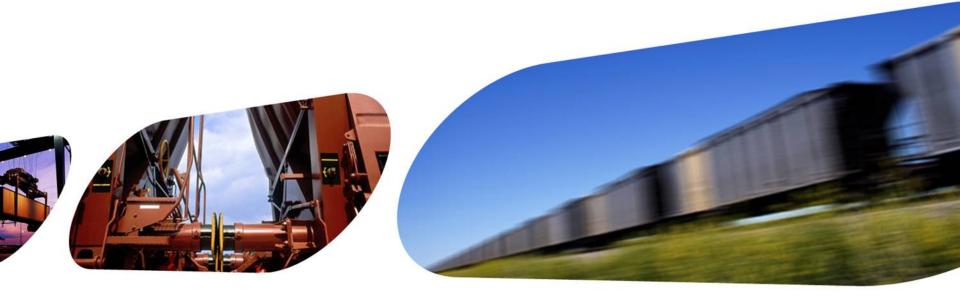


Annual Performance Report







Co-financed by the Connecting Europe Facility of the European Union

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Introduction

In the Implementation Plan of the Corridor, published as Book 5 of the Corridor Information Document on January 2019, a number of KPI's and Other Measurements (OM) are described that are being monitored to be able 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.

To be able to compare, the list of indicators described in this document is similar to those used in the previous Annual Performance Reports.

The indicators can be divided into two business fields.

- The information on corridor traffic
- The information on the corridor capacity offered & allocated by the C-OSS.

Each of these groups consists of Key Performance Indicators (KPI), for which clear objectives have been defined, and Other Measurements (OM), that give an insight into what is happening on the corridor, but to which no objective can be linked.



Choosing performance indicators

The KPIs and OMs 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/OM should be understandable to the public it is designed for
- Comparability: KPI/OM should be comparable across time and region
- Relevance and empowerment: KPI/OM should provide information on which project decisions can be based



Update on Corridor Traffic

The following pages will provide insight into the trains running on the Corridor. For this, it is necessary to know when a train is labelled as a corridor train:

The following criteria have to be met:

- An international freight train
- Crossing at least one border of the Corridor
- Running at least 70 KM on Corridor lines

The data used to calculate the given KPIs and OMs, comes from the national IM databases and the international TIS database, managed by RNE. More details are given per KPI or OM.

Where available, information is provided on the main causes of the evolutions displayed.



KPI 01 – Traffic Volume (Total) (1)

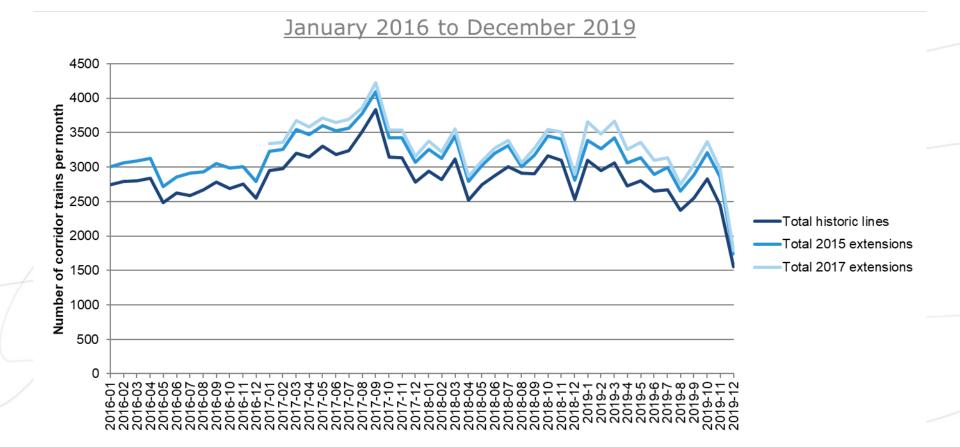
<u>KPI 01</u> displays all corridor trains on the Rail Freight Corridor North Sea – Mediterranean. <u>Trains that pass more than one border are counted only once</u>. The first graph gives an overview of the number of trains over the last four years, the second shows the 12-months evolution over the last four years, while the table compares <u>2019</u> with the corresponding months of 2018.

The data used per border is the following :





KPI 01 – Traffic Volume (Total Jan.2016 - Dec.2019)

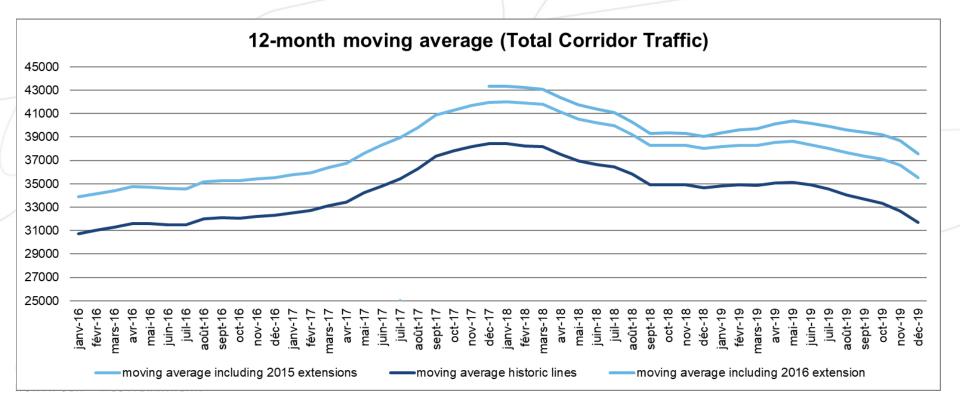




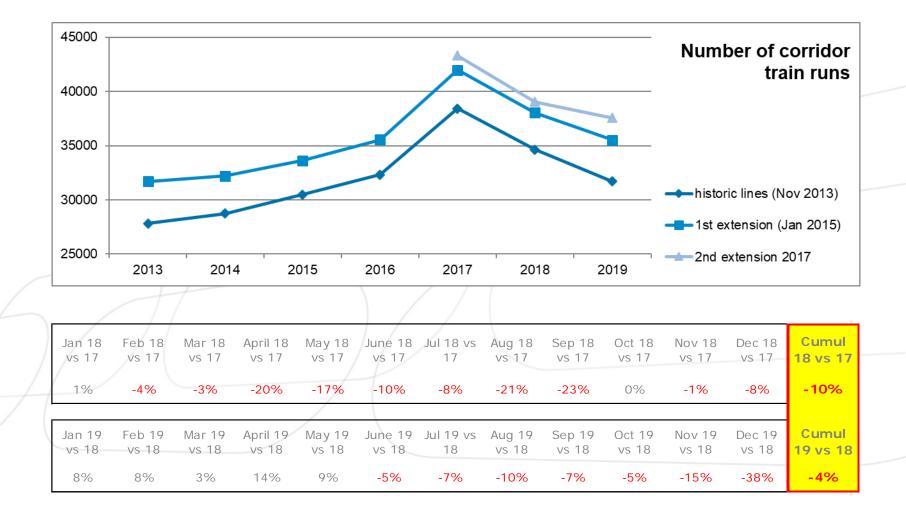
KPI 01 – Traffic Volume (Total) (3)

The moving average is displayed to smooth out short-term fluctuations and highlight longer-term trends or cycles. Each figure shows the number of train runs during the last 12 months preceding the last day of the given month.

The impact of the strikes in France (2018 and 2019) and the disruptions in France (2019) can easily be spotted in the figures shown.



KPI 01 – Traffic Volume (Total Jan.2013 - Dec.2019)





KPI 02 – Punctuality (1)

KPI 02 measures the average punctuality of trains running on the corridor <u>on a</u> <u>fixed number of locations.</u> A train will be added to this train list if it meets the following criteria:

- > Passing a Corridor border point <u>AND</u>
- > Passing one of the predefined measuring points along the Corridor

This means that from 2017, the global corridor punctuality figure is no longer calculated on the basis of a fixed list of regular trains, but on all trains meeting the above described standard.

A corridor train is punctual when having a delay of maximum **30** minutes.

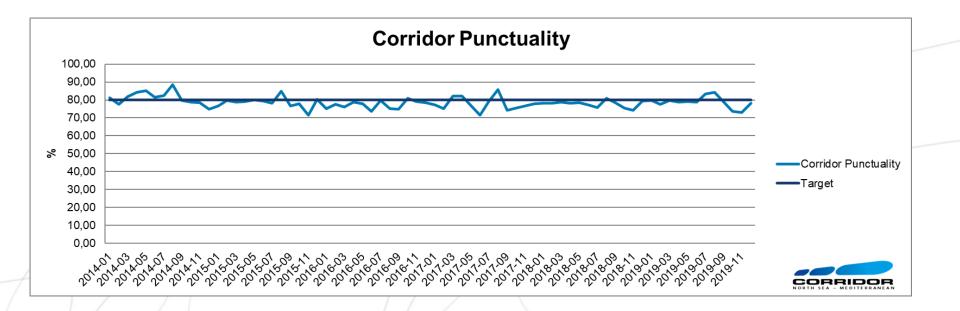
The data is displayed via two graphs and three tables:

- > Overview of the average punctuality per month over the last six years
- Comparison of the every month for the period 2019 with the corresponding month of the previous year
- > 12-month evolution over the last five years
- > Yearly punctuality figure compared to first year of the Corridor (2013)
- > Average punctuality at entry and exit of the Corridor from OBI

The follow-up of this punctuality report is done via the Train Performance Management Working Group, to which Corridor users are regularly invited to participate.



KPI 02 : Punctuality (2)



Comparison to last year

Variation 2019 vs 2018

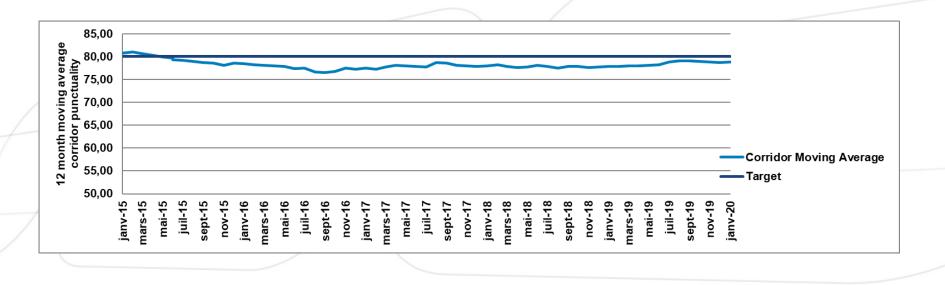
		Jan 19 vs 18	Feb 19 vs 18	Mar 19 vs 18	April 19 vs 18	May 19 vs 18	June 19 vs 18	July 19 vs 18	August 19 vs 18	Sep 19 vs 18	Oct 19 vs 18	Nov 19 vs 18	Dec 19 vs 18	2019 vs 2018
То	tal	2%	-1%	1%	1%	1%	2%	10%	4%	0%	-2%	-2%	-2%	3%



KPI 02 : Punctuality (3)

12-month moving average (average complete corridor)

The moving average is displayed to smooth out short-term fluctuations and highlight longer-term trends or cycles. Each figure shows the average punctuality during the last 12 months preceding the last day of the given month.





KPI 02 : Punctuality (4)

Evolution since start Corridor (OBI report)

It must be noted that the objective of achieving 80% punctuality on the corridor has not been reached.

In 2020, one of the main objectives of the TPM working group is to study "illtrains" in order to gain punctuality points.

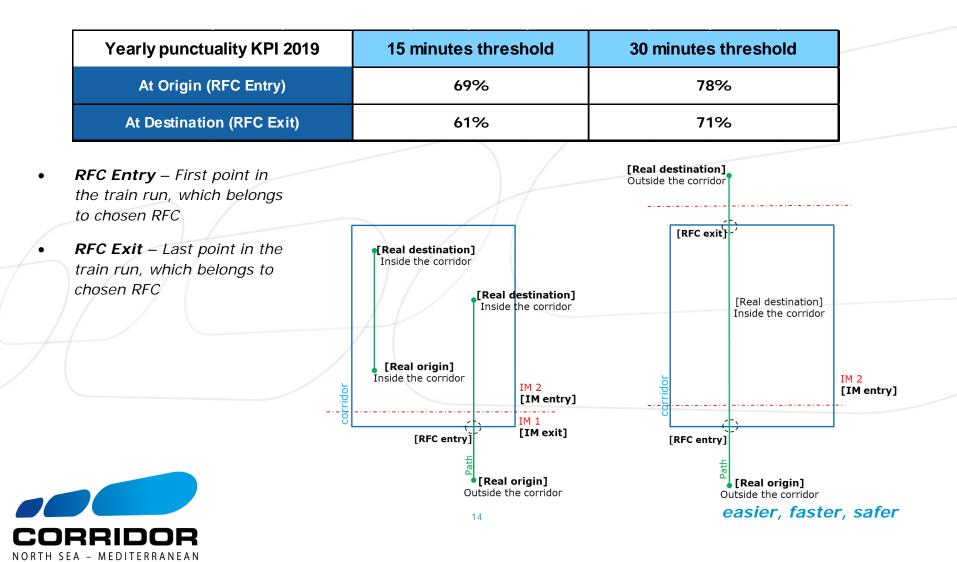
	Evolution of punctuality since 2013	2013	2014	2015	2016	2017	2018	2019	2020 Jan	
/	Average RFC both directions in %	78,44	81,16	78,59	77,30	77,80	78,19	80,16	71,91	

The results have been corrected from the last annual report.



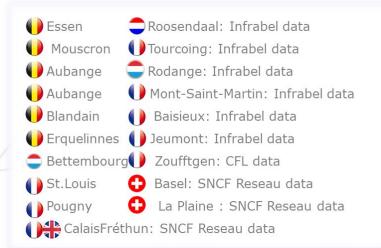
KPI 02 : Punctuality (5)

Punctuality at RFC entry and exit – Report from OBI



OM 01 – Traffic Volume (Per Corridor Border) (1)

OM 01 displays <u>all corridor trains</u> on the Rail Freight Corridor North Sea – Mediterranean, <u>per border</u>. Trains that pass more than one border are thus counted several times. The data used per border is the following:

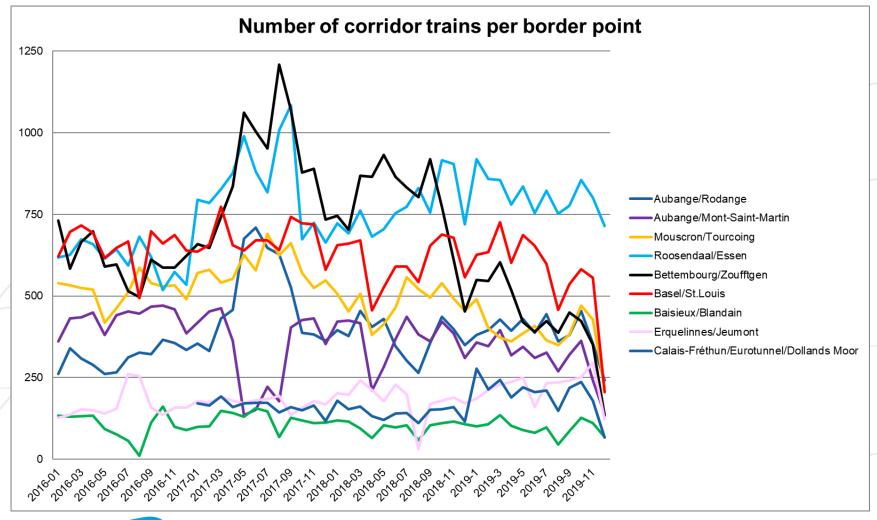


The data is displayed via two graphs and three tables.

- > overview of the number of trains over the last 4 years
- 12-months evolution over the same period
- The table compares every month during the period 2018 / 2019 with the corresponding month of the previous year.



OM 01 – Traffic Volume (Per Corridor Border) (2)

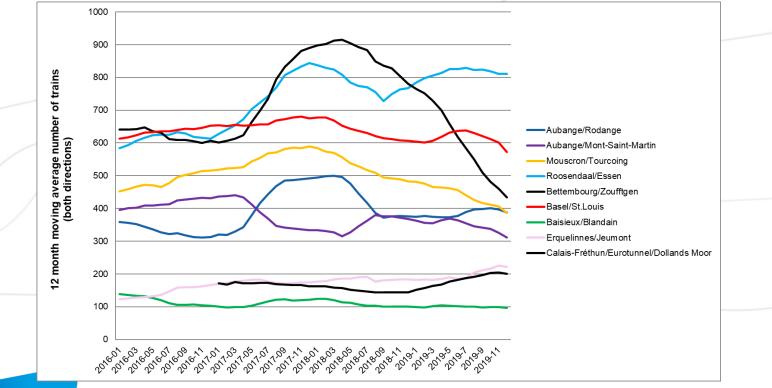




OM 01 – Traffic Volume (Per Corridor Border) (3)

12-month moving average

The moving average is displayed to smooth out short-term fluctuations and highlight longer-term trends or cycles. Each figure shows the average number of corridor trains passing each border during the last 12 months, per month, preceding the last day of the given month.





KPI 01 – Traffic Volume % per border



NORTH SEA - MEDITERRANEAN

PCS border lo	PCS border location names								
ProRail	Infrabel								
Roosendaal Grens	Essen Grens	9724	24%						
Infrabel	ACF CFL								
Aubange frontiere LU	Rodange frontiere BAUB	4653	11%						
Infrabel	SNCF Réseau								
Mouscron frontière	Tourcoing frontière	4635	11%						
Aubange frontière FR	Mont St Martin fr FR BE	3731	9%						
Erquelines frontière	Jeumont frontière FR BE	2653	6%						
Blandain frontière	Baisieux fr FR BE	1149	3%						
ACF CFL	SNCF Reseau								
Bettembourg fr	Zoufftgen (IE) fr FR LU	5198	13%						
SNCF Réseau	CFF Infra								
Bale st Jean Point de contact	Basel st Johan	6866	17%						
Pougny chancy fr FR SU	La Plaine fr	341	1%						
Eurotunnel	SNCF Réseau								
Calais Frethun faisceau tunnel -	Calais Frethun faisceau tunnel -	2057	5%						
Doolands Moor	Doolands Moor								



OM 01 – Traffic Volume (Per Corridor Border) (3)

2019 vs 2018

The table below provides an overview on the evolution of the number of trains at the given border compared to last year.

2019 vs 2018
3%
-16%
-20%
6%
-45%
-6%
-4%
21%
40%
-1%
64%

Start of calculation May 18



OM 01 – Traffic Volume (Per Corridor Border) (4)

2019 vs start RFC NSM (2013)

The table below provides an overview of the evolution of the number of trains at the RFC NSM borders since the start of the Corridor.

Traffic per border⊟	2019 vs start RFC NSM (2013)	Total number of trains in 2019
Bettembourg/Zoufftgen	-14%	5 198
Roosendaal/Essen	70%	9 724
Basel/St.Louis	-4%	6 866
Mouscron/Tourcoing	-13%	4 635
Aubange/Rodange	30%	4 653
Aubange/Mont-Saint-Martin	-4%	3 731



Update on Corridor Capacity

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 for this capacity.

Capacity on the Corridor is published under the form of PaPs, via the online platform PCS. Only requests that have been placed via this tool can be taken into account.





KPI03 – Average Planned Speed of PaPs (1)

KPI 03 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, which is displayed in the table provided.

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





KPI03 – Average Planned Speed of PaPs (2)

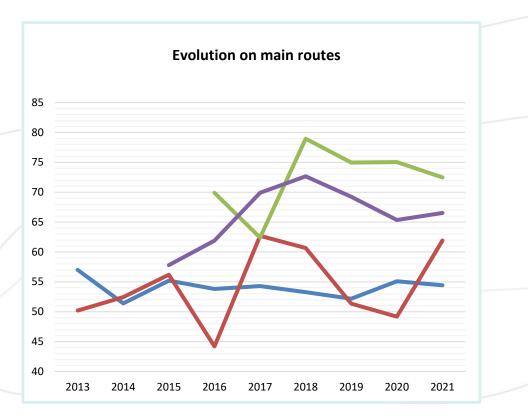
KM/H per Corridor Route													
Route including	Length	Catalogue <u>TT2013</u>	Catalogue TT2019	Catalogue TT2020	Catalogue TT2021	Objective catalogue TT 2018 to 2020	Objective catalogue TT 2025						
Antwerp - Basel	748,8	57,0	52,2	55,1 🗸	54,4	55	58						
Antwerp - Bettembourg	343,7	60,7	57,8	57,4	54,9	60	62						
Mont-St-Martin - Basel	425,9	51,4	46,4	50,5	51,9	50	54						
Rotterdam - Antwerp	74,3	53,4	64,6	64,1	64,1	70	72,5						
Antwerp - Lille	125,4	50,2	51,4	49,2 💋	61,9	56	60						
Lille - Paris	247,3	NA	69,2	68,5 💋	70,7	72,5	75						
Calais - Metz	454,7	NA	75,0	75,1 🗸	72,5	65	68						
Metz - Lyon	454,1	NA	69,2	65,3	66,5	70	72,5						
London - Calais	230,4	NA	40,7	40,7	40,7	60	68						
Dunkerque - Liège	311,1	NA	55,1	58,7	58,7	57,5	60						

→ Journey times include commercial and operational stops



KPI03 – Average Planned Speed of PaPs (3)





KPI03 – Average Planned Speed of PaPs (4)

We can see that for timetable 2021, only moderate fluctuations in the average planned speed of the PaPs appear. A positive evolution could be noted:

- For the route in France through Alsace/Lorraine
- For the route between Antwerp and Lille

For the following O/Ds, there was a negative evolution:

- Athus-Meuse
- Artère Nord-Est

Planning only on the direct line between Antwerp and Mouscron leads to an improved situation on that axis, while restructuring of the timetables due to TCRs leads to somewhat longer travel times on the lines indicated.

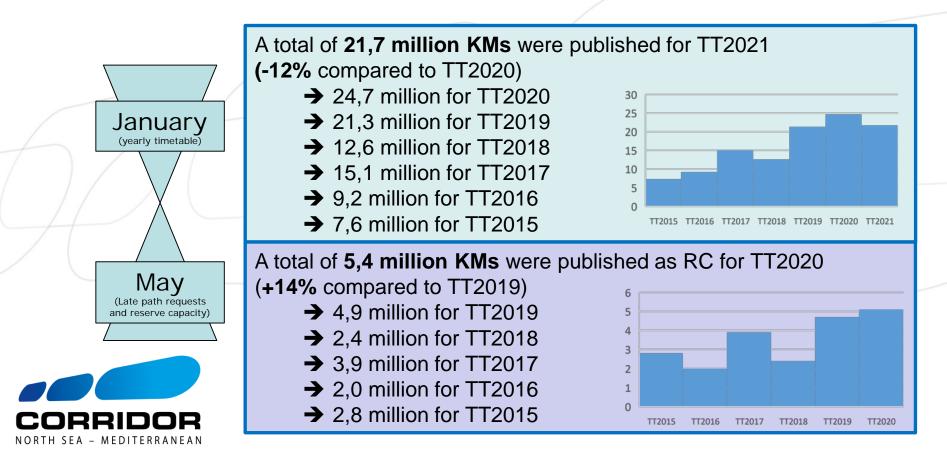
The journey times also include commercial stops, up to 4 hours, based on the outcome of the capacity needs survey.



KPI04 – Volume of offered capacity

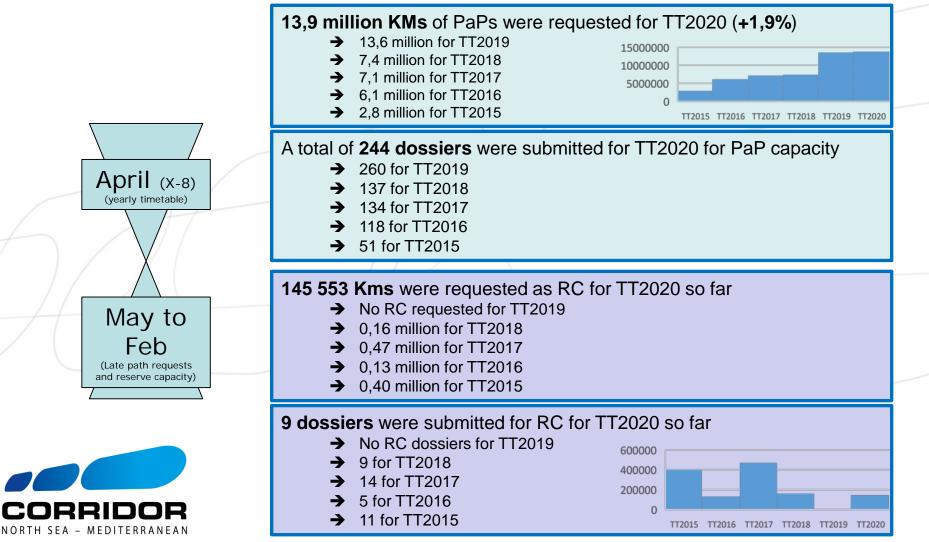
KPI 04 displays all the PaPs (KMs per year) that have been published by the C-OSS of the Corridor in January 2020, for the **annual timetable 2021**, and in summer 2019, as Reserve Capacity for late path requests and ad hoc requests for timetable 2020.

It must be noted that most PaPs run Monday to Friday, but some might have more (7) or less (minimum 3) running days, or that a given PaP might not be available on some days throughout the year.



KPI05 – Volume of requested capacity

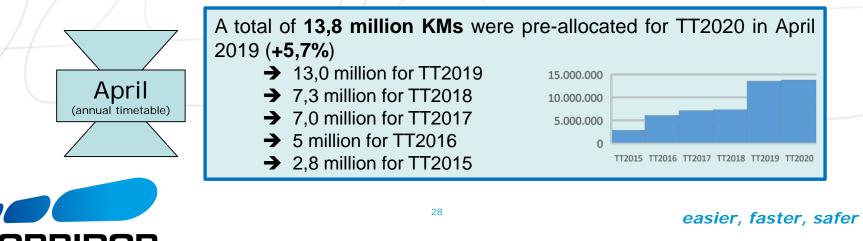
KPI 05 displays all the requests for PaPs (KMs per year) that have been received by the C-OSS of the Corridor for the annual timetable 2020 in April 2019, and for RC up to February 2020.



KPI06 – Volume of pre-booked capacity

KPI 06 shows the number of PaPs which have been (pre-) booked by the C-OSS in the second half of April 2019. This means that the PaP sections requested were allocated, but only under the condition that possible feeder/outflow sections, which appear in most of the requests, can be constructed by the concerned IMs/ABs and that these proposals will be accepted by the applicant, and/or that the applicant does not withdraw its request before active timetable (end of August). The KPI is displayed as KMs per year.

If the volume of requested capacity is close to the volume of pre-booked capacity, this means that there are very little conflicting requests, and that thus the PaP offer can be perceived as adequate (both are identical for TT2020, thus no conflicts occurred).



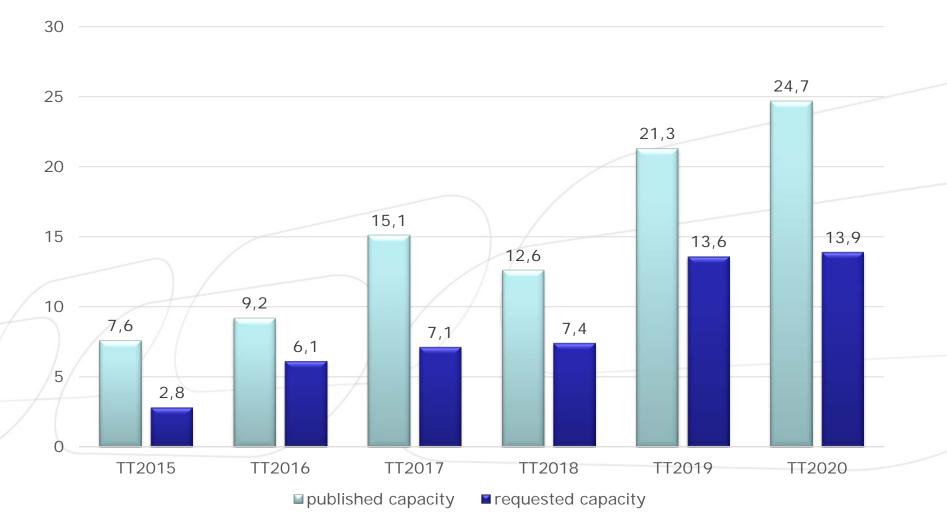
NORTH SEA - MEDITERRANEAN

KPI04 / KPI05 / KPI06 Overview (1)





KPI04 / KPI05 Overview (1)





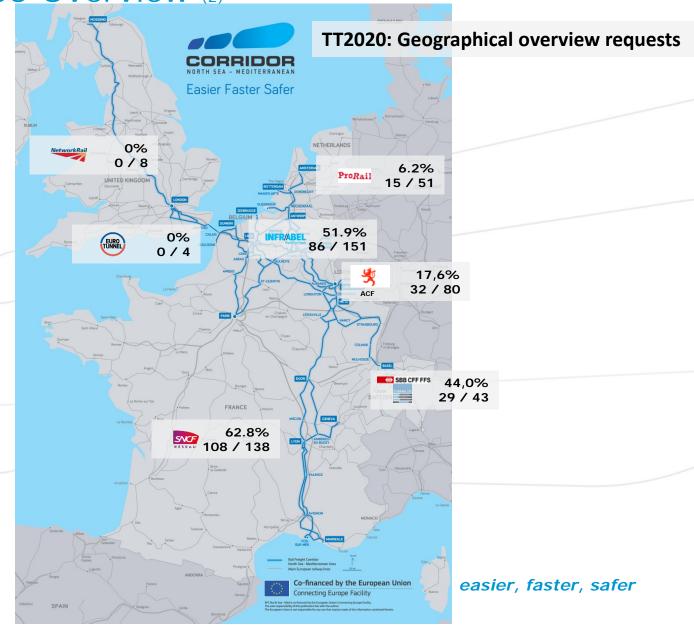
KPI04 / KPI05 Overview (2)

Per Infrastructure Manager is indicated:

Percentage of capacity requested in April which was offered in January

Number of PaPs at least partly requested in April / PaPs published in January





KPI 07: Ratio of the capacity allocated by the C-OSS and the total allocated capacity (1)

KPI 07 provides information on the share of trains running on the corridor which were ordered via the C-OSS, compared to the total amount of corridor circulation.

To have an idea of this, we have analysed the number of <u>scheduled</u> international freight train runs at the RFC NSM borders for timetables 2018 to 2020 (<u>as per start of timetable</u>), to be able to compare these figures to the number of train runs foreseen for timetable 2018 to 2020 as ordered and allocated via the RFC NSM OSS (<u>end of August</u>)

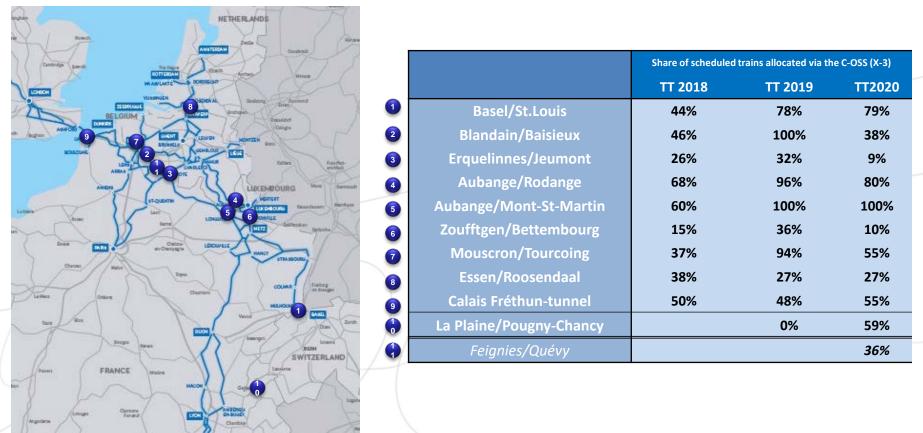
- This means a border crossing via PaP
- Or via <u>feeder/outflow</u>

Figures can only be regarded as an indication:

- Works or last minute demands from the customer might lead to changing timetables, routing or calendar; partly or entirely
- Cancellations (between allocation by C-OSS and start of timetable; partly or entirely)



KPI 07: Ratio of the capacity allocated by the C-OSS and the total allocated capacity (2)

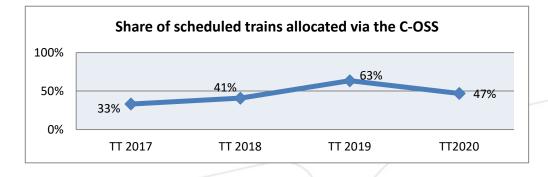


For TT2020, for the first time, PaP capacity via La Plaine

was requested. Figures for Feignies were added, even though the border is not part of RFC NSM lines. This way, overall evolution of cross-border freight services can better be monitored.



KPI 07: Ratio of the capacity allocated by the C-OSS and the total allocated capacity (3)



Even though the volume of requested capacity went slightly up for timetable 2020, we see that this rise is largely due to the increase of requests for multicorridor requests to Germany (Forbach), Italy (Modane) and Spain (Perpignan/Cerbère). Also, we see a big increase in PaP capacity requested for national use only, as is the case on the Athus-Meuse in Belgium and on the Alsace plain in France. Overall though, we see that half of all freight services that cross RFC NSM borders are requested through the RFC (PaP or feeder/outflow).



OM 03: Volume of requests -OM 04: Number of conflicts

OM 03 (volume of requests) and OM 04 (number of conflicts) cannot be analysed separately.

It is important to stress that a request means one dossier in PCS. Such a dossier can have the following characteristics:

A request for:

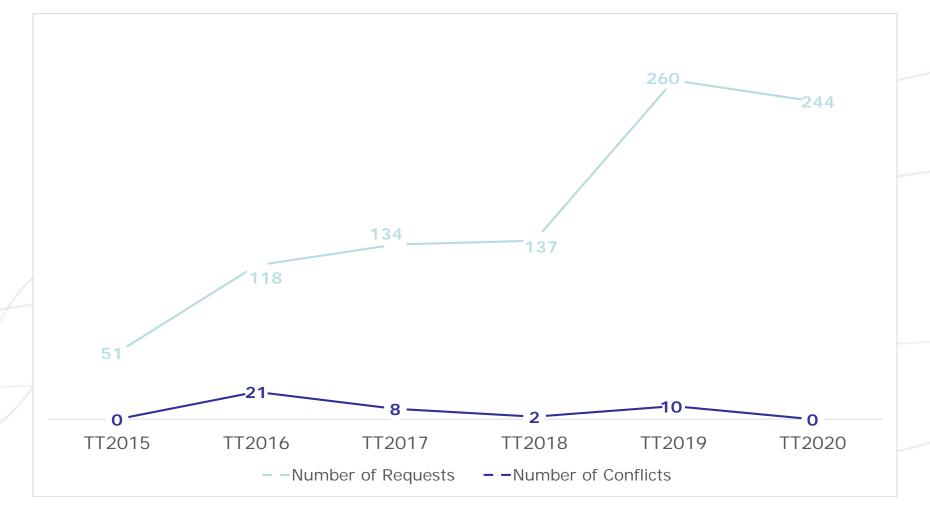
- > A PaP running one day of the year ←→ A PaP running all days of the year
- > A PaP running on one section $\leftarrow \rightarrow$ A PaP running on ten sections
- > A PaP with feeder/outflow sections $\leftarrow \rightarrow$ A pure PaP
- > A PaP on one Corridor \leftarrow > A PaP on several Corridors
- ➤ A PaP crossing a border on another Corridor ← ➤ A PaP crossing a Rail Freight Corridor North Sea – Mediterranean border

For this reason, the number of requests in itself doesn't tell a lot. However, to be able to analyse and understand the level of conflicts (conflicting requests placed between January and April), this figure should be known.

OM 04 provides information on the number of conflicts for timetable 2020 at X-8, for which the priority rule had to be applied.



OM 03: Volume of requests -OM 04: Number of conflicts





OM 05: Relation between results capacity wishes survey, the published and the requested capacity

OM 05 compares for each timetable year, for a given Corridor O/D, the following:

- the average number of paths per day, that were expressed as capacity need
- the average number of PaPs per day, that were published in the PaP Catalogue
- The average number of paths per day requested in April via the C-OSS, via PaP or feeder/outflow.

The goal of this KPI is to be as transparent as possible in the analysis if what is published as a PaP meets market demands.



OM 05: Relation between results capacity wishes survey, the published and the requested capacity

	TT 2015		TT 2016		٦	T 201	7	TT2018			TT2019			TT2020			
Route	Offer per Corridor Route	Requested per Corridor Route (PaP and/or f/o)	Capacity Wishes	Offer per Corridor Route	Requested per Corridor Route (PaP and/or f/o)	Expressed Capacity Wishes per Corridor Route	Offer per Corridor Route	Requested per Corridor Route (PaP and/or f/o)	Capacity Wishes	Offer per Corridor Route	Requested per Corridor Route (PaP and/or f/o)	Expressed Capacity Wishes per Corridor Route	Offer per Corridor Route	Requested per Corridor Route (PaP and/or f/o)	Capacity Wishes	Offer per Corridor Route	
Including					A٧	erage	paths p	per day	, both (directi	ons cor	nbined					
Antwerp - Basel	22	9	18	18	13	18	23	11	22	18	15	23	26	11	26	22	19
Antwerp - Bettembourg	12	1	8	27	11	8	38	11	5	33	9	5	40	20	4	65	10
Mont-St-Martin - Basel	18	9	18	15	12	18	21	6	17	9	9	24	20	20	22	18	18
Rotterdam - Antwerp	36	0	2	36	3	0	29	1	6	31	3	8	37	5	6	32	1
Antwerp - Lyon	2	0	16	2	3	2	2	1	15	2	1	8	4	7	3	5	2
Antwerp - Lille	14	5	52	27	13	6	25	11	38	20	8	30	19	22	24	20	10
Lille/Somain - Paris	N.A.	2	8	2	4	4	10	7	29	6	6	16	13	9	12	13	4
Metz - Lyon	6	0	26	11	10	10	15	13	24	18	11	47	29	13	36	36	30
Dunkerque - Liège	N.A.	0	6	3	2	4	4	2	2	2	2	2	2	2	2	2	2
London - Calais	N.A.	0	0	N.A.	1	10	4	5	0	4	2	0	6	0	0	4	2
Calais - Metz	N.A.	0	4	2	3	12	6	11	8	5	4	12	6	5	17	14	7



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