Capacity study
Brenner Corridor 204X

WORK REPORT * | STATUS DECEMBER 2025

* This approved report represents the current status of work and will be updated on an ongoing basis.

Bundesministerium für Verkehr
Bundesministerium Innovation, Mobilität und Infrastruktur
MIT MINISTERO DELLE INFRASTRUTTURE E DEI TRASPORTI
DB InfraGO
ÖBB INFRA
RFI RETE FERROVIARIA ITALIANA GRUPPO FERROVIE DELLO STATO ITALIANE
BBT
Co-funded by the European Union
BCP BRENNER CORRIDOR PLATFORM

Capacity study 204X

BASIC DATA 1/2

design-case 204X

Infrastructural condition RFI

- 2-tracks existing line
- 2-tracks new line BBT
- stat.PM Fortezza + 2-tracks new line PM Fortezza – PM Marco (with bypass Bolzano, Trento and Rovereto)
- 2-tracks new line Pescantina – fork San Massimo – Verona
- overtaking stations for freight trains lengths of 740 m (Mezzocorona, Trento-Roncafort, Ala)
- PM Sorni + PM Marco (with 2 passing tracks in both directions)
- expansion stat. Bronzolo Scalo
- *double-tracking of the existing line to Merano*
- *selective double-tracking of the existing Pustertal-line*

Infrastructural condition DB

- station Fischbach NEW (passing track for 740 m train length)
- station Kirchseeon NEW (passing track for 740 m train length)
- passing-station Rottau NEW
- Fernbahn Munich-Trudering – - passing station Baldham - fork Osterseeon – Grafing Bahnhof – Rosenheim – Kufstein/Salzburg ETCS L2/BL3
- continuous 4-tracks fork Osterseeon – border G/A (ECTS L2/BL3) with passing-stations Taglaching, OsterMunich and Lauterbach (train length 740m)

Infrastructural condition ÖBB

- station Kufstein NEW (train length 740 m)
- station Wörgl NEW (train length 740 m)
- station Schwaz NEW (train length 740 m)
- station Fritzens-Wattens NEW (train length 740 m)
- passing-station Vomp new line
- continuous 4-tracks from border G/A to border I/A (ETCS L2/BL3)

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BASIC DATA 2/2

design-case 204X

Assumption concerning vehicle technology

Long-distance passenger transport (Munich-Verona-Munich):

- RJ2-simple-set 622 t / 258m / 9 Wg BR 1216 or 1293 (max.sp. 230 km/h)
- ETR 485 454 t / 237m (max.sp. 250 km/h)
- ETR 500 642 t / 354m (max.sp. 300 km/h)
- ETR 600 443 t / 188m (max.sp. 250 km/h)
- ETR 675 400 t / 188m (max.sp. 250 km/h)

Short-distance passenger transport (ÖBB-area)

- 4024 simple-set 116 t / 67m (max.sp. 140 km/h)
- 4746 simple-set 163 t / 75m (max.sp. 160 km/h)
- 4748 simple-set 202 t / 101m (max.sp. 160 km/h)
- ETR 160 Alstom Corradia (ÖBB/SAD) 250 t / 128 m (max. sp. 160 km/h)

Short-distance passenger transport (RFI-area)

- ETR 170 203 t / 107m (max.sp. 160 km/h)
- ETR 526 240 t / 97m (max.sp. 160 km/h)

Short-distance passenger transport (DB-area)

- ET 427 Flirt 3 – simple-set 204 t / 107m (max.sp. 160 km/h)
- ET 427 Flirt 3 – double-set 408 t / 214m (max.sp. 160 km/h)
- ET 427 Flirt 3 – triple-set 612 t / 321m (max.sp. 160 km/h)

Freight transport (cross-section Brenner) *(status december 2023)

- variant short (BBT) [1] **2000*t** / 550 m BR 2159 or 193 (max.sp. 100 km/h)
- variant medium (BBT) [2] **2000*t** / 650 m BR 2159 or 193 (max.sp. 100 km/h)
- variant long (BBT) [3] **2000*t** / 740 m BR 2159 or 193 (max.sp. 100 km/h)
- variant Hall/Tirol – Innsbruck - BBT 1960 t / 600 m / 2x BR 2159 od.
  + variant deviation Brennerpass 1450 t / 600 m / 2x BR 193 (max.sp. 100 km/h)
- variant RORO Brennersee 1450 t / 420 m / 2x BR 193 (max.sp. 80 km/h)
- variant RORO Trento 2000 t / 650 m BR 193 (max.sp. 100 km/h)

***) 1600 t → max. sp. 120 km/h**

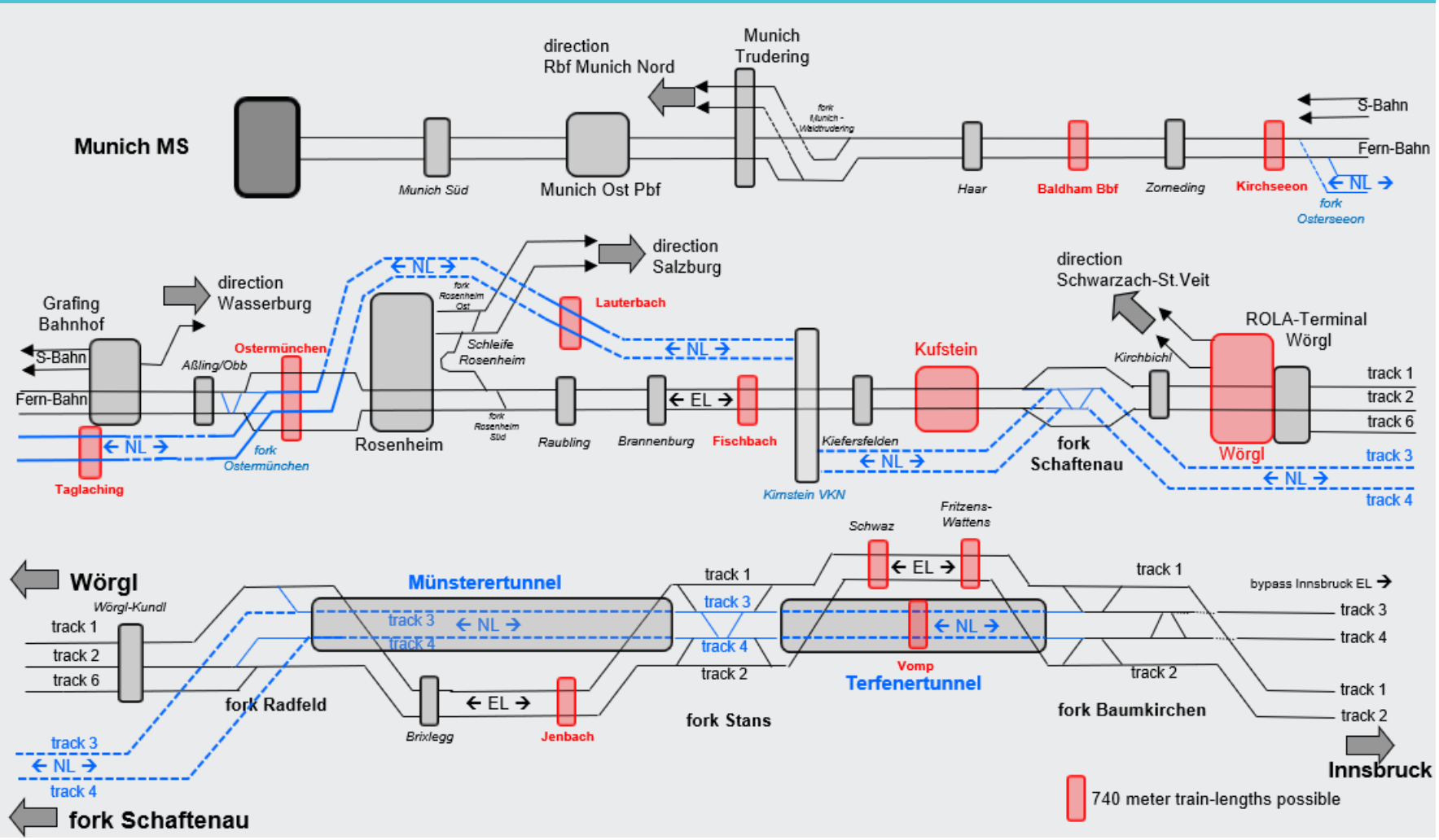
traction of the variants with BR 2019 (Stadler EURO 9000) - then 2600 t possible!

Assumptions on the distribution of the freight transport system paths on the Brenner-axis through the BBT in the BCP-capacity study 204X:

- *[1] Relative share of system paths: app. 25%*
- *[2] Relative share of system paths: app. 25%*
- *[3] Relative share of system paths: app. 50%*

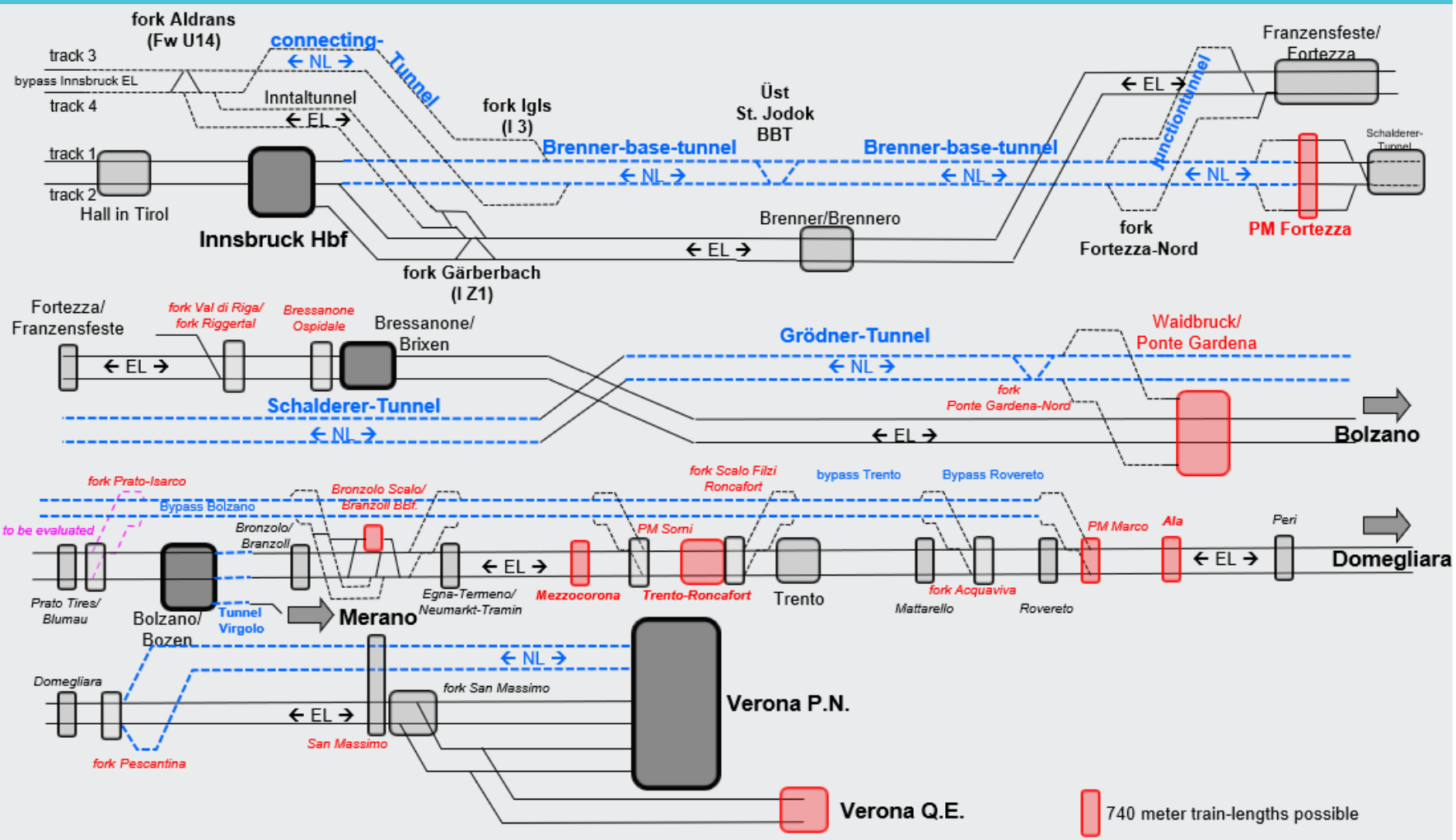
Capacity study 204X

RAIL INFRASTRUCTURE BRENNER-NORTHERN ACCESS ROUTE 204X



Capacity study 204X

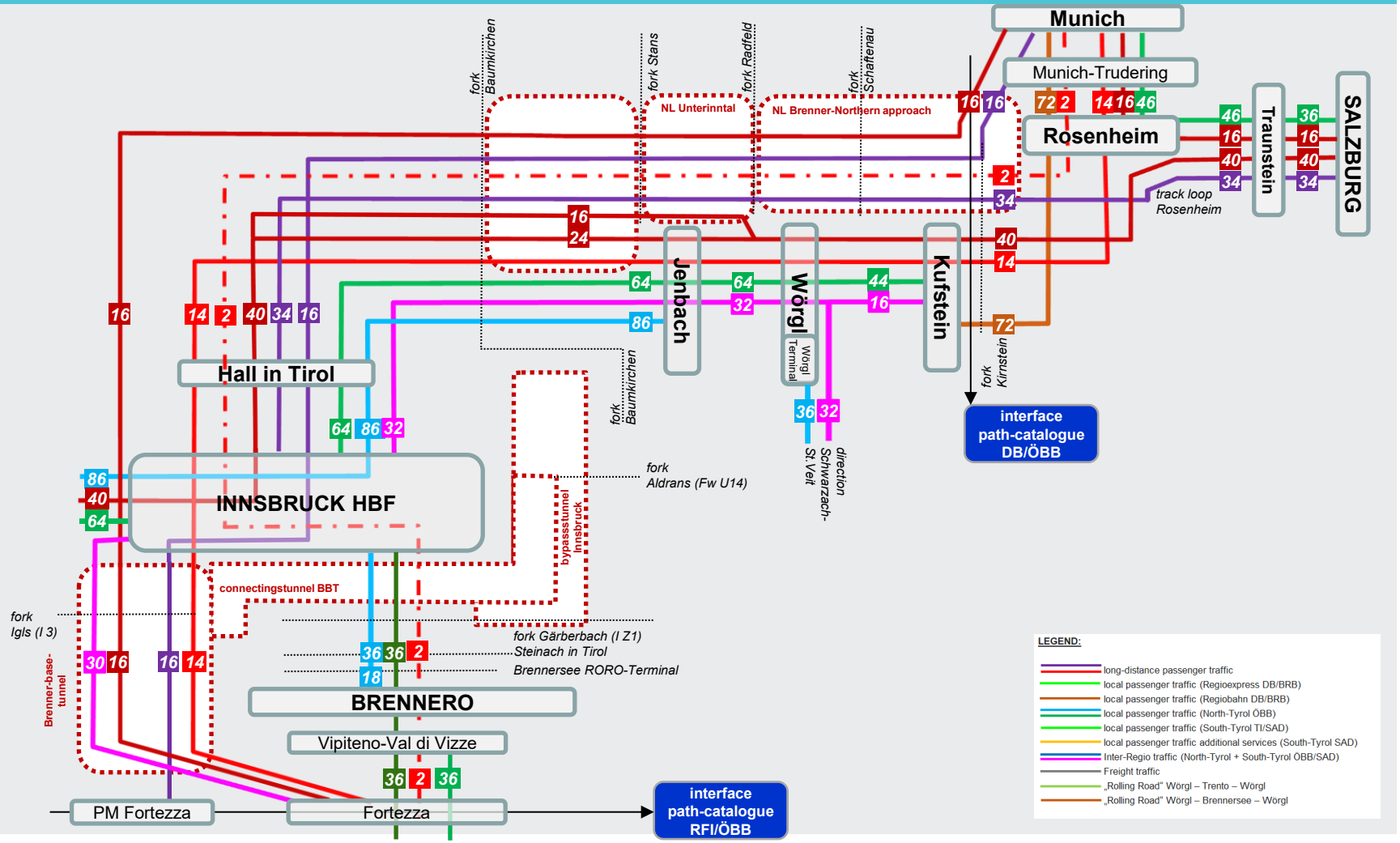
RAIL INFRASTRUCTURE BBT + BRENNER-SOUTHERN ACCESS ROUTE 204X



Capacity study 204X

CAPACITY-UTILIZATION BRENNER-NORTHERN ACCESS ROUTE 204X

QUANTITY FRAMEWORK FOR LONG-DISTANCE / LOCAL PASSENGER TRANSPORT



Capacity study 204X

CAPACITY-UTILIZATION BBT + BRENNER-SOUTHERN ACCESS ROUTE 204X

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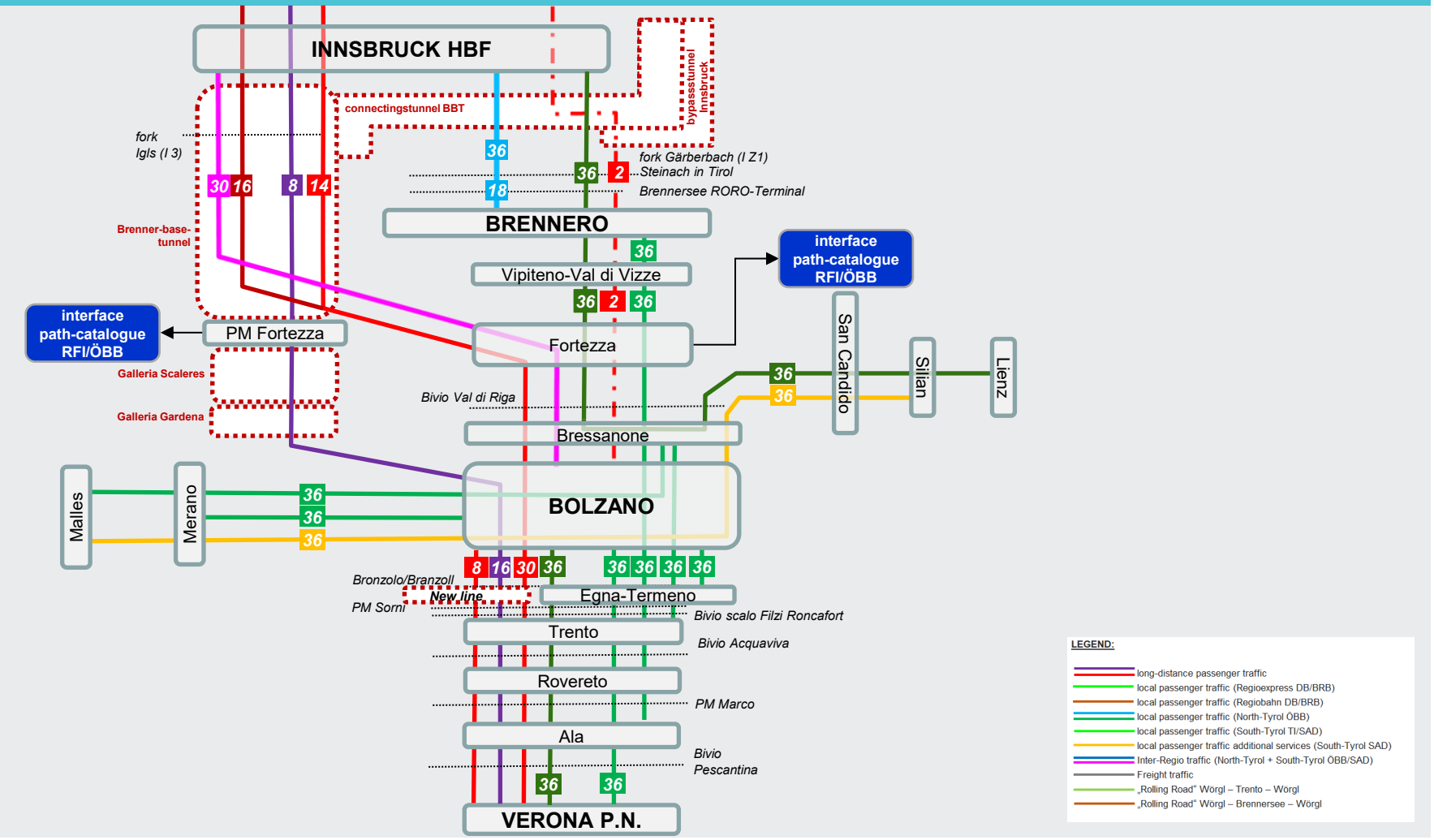
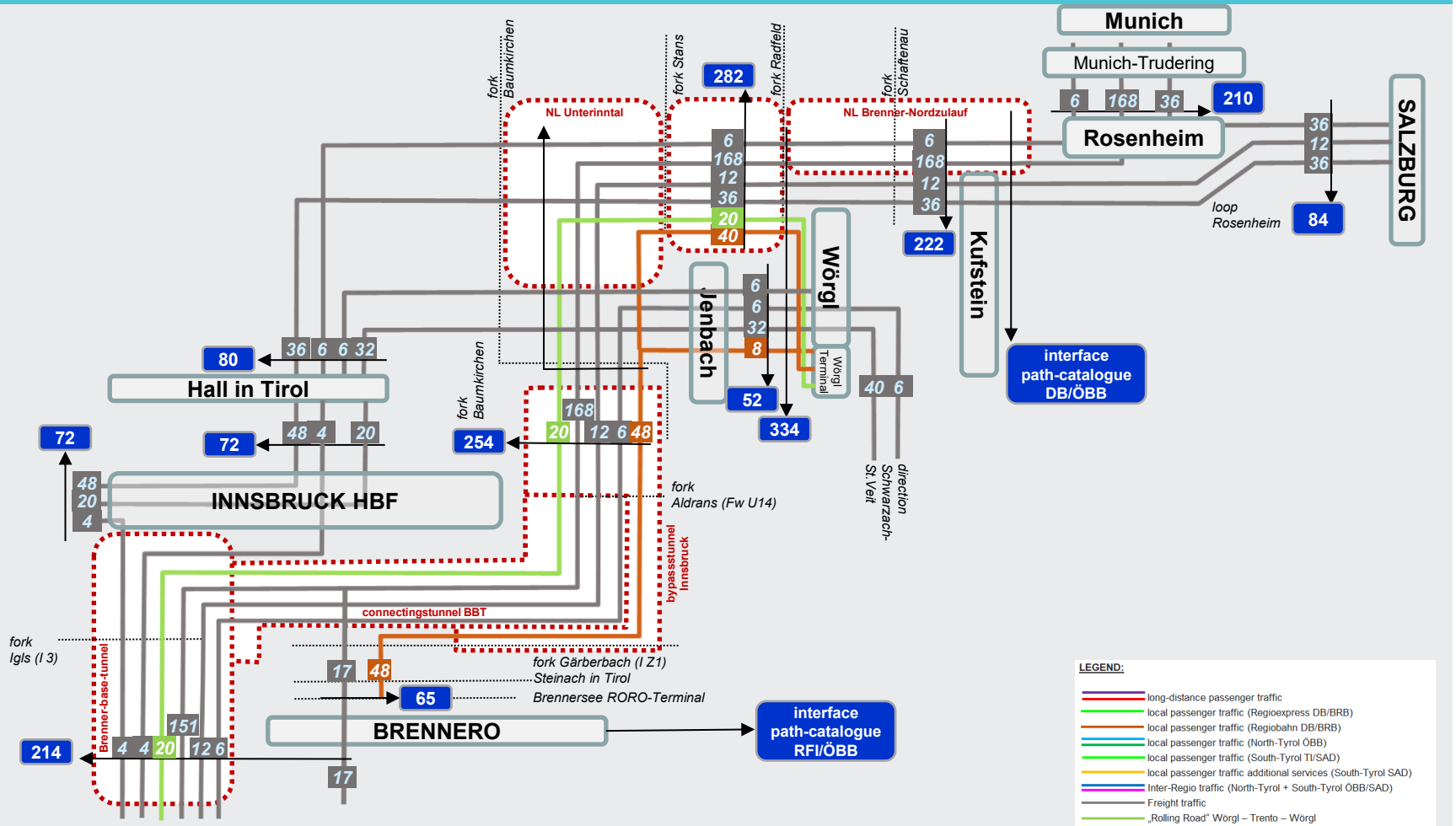


Capacity study 204X

CAPACITY-UTILIZATION BRENNER-NORTHERN ACCESS ROUTE 204X

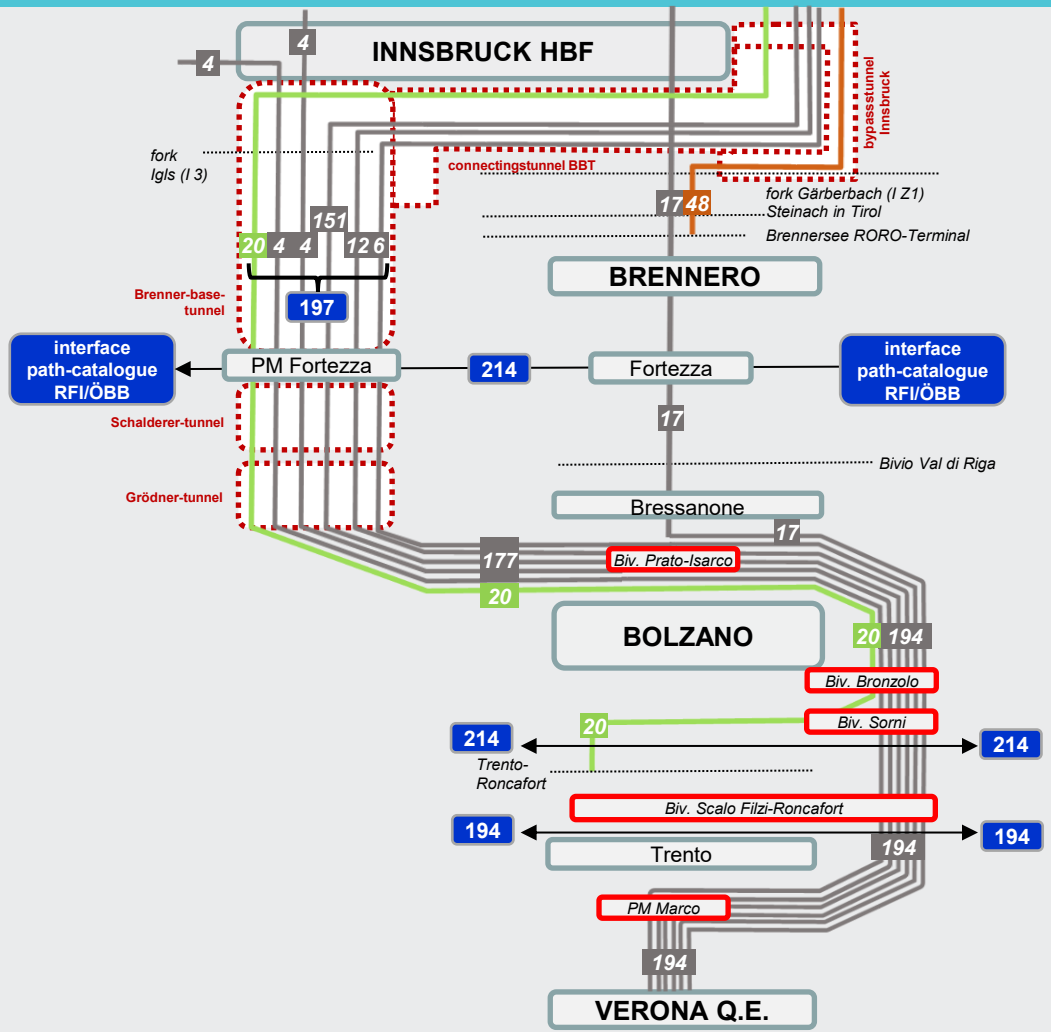
QUANTITY FRAMEWORK FOR FREIGHT TRANSPORT



Capacity study 204X

CAPACITY-UTILIZATION BBT + BRENNER-SOUTHERN ACCESS ROUTE 204X

QUANTITY FRAMEWORK FOR FREIGHT TRANSPORT



Load distribution according to freight transport paths

North-south-direction
- *Via BBT* 109 FT
- *Via Brenner/Brennero* 5 FT

South-north-direction
- *Via BBT* 88 FT
- *Via Brenner/Brennero* 12 FT

LEGEND:
- long-distance passenger traffic
- local passenger traffic (Regioexpress DB/BRB)
- local passenger traffic (Regiobahn DB/BRB)
- local passenger traffic (North-Tyrol ÖBB)
- local passenger traffic (South-Tyrol TI/SAD)
- local passenger traffic additional services (South-Tyrol SAD)
- Inter-Regio traffic (North-Tyrol + South-Tyrol ÖBB/SAD)
- Freight traffic
- „Rolling Road" Wörgl – Trento – Wörgl
- „Rolling Road" Wörgl – Brennersee – Wörgl

BRENNER CORRIDOR PLATFORM

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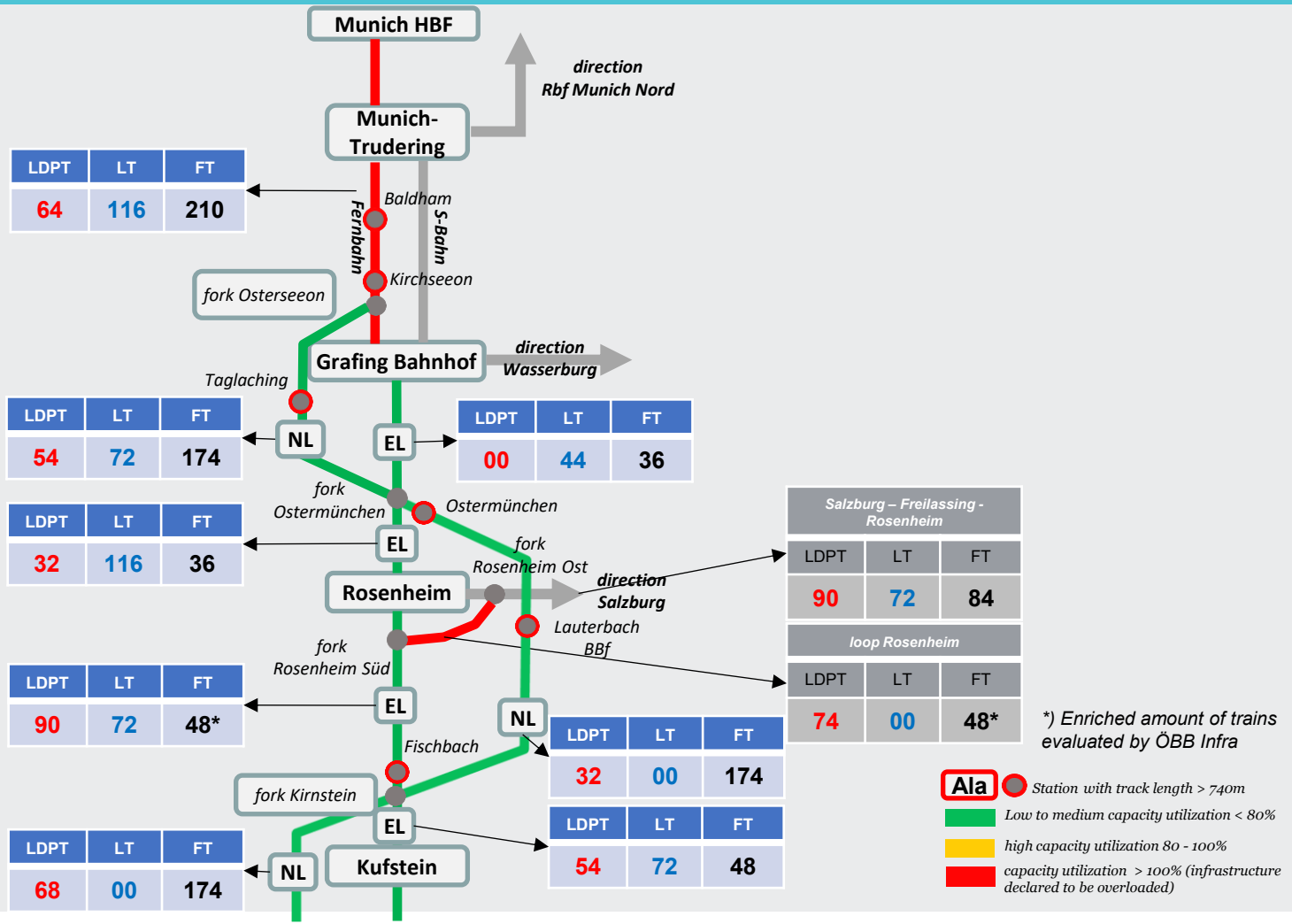
CAPACITY-UTILIZATION BRENNER-NORTHERN ACCESS ROUTE 204X



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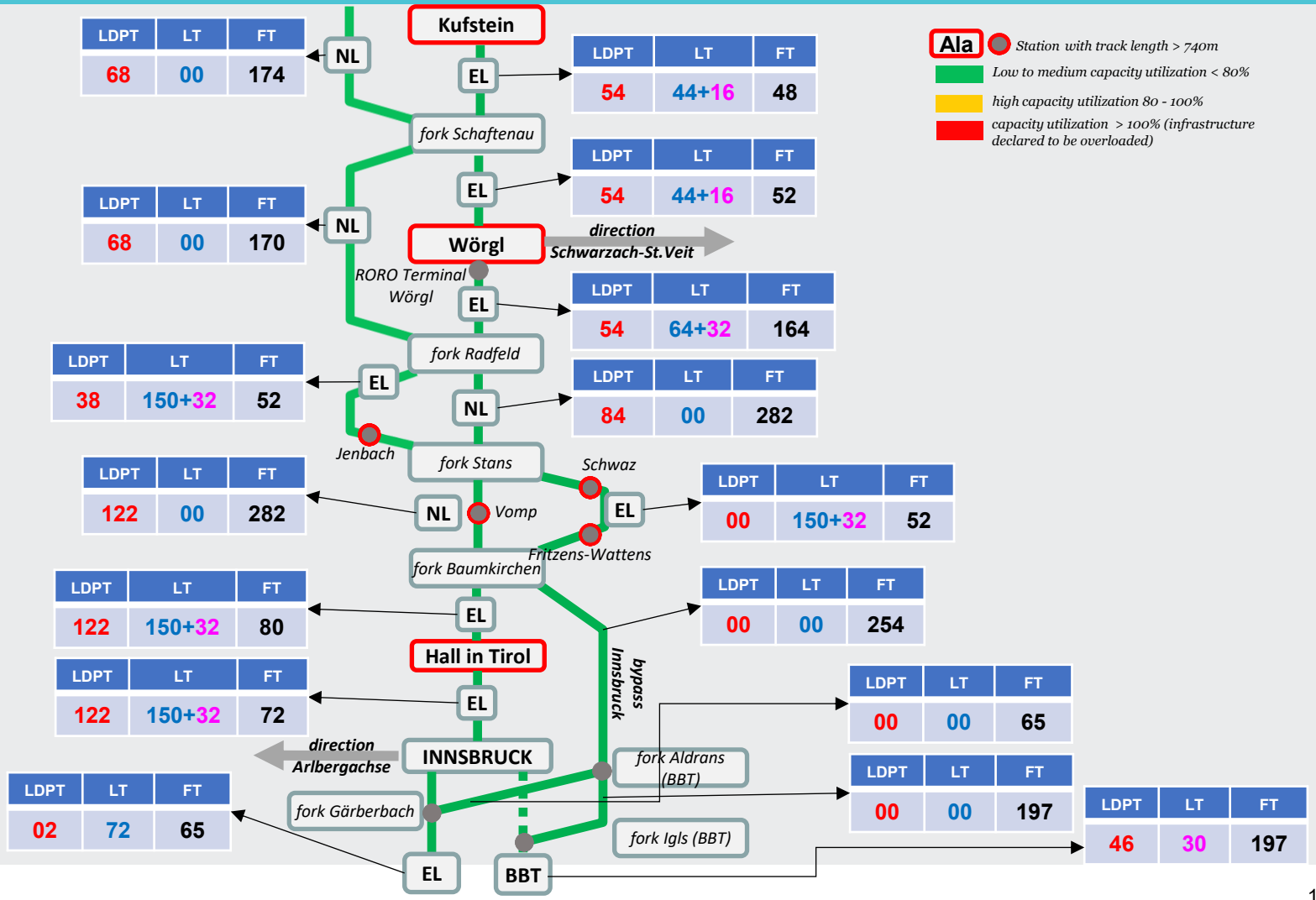
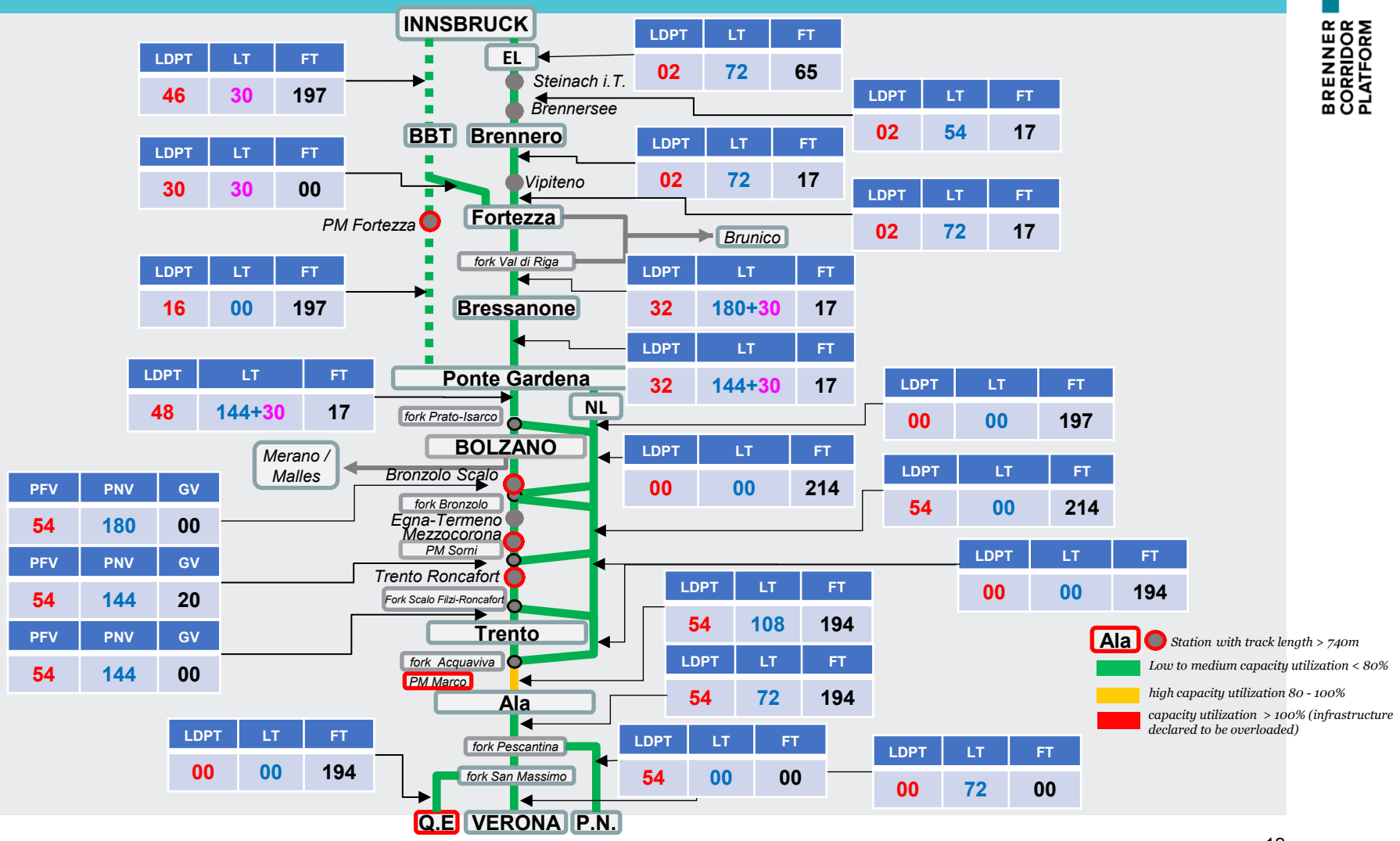


Capacity study 204X

CAPACITY-UTILIZATION BBT + BRENNER-SOUTHERN ACCESS ROUTE 204X



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DATA TRANSFER OF THE PATH-CATALOG TO RFI

► Path-catalog RFI/DB/ÖBB

- Finalization of the coordinated train numbers from long-distance/local passenger transport and freight transport at the Kufstein interface between Germany and Austria
  - the infrastructural basis of the Brenner northern approach can be seen in slide 4
  - the train numbers are based on the quantity framework for passenger traffic/freight traffic on slides 6/8
- Connection points of the path-catalog data RFI/ÖBB is Fortezza/Franzensfeste (existing line) or PM Fortezza (new line)
  - the infrastructural basis of the Brenner northern approach can be seen in slide 5
  - the train numbers are based on the quantity framework for passenger traffic/freight traffic on slides 7/9
    - All market segments are represented in the route catalog (→ capacity utilization)
    - The long-distance passenger transport market segment is based on the BCP's passenger transport study, the basics of the D-Takt and Austria's national offer reviews
    - The local passenger transport market segment is based on the basics of the D-Takt, national offer reviews in North Tyrol for the Brenner northern approach (Lower Inn Valley), as well as the „Landesplan für nachhaltige Mobilität 2035“/«Piano Provinciale della Mobilità Sostenibile 2035» of the provinces of North Tyrol, South Tyrol and Trentino

RJ 382	25.b		Personen-Fernverkehr		VERONA PORTA NUOVA	ab	07:12	NBS Verona PN - VKN Pescantina; ABS VKN Pescantina - Fortezza; Brenner-Basis-Tunnel ABS Innsbruck - VKN Baumkirchen; NBS VKN Baumkirchen - VKN Osterseeon	STAZ. FORTEZZA durch	09:12:00			durch VKN Schaftenau	10:08:00	MÜNCHEN HBF	10:48	an	Rovereto 07:44/46 - Trento 07:59/08:01 - **Bolzano/Bozen 08:31/33** - Bressanone/Brixen 09:01/03 - BBT - **Innsbruck Hbf 09:40/44** -	RJ 2-Garnitur einfach 622t / 258m / 9Wg - BR1216 Vmax 230 km/h
400186	82	Güterverkehr		VERONA QUADRANTE EUROPA	ab	XX:XX	NBS Ponte Gardena - VKN Osterseeon	durch	21:20:00			durch VKN Schaftenau	22:46:00	durch	23:46:00	MÜNCHEN TRUDERING				2000 t / 740 m / BR 2159 od. 193
400188	83	Güterverkehr		VERONA QUADRANTE EUROPA	ab	XX:XX	NBS Ponte Gardena - VKN Osterseeon	durch	21:27:00	Übf. VOMP 22:23/22:30		durch VKN Schaftenau	23:00:00	durch	00:00:00	MÜNCHEN TRUDERING				2000 t / 740 m / BR 2159 od. 193

Capacity study 204X

REINVESTMENT IN INFRASTRUCTURE FOR 204X – ÖBB BRENNER NOTHERN ACCESS ROUTE

► station of Kufstein

- 20% of freight traffic from fork Schaftenau (A) – planned to fork Kirnstein (D) on existing route (see slide 11) (an increase for the purpose of using the services at Kufstein station is possible)
- predictable amount of freight traffic – 48 freight paths fork Schaftenau (A) – fork Kirnstein (D)
- storage capacity: Suitability of 3-4 track axes 740m train length / several track axes 650m or 550m train length
- traction service corresponds to the current condition

► station of Wörgl

- 30% of freight traffic from fork Radfeld (A) – planned to fork Schaftenau(A)/Kirnstein (D) on existing route (see slide 11) (an increase for the purpose of using the services at Kufstein station is possible)
  - predictable amount of freight traffic
    - 52 FT-paths fork Radfeld - fork Schaftenau → towards Munich/Salzburg
    - 68 FT-paths RORO fork Radfeld – Wörgl terminal → towards Brennersee/Trento
    - 38 FT-paths RORO fork Radfeld – Wörgl → Richtung the Tauern-axis
  - displaced freight transport by fast long-distance passenger transport
    - 11 FT-paths south-north direction
    - 10 FT-paths north-south direction
- storage capacity: Suitability of 3-4 track axes 740m train length / several track axes 650m or 550m train length
- traction service corresponds to the current condition