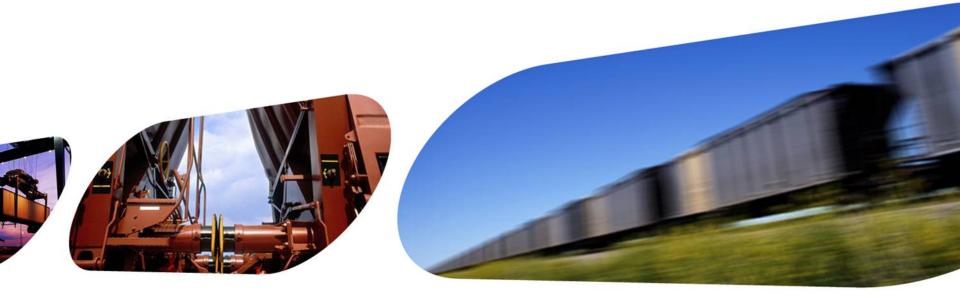
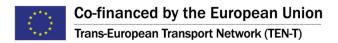


Performance of the corridor

RAG – 27 May 2015





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Introduction

In the Implementation Plan of the Corridor, published as Book V of the Corridor Information Document, 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. The majority of these indicators can be found in this performance report, with which all our stakeholders are informed about the progress of the Corridor on a yearly basis. 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 can be divided into two business fields. The information on Corridor traffic, and the information on the Corridor capacity offered and 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

All indicators have been described in the Implementation Plan of the Corridor, published as Book V of the Corridor Information Document on the website (<u>http://www.rfc-northsea-med.eu</u>).



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
- Travelling at least 70 kilometres along 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 – Total Corridor Traffic₍₁₎

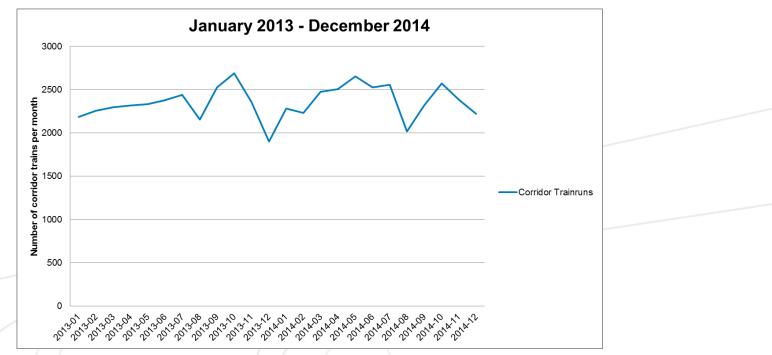
KPI 01 displays all corridor trains on the Rail Freight Corridor North Sea – Mediterranean. Trains that pass more than one border are counted only once. The data used per border is the following:

- Essen/Roosendaal: Infrabel data
- Mouscron/Tourcoing: Infrabel data
- > Aubange/Rodange: Infrabel data
- > Aubange/Mont-Saint-Martin: Infrabel data
- Bettembourg/Zoufftgen: CFL data
- St.Louis/Basel: SNCF-Réseau data

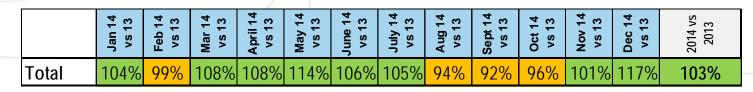
The data is displayed via two graphs and one table. The first graph gives an overview of the number of trains over the last two years, the second shows the 12-month evolution over the last three years, while the table compares every month of 2014 with the corresponding month of the previous year.



KPI 01 – Total Corridor Traffic₍₂₎



Comparison to last year



Green: increase

Orange: decrease

Dark green: increase by more than 20% Red: decrease by more than 20%



KPI 01 – Total Corridor Traffic₍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 number of train runs during the last 12 months preceding the last day of the given month.





KPI 01 – Total Corridor Traffic₍₄₎

The evolution of the total amount of Corridor traffic is influenced heavily by the economic growth of the Corridor region. However, the Corridor aims to increase the amount of Corridor trains in the following manner, compared to the year 2013, taking into account a low economic growth:



For the year 2014, there is already a rise in Corridor traffic of 3% compared to last year.



KPI 02 – Ton $KM_{(1)}$

KPI 02 measures the amount of tons that are transported over RFC North Sea – Med per kilometre. For this, the train weight of each corridor train is taken into account.

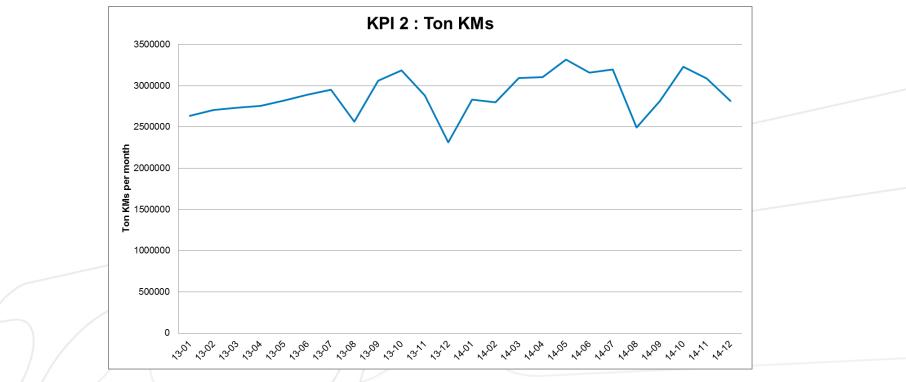
However, due to the fact this data is only partially available (no real train weight figures for France for example), the average train weight for trains passing the following borders (approximately 60% of all corridor trains) is used to calculate the figures for trains for which this information is missing:

- Essen/Roosendaal
- Mouscron/Tourcoing
- > Aubange/Mont-Saint-Martin
- > Aubange/Rodange

The data is displayed, via two graphs and one table. The first graph gives an overview per month over the last two years, the second shows the 12-month evolution over the last three years, while the table compares every month of 2014 with the corresponding month of the previous year.



KPI 02 – Ton- $KM_{(2)}$



Comparison to last year

	Jan 14 vs 13	Feb 14 vs 13	Mar 14 vs 13	April 14 vs 13	May 14 vs 13	June 14 vs 13	July 14 vs 13	Aug 14 vs 13	Sept 14 vs 13	Oct 14 vs 13	Nov 14 vs 13	Dec 14 vs 13	2014 vs 2013
Total	107%	103%	113%	113%	118%	109%	108%	97%	<mark>9</mark> 2%	101%	107%	122%	107%

Green: increase Orange: decrease Orange: decrease Dark green: increase by more than 20% Red: decrease by more than 20%



KPI 02 – Ton- $KM_{(2)}$

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 number of Ton KMs during the last 12 months preceding the last day of the given month.





KPI 02 – Ton $KM_{(4)}$

The Corridor aims to increase the amount of Ton KM in the following matter, compared to the year 2013, taking into account a low economic growth:

2020	2030
+ 3%	+9%

For the year 2014, there is already a rise in Corridor traffic of 2% compared to last year.



KPI 03 – Punctuality⁽¹⁾

KPI 03 measures the average punctuality of a selection of corridor trains on a fixed number of passage points. A train will be added to this train list if it meets the following criteria:

- Corridor train
- Regular yearly timetable
- > Runs along one of the following axes of the Corridor:
 - (Antwerp) Namur Basel
 - Antwerp Bettembourg
 - (Rotterdam) Antwerp Lille
 - Bettembourg Lyon

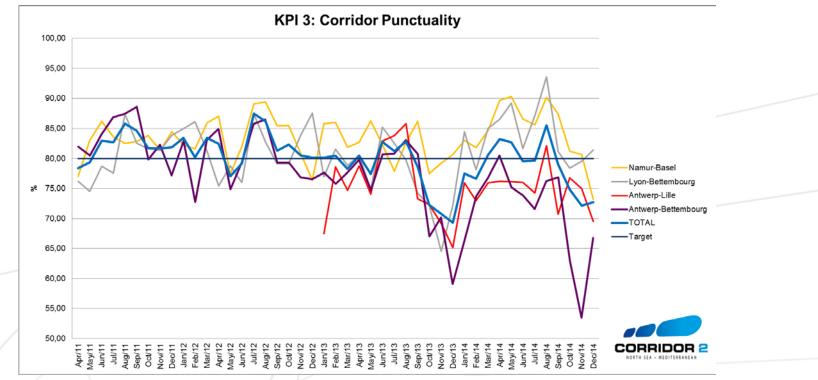
For the calculation of the total Corridor punctuality, the average punctuality of the selection of corridor trains in 26 pre-defined measuring points across the corridor is taken into account. A corridor train is punctual when having a delay of maximum 30 minutes.

The data is displayed via two graphs and one table. The first graph gives an overview per month over the last two years, the second shows the 12-month evolution over the same period, and the table compares every month of 2014 with the corresponding month of the previous year.

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 03 : Punctuality⁽²⁾



Comparison to last year

NORTH SEA - MEDITERRANEAN

	Jan 14 vs 13	Feb 14 vs 13	Mar 14 vs 13	April 14 vs 13	May 14 vs 13	June 14 vs 13	July 14 vs 13	Aug 14 vs 13	Sept 14 vs 13	Oct 14 vs 13	Nov 14 vs 13	Dec 14 vs 13	2014 vs 2013	
Total	97%	9 5%	103%	103%	107%	96%	<mark>98</mark> %	103%	101%	104%	102%	105%	101%	

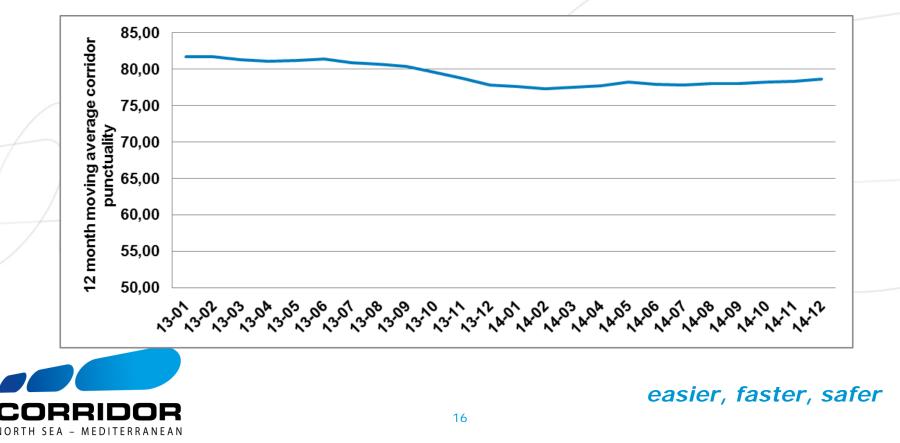
Green: increase

Orange: decrease Dark green: increase by more than 20% Red: decrease by more than 20%

KPI 03 : 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 03 : Punctuality(4)

Please find some of the main causes of punctuality drops on the Corridor for timetable 2014:

- Several strikes occurred throughout the year with a big impact on the punctuality, most notably:
 - > Strike of French railway personnel in June
 - > National strikes in Belgium on 4 Mondays in November and December
- An overview of the major events that caused delays on the Corridor are presented on a monthly basis in our standard punctuality reports, covering the major axes of the Corridor. If you are interested in receiving these reports or if you would like to participate in the steering group (Train Performance Management), please contact the C-OSS (<u>oss@rfc2.eu</u>)

The average punctuality on the Corridor for timetable 2014 was **78,7%**. The target set for timetable 2014 was to reach an average punctuality of **80%**, which unfortunately was not reached. Nevertheless, a punctuality of 78,7% means a small improvement compared to 2013 (77,9%).



OM 01 – Cross Border Traffic(1)

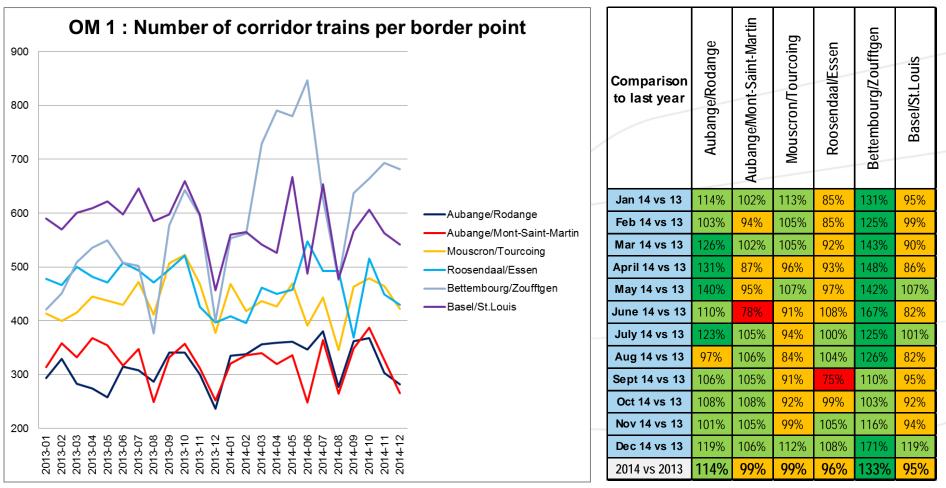
OM 01 displays all corridor trains on the Rail Freight Corridor North Sea – Mediterranean, per border. Trains that pass more than one border are thus counted several times. The data used per border is the following:

- > Essen/Roosendaal: Infrabel data
- Mouscron/Tourcoing: Infrabel data
- > Aubange/Rodange: Infrabel data
- > Aubange/Mont-Saint-Martin: Infrabel data
- Bettembourg/Zoufftgen: CFL data
- St.Louis/Basel: SNCF-Réseau data

The data is displayed via two graphs and one table. The first graph gives an overview of the number of trains over the last two years, the second shows the 12-month evolution over the same period, and the table compares every month of 2014 with the corresponding month of the previous year.



OM 01 – Cross Border Traffic₍₂₎

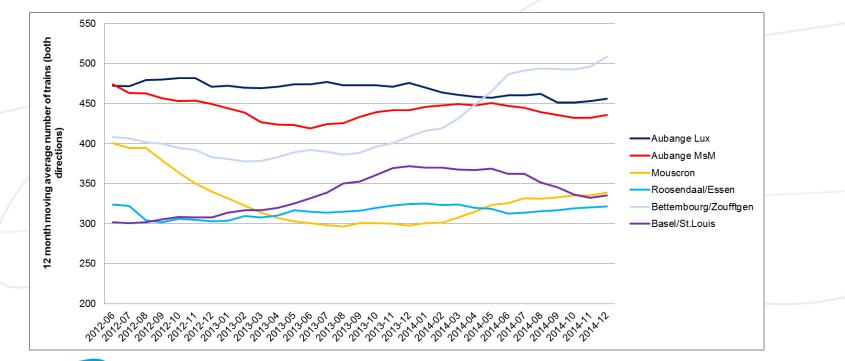




OM 01 – Cross Border Traffic₍₃₎

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 number of corridor trains passing each border during the last 12 months preceding the last day of the given month.





OM 01 – Cross Border Traffic₍₄₎

- In June 2014, the big railway strike in France caused circulations to drop 20% at the French Rail Freight Corridor North Sea – Mediterranean border points. These figures are not higher because of the high amount of partial cancellations (international trains cross the border, but are stopped in a marshalling yard nearby).
- The big rise in number of circulations via Luxembourg (Rodange and Bettembourg borders) throughout the first part of the year, and the decline of circulations via the Aubange – Mont-Saint-Martin border between Belgium and France, are caused by works on the French side of this border which led trains from Belgium to France (and vice versa) to run through Luxembourg.



OM 02 – Delay Reason

It was decided not to publish any data on delay reasons, because no validation by the customers (via the EPR validation tool) is performed after the ending of this project, and thus no reliable or objective data on international train runs is available.



OM 03 – Top Corridor Flows

OM 03 gives an overview on the main origins, destinations and routes of corridor trains. Because of its complexity, the complete analysis will be included in the update of the Transport Market Study, scheduled in 2016/2018.

Please find the results for the <u>requests</u> (dossiers in PCS) placed via the C-OSS, which means that at least partly a PaP has been requested, below:

FROM	ТО	#	comments
Belgium	Italy	17	Belgian harbours to northern Italy
Belgium	Germany	8	via Roosendaal
Lorraine	Switzerland	5	part of longer trajectory
Belgium	Strasbourg	4	
Belgium	Switzerland	3	
Belgium	Roosendaal	3	part of longer trajectory
Belgium	Lyon region	2	
Calais	Roosendaal	2	O/D UK ; part of longer trajectory
Northern France	Belgium	2	
Belgium	Lorraine	1	
Belgium	Luxembourg	1	
Switzerland	Luxembourg	1	
Italy	Luxembourg	1	
Italy	Lorraine	1	

OM 04 – Users

It was decided not to publish the share of train runs via the Corridor, since we believe this is private information (internal use for Managing Board and Executive Board only).

OM 05 – Lost Minutes

Currently, the calculation of this indicator is being reviewed to be able to provide more reliable data.



OM 06 – Cancelled Trains(1)

OM 06 measures the amount of cancelled corridor trains (entire trajectory). Today, only partial data is available, for trains crossing the following border points:

- Essen/Roosendaal
- Mouscron/Tourcoing
- Aubange/Rodange
- Aubange/Mont-Saint-Martin

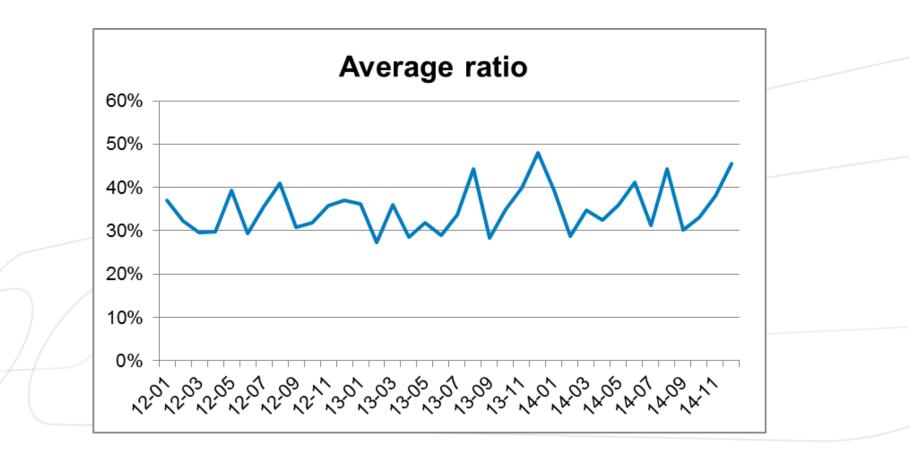
This means approximately 60% of corridor trains are included in the report.

Trains are labelled as cancelled when they are included in the yearly timetable and:

- > for a given running day cancelled or
- the train does not show up
- cancelled by RU or IM (whatever reason)



OM 06 – Cancelled Trains(2)





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.

To be able to display the PaPs published, a number of sections have been defined. Please find an overview of these sections in annex 5 to the Corridor Information Document (TT2015), or click here.



KPI04 – Theoretical Running Time

KPI 04 compares the average yearly timetable running time with the average pre-arranged path running time for predefined Rail Freight Corridor North Sea – Mediterranean routes. To be able to compare these figures along the Corridor, the resulting average speed is displayed.

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 quality of the PaPs offered by the corridor. The goal of these PaPs is to deliver premium quality paths. By comparing them with all the yearly timetable paths, the quality of the paths can be monitored.



KPI04 – Theoretical Running Time

		KM/H per corridor route	2013	2014	2015	Objective IP
	PaP	Antwerpen - Bettembourg	60,74	59,69	61,56	55,00
	Π	Antwerpen - Bettembourg		59,52		
	PaP	Antwerpen - Basel	57,02	51,43	55,23	50,00
	Π	Antwerpen - Basel		55,40		
	PaP	Antwerpen - Lille	50,16	52,44	66,45	52,00
	Π	Antwerpen - Lille		52,44		
	PaP	Rotterdam - Antwerpen	53,39	58,66	71,33	<mark>55,0</mark> 0
	Π	Rotterdam - Antwerpen		56,79		
	PaP	Antwerpen - Lyon	no paths	no paths	60,77	tbd
7	PaP	Antwerp-Aubange	66,69	65,01	67,86	50,00
Г	Π	Antwerp-Aubange		61,41		
	PaP	Aubange-Basel	51,36	44,64	48,49	50,00
	Π	Aubange-Basel		49,43		



KPI04 – Theoretical Running Time

Only on the Aubange – Basel section, the defined objective could not be met. This is caused by two – closely linked – reasons:

- The quality of the PaPs offered through the Alsace Lorraine region in France suffers from the many works on these lines.
- SNCF Réseau has chosen to increase the robustness of the paths by lowering the speed of the paths compared to last years offer.



KPI05 – PaPs per Section(1)

KPI 05 displays all the PaPs that have been published by the C-OSS of the Corridor in January 2014, for the annual timetable 2015.

These PaPs are displayed per section of the Corridor. For each of these sections, two figures are displayed.

- The first figure shows the number of paths on the given section per day, direction north to south
- The second figure shows the number of paths on the given section per day, direction south to north

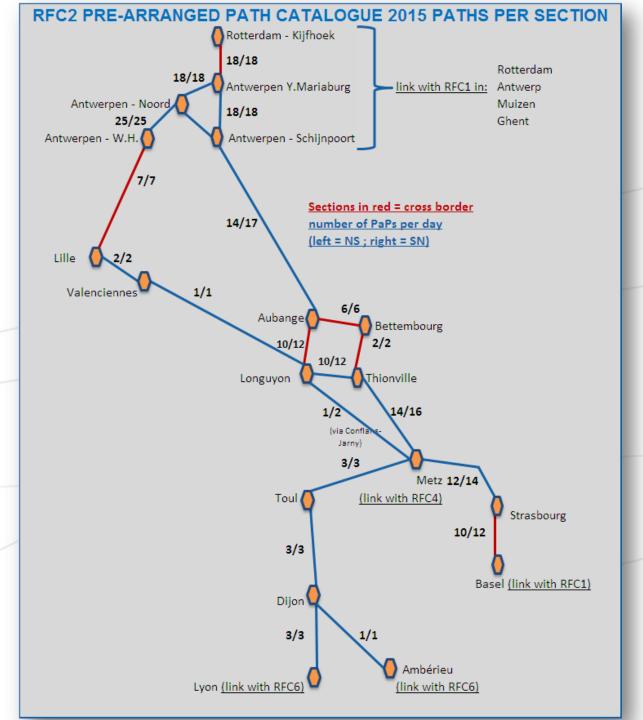
It must be noted that most PaPs run Monday to Friday, but some might have more (7) or less (minimum 3) running days, or that a given PaP might not be available on some days throughout the year.

When counting the number of kilometers of PaP that have been published for the entire year, a total of **7.6 million km** of paths were published.

After the first request deadline of April 15, **37,5%** of all capacity was republished early May







KPI05 – PaPs per Section₍₃₎

- For the first PaP publication, the focus point of the Corridor was on a sufficient number of PaPs on the axis between Antwerp and Basel
- A high volume of PaPs was offered between Rotterdam and Antwerp to allow the following connections:
 - > Rotterdam to Basel via Antwerp
 - > Rotterdam to Northern France (Calais, Picardie) via Antwerp
 - > Belgium to Germany via Roosendaal

The large amount of works on the artère Nord-Est (Lille – Longuyon) and on the lines between the Lorraine region and Lyon had a big impact on the amount of published PaPs



KPI06 – Requests for PaPs₍₁₎

KPI 06 displays all the requests (dossiers in PCS) that have been received by the C-OSS of the Corridor for the PaPs published for the annual timetable 2015.

For this KPI, two periods have to be distinguished:

- Requests placed before the deadline of April 15
- Requests placed after the deadline of April 15, but before publication of the Reserve Capacity on October 13

For the second period, only the following paths could be requested:

- PaPs for which no request was received before the deadline of April 15 and
- PaPs that have been republished by the C-OSS beginning of May



KPI06 – Requests for PaPs₍₂₎

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 ← → A PaP on several Corridors
- A PaP crossing a border on another Corridor ←→ A PaP crossing a Rail Freight Corridor North Sea – Mediterranean border

Requests received before April 15:

- > 51 dossiers
- 2.9 million km of paths were requested
- This means 38,6% of all capacity published in January, which meets the objective of 30%

Requests received between April 15 and October 13:

- > 12 dossiers
- > 552,823 km of paths were requested
- This means 7,32% of all capacity published in January, which meets the objective of 5%



KPI06 – Requests for PaPs₍₃₎

This first year of capacity allocation via the C-OSS made us draw the following conclusions, to be improved for the next timetable periods:

- Importance of PCS training and explanation of publication method and allocation rules to potential customers
- > New procedure for the allocation of train numbers is needed
- The work windows in France, and the non-publication of PaPs caused clients more work than before + this resulted in difficulties for the customers (this is solved for timetable 2016 due to new functions in PCS)
- Long distance PaPs were sometimes only requested partially because stop times were not sufficient
- Customers expressed their understanding for flaws but expect improvement next year



KPI07 – Allocated PaPs

KPI 07 shows the number of PaPs which have been (pre-)allocated by the C-OSS, between April 15, 2014 and October 13, 2014.

For this KPI, two periods have to be distinguished:

- > Requests for PaPs placed before the deadline of April 15
- Requests for PaPs placed after the deadline of April 15, but before publication of the Reserve Capacity on October 13

All PaPs requested via the C-OSS before April 15, could be allocated (51 dossiers) end of April, meeting the objective of 75%.

All PaPs requested via the C-OSS between April 15 and October 13 (12), could be allocated, meeting the objective of 75%.

All these figures concerning allocation by the C-OSS are under the condition that the applicant accepts the proposal for feeder/outflow (where needed), or still needs the PaP (before active timetable).



KPI08 – Reserve Capacity

KPI 08 displays all the PaPs that have been published by the C-OSS of the Corridor in October 2014, for the annual timetable 2015.

These PaPs are displayed per section of the Corridor. For each of these sections, two figures are displayed.

- The first figure shows the number of paths on the given section per day, direction north to south
- The second figure shows the number of paths on the given section per day, direction south to north

The reserve capacity consists of PaPs that have been published in January, but have not been requested, or PaPs that have been requested, but for which the applicant has withdrawn its request.

When counting the number of kilometers of PaPs that have been published as Reserve Capacity, a total of **240,098 km** of PaPs were published, via **17 PaPs**, covering all major axes of the Corridor.

The objective of the Corridor is to provide at least 10% of the capacity provided in the yearly timetable PaP Catalogue (in KM). This means that 2014, this objective was not met (only 3,2% published). This problem has been analysed and the necessary procedures have been put in place which must allow sufficient capacity to be handed to the Corridor for next years' Reserve Capacity Catalogue.



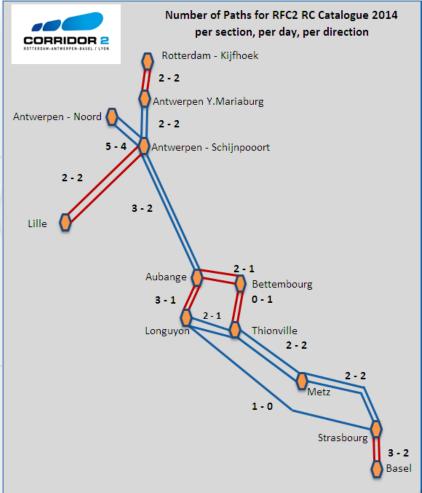
KPI09 – Allocated Reserve Capacity

KPI 09 shows the number of Reserve Capacity PaPs, published in November 2013 for timetable 2014, which have been (pre-)allocated by the C-OSS, during the year.

39

The following RC PaPs have been published for timetable 2014:

A total of **4** dossiers for this Reserve Capacity has been received. All could be Allocated, meeting the objective of 75%.





OM07 – Allocated PaPs in Active Timetable

OM 07 shows the number of PaPs which have been (pre-)allocated by the C-OSS, between April 15, 2014 and October 13, 2014, that have been accepted by the applicant and thus entered in active timetable.

For this two periods have to be distinguished:

- Requests for PaPs placed before the deadline of April 15
- Requests for PaPs placed after the deadline of April 15, but before publication of the Reserve Capacity on October 13

45 out of 51 requests for PaPs placed before the deadline of April 15 were promoted to Active Timetable and were included in the yearly timetable 2015, under the condition that no cancellation/modification was asked via the IMs at a later stage.

9 out of 12 requests for PaPs placed after the deadline of April 15, but before publication of the Reserve Capacity on October 13, were promoted to Active Timetable and were included in the yearly timetable 2015, under the condition that no cancellation/modification was asked via the IMs at a later stage.



OM08 – Double Bookings

OM 08 provides information on the number of conflicting applications for prearranged paths at X-8, for which the priority rule had to be applied.

On Rail Freight Corridor North Sea – Mediterranean lines, no conflicts occurred.

However, for three requests, including PaPs on RFC North Sea–Mediterranean and RFC Rhine-Alpine, conflicts occurred on the Swiss PaP sections requested (RFC Rhine-Alpine). These conflicts were thus treated by the C-OSS of RFC Rhine-Alpine. The RFC North Sea-Mediterranean PaPs could be allocated.



OM09 – Allocated PaPs for Reserve Capacity in Active Timetable

OM 09 gives information on the number of C-OSS allocated pre-arranged paths during the reserve capacity phase, for timetable 2014, which reached active timetable phase.

Out of 4 requests for reserve capacity for timetable 2014, **all 4** entered into active timetable.



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