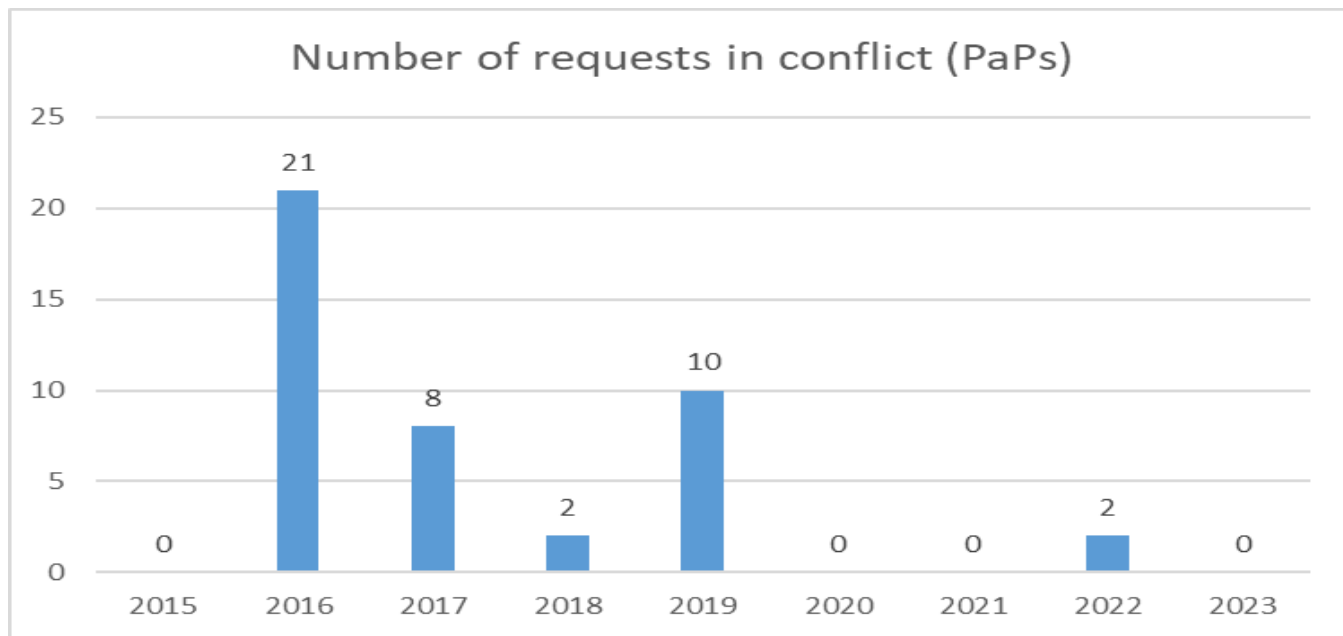
This KPI displays the number of Reserve Capacity Requests & Rolling Planning requests that have been received by the C-OSS of the Corridor for the annual timetables 2015 to 2022 = number of PCS dossiers requested. We have mentioned the ordered Rolling Planning in the frame of the Amsterdam – Brussels TTR Pilot.

Number of Reserve Capacity / Rolling Planning requests



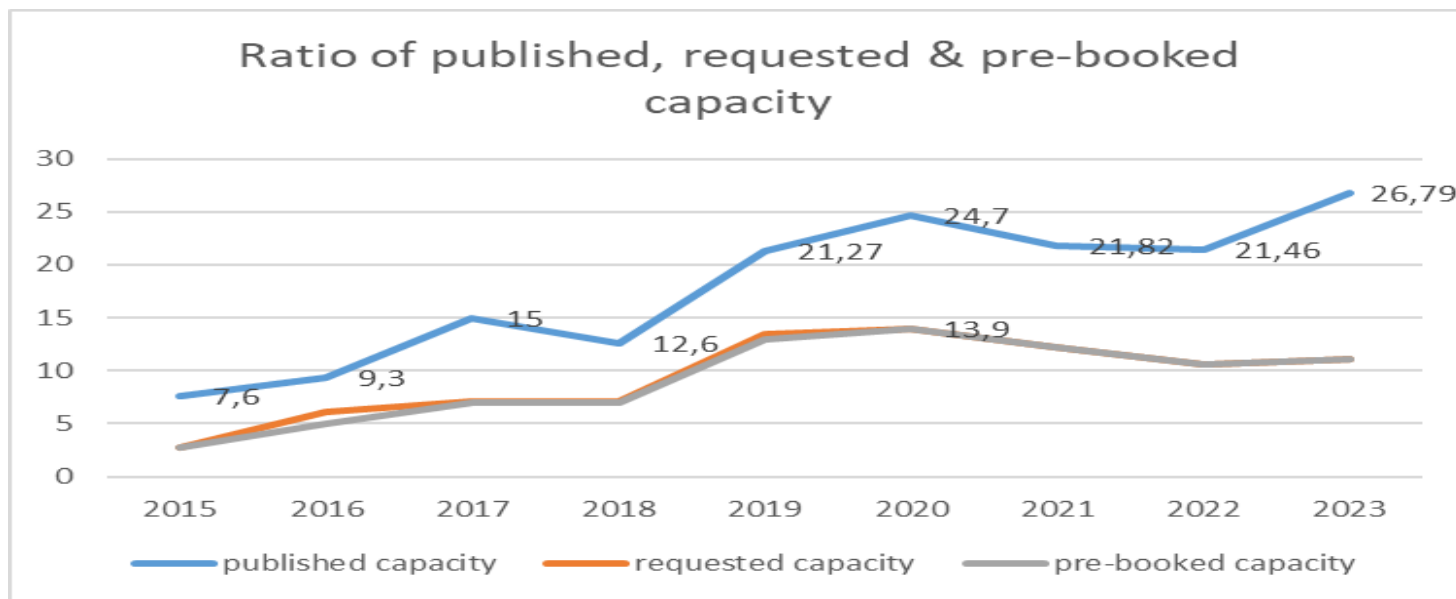
## 3.8. Number of requests (PaPs) in conflict

This KPI displays the number of PaPs requests that have been received by the C-OSS of the Corridor for the annual timetables 2015 to 2023 = number of PCS dossiers submitted at the deadline for submitting path requests which are in conflict with at least one other dossier for PaPs on the same RFC.



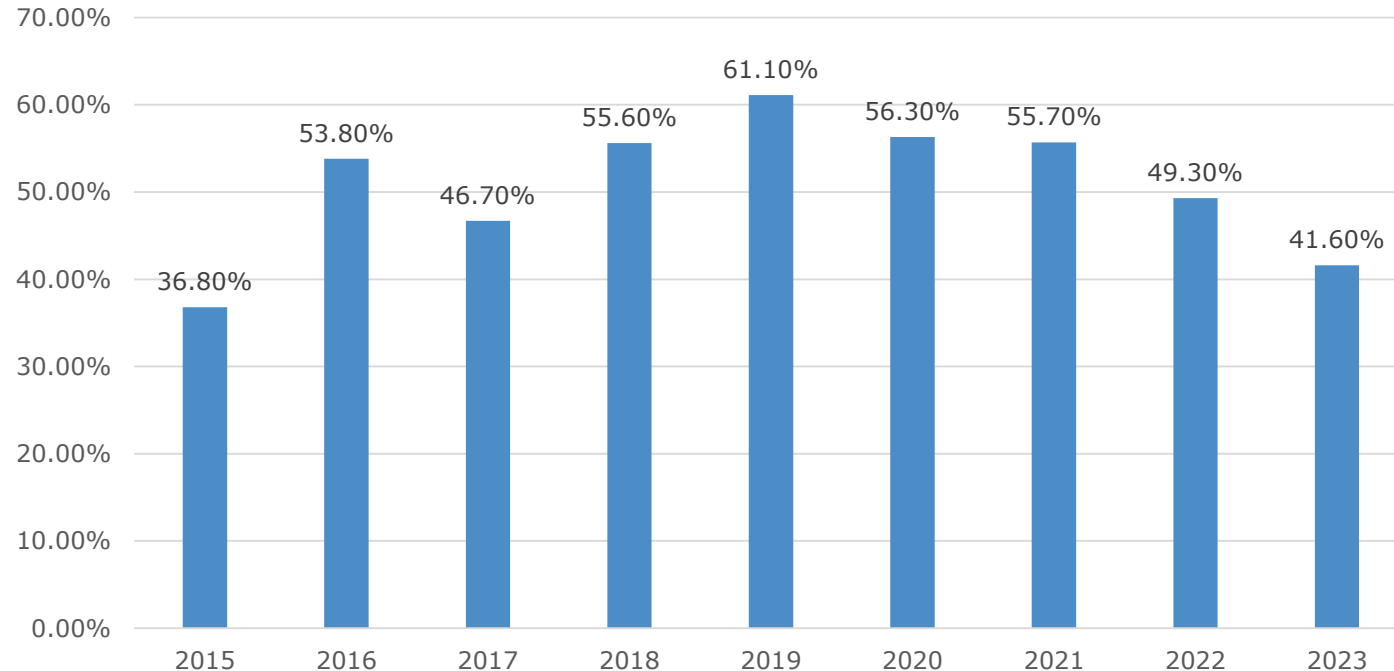
## 3.9. Ratio of Published / Requested / pre-booked capacity (PaPs)

This KPI compares the published, requested & pre-booked capacity in PaP km for the annual timetables 2015 to 2023. This KPI is based on the statistics communicated to RNE via the C-OSS Community.



## 3.10 Ratio of Pre-Booked Capacity (PaPs)

This KPI displays the ratio of the Volume of Pre-Booked Capacity to the Volume of Offered Capacity (PaPs) for the annual timetables 2015 to 2023. This KPI has been calculated retroactively based of the statistics communicated to RNE via the C-OSS Community.



## 3.11. Average Planned Speed of PaPs

This KPI compares the average speed of pre-arranged paths on predefined Rail Freight Corridor North Sea – Mediterranean routes with the pre-arranged paths on the corresponding lines for the previous year. Per corridor route, an objective has been defined in the Corridor Implementation Plan.

The goal of this KPI is to be able to determine the evolution of the speed of the PaPs over time.

KM/h per Corridor Route							
Route including	Length Km	Catalogue TT 2013	Catalogue TT 2020	Catalogue TT 2021	Catalogue TT 2022	Catalogue TT 2023	Catalogue TT 2024
Antwerp - Basel	748,8	57	55,1	54,4	55,7	59,4	61,2
Antwerp - Bettembourg	343,7	60,7	57,4	54,9	56,0	57,4	57,8
Antwerp - Uckange via Artère Nord Est	395,1	n.a.	n.a.	n.a.	n.a.	63,1	64,8
Rotterdam-Antwerp	74,3	53,4	64,1	64,1	62,59	64,8	62,8
Metz - Lyon	454,1	n.a.	65,3	66,5	62	71,5	67,6
Dunkerque - Liège	311,1	n.a.	58,7	58,7	59,2	52,7	58,7
Antwerp - Paris	403,7	n.a.	n.a.	n.a.	n.a.	43,2	39,2

→ Journey times include commercial and operational stops



# 4. OPERATIONS

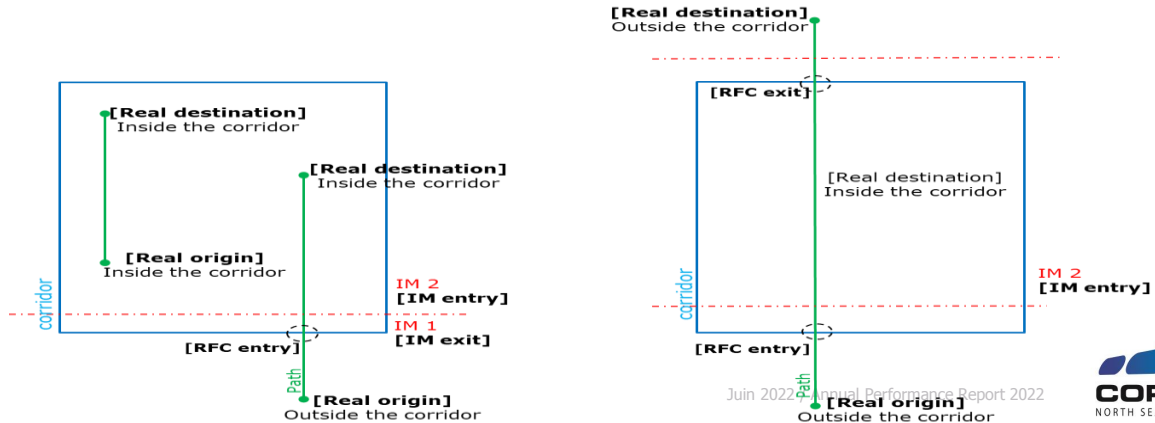
## 4.1 Corridor Punctuality at Origin and Destination

Punctuality calculation is based on the Train Information System (TIS) data at defined measuring points. This KPI shows the average punctuality of trains running at the entry and exit of the Corridor, through different delay thresholds.

Yearly punctuality KPI 2022		15 minutes threshold	30 minutes threshold
At Origin (RFC Entry)	NS	69%	78%
	SN	68%	77%
At Destination (RFC Exit)	NS	61%	71%
	SN	59%	68%

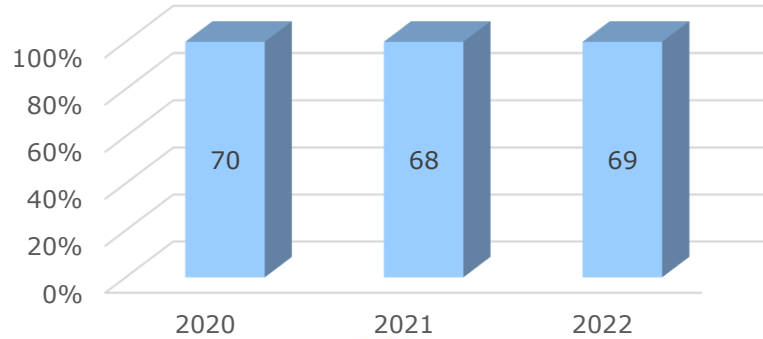
Source TIS

- **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



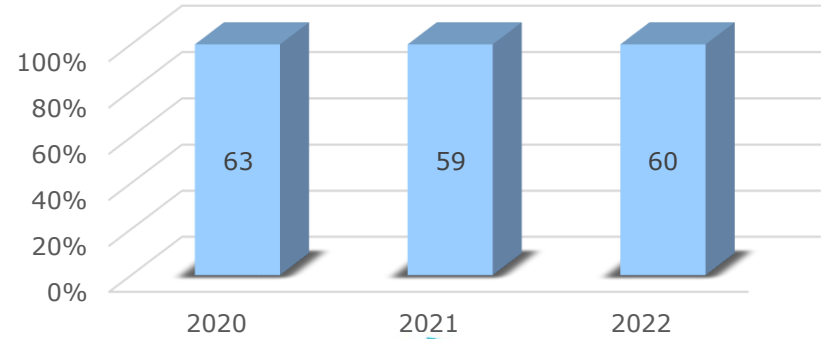
## RFC ENTRY

Delay ≤ 15 min

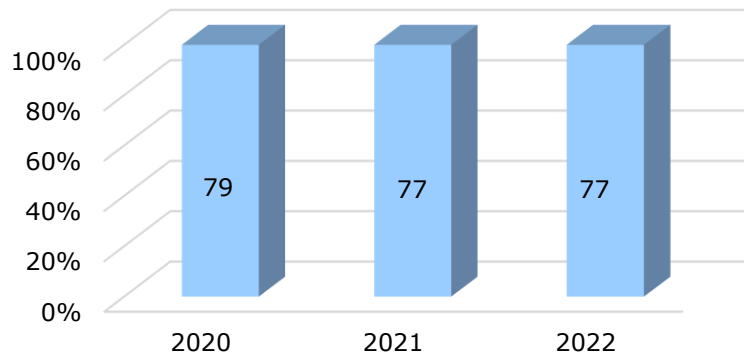


## RFC EXIT

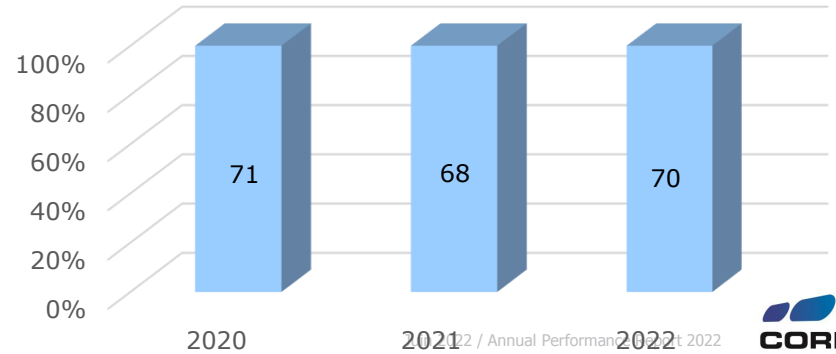
Delay ≤ 15 min

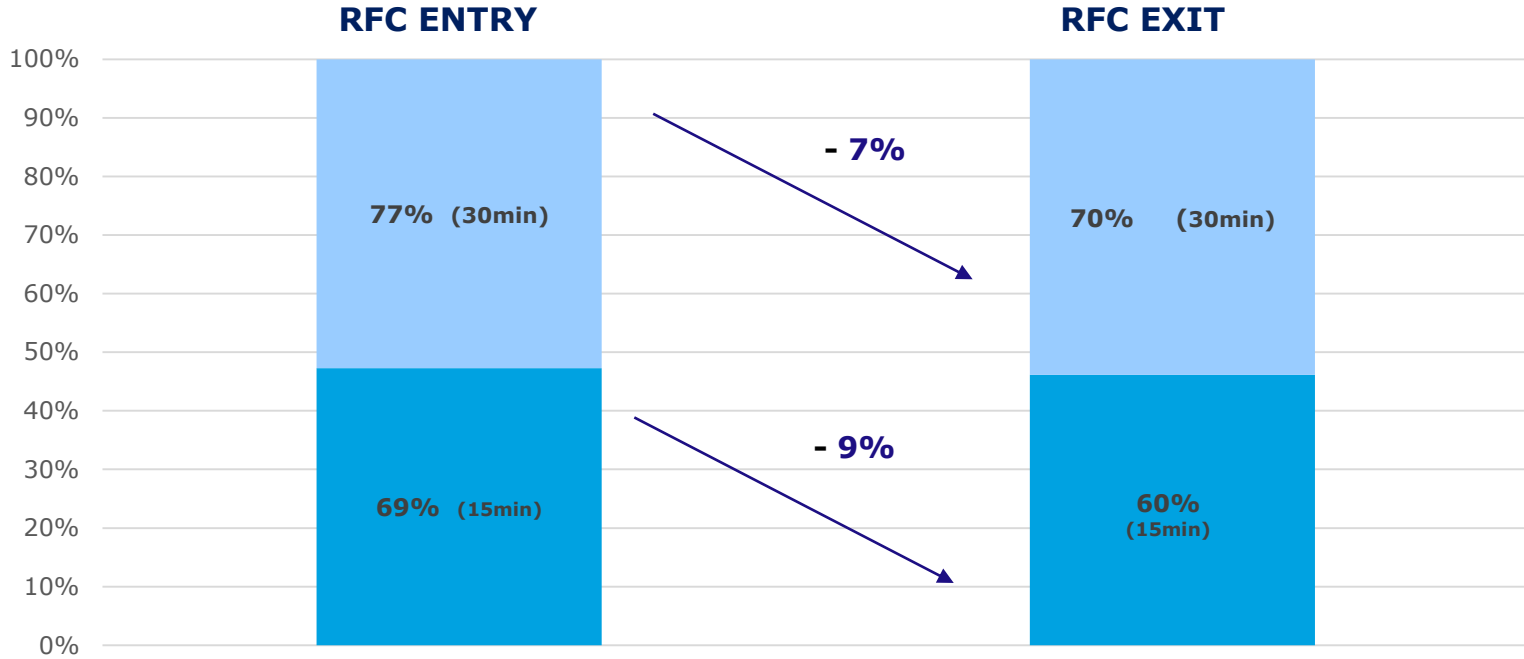


Delay ≤ 30 min



Delay ≤ 30 min





## 4.2 RFC Punctuality (internal RFC NSM KPI)

This KPI measures the average punctuality of trains running on the corridor on a fixed number of locations (31 reporting points).

ANTWERP - BASEL	ANTWERP - BETTEMBOURG	ANTWERP - LILLE	BETTEMBOURG - LYON
-Y.SCHIJN	-Y.SCHIJN	-Bettembourg secteur Ouest	-Bettembourg secteur Ouest
-MUIZEN-GOEDEREN	-LEUVEN	-ANTWERPEN-W.H.-B.KALLO	-Uckange - Bât Voyageurs
-LEUVEN	-NAMUR	-MOUSCRON	-Hagondange - Bât Voyageurs
-NAMUR	-BERTRIX	-Lille-Flandres - Bât Voyageurs	-Metz-Sablou - Jonct V2/V2R
-DINANT	-Y.AUBANGE		-Barisey-la-Côte
-BERTRIX	-Bettembourg secteur Ouest		-Is-sur-Tille
-Y.AUBANGE			-Mâcon-Ville - Bât Voyageurs
-Uckange - Bât Voyageurs			-Lyon-Vaise - Bât VoyageursLyon-Vaise - Bât Voyageurs
-Woippy - Bât Voyageurs			-Tournon - Bât Voyageurs
-Rémillly - Bât Voyageurs			-La Voulte-sur-Rhône - Aig Km 634,9
-Réding - Bât Voyageurs			-Livron - Bât Voyageurs
-Vendenheim			
-Lutterbach (Haut-Rhin) - Bât Voyageurs			
-St-Louis (Haut-Rhin) - Bât Voyageurs			
-Basel SBB			
-MS - Basel SBB RB			

A train will be counted in this train list if it meets the following criteria:

- Passing a Corridor border point and
- Passing one of the predefined reporting points along the Corridor

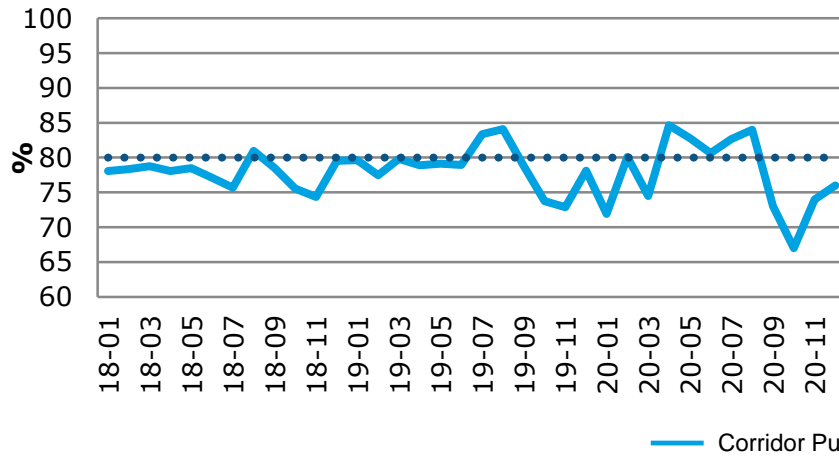
The data displayed on the graphs below are:

- the overview of the average punctuality at 15 minutes thresholds, per month between 2018 and 2020 based on the old version of TIS
- the overview of the average punctuality at 15 minutes thresholds, per month between 2021 and 2022 based on the latest version of TIS

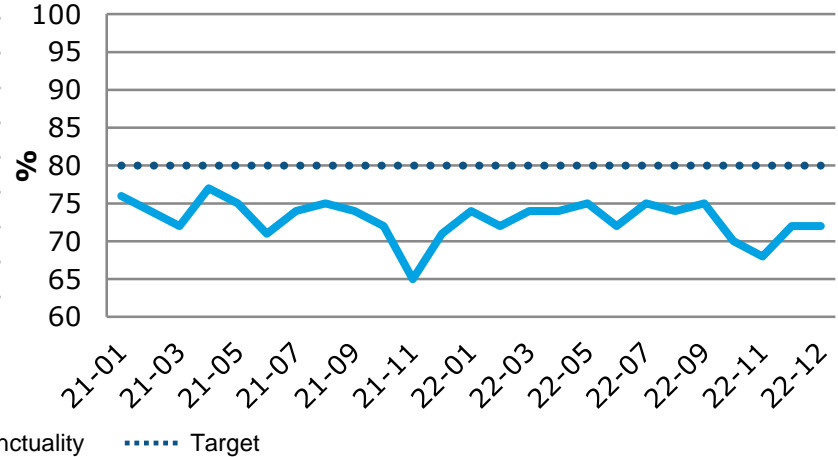
The latest version of TIS was deployed at RNE in 2022.

To be able to compare data from a previous year, it was decided to re-run the figures for 2021 (it is not possible to re-run the years before 2021)

### Annual punctuality 2018 - 2020



### Annual punctuality 2021 - 2022



After an improvement at the beginning of 2020, the punctuality figures drastically dropped at mid year, mainly due to RU causes (train preparation, formation, loading irregularities, staff issues...), followed by the exceptional weather conditions in Belgium (heavy rainfall between 13th and 15<sup>th</sup> of July 2021), an ICM at Rumigny but also for infrastructure restrictions due to construction works.

## 4.3 Number of trains crossing a border along the RFC

This KPI displays all corridor trains on the Rail Freight Corridor North Sea – Mediterranean.

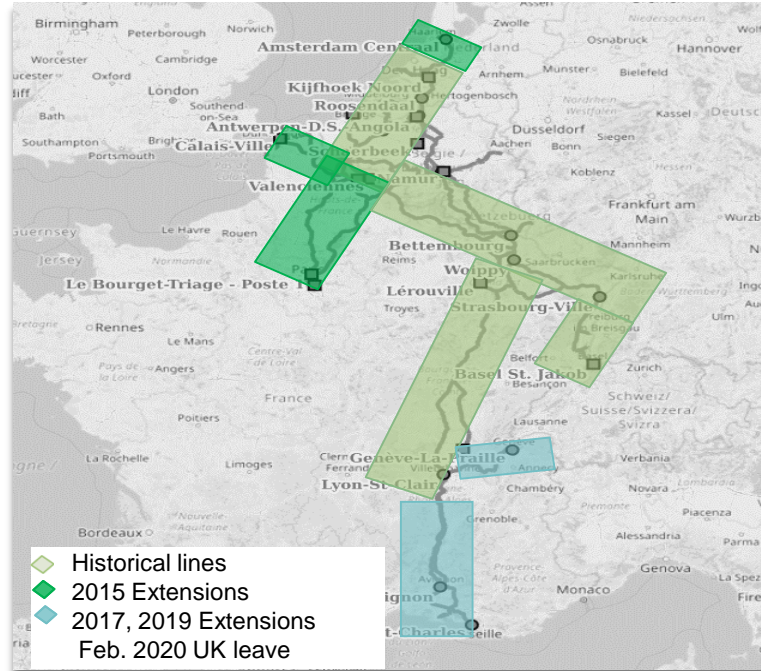
Data used per border :

Border location name	
 Prorail	 Infrabel
Roosendaal Grens	Essen Grens
 Infrabel	 ACF CFL
Aubange frontière LU	Rodange frontière
 Infrabel	 SNCF Réseau
Mouscron Fr	Tourcoing frontière
Aubange Fr LU	Mont-St-Martin frontière
Erquelinnes frontière	Jeumont frontière
Blandain frontière	Baisieux frontière
Feignies	Quévy
 ACF CFL	 SNCF Réseau
Bettembourg frontière	Zoufftgen frontière
 SNCF Réseau	 CFF Infra
Bâle-St-Jean	Basel St. Johann
Pouigny Chancy	La Plaine

Figures are provided by the IM's.

The figures for Feignies/Quévy are mentioned for information purposes, even though the border does not officially make part of RFC NSM lines and are not published in RNE KPI's

Extension timeline :



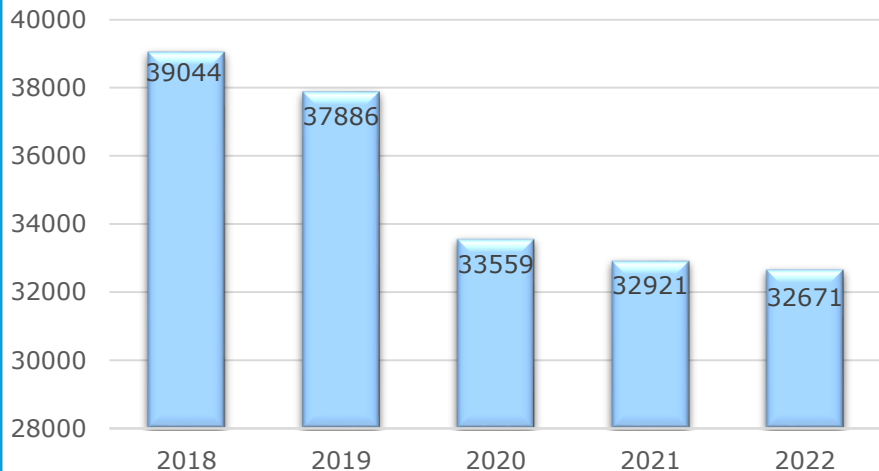
This KPI as shown in the graph displayed below, shows the trend of the corridor for the last five calendar years. The information on the number of trains is provided by the IM's and is related to the border points on the Corridor.

The train volumes on the corridor have been steadily declining since 2018.

In this context, a marketing working group has been set up with the purpose to understand the reason of this decrease and explain the fall in corridor volume within the last years.

The annual number of trains crossing Aubange/Mont St Martin, Baisieux/Blandain and Erquelinnes/Jeumont decreased in 2022 mainly due the price of electricity in Belgium and also works (Athus Meuse) which incite the RU's to re-route their trains through the border Feignies/Quévy

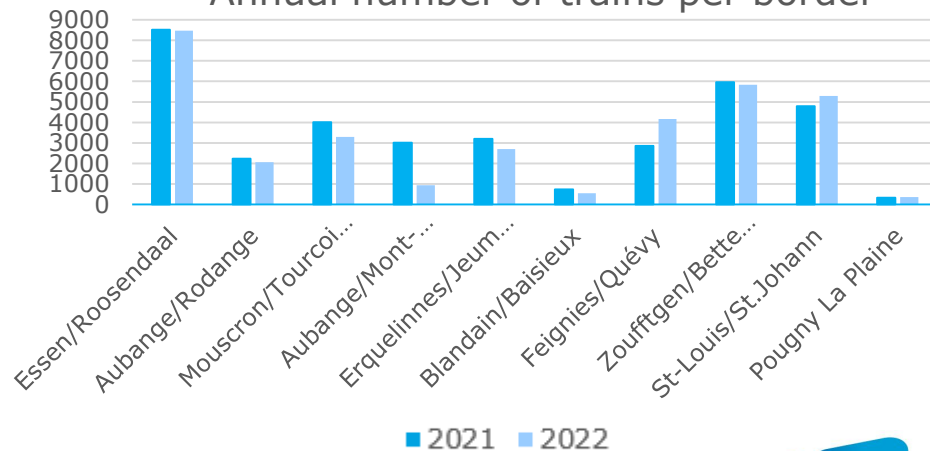
## Annual number of trains



Variation 2022 vs 2021

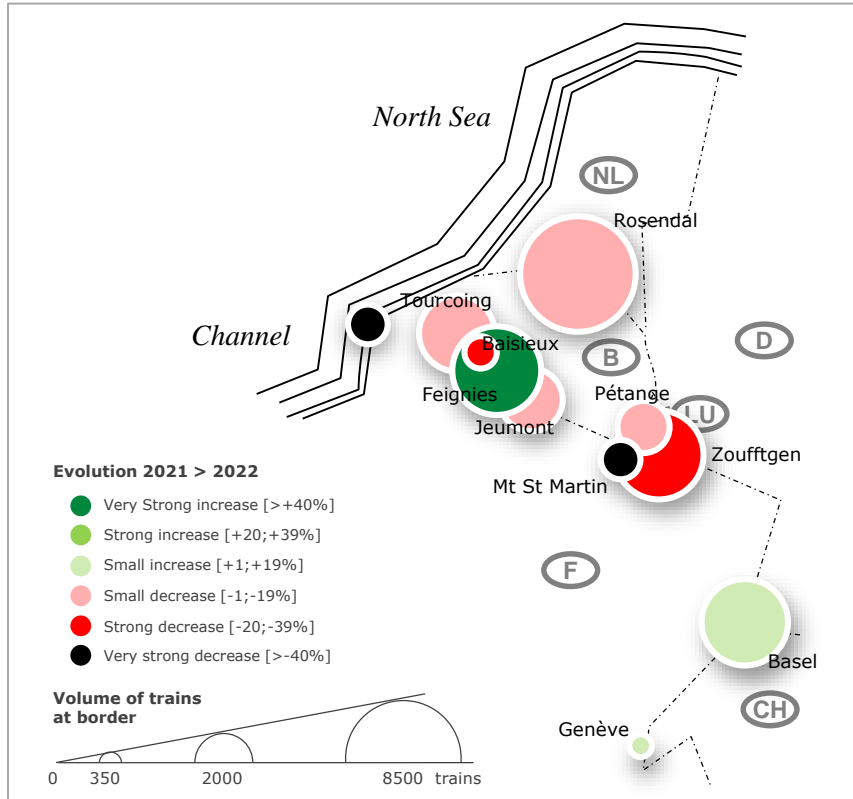
	ES	FR	BE	LU	DE	PL	CZ	SK	IT	GR	TR	UK	IE	PT	ES	FR	BE	LU	DE	PL	CZ	SK	IT	GR	TR	UK	IE	PT
Total	-0.5%	3.5%	-6%	-7%	10%	-6%	13%	-7%	4%	-9%	8%	-16%	-1%															

## Annual number of trains per border



# 5. MARKET DEVELOPMENT

## 5.1. Number of train per borders



Border location name		Volume (Nb Trains) 2022	Share	↗ 22 / 21
Prorail	Infrabel			
Roosendaal Grens	Essen Grens	8464	24%	- 1% →
Infrabel	ACF CFL			
Aubange frontière LU	Rodange frontière	2063	6%	- 8% →
Infrabel	SNCF Reseau			
Mouscron Fr	Tourcoing frontière	3290	9%	-17% →
Aubange Fr LU	Mont-St-Martin frontière	940	3%	-69% →
Erquelines frontière	Jeumont frontière	2695	8%	-16% →
Blandain frontière	Baisieux frontière	547	2%	-25% →
Feignies	Quévy	4162	12%	+46% →
ACF CFL	SNCF Reseau			
Bettembourg frontière	Zoufftgen frontière	5842	17%	-26% →
SNCF Reseau	CFF Infra			
Bâle St-Jean	Basel St. Johann	5288	15%	+11% →
Pougny Chancy	La Plaine	364	1%	+13% →
Eurotunnel	SNCF Reseau			
Doolands Moore	Calais frethun faisceau tunnel	1071	3%	- 43% →

The evolution of the number of trains per border gives an indication of the geographical spread of the traffic on the Corridor. The Belgian – Dutch border point remains the most active for the Corridor. However, the Benelux/Switzerland axis is a strong capacity axis for the development of the Antwerp port Area, which explains the good share of traffic on the Basel/Saint Louis border point.



## 5.2. Ratio of the capacity allocated by the C-OSS and the total allocated capacity

This KPI displays the number of trains allocated in the yearly timetable by the C-OSS per RFC border / the total number of allocated international freight trains in the yearly timetable per RFC border.

Figures for Feignies/Quévy are mentioned, even though the border does not officially make part of RFC NSM lines. This way, overall evolution of cross-border freight services can better be monitored

Ratio of the capacity allocated by the C-OSS and the total allocated capacity						
	TT 2018	TT 2019	TT2020	TT 2021	TT 2022	TT2023
Basel/St.Louis	44%	78%	79%	79%	54%	64%
Blandain/Baisieux	46%	100%	38%	83%	0%	46%
Erquelinnes/Jeumont	26%	32%	9%	26%	63%	45%
Aubange/Rodange	68%	96%	80%	93%	100%	94%
Aubange/Mont-St-Martin	60%	100%	100%	92%	100%	63%
Zoufftgen/Bettembourg	15%	36%	10%	65%	82%	87%
Mouscron/Tourcoing	37%	94%	55%	84%	57%	49%
Essen/Rosendaal	38%	27%	27%	19%	28%	28%
La Plaine/Pougny-Chancy		0%	59%	0%	100%	100%
Calais-Fréthun-Tunnel	50%	48%	55%	55%	0%	5%
Feignies/Quévy			36%	75%	48%	65%

**CONTACT**

[www.rfc-northsea-med.eu](http://www.rfc-northsea-med.eu)

**ProRail**

**INFRABEL**

**SNCF**  
RÉSEAU



**SBB CFF FFS**

**TVS**  
**SAS**  
**SAT**



**ACF**

**CFL**