



BENCHMARKING MÜNCHEN

Topic:

**Challenges of the Bavarian transportation system –
How do Munich and Oberbayern solve the funding of infrastructure investments?**

Speaker:

Hans Peter Göttler, Head of Transport Department

Bavarian Ministry of

Economic Affairs, Infrastructure, Transport and Technology

Date:

Thursday, 09 February 2012, 9:30 a.m.

Venue:

Haus der Bayerischen Wirtschaft

Max-Joseph-Straße 5, München



Agenda

1. History and Basic Facts
2. Enhancing Railway Infrastructure in the Munich Metropolitan Region and Connections to Munich Airport
3. The “Bahnknoten München” Concept
4. The funding of railway infrastructure in Germany
5. Projects within the “Bahnknoten München” Concept:
Aim, State of Planning, Funding and Time Frame of the Individual Projects



1. History and Basic Facts (1)

Munich suburban railway (S-Bahn):

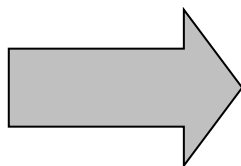
- May 1972: operation starts
- until today: increase in passenger numbers from 200,000 to 800,000
- bottleneck between the central railway station and the station Munich East called “Stammstrecke”: one of the busiest routes in Europe, all lines pass through this tunnel (30 trains per hour in each direction)
- throughout the suburban railway network: 20/40-minute interval with a few lines with 10-minute interval
- partial mixed operation: suburban railway, regional trains, long-distance trains and freight trains on the same tracks → capacity problems



1. History and Basic Facts (2)

Munich Airport:

- 1992: the airport moved from “Munich Riem” to the “Erdinger Moos”, 40 km north-east of Munich
- connections between the airport and downtown Munich are not ideal (45 minutes); neither are connections to the rest of Bavaria
- 2008: “Transrapid” maglev project between airport and Munich central station failed
- extremely busy access routes are partly single track and not yet electrified (e.g. ABS38 towards the east)



development of the regional railway infrastructure does not keep up with the economic growth of the metropolitan region

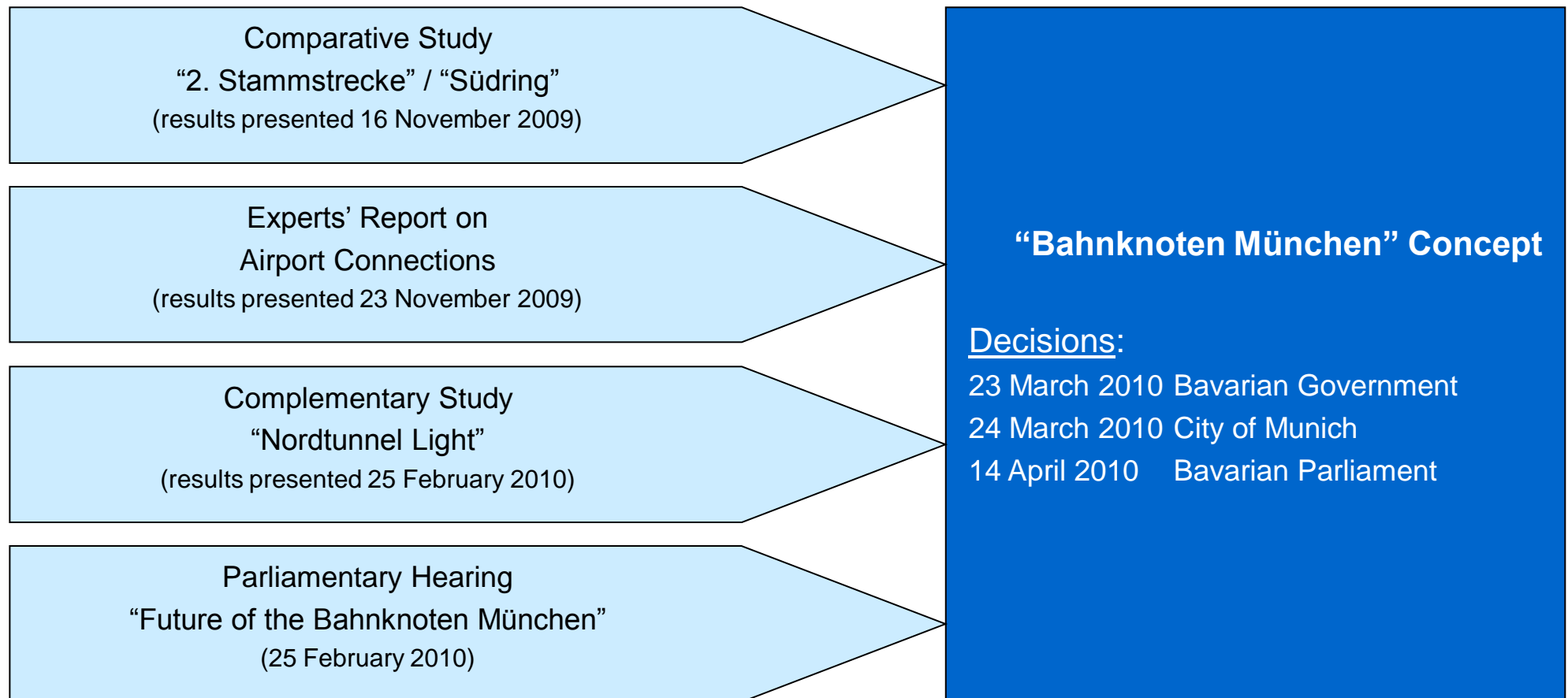


2. Enhancing Railway Infrastructure in the Munich Metropolitan Region and Connections to Munich Airport

- improve the supply by introducing a 15/30-minute interval with “express lines” within the entire suburban railway network
- higher quality of operation and less operational faults through a second tunnel from Munich Central Station to Munich East (“2. Stammstrecke”)
- separate tracks for the suburban railway trains and freight trains
- better connections for the Munich metropolitan region
- better ground connections to Munich Airport from downtown Munich, from the area west of Munich (Augsburg / Bayerisch Schwaben), from north eastern and south eastern Bavaria
- Munich Airport more competitive (national and international market)
- growth impulse for the region

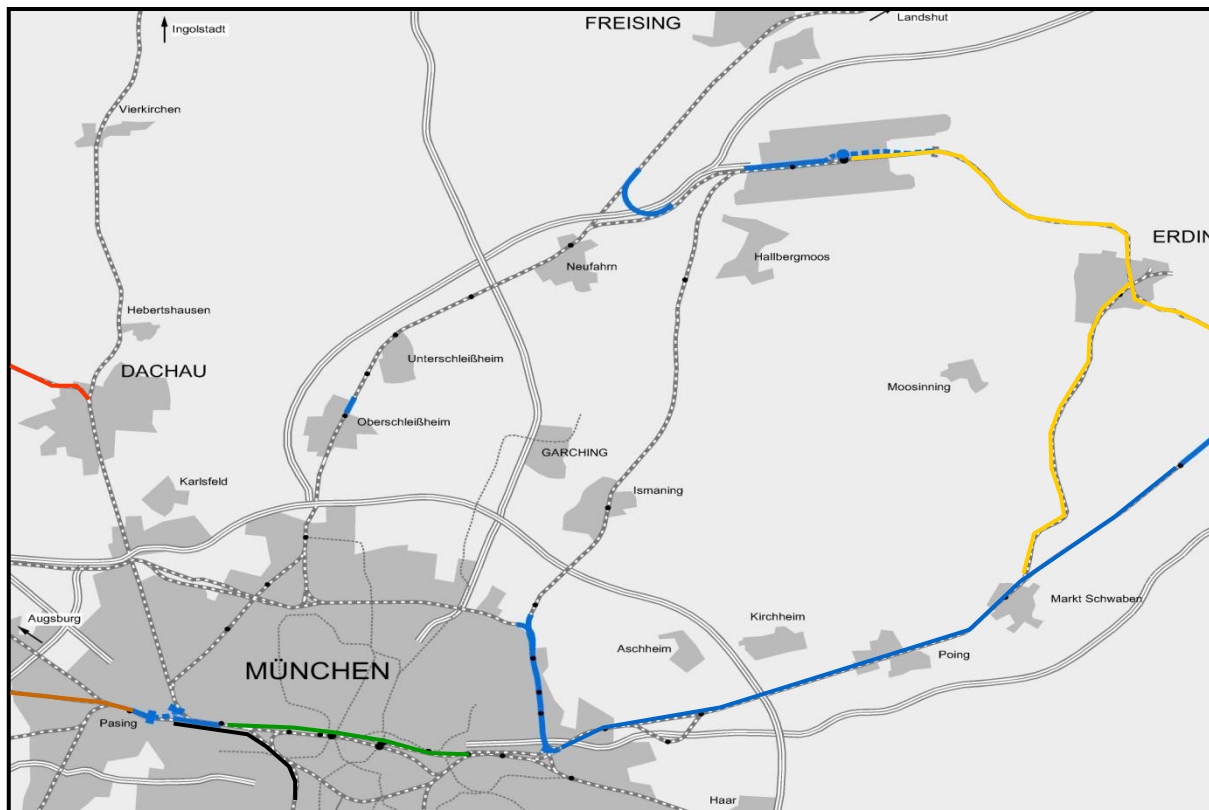


3. The “Bahnknoten München” Concept Planning and Political Decisions





3. The “Bahnknoten München” Concept Overview: Projects



“Bahnknoten München” Concept Infrastructural projects	
“2. Stammstrecke”	
Eastern Corridor	
<ul style="list-style-type: none"> - upgrade Daglfing – Johanneskirchen - Neufahrner Kurve - upgrade Pasing station and connection to the “2. Stammstrecke” - Pasinger Kurve - ABS 38 - second train station at the airport - additional track in Oberschleißheim 	
Erdinger Ringschluss	
<ul style="list-style-type: none"> - Erdinger Ringschluss - Walpertskirchner Spange - (partial) upgrade Erding – Markt Schwaben 	
Upgrade Linie A (Dachau – Altomünster)	
Extension of the S 7 to Geretsried	
Upgrade Pasing – Eichenau	
Sendlinger Spange	



4. The funding of railway infrastructure in Germany

- overall responsibility of funding railway infrastructure lies by law with the federal government in Berlin; funds of the so-called “Bedarfsplan - Schiene”, part of the railway-funding-law “BSchWAG”
- all infrastructure (tracks, stations, energy-lines) is property of the “Deutsche Bahn”, a company, owned by the federal government
- the funding of suburban railway infrastructure works in a different way: here the federal government and the states share by law (“GVFG”) the responsibility for the funding; 60 % for the federal government, 40 % for the state
- in reality all the 16 states share a limited annual budget of the federal government; because of a shortage of funds all projects have to be listed by the states by priority

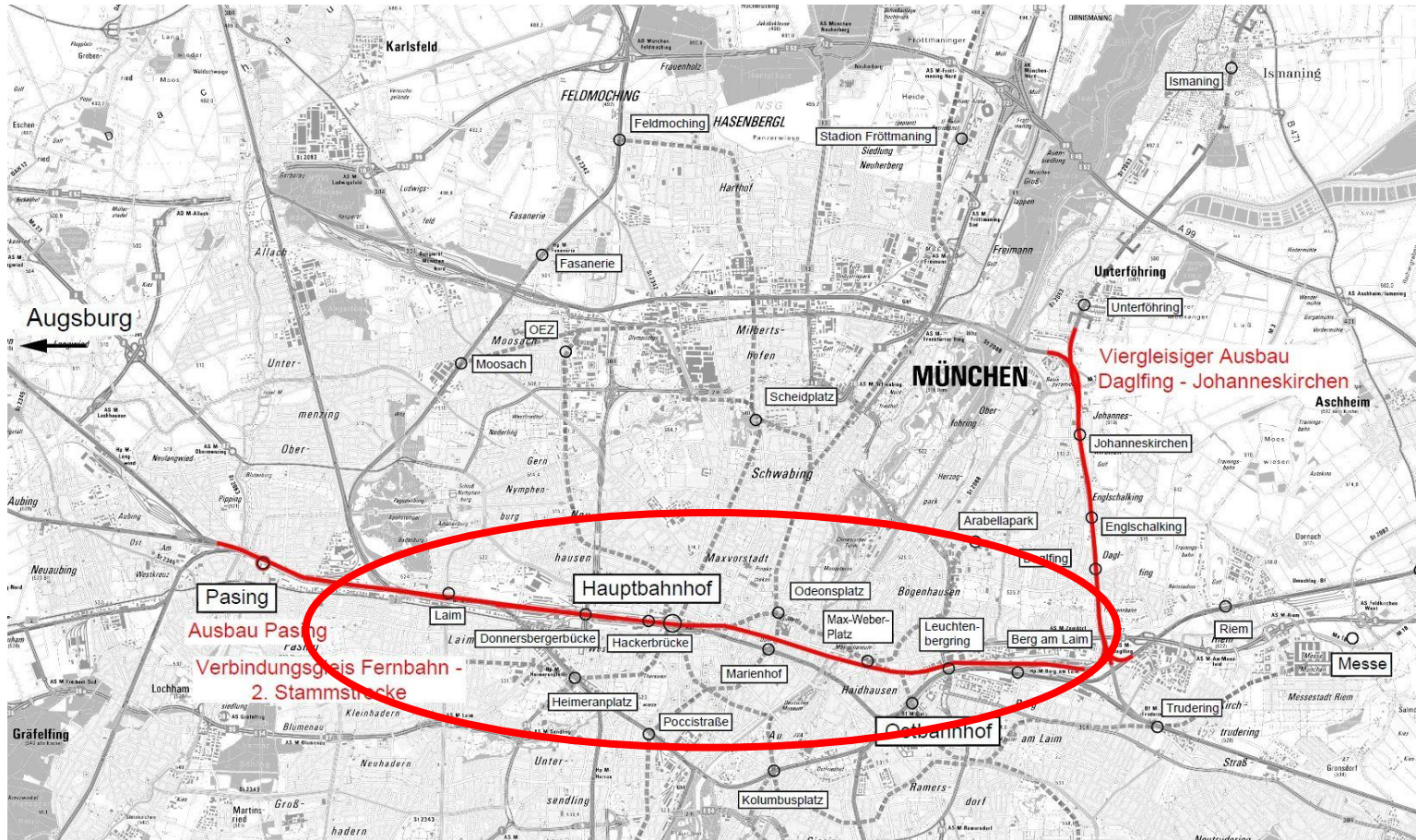


5. Projects within the “Bahnknoten München” Concept: 1st stage of Construction; put into action until 2020

GVFG-Projects (federal contributions)	Bahnknoten München (Funding by the Federal “Bedarfsplan Schiene”)	Projects within the Federal “Bedarfsplan Schiene” (BSchWAG)
“2. Stammstrecke”	4-track upgrade Daglfing – Johanneskirchen	ABS 38 München – Mühldorf – Freilassing
Neufahrner Kurve	upgrade of Pasing station and connection between tracks for regional transport and “2. Stammstrecke”	
Erdinger Ringschluss	Walpertskirchner Spange	
Extension of the S 7 Wolfratshausen – Geretsried		



5. Projects within the “Bahnknoten München” Concept: „2. Stammstrecke“





5. Projects within the “Bahnknoten München” Concept:

„2. Stammstrecke“

aims:

- reduce the operational faults of the suburban railway system
- higher quality of operation (punctuality)
- higher capacity for shorter intervals
- relief of the existing route between Munich Central Station and Munich East
- faster connection to Munich “hot spots” (Hauptbahnhof, Marienplatz)

state of planning: plan approval procedure

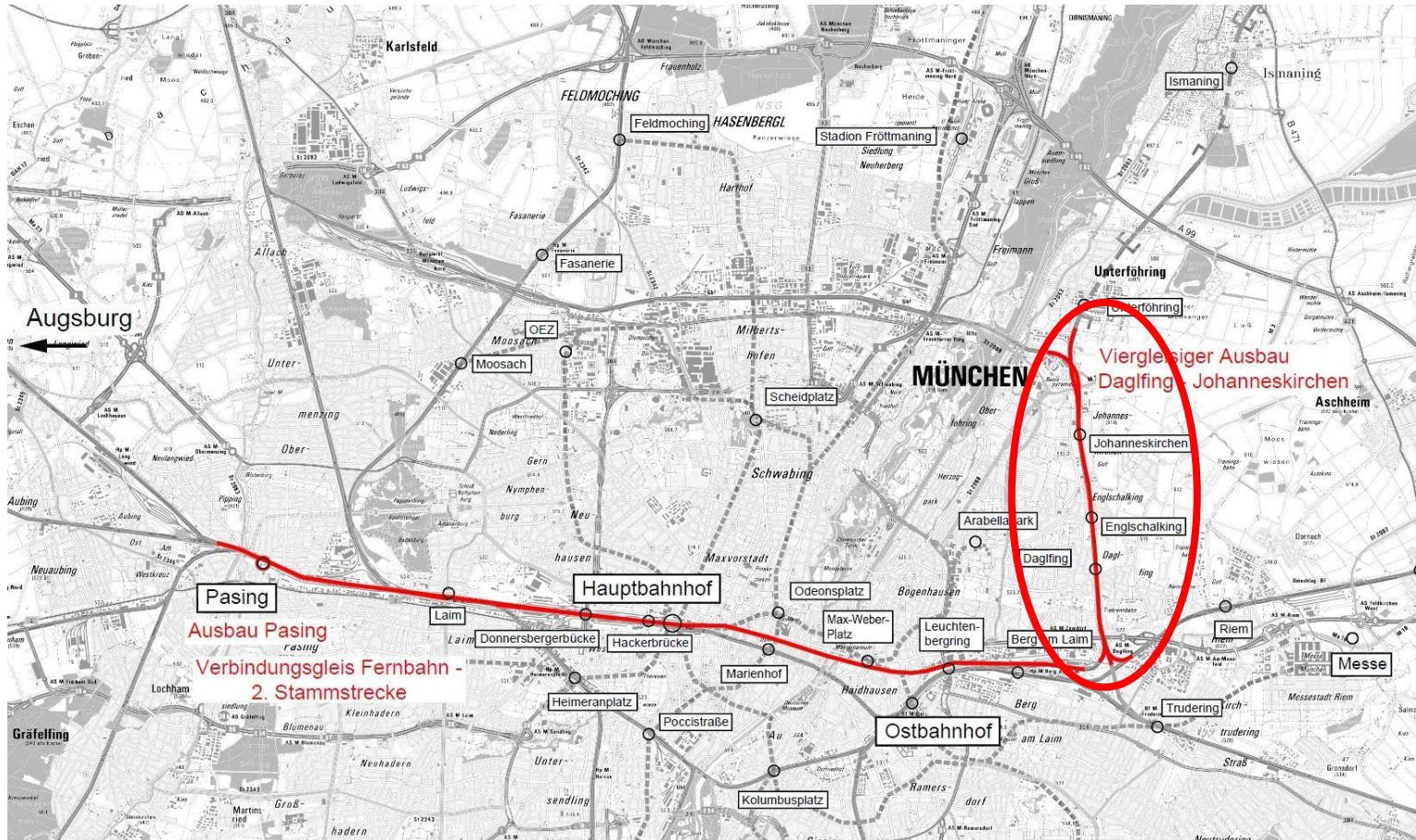
aspired funding:

”Gemeindeverkehrsfinanzierungsgesetz” (GVFG)
→ federal government, state of Bavaria and City of Munich

possible start of operation: 2019



5. Projects within the “Bahnknoten München” Concept: 4-Track upgrade Johanneskirchen - Daglfing





5. Projects within the “Bahnknoten München” Concept:

4-Track upgrade Johanneskirchen - Daglfing

aims:

- fast, direct connection between downtown Munich and Munich airport via express trains
- solving the capacity problems for freight trains
- separate tracks for suburban trains and freight trains

state of planning: feasibility study

aspired funding:

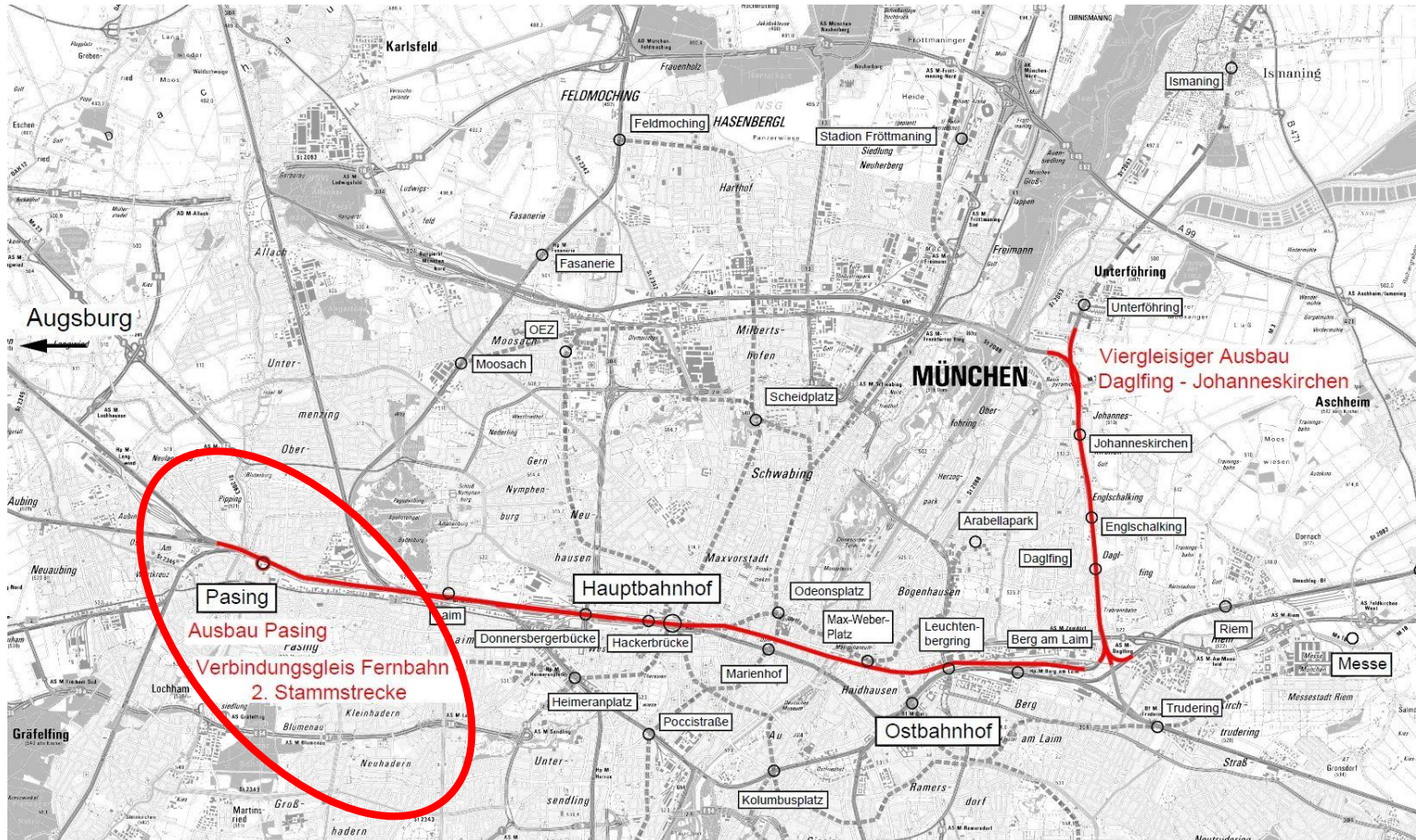
”Bundesschienenwegeausbaugesetz” (BSchWAG)

→ federal government

possible start of operation: 2020



5. Projects within the “Bahnknoten München” Concept: Upgrade of Pasing Station





5. Projects within the “Bahnknoten München” Concept:

Upgrade of Pasing Station

aims:

- fast, direct connection between Augsburg, downtown Munich and Munich airport via the “2. Stammstrecke”

state of planning: feasibility study

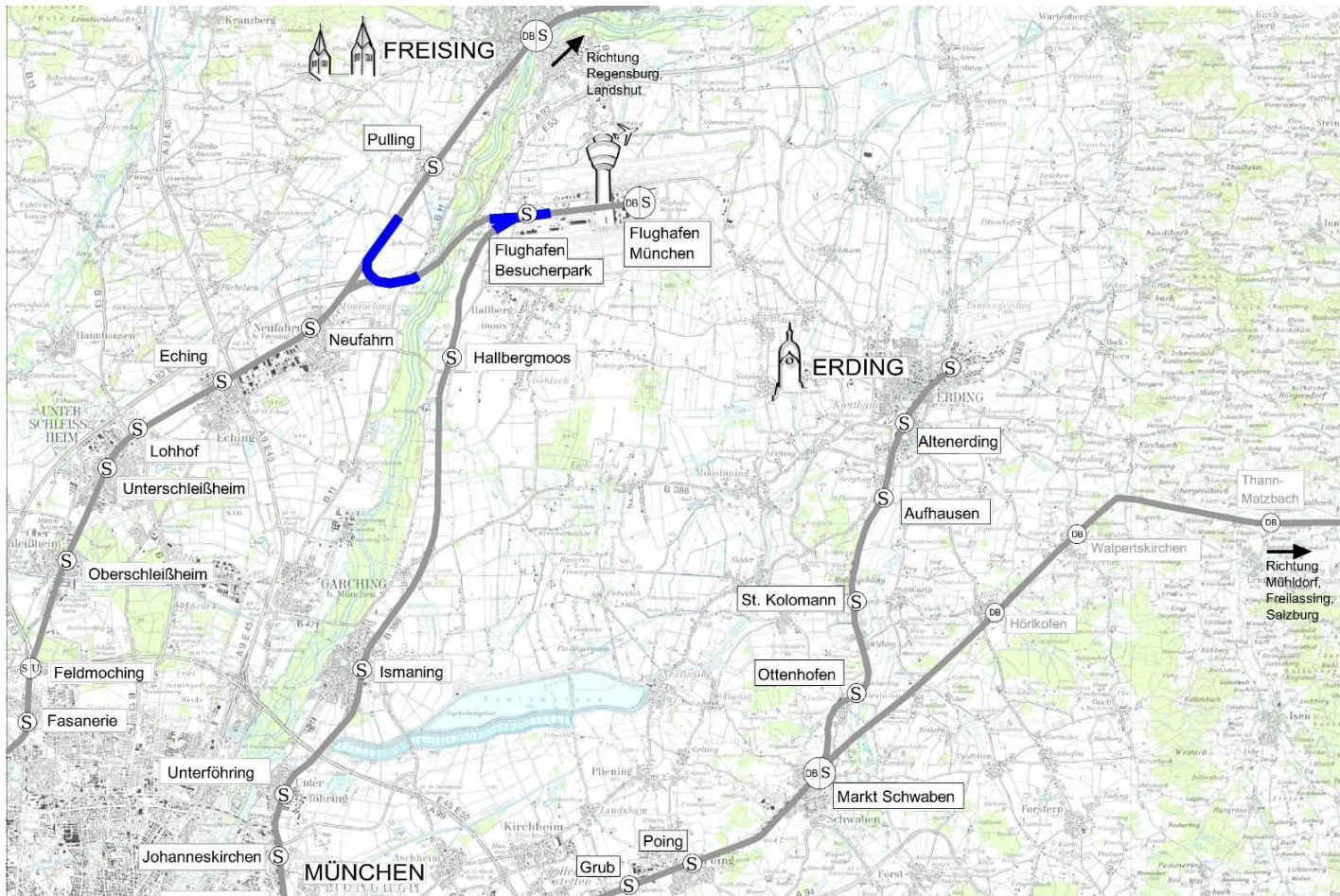
aspired funding:

”Bundesschienenwegeausbaugesetz” (BSchWAG)
→ federal government

possible start of operation: 2020



5. Projects within the “Bahnknoten München” Concept: Neufahrner Kurve





5. Projects within the “Bahnknoten München” Concept:

Neufahrner Kurve

aims:

- fast, direct connection (hourly) between the cities of Regensburg, Landshut, Freising and Munich airport

state of planning: plan approval procedure

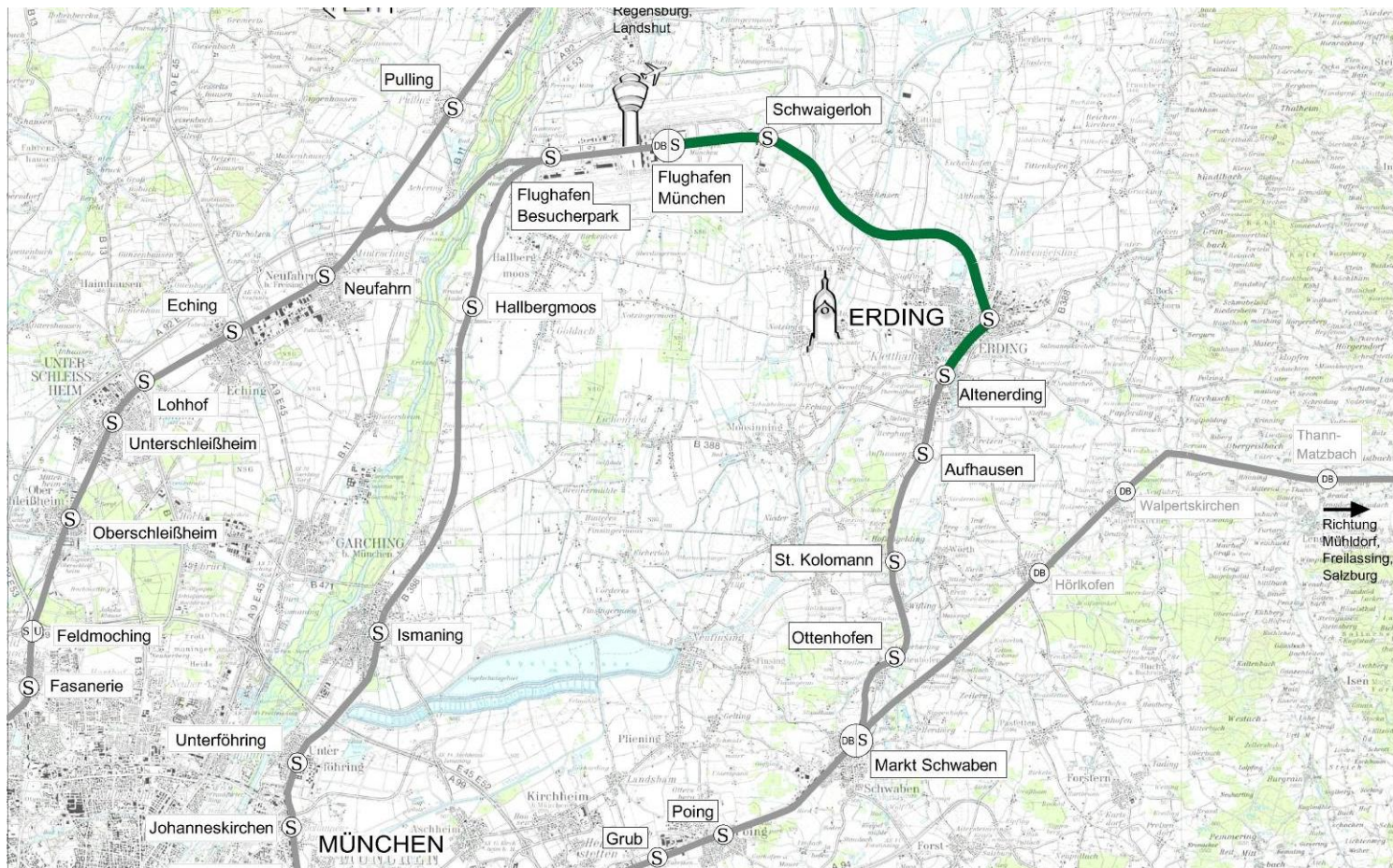
aspired funding:

Gemeindeverkehrsfinanzierungsgesetz” (GVFG)
→ federal government, state of Bavaria

possible start of operation: end of 2016



5. Projects within the “Bahnknoten München” Concept: Bridging the gap between the city of Erding and Munich airport





5. Projects within the “Bahnknoten München” Concept:

Bridging the gap between the city of Erding and Munich airport

aims:

- extension of the suburban line from the city of Erding to Munich airport
- improve the connection from the eastern parts of the metropolitan region of Munich to the airport

state of planning: preliminary planning finished

aspired funding:

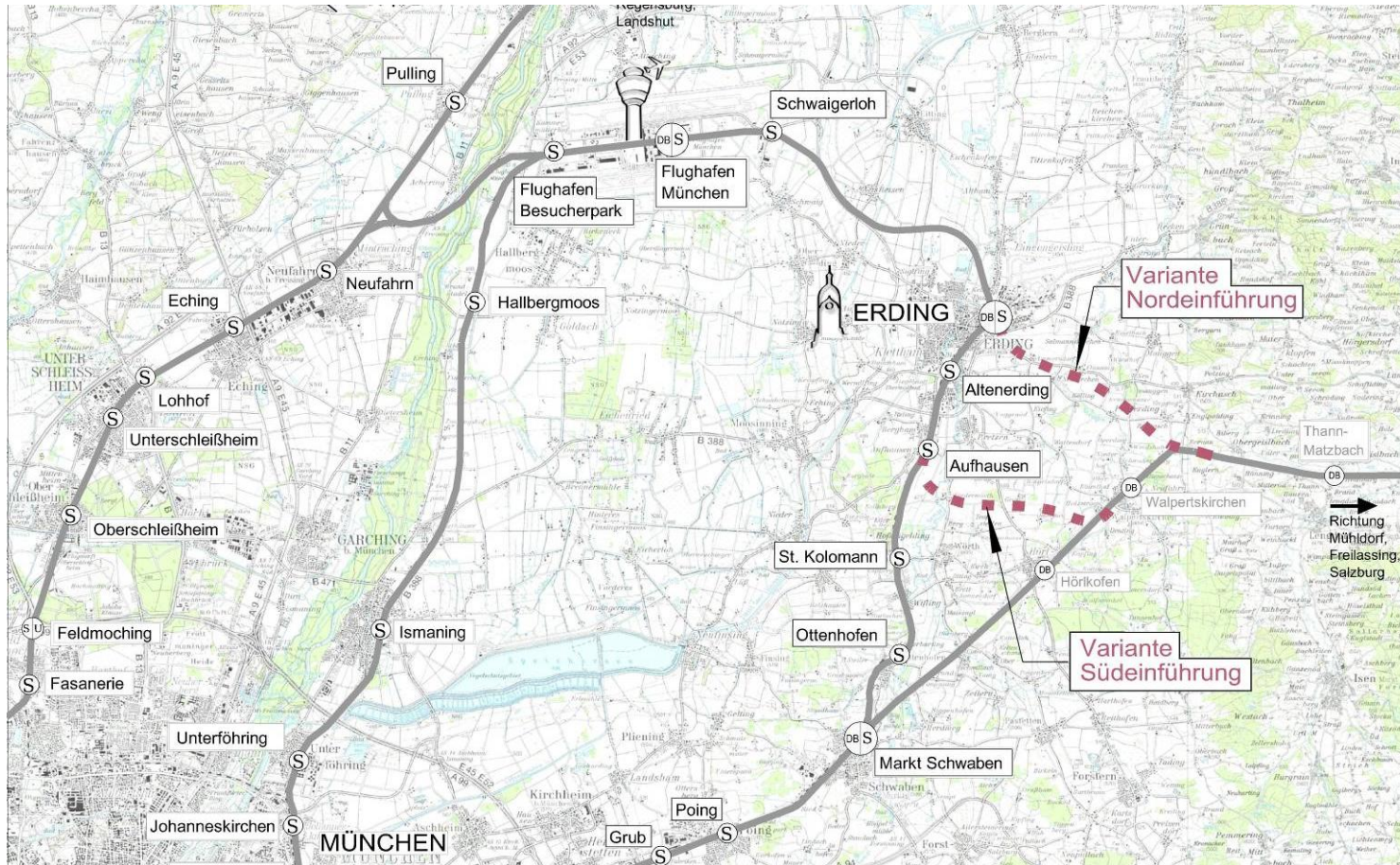
Gemeindeverkehrsfinanzierungsgesetz” (GVFG)

→ federal government, state of Bavaria

possible start of operation: 2019



5. Projects within the “Bahnknoten München” Concept: Walpertskirchner Spange





5. Projects within the “Bahnknoten München” Concept:

Walpertskirchner Spange

aims:

- direct, fast, hourly connection from the cities of Dorfen, Mühldorf an Salzburg to Munich airport
- linking the “ABS 38” and the “Erdinger Ringschluss” together and connecting South-East-Bavaria to the Airport

state of planning: preliminary planning finished (two alternatives)

aspired funding:

”Bundesschienenwegeausbaugesetz” (BSchWAG)

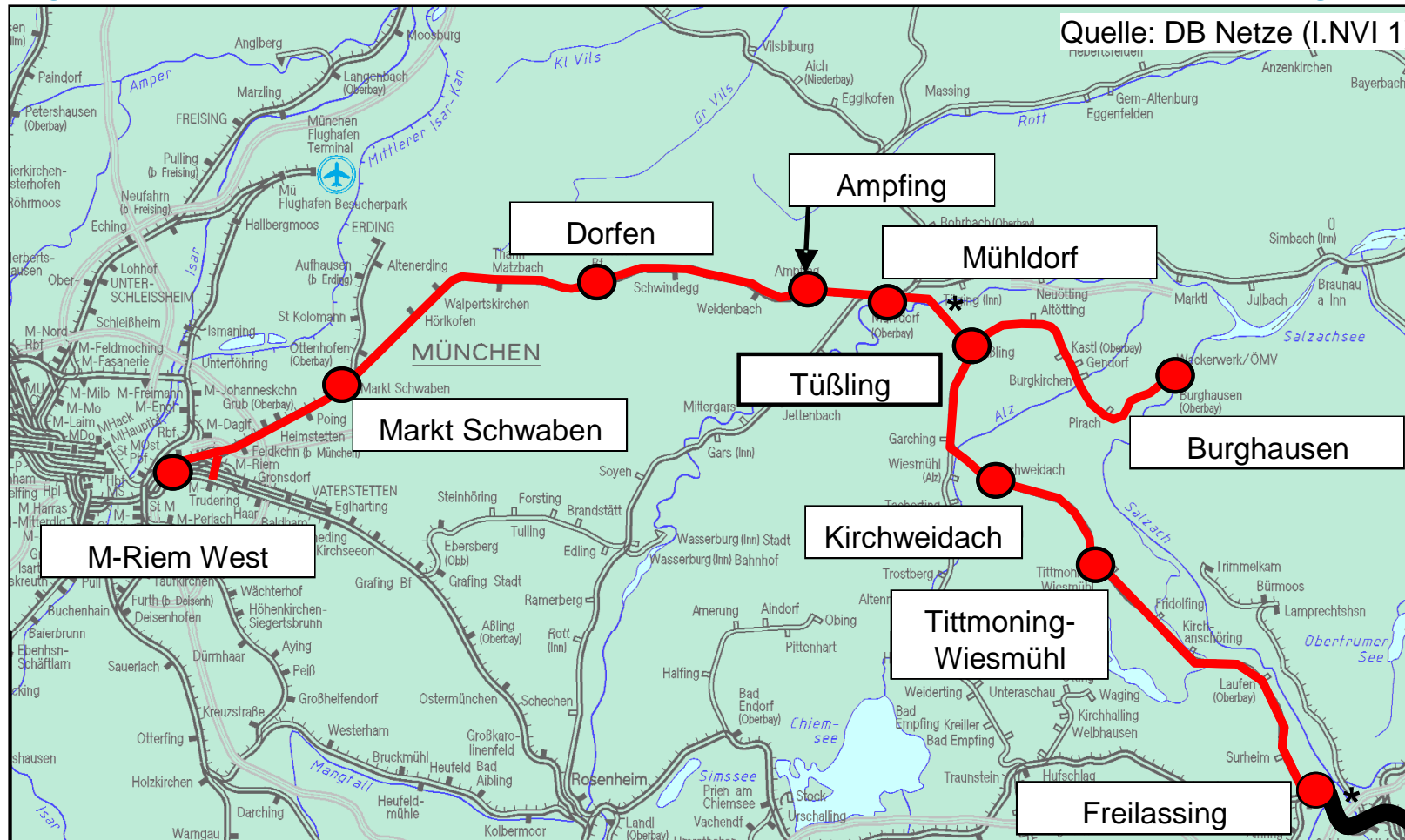
→ federal government

possible start of operation: 2020



5. Projects within the “Bahnknoten München” Concept:

Upgrade and electrification of the „ABS 38“ between Munich and Salzburg





5. Projects within the “Bahnknoten München” Concept:

Upgrade and electrification of the „ABS 38“ between Munich and Salzburg

aims:

- direct, fast connection between Salzburg, Mühldorf and Munich airport
- better connection between Munich and the “Bavarian Chemical Triangle” near the city of Burghausen for freight trains and passenger trains

state of planning: new definition of the project by the federal government in Oct. 2010

- double-track upgrade Markt Schwaben – Ampfing
- double-track upgrade Kirchweidach – Tittmoning-Wiesmühl
- electrification Markt Schwaben – Freilassing
- electrification Tüßling – Burghausen

preliminary planning currently carried out by Deutsche Bahn

aspired funding:

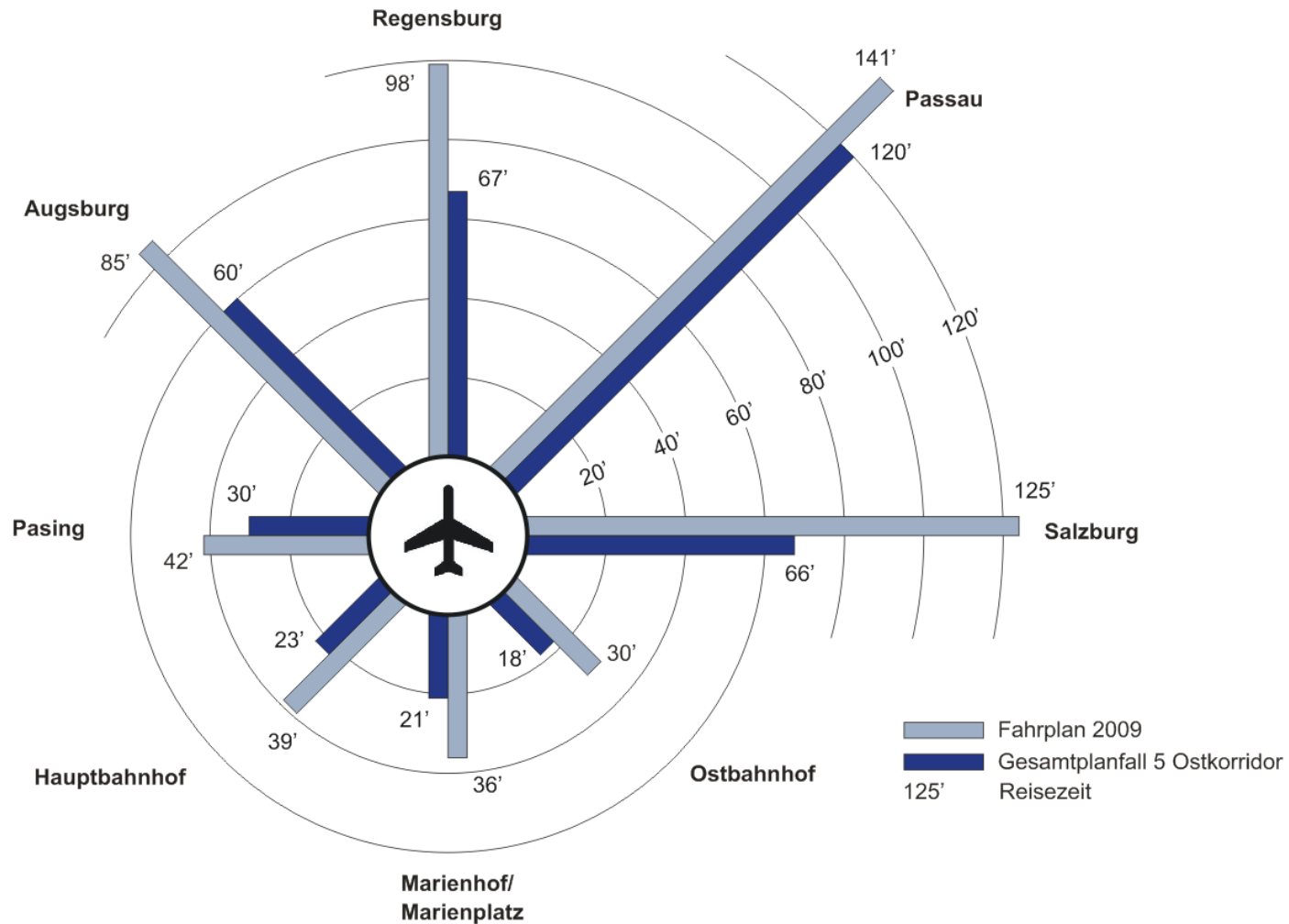
”Bundesschienenwegeausbaugesetz” (BSchWAG)

→ federal government

possible start of operation: 2020



The „Bahnknoten München Concept: Reducing the Travelling Times





Thank you for
your attention!

Transport Department
February 9, 2012