

















Alpine-Western Balkan rail freight corridor

Amber Amber Rail Freight Corridor



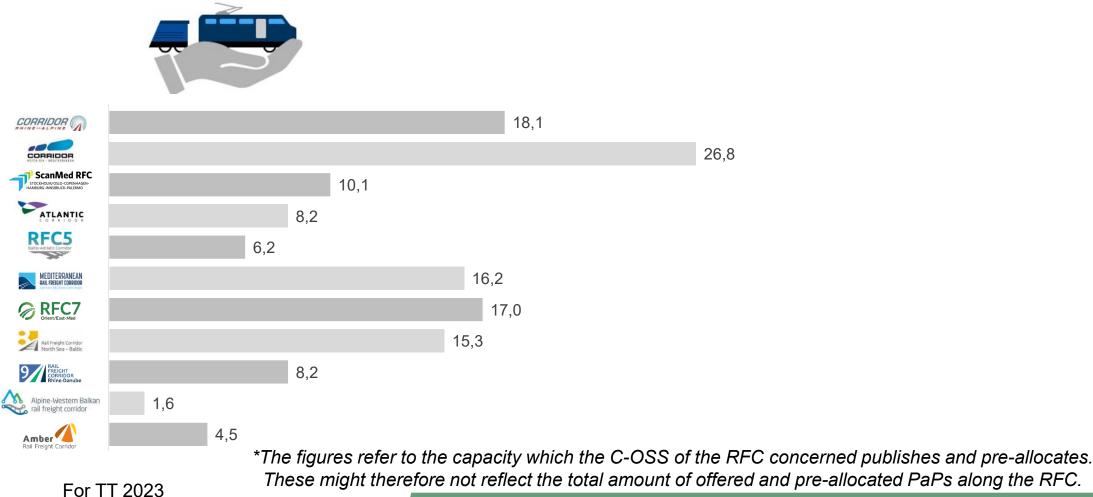
## **Commonly applicable RFC KPIs**

2022



#### Volume of offered capacity – PaPs (at X-11)

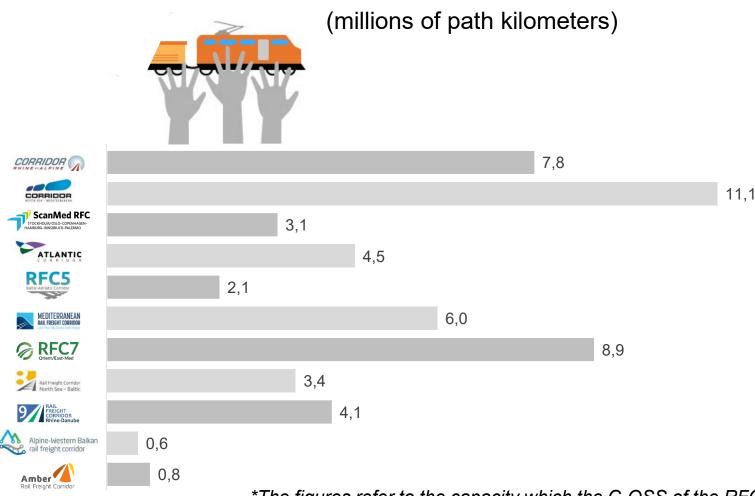
(millions of path kilometers)











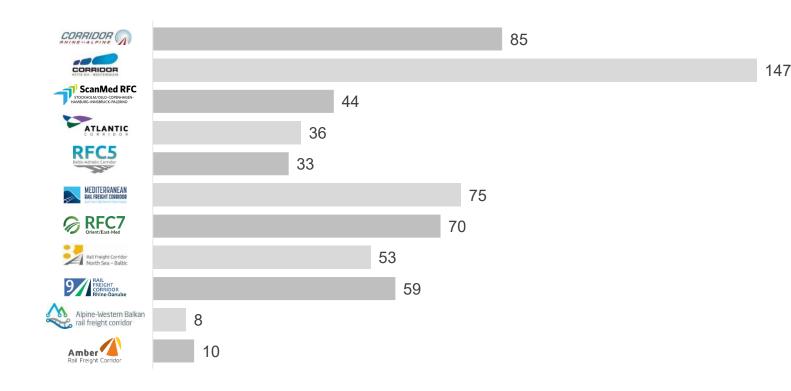


For TT 2023

\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.

Number of requests – PaPs (at X-8)

(number of PCS dossiers)





\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.

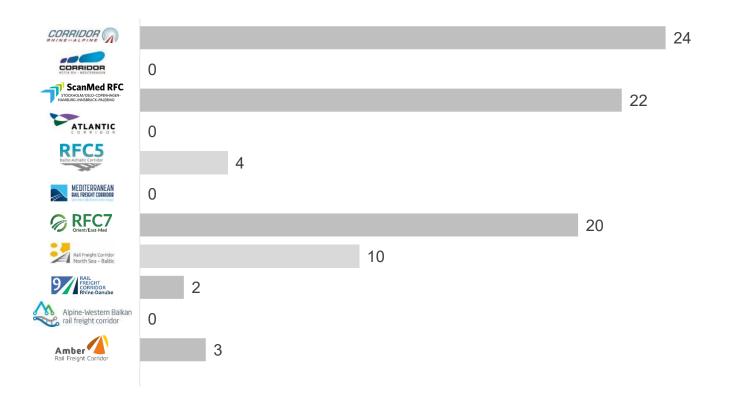
#### Commonly applicable RFC KPIs



For TT 2023

Number of conflicts – PaPs (at X-8)

(number of conflicting PCS dossiers)





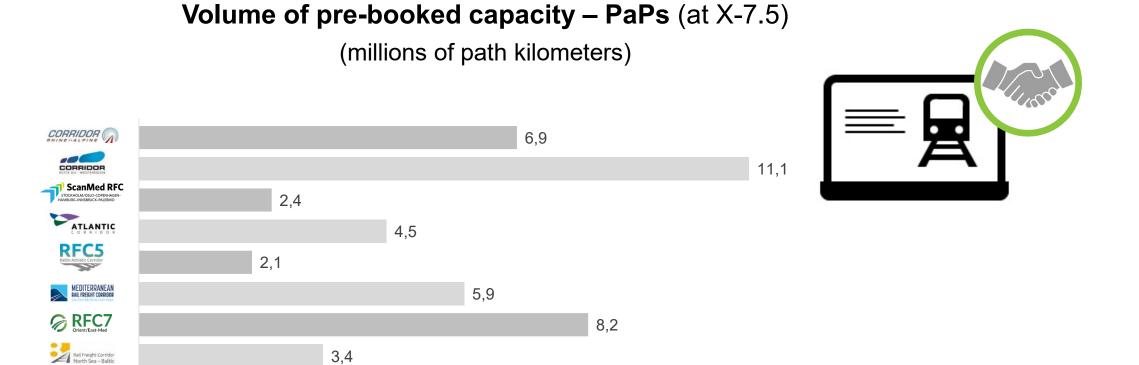
\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.

#### Commonly applicable RFC KPIs



For TT 2023

4,1



\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.

#### Commonly applicable RFC KPIs



0.6

0,6

9 RAIL FREIGHT CORRIDOR Bhine-Danube

Amber Rail Freight Corridor

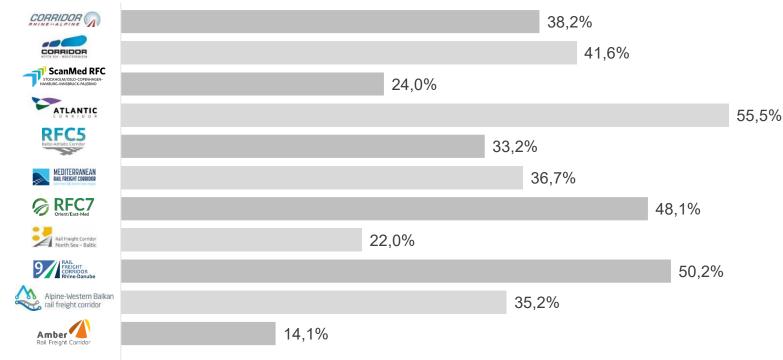
Alpine-Western Balkan rail freight corridor



Ratio of pre-booked capacity – PaPs (at X-7.5)

(to the volume of capacity offered at x-11)





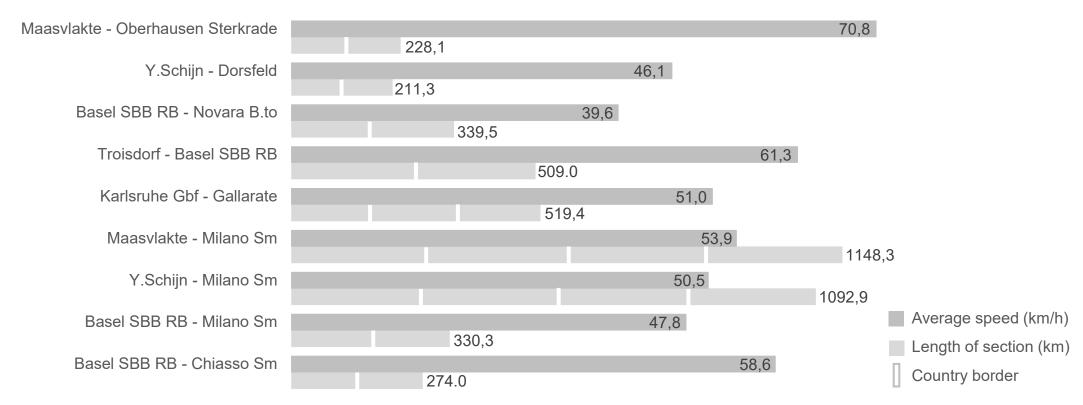
\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.



### Average planned speed of PaPs for TT 2023

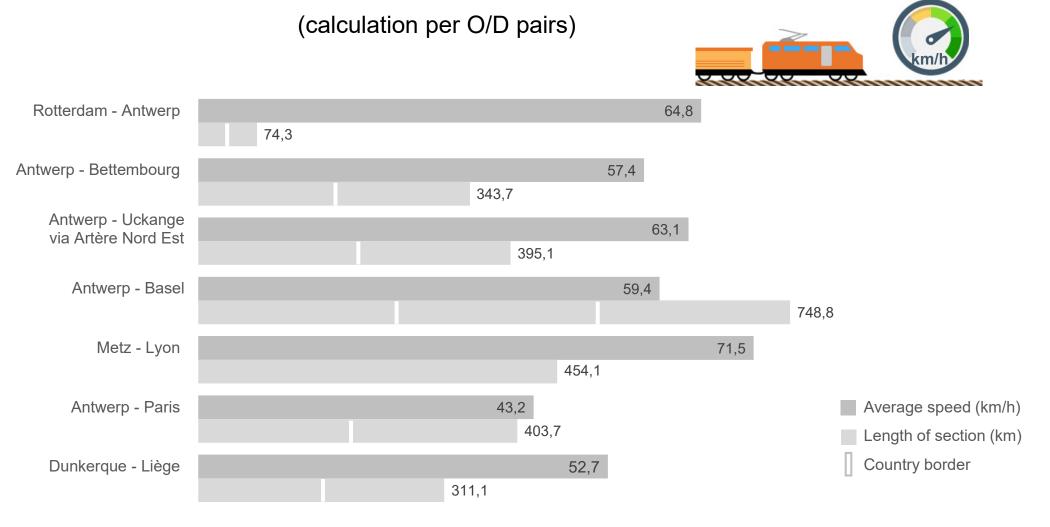
(calculation per O/D pairs)





\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.

#### Average planned speed of PaPs for TT 2023



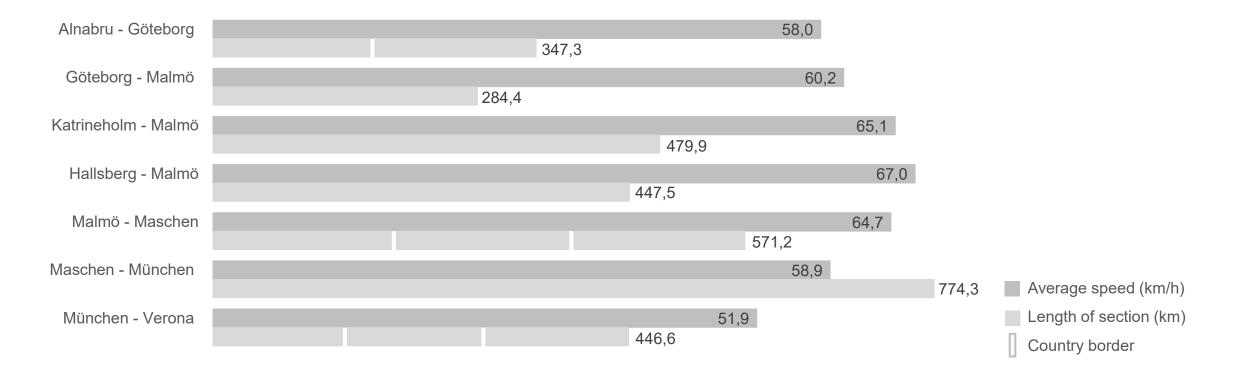


\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.

#### Average planned speed of PaPs for TT 2023

(calculation per O/D pairs)



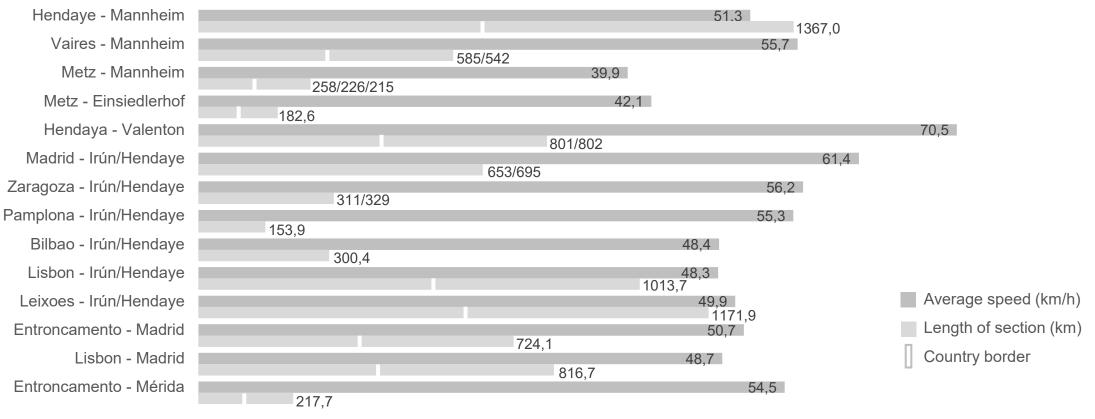


\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.

### Average planned speed of PaPs for TT 2023

(calculation per O/D pairs)

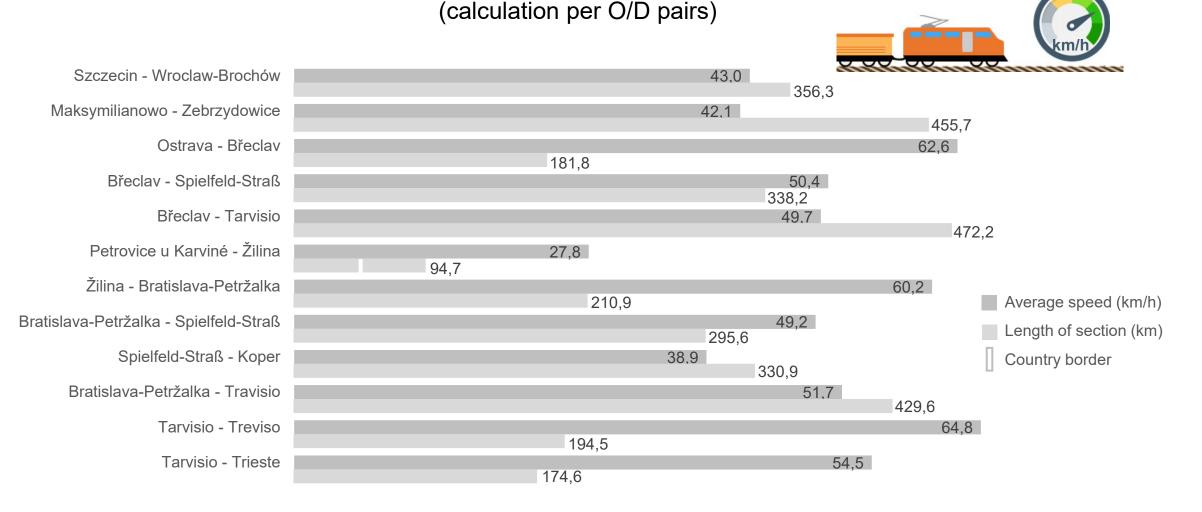




ATLANTIC

\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.

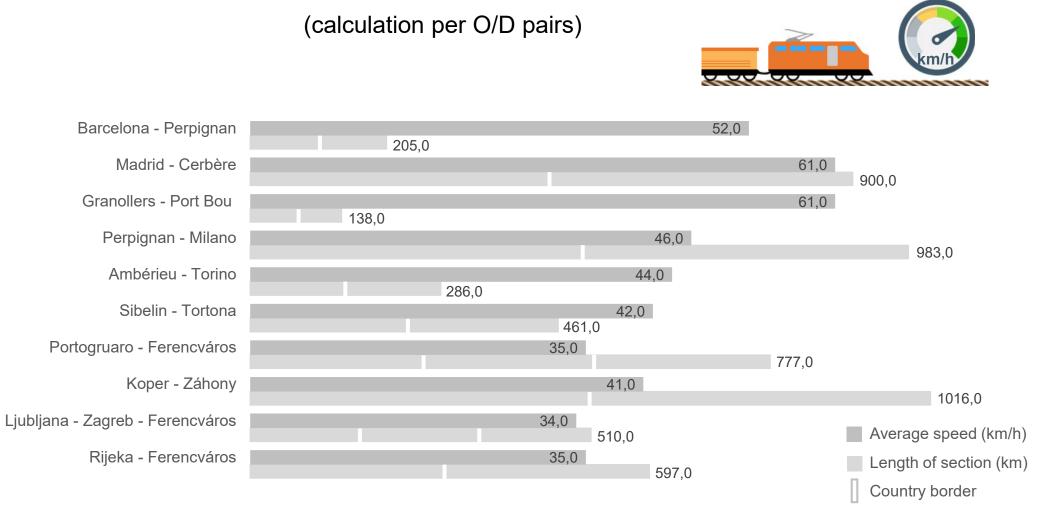
#### Average planned speed of PaPs for TT 2023



\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.



### Average planned speed of PaPs for TT 2023



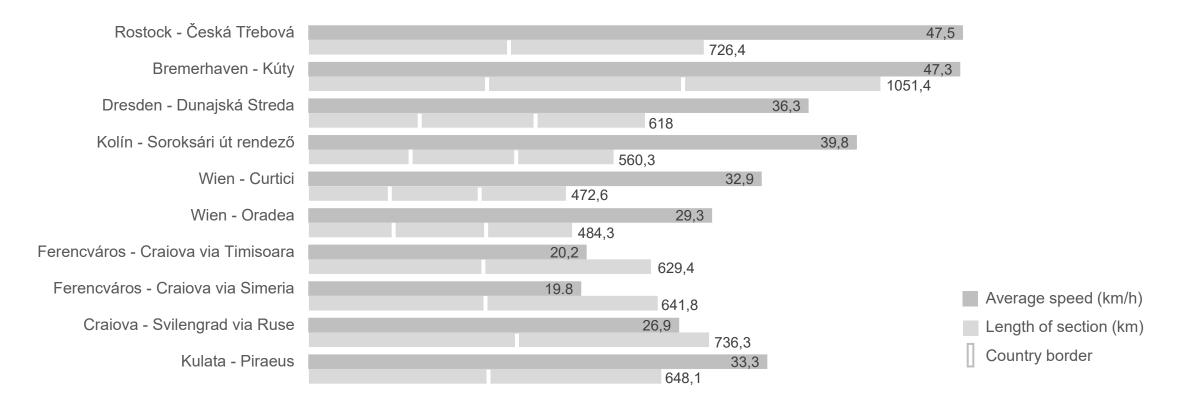
\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.



### Average planned speed of PaPs for TT 2023

(calculation per O/D pairs)



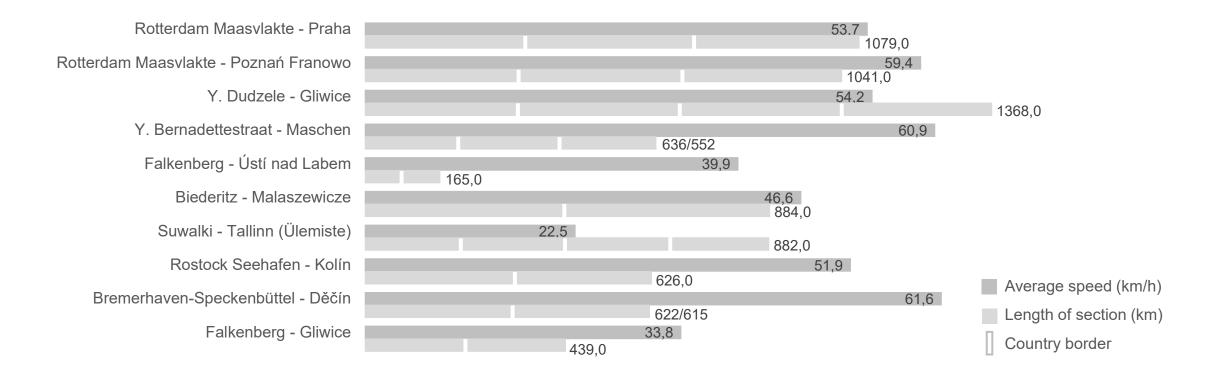


\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.

### Average planned speed of PaPs for TT 2023

(calculation per O/D pairs)





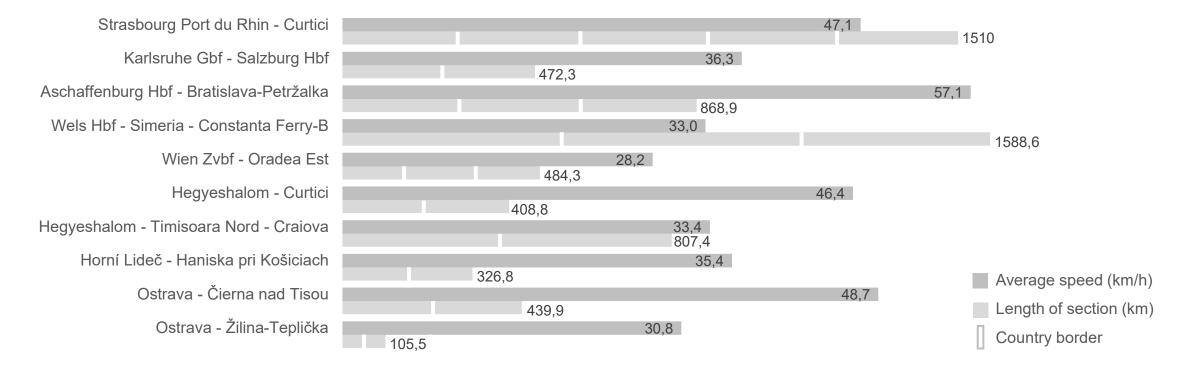
\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.



### Average planned speed of PaPs for TT 2023



(calculation per O/D pairs)

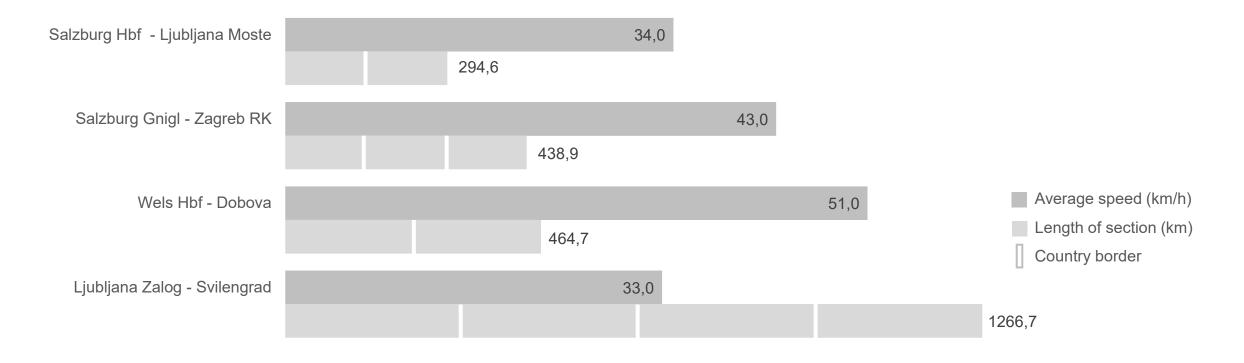


\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.

### Average planned speed of PaPs for TT 2023

(calculation per O/D pairs)





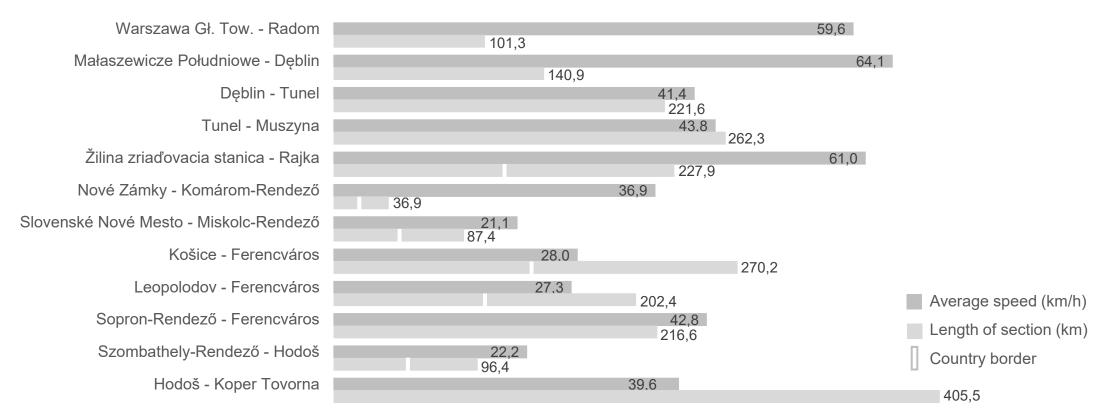
\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.



### Average planned speed of PaPs for TT 2023

(calculation per O/D pairs)



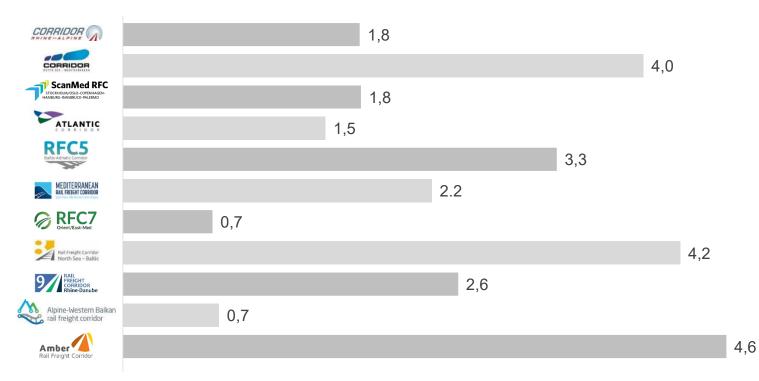


\*This KPI should be perceived as qualitative as journey times might include commercial and operational stops.



#### Volume of offered capacity – Reserve Capacity (at X-2)

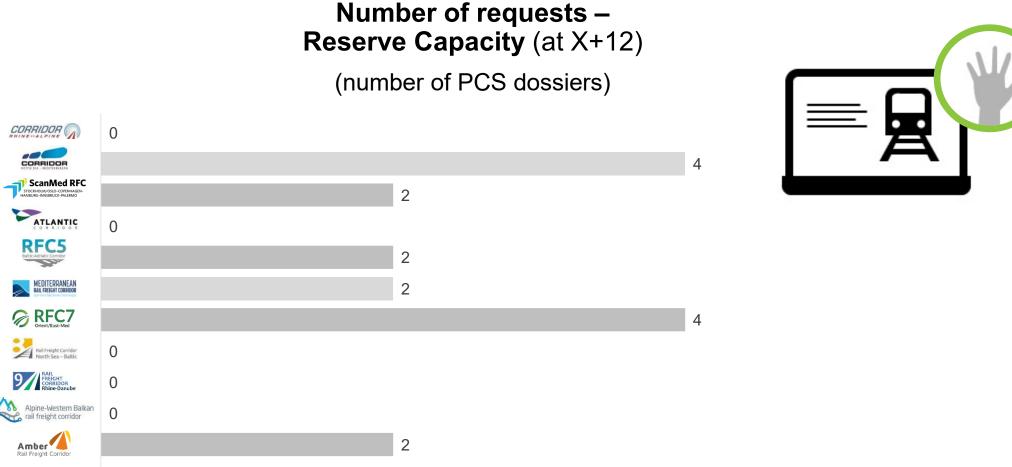
(millions of path kilometers)





\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.





\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.

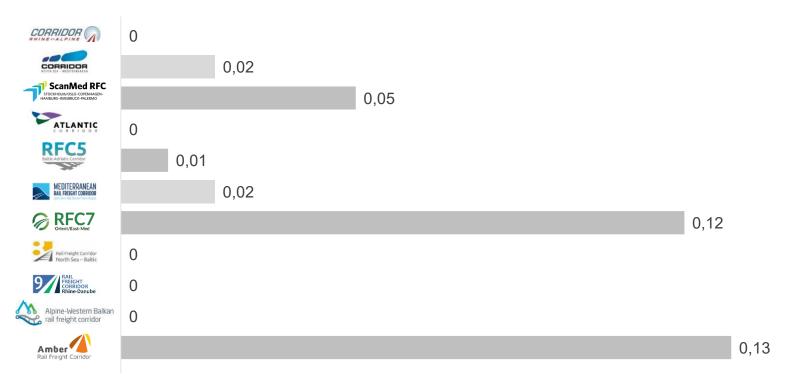
#### Commonly applicable RFC KPIs



For TT 2022

#### Volume of requested capacity – Reserve Capacity (at X+12)

(millions of path kilometers)

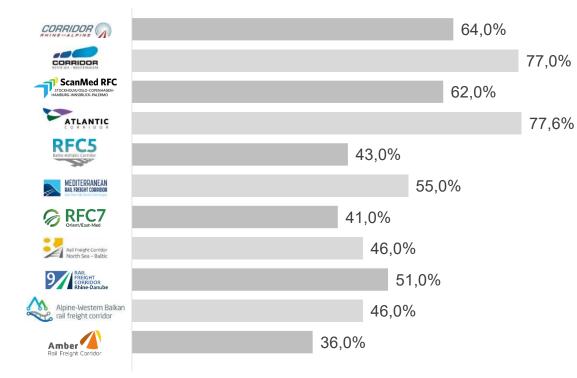


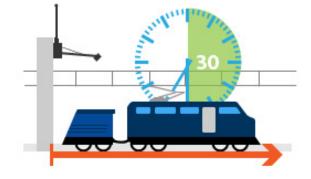
\*The figures refer to the capacity which the C-OSS of the RFC concerned publishes and pre-allocates. These might therefore not reflect the total amount of offered and pre-allocated PaPs along the RFC.



#### **Punctuality at origin** (RFC entry)

(delay  $\leq$  30 minutes)

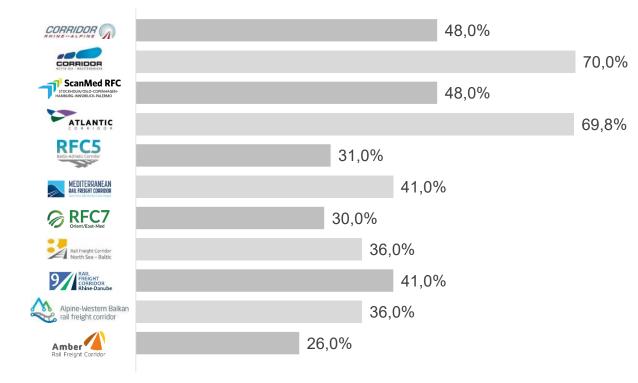


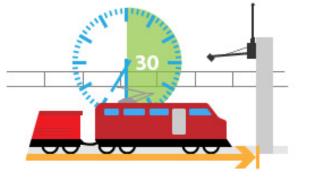




**Punctuality at destination** (RFC exit)

(delay  $\leq$  30 minutes)

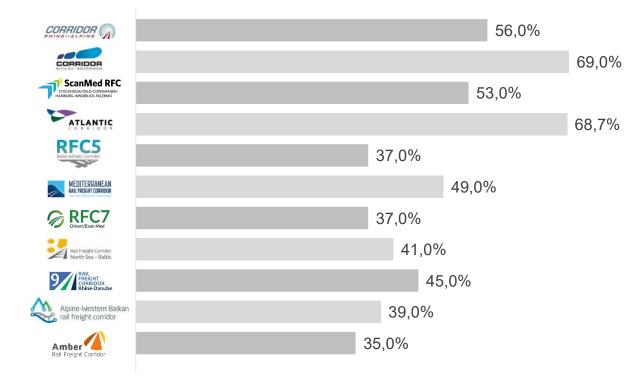


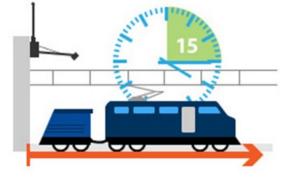




#### **Punctuality at origin** (RFC entry)

 $(delay \le 15 minutes)$ 



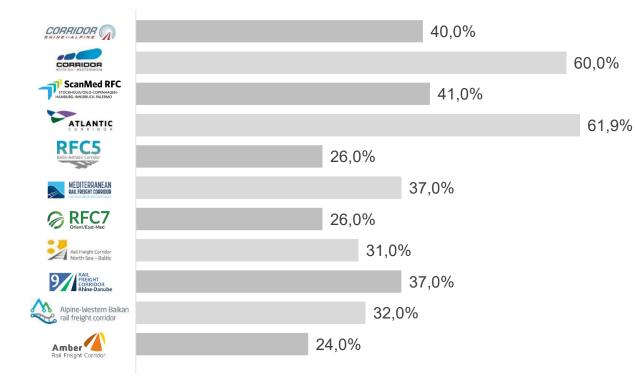


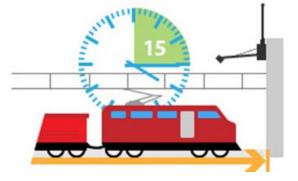


Commonly applicable RFC KPIs

**Punctuality at destination** (RFC exit)

(delay  $\leq$  15 minutes)

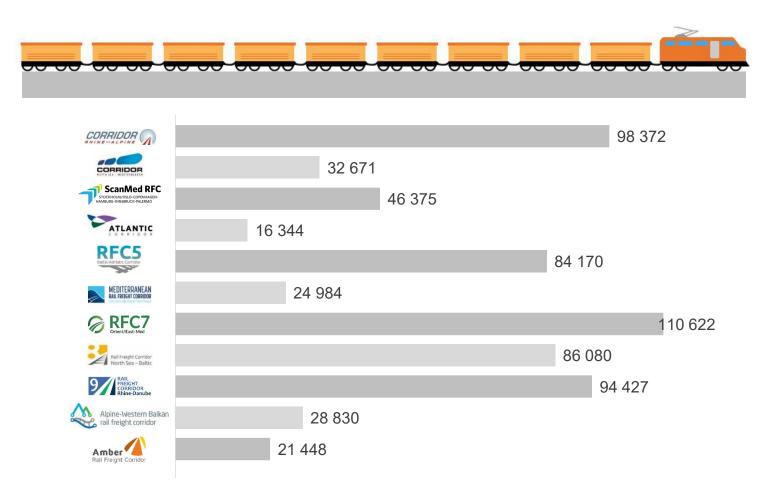








#### Number of trains crossing a border along the RFC\* 2022



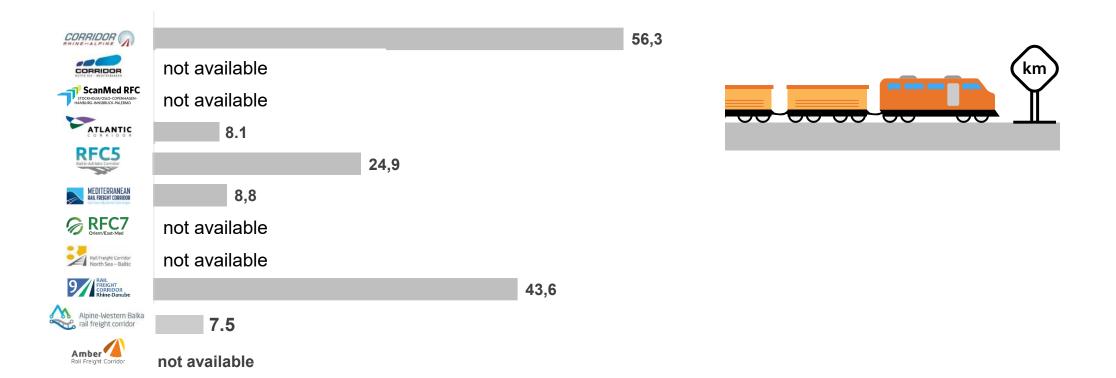
\*The calculation of this KPI is based on data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation.





#### Train kilometers of trains crossing a border along the RFC\* 2022

(millions of trains kilometers)



\*The calculation of this KPI is based on data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.





#### 2022

Border	Avg. planned dwell (min.)	Avg. real dwell (min.)
Aachen-West - Montzen	68	93
Basel Badischer Bf Basel SBB PB/RB	50	58
Brig - Domo II	132	128
Brig - Domodossola	47	57
Chiasso SM - Bivio PC Rosales	50	47
Emmerich - Zevenaar Oost	9	10
Kaldenkirchen - Venlo	38	42
Ranzo - S. Abbondio - Luino	29	24

\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.





#### 2022

Border	Avg. planned dwell (min.)	Avg. real dwell (min.)
Elvas - Badajoz	22	21
Irun - Hendaye	36	24
Saarbrücken - Forbach	36	35
Vilar Formoso - Fuentes de Onoro	41	35

\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.





#### 2022

Border	Avg. planned dwell (min.)	Avg. real dwell (min.)
Bernhardsthal - Břeclav os.n.	112	142
Chałupki - Bohumín os.n.	24	9
Chałupki - Bohumín-Vrbice	132	76
Kittsee - Bratislava-Petržalka	65	103
Marchegg - Devínska Nová Ves	32	76
Międzylesie - Lichkov	52	17
Mosty u Jablunkova - Čadca	71	62
Spielfeld-Straß - Šentilj	26	35
Thörl-Maglern - Tarvisio Boscoverde	52	72
Villa Opicina - Sežana	78	125
Zebrzydowice - Petrovice u Karviné	96	99

\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.





Border	Avg. planned dwell (min.)	Avg. real dwell (min.)
Bardonecchia - Modane	4	3
Dobova - Savski Marof	133	261
Figueres Vilafant - Perpignan	7	1
Hodoš - Őriszentpéter	94	149
Koprivnica - Gyékényes	165	255
Port-Bou - Cerbère	1	2
Villa Opicina - Sežana	78	125

\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.





## Dwell times in border sections

2022

Border crossing point	Values to publish (minutes)
Curtici – Lőkösháza	CFR-MÁV: 973 MÁV-CFR: 274
Golenti – Vidin	CFR-NRIC: 187 NRIC-CFR: 151
Giurgiu – Ruse	CFR-NRIC: 24 NRIC-CFR: 24

\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.





#### 2022

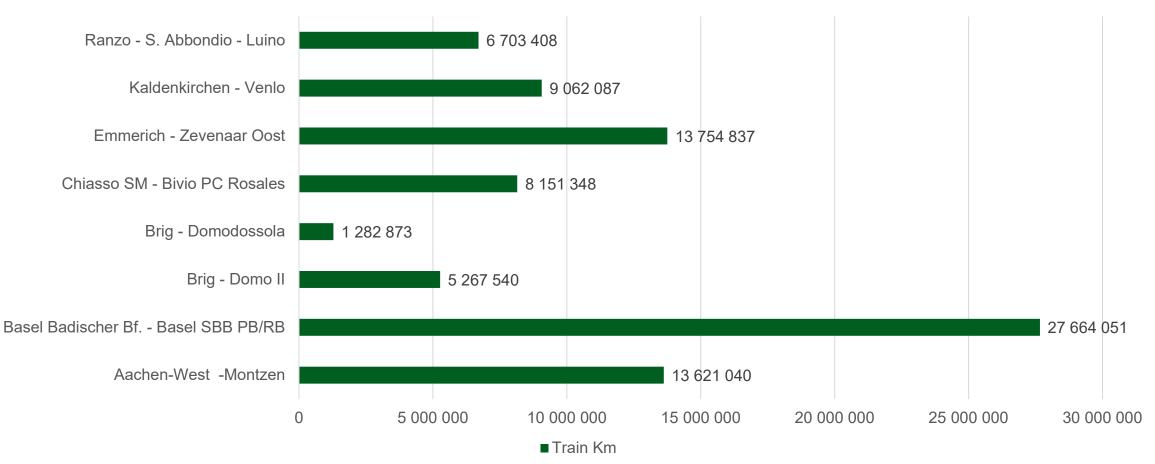
Border	Avg. planned dwell (min.)	Avg. real dwell (min.)
Dobova - Savski Marof	133	261
Kalotina Zapad - Dimitrovgrad	315	610
Rosenbach - Jesenice	74	128
Spielfeld-Straß - Šentilj	28	37
Tovarnik - Šid	126	165

\*The calculation of this KPI is based on the data in RNE's TIS, except for border Kalotina Zapad – Dimitrovgrad (data is obtained from national systems since Serbian IM, IŽS, does not use TIS). International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.



## **MARKET DEVELOPMENT**

#### Train kilometers of trains per border 2022

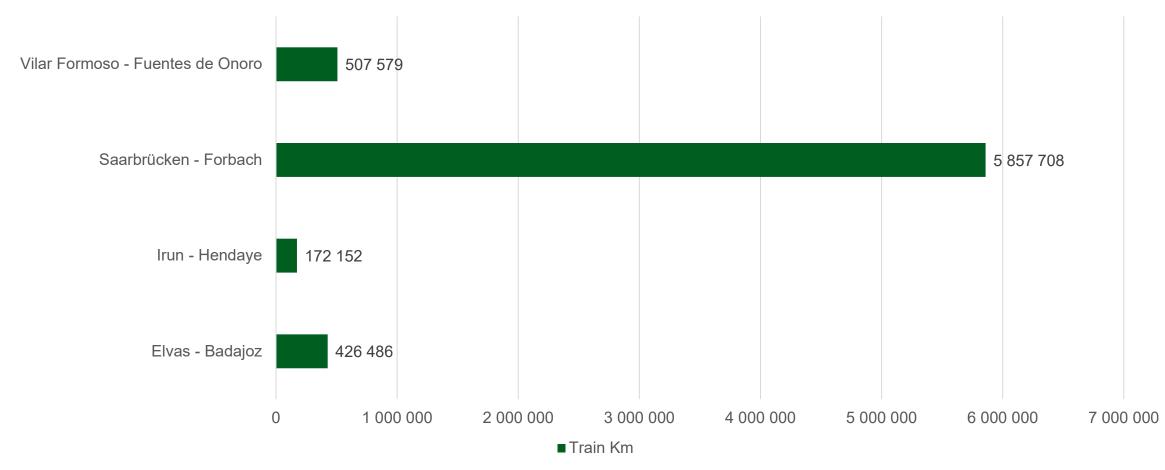


\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.



## MARKET DEVELOPMENT

#### Train kilometers of trains per border 2022

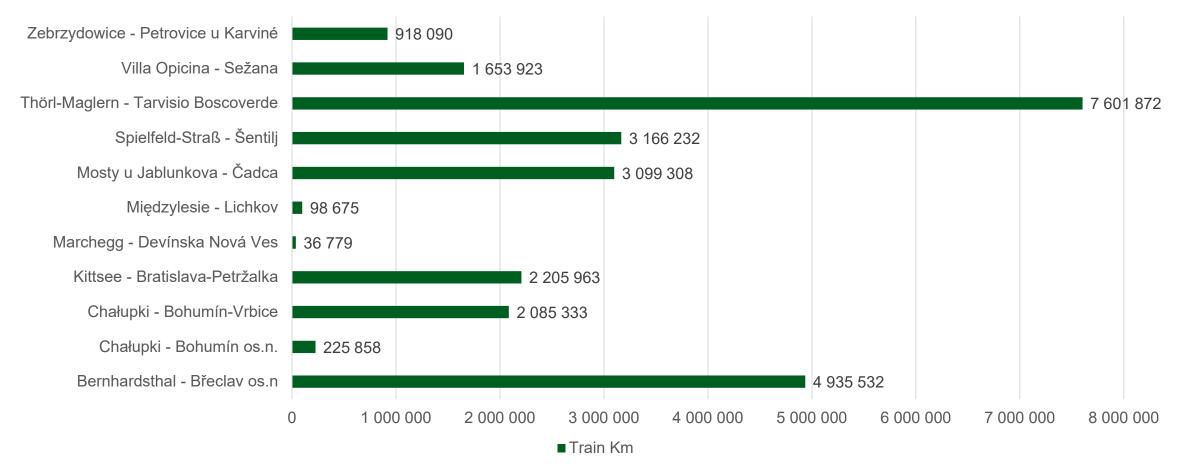


\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.



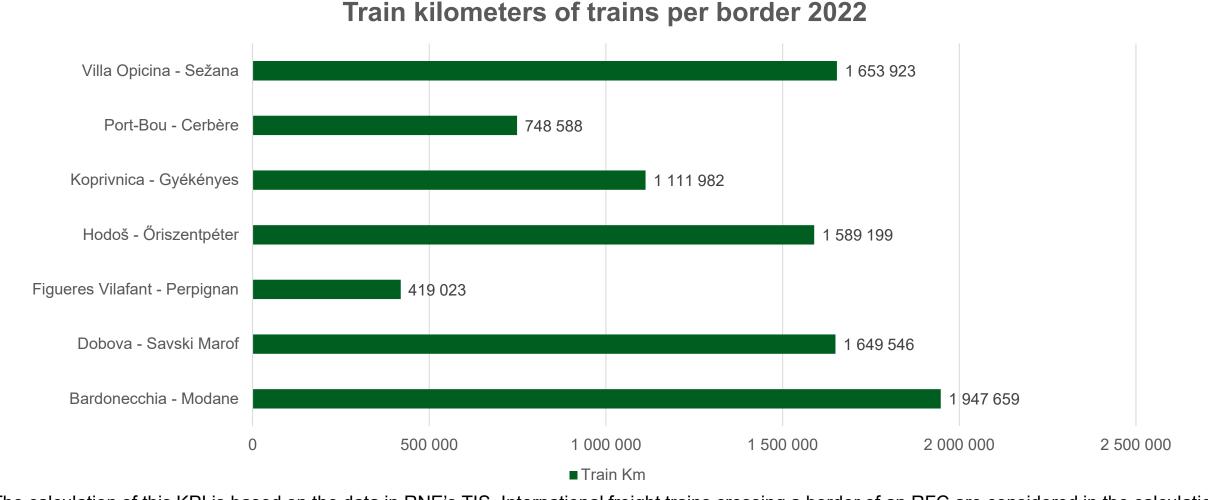
## **MARKET DEVELOPMENT**

#### Train kilometers of trains per border 2022



\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.

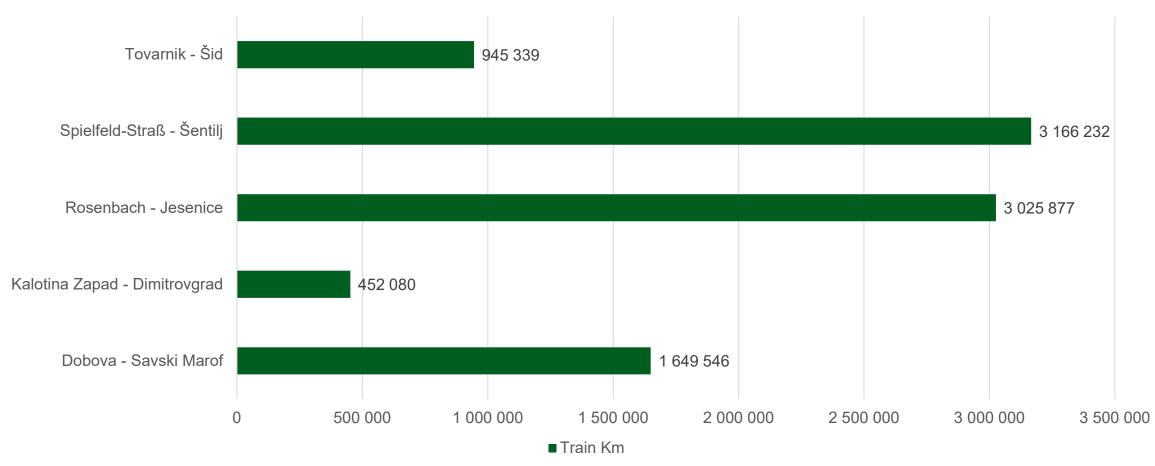




\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.



#### Train kilometers of trains per border 2022



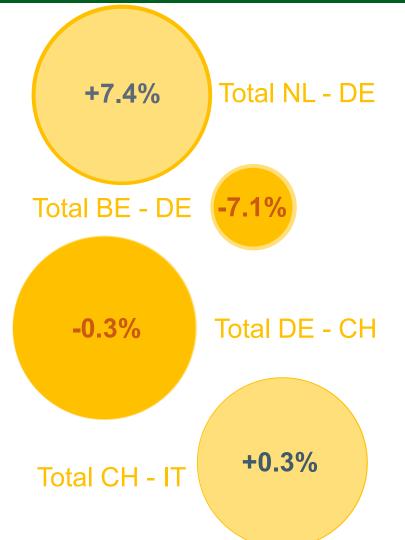
\*The calculation of this KPI is based on the data in RNE's TIS. International freight trains crossing a border of an RFC are considered in the calculation. The presented data might differ from the data gathered in the national systems due to data quality differences between individual IMs.



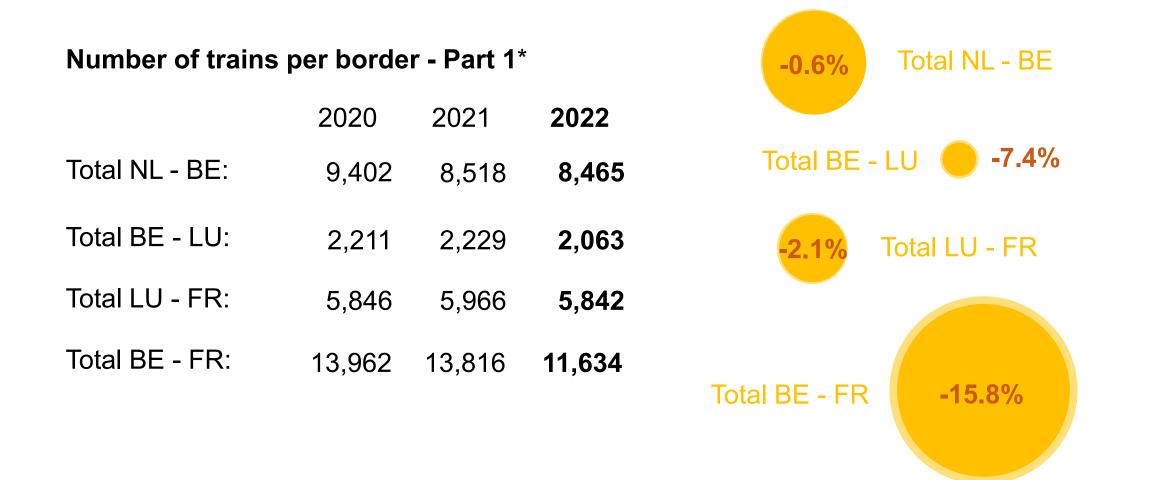
#### Number of trains per border\*

CORRIDOR

	2020	2021	2022
Total NL - DE:	43,572	46,175	49,572
Total BE - DE:	19,694	23,446	21,777
Total DE - CH:	47,387	50,005	49,842
Total CH - IT:	42,719	45,782	45,960



\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



#### Number of trains per border - Part 2\*

	2020	2021	2022	
Total GB - FR:	1,945	1,902	1,071	-43.7% Total GB - FR
Total FR - CH:	5,760	5,105	5,642	Total FR - CH +10.5%

\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.





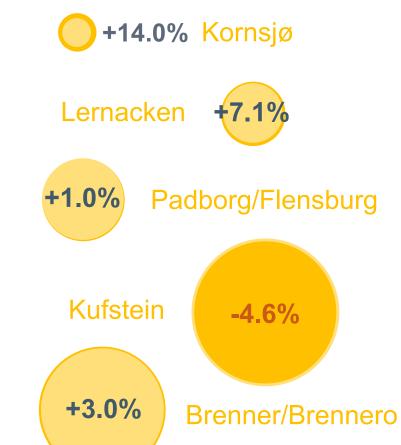
#### Number of trains per border\*

ScanMed RFC

STOCKHOLM/OSLO-COPENHAGE

RailNetEurope

	2020	2021	2022
Kornsjø:	951	1,229	1,401
Lernacken:	7,858	6,965	7,457
Padborg/Flensburg:	9,434	9,116	9,209
Kufstein:	23,684	25,960	24,768
Brenner/Brennero:	18,775	19,866	20,458



\*The calculation of this KPI is based mainly on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.

#### Number of trains per border\*

	-			. 44 00/
	2020	2021	2022	+11.9%
Total DE - FR:	8,857	9,759	10,919	
Hendaye:	2,713	1,812	1,187	Hendaye
lrún:	2,732	2,465	1,135	-53.4%
Total ES - PT:	2,652	2,468	2,393	
				Total ES - PT

\*The calculation of this KPI is based mainly on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.

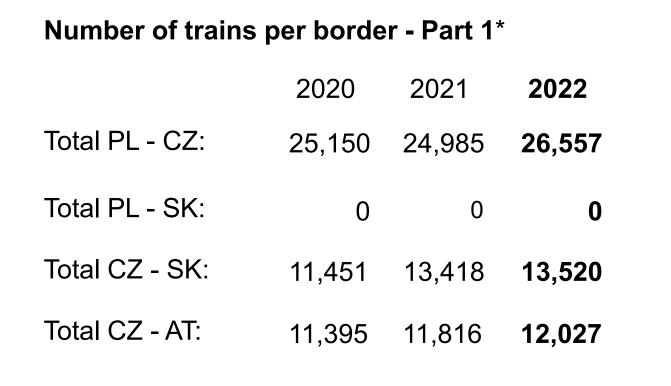


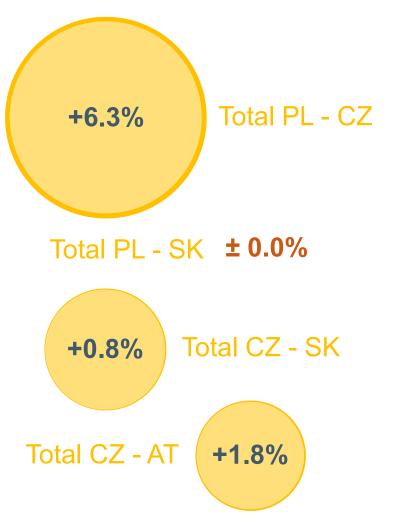
#### Commonly applicable RFC KPIs

Total DE - FR

Irún

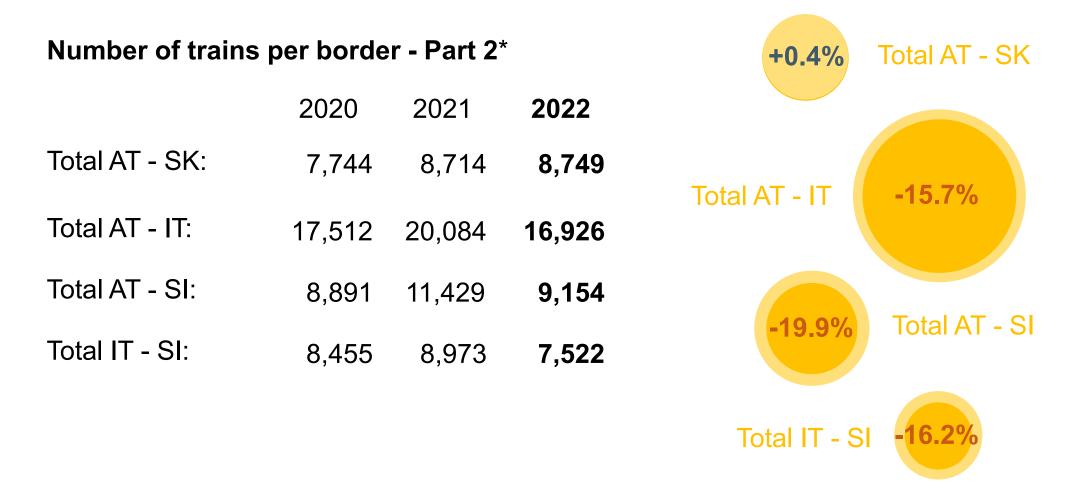
-3.0%





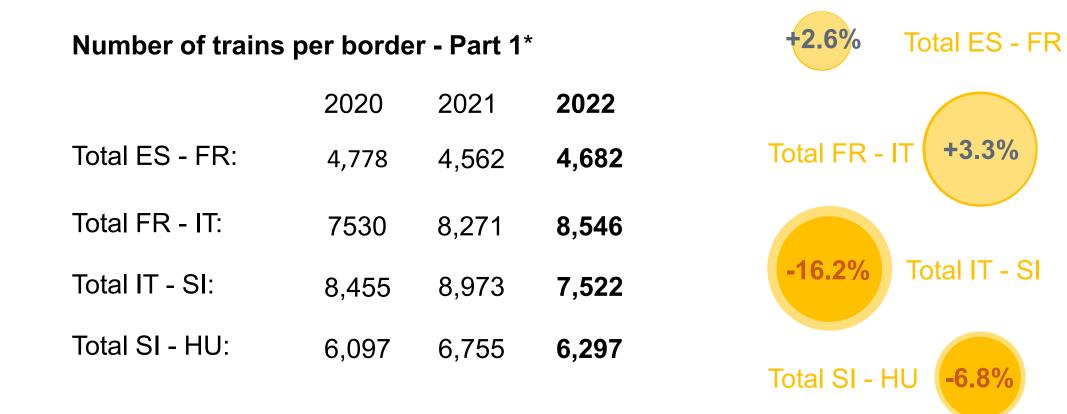
\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.





\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



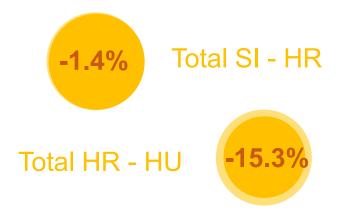


\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



#### Number of trains per border - Part 2\*

	2020	2021	2022
Total SI - HR:	7,300	7,161	7,058
Total HR - HU:	8,001	7,091	6,008

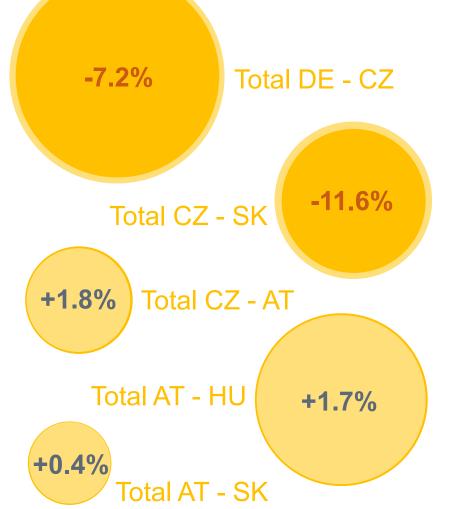


\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



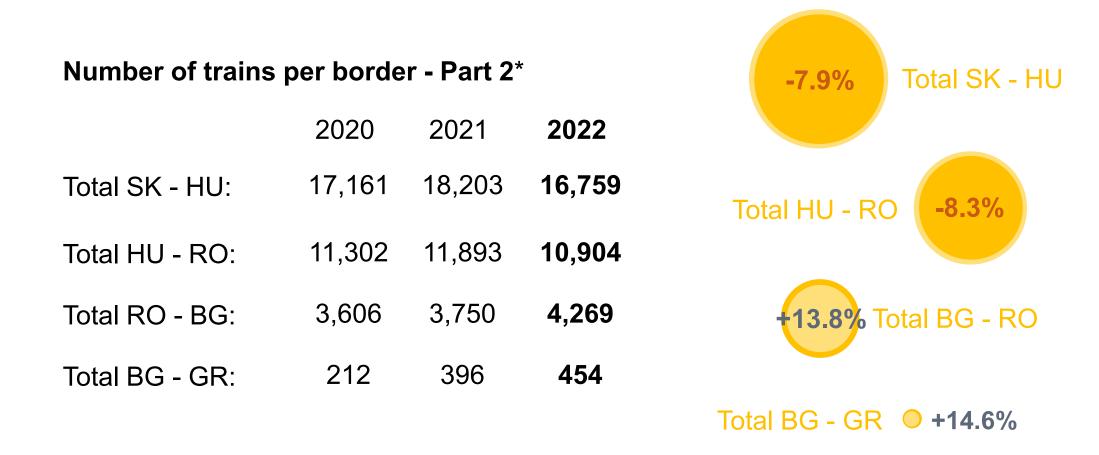
Number of trains per border - Part 1\*

	2020	2021	2022
Total DE - CZ:	30,408	28,737	26,675
Total CZ - SK:	18,611	18,880	16,688
Total CZ - AT:	11,395	11,816	12,027
Total AT - HU:	19,340	20,289	20,634
Total AT - SK:	7,744	8,714	8,749



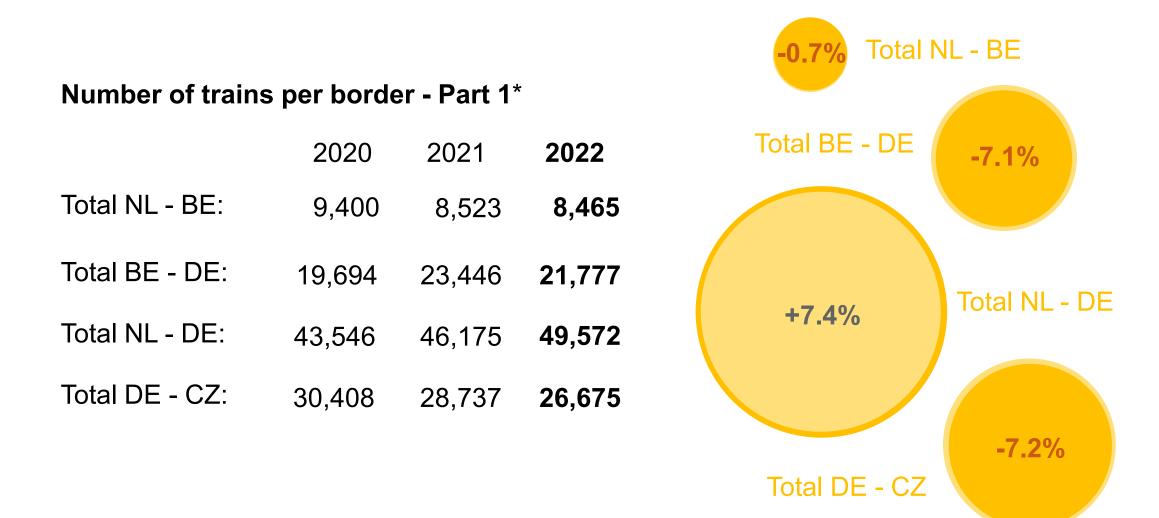
\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.





\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.





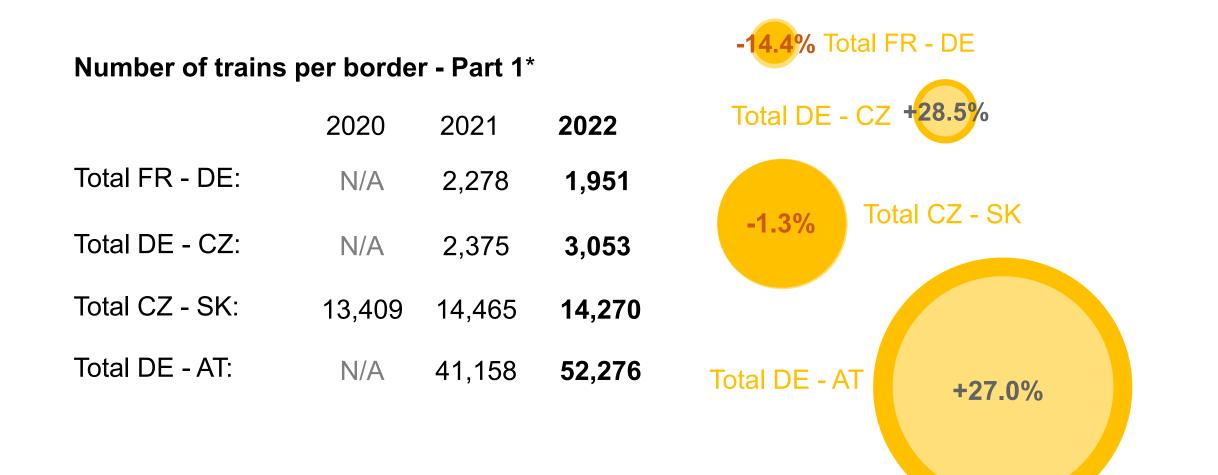
\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.





\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.

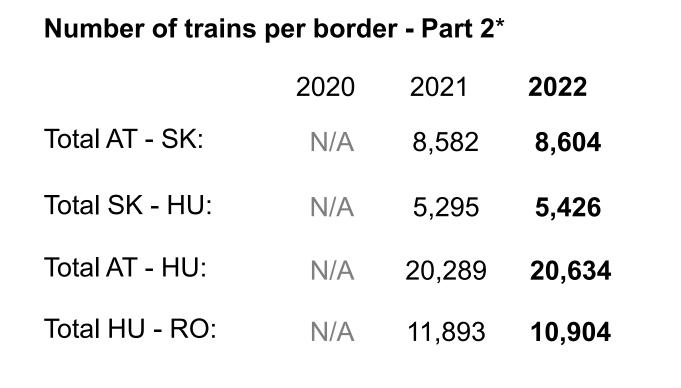


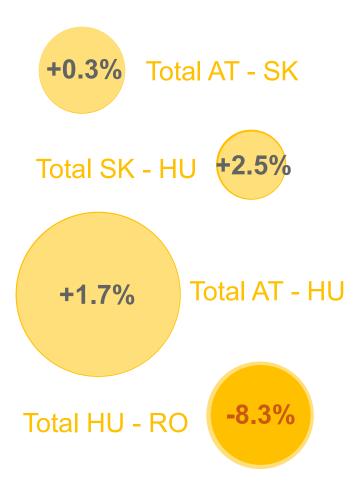


\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.

FREIGHT





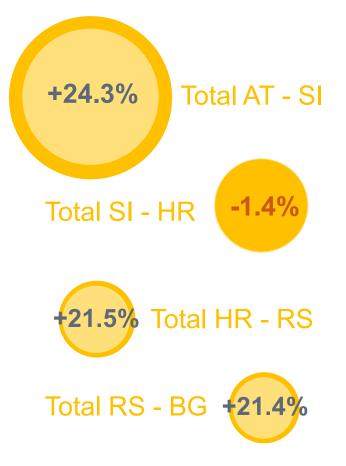


\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



#### Number of trains per border\*

	2020	2021	2022
Total AT - SI:	15,316	14,718	18,296
Total SI - HR:	7,300	7,161	7,058
Total HR - RS:	3,848	3,816	4,638
Total RS - BG:	3,274	3,368	4,090

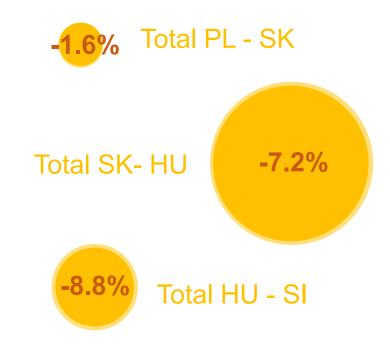


\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



#### Number of trains per border\*

	2020	2021	2022
Total PL - SK:	1,884	2,004	1,972
Total SK - HU:	19,926	21,880	20,301
Total HU - SI:	6,097	6,755	6,297



Commonly applicable RFC KPIs

\*The calculation of this KPI is based on data in IMs' systems. The total sum of the figures per border does not correspond to the figure of the KPI 'Overall number of trains on the RFC' due to, among other reasons, the potential double-counting of trains crossing more than one border.



# Disclaimer

- » The KPIs reflect the performance of each individual RFC, therefore, when comparing the figures of various RFCs, the specificities of each one have to be considered. Each RFC may apply any additional KPIs, which are published in their annual reports on their websites and/or in the <u>Customer Information Platform</u> (CIP), where applicable.
- » Please refer to the annual reports of individual RFCs for comprehensive information concerning the figures and their analysis. In addition, you can find the description of each commonly applicable KPI in the RNE '<u>Guidelines for Key Performance Indicators of Rail Freight Corridors</u>'.

