

Key Performance Indicators

In this paragraph we report the 2021 figures regarding:

- the Capacity KPIs compared to the previous year
- the Operation KPIs with punctuality at origin / destination, and the share of delay minutes according to groups of causes
- the Market KPIs describing the Traffic Volume in terms of number of trains crossing the corridor border points
- the punctuality at border stations and at relevant points

Capacity KPIs

			2021 TT2022	2020 TT2021
Offered Capacity	Volume of offered capacity (PaPs) at X-11 (in Mio. km*d	ays)	13,7	13,8
Опегей Сарасіту	Volume of offered capacity (RC) at X-2 (in train km.)		1,8	1,9
	Volume of requested capacity (PaPs) at X-8 (in Mio. km*	days)	5,6	7,6
Requested Capacity	Volume of requested capacity (RC) at X+12 (in Mio. km*	AR2022	0	
	Volume of requests (PaPs) at X-8		45	49
	Volume of requests (RC) at X+12		AR2022	0
Pre-booked Capacity	Volume of pre-booked capacity (PaPs) at X-7,5 (in Mio. I	m*days)	4,4	5,5
Conflicting requests	Number of conflicts (PaPs)	23	38	
TCR-affected capacity	Share of pre-booked PaPs affected by TCRs (in PaP days)	0%	0%	
Response time for a corridor offer (RC)	Number of days needed by the C-OSS to deliver an RC-offer to a customer		AR2022	not applicable
Integration of the product	Number of PaP-requests including Terminal slots (TICO)		0	1
Cross-corridor PaP-requests	Number of PaP-requests including at least one PaP-segment on another RFC (in %)		17,8	14,3
Cancellation/Modification rate	Cancellations / modification rate of PaPs before TT chan	ge (share of not cancelled days)	73%	87%
		Alnabru-Göteborg	58	56
		Göteborg-Malmö	61	66
	Average planned speed of PaPs at X-11 (in km/h)	Katrineholm-Malmö	61	59
Planned speed		Hallsberg-Malmö	64	69
		Malmö-Maschen	65	63
		Maschen-München	65	69
		München-Verona	52	53
		Kornsjö	0%	0%
	Ratio of capacity allocated by the C-OSS and the total	Peberholm	59%	59%
Ratio of capacity		Padborg	52%	50%
l	allocated capacity at TT change	Kufstein	0%	1%
l		Brennero	0%	2%



Operations KPIs

KPI	Definition	Source	2021	2020
Punctuality at origin	Percentage of trains on time (30') at origin / (RFC Entry)	TIS / OBI	66 %	71 %
Punctuality at destination	Percentage of trains on time (30') at destination / (RFC Exit)	TIS / OBI	55 %	64 %

Delay Causes

Share of delay minutes in respective group of delay causes

Source: TIS / OBI

• Content: all international trains on the corridor which cross at least one corridor border

	2021	
Delay Group	North - South	South - North
Infrastructure Manager	11 %	10 %
Railway Undertaking	58 %	59 %
Secondary	29 %	29 %
External	3 %	3 %



Market KPIs

Number of train runs crossing the defined border points

Border point(s)	North - South	South – North	Data source
Kornsjö	584	645	BaneNOR
Peberholm	3478	3487	TRV
Padborg / Flensburg	4566	4550	DB
Kiefersfelden / Kufstein	13122	12838	DB/ÖBB
Brennero / Brenner	9983	9883	ÖBB/RFI



Punctuality measures

Punctuality at border stations and important points - general remarks

Punctuality 0-30 minutes (%)

- Source: TIS / OBI
- Content: all international trains on the corridor which cross at least one corridor border
- Main traffic is on the stretches Malmö Maschen and Munich Verona
- Only a few trains run on Northern <u>and Southern part of the corridor (e.g., from Scandinavia to Italy)</u>, so there is barely a direct connection between punctuality at Maschen and Munich (and vice versa)
- Especially the departure figures at Munich and Maschen are negatively
 influenced by trains arriving from <u>other</u> parts Germany as well as from the
 Netherland and Belgium. The punctuality of these trains is significantly lower
 than the average.

Point	Punctuality N-S	+/- 2020	Remarks
Malmö departure	83	-6	
Peberholm (run through)	80	-8	
Flensburg (run through)	64	-8	
Maschen Rbf arrival	52	-12	
Munich departure	62	-6	Aggregated from different stations
Kufstein arrival	63	-7	
Kufstein departure	62	-5	
Brennero / Brenner arrival	60	-6	
Brennero / Brenner departure	49	-9	
Verona QE arrival	52	-13	



Comments on Comparability of the data / Data Quality

- Punctuality is calculated on base of delta-t (delay) for defined points in TIS
- This delta-t is delivered by the national system (based on the timetable there)
- Different national processes (e.g. for train numbering, timetabling or ad hoc trains) can lead to deviations
- If the different train parts have different numbers, the connection gets lost in many cases (not linked trains)
- The problem can influence punctuality figures and the <u>amount</u> of trains

Point	Punctuality S-N	+/-2020	Remarks
Verona QE departure	65	-7	
Brennero / Brenner arrival	62	-11	
Brennero / Brenner departure	50	-11	
Kufstein arrival	56	-6	Starting trains between Brenner and Kufstein
Kufstein departure	55	-8	
Munich arrival	52	-11	Aggregated from different stations
Maschen Rbf departure	66	-6	Incl. trains starting in other parts of Germany, NL or B
Flensburg (run through)	56	-6	
Peberholm (run through)	64	-7	: ¥:
Malmö arrival	68	-4	•