

Deutschlandtakt - further development towards Europatakt

EPF Conference 2021

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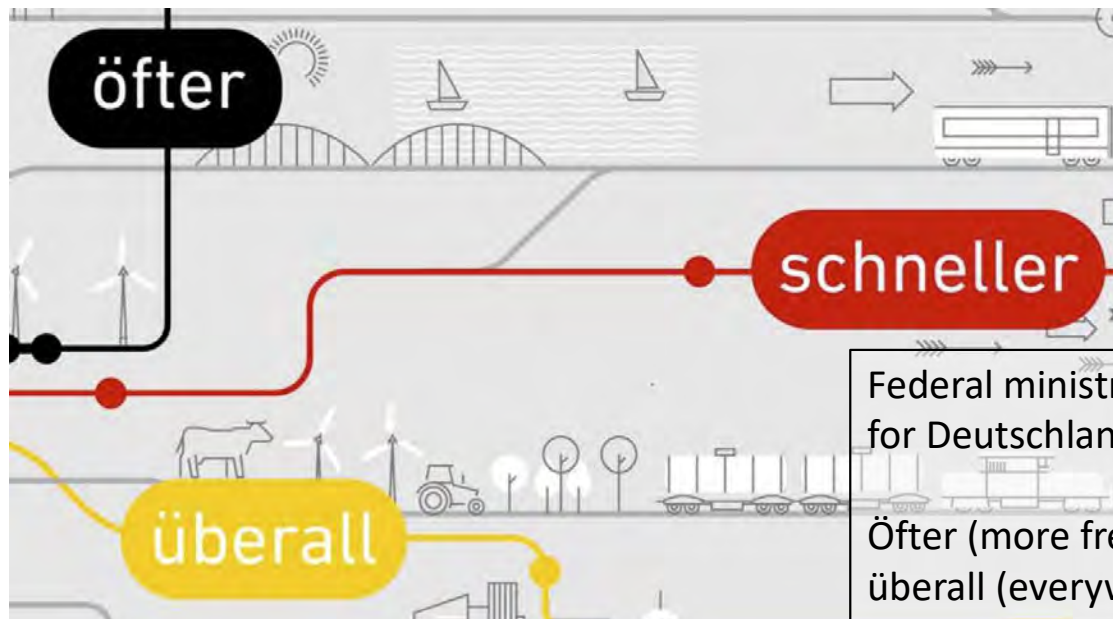


Deutschlandtakt



Europatakt

**From Deutschlandtakt to Europatakt –
a remarkable development, initiated by „rail NGO“ in Germany**



EPF conference 26th June 2021
presented by Hans Leister as one
of the initiators of Deutschlandtakt.

Federal ministry of transport with its campaign
for Deutschlandtakt:

Öfter (more frequent), schneller (faster) and
überall (everywhere)



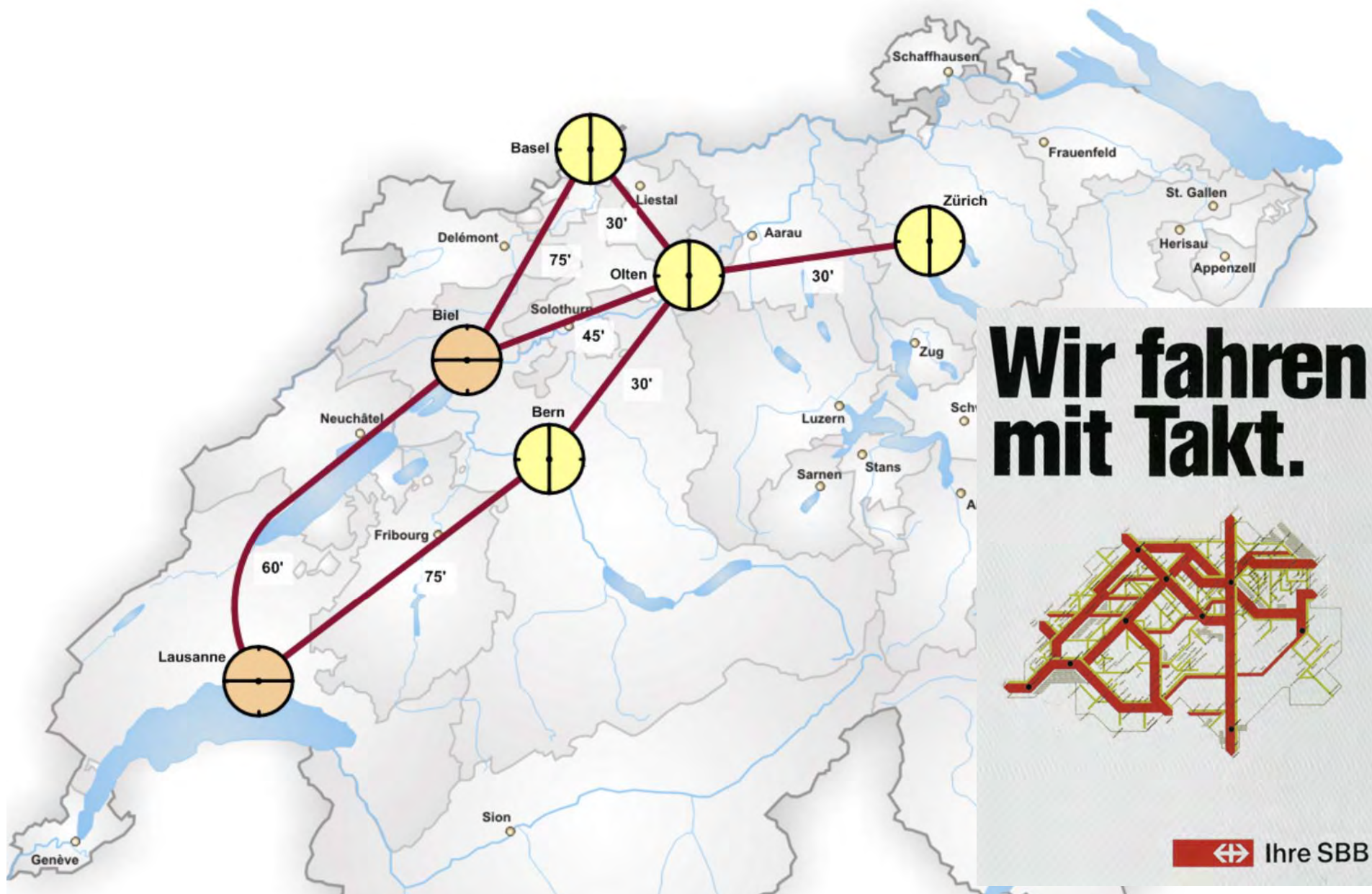
2008 start of the
lobby campaign for Deutschlandtakt.



Situation 2008:

DB president Hartmut Mehdorn tried to sell half of the shares of the Deutsche Bahn to private shareholders, including the infrastructure.
Target: World wide activities in logistics, German rail as starting point.

Indipendent experts developped a positive vision of a rail company
with clear state control: Deutschlandtakt.



Initiative Deutschlandtakt

Members of the informal group:

- Passenger association
- PTA association
- Environmental group
- Independent cargo operators org.
- Operators' association
- Several independent rail experts



Today: Deutschland is government strategy – supported by all parties (except far right AfD)



All Parties want more rail transport: Part of the solution, to reduce and finally eliminate CO2 emission.

Der Schienenverkehr ist ein Schwerpunkt unserer verkehrspolitischen Agenda. Bahnfahren soll in-
nereuropäisch günstiger und attraktiver als Fliegen sein. Wir wollen rasch einen Deutschlandtakt
umsetzen und einen Europatakt aufbauen. Hierfür werden wir investieren: in den Aus- und Neu-

Wir sorgen für nachhaltige Mobilität

Investitionen für starke Bahnen in Stadt und Land

Die Bahn ist ein öffentliches, soziales Gut und das Rückgrat einer nachhaltigen Mobilitätswende. Wir
wollen den Bahnverkehr ausbauen, alle deutschen Großstädte mit regelmäßigen Verbindungen an

Antrag

der Fraktionen der CDU/CSU und SPD

Die Schiene europaweit stärken – Das Jahr der Schiene erfolgreich nutzen

**Schienenverkehr neu denken – Mit mehr
Wettbewerb zu einer attraktiveren Bahn**

Wir werden die Verkehrswende voranbringen und bis 2030 das modernste und klimafreundlichste
Mobilitätssystem Europas aufbauen. Das ist eine gesamtstaatliche Aufgabe, zu der die Bundes-
regierung ihren Beitrag leisten wird, die aber auch Länder und Kommunen in die Pflicht nimmt.
Unser Ziel ist eine Mobilitätsgarantie: Jede*r Bürger*in – in der Stadt und auf dem Land - soll einen
wohnortnahen Anschluss an den öffentlichen Verkehr haben. Dazu nutzen wir die Möglichkeiten
der Digitalisierung: mit neuen Mobilitätsdienstleistungen, die vernetzte Mobilitätsangebote auf
digitalen Plattformen nutzbar machen. Modelle wie das 365-Euro-Ticket oder Modellprojekte für
einen ticketfreien Nahverkehr unterstützen wir.
Wir werden einen Mobilitätsplan 2030 auf den Weg bringen, der den öffentlichen Personennah-
verkehr und den Schienenverkehr auf ein neues Niveau bringt. Der Bund wird durch Austauschpro-

Deutschlandtakt – two sides of the coin.

- **Attractivity:** Regular interval services and best-possible connections are key to for an attractive nationwide system of public transport.
- **Effectivity:** If the target timetable for the network is fixed before start of construction, expansion of rail infrastructure is possible with effective use of limited investment budgets.

Punctuality and Deutschlandtakt: Precondition – and result.

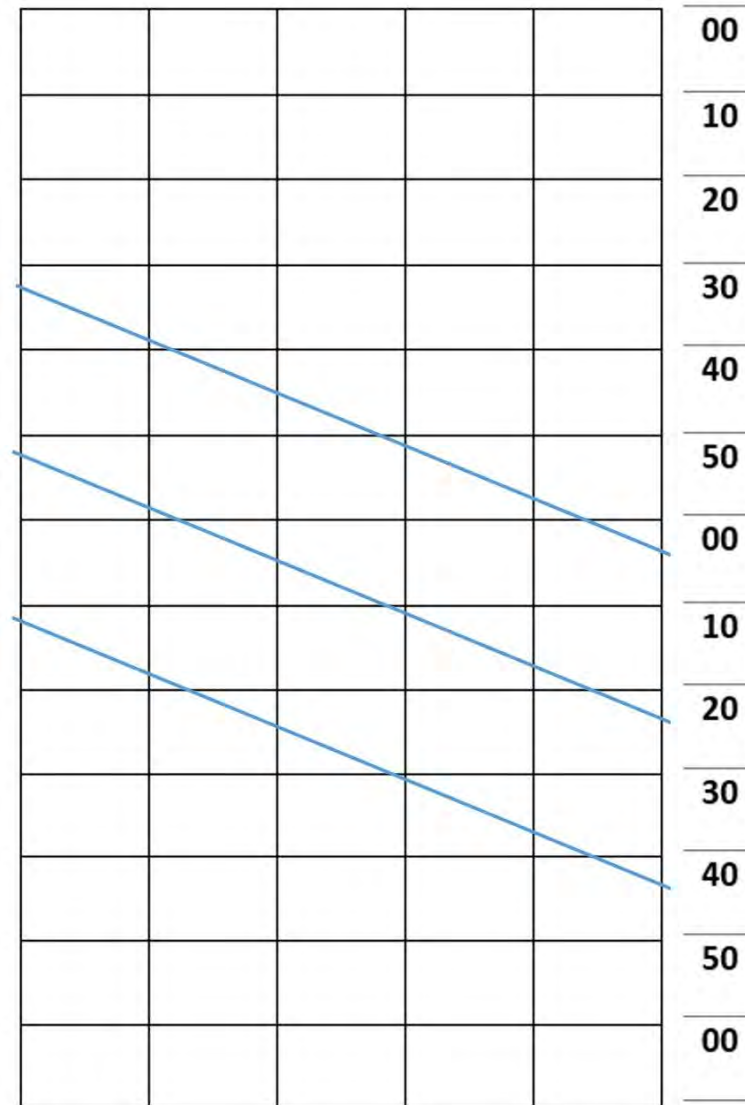


Three levels of Taktfahrplan

1. Train service with regular intervals
2. Zero-symmetric Taktfahrplan
3. Integraler Taktfahrplan

Three levels: 1

1. Train service with regular intervals on defined lines, for example every 60 minutes (Taktfahrplan).

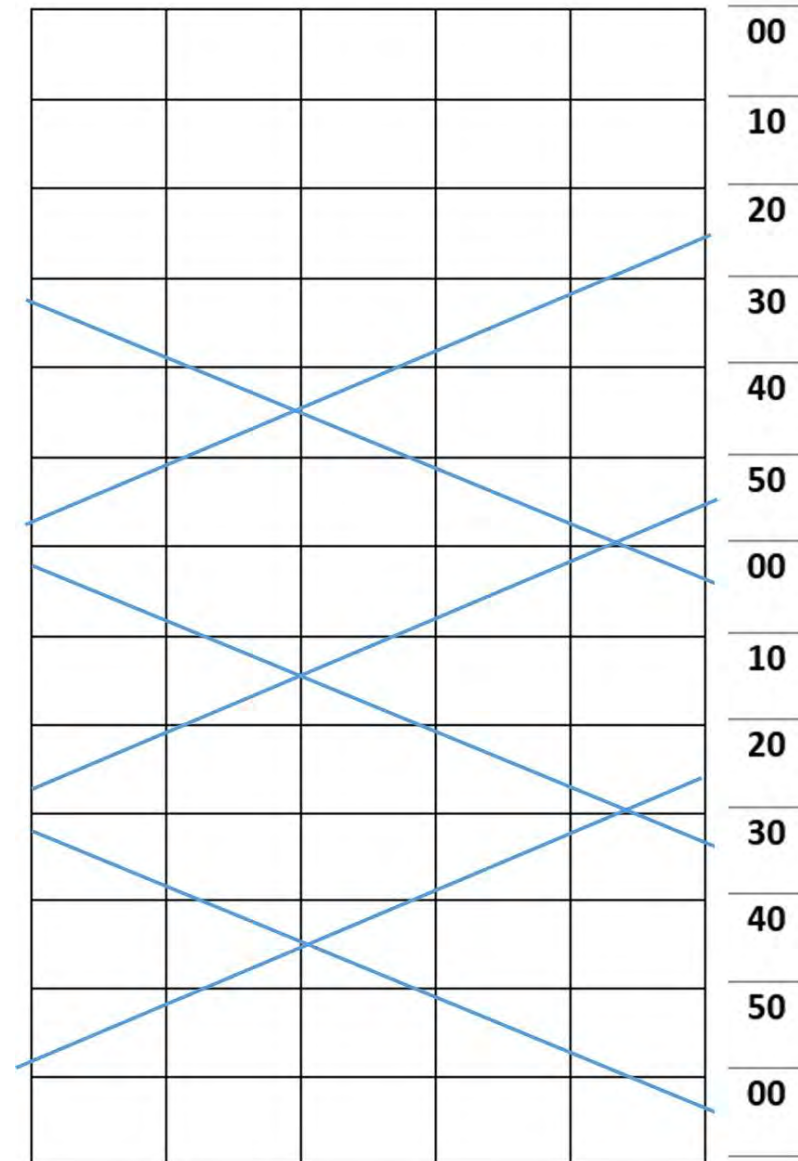


Three levels: 2

2. Zero-symmetric (nullsymmetrischer) Taktfahrplan:

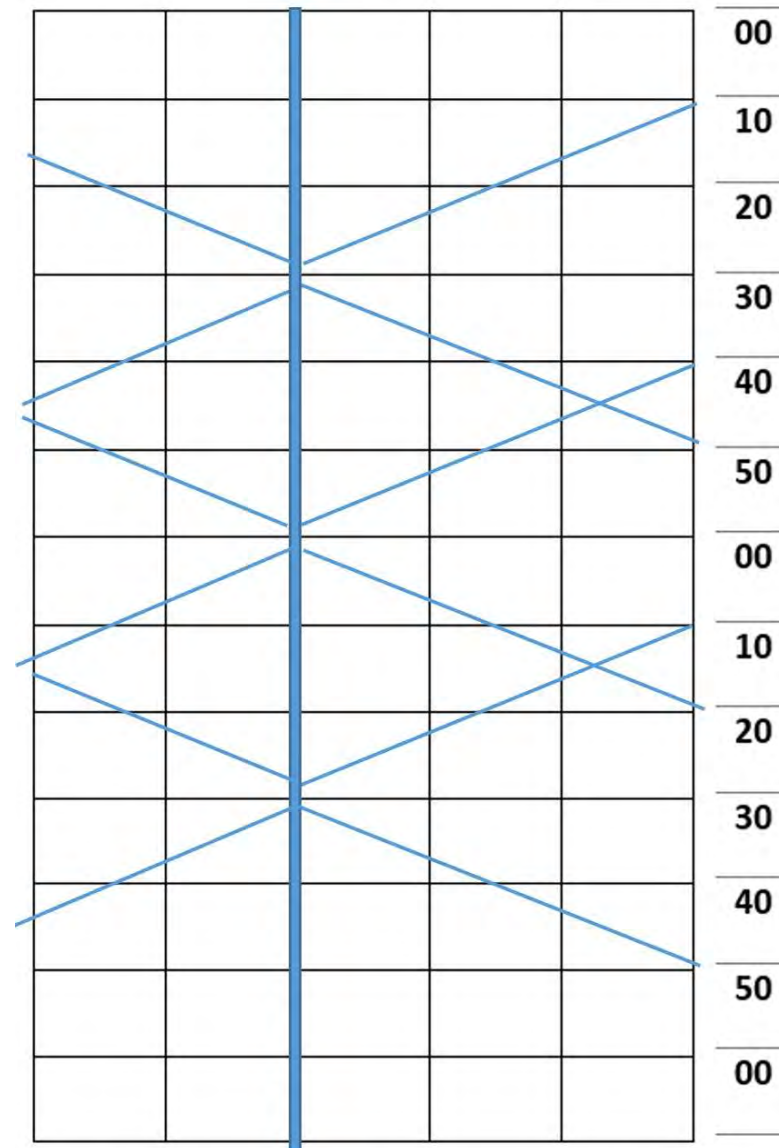
The two directions of the same line meet at the minute zero.

The minute of departure and the minute of arrival at the same station in other direction: symmetric to zero.



Three levels: 3

3. Integraler Taktfahrplan: A system of lines with zero-symmetric timetable.
Meeting at hubs at the minutes zero or 30.



Taktfahrplan in Germany

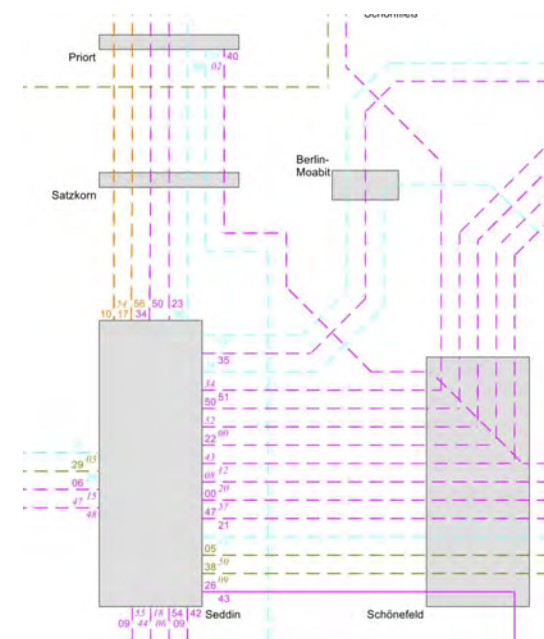
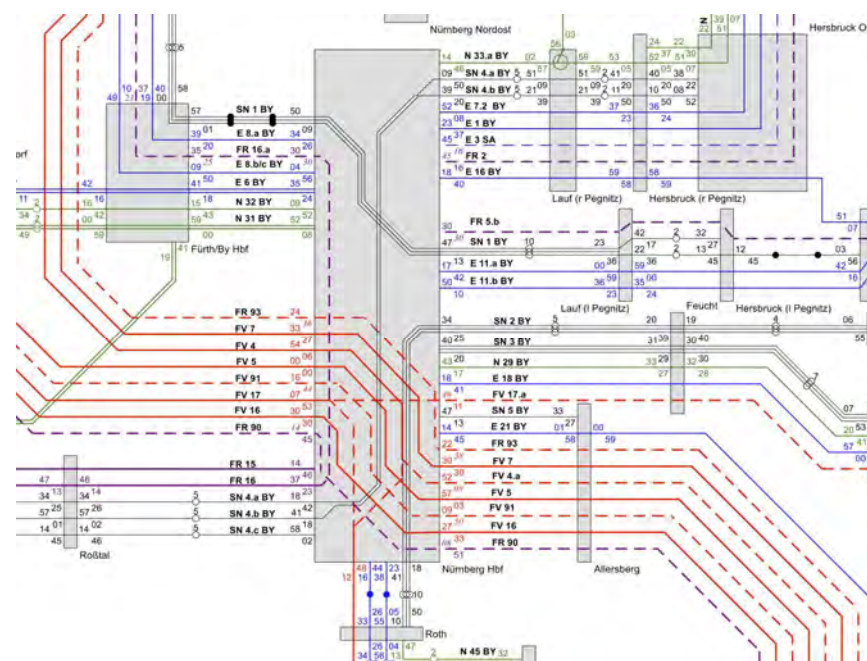
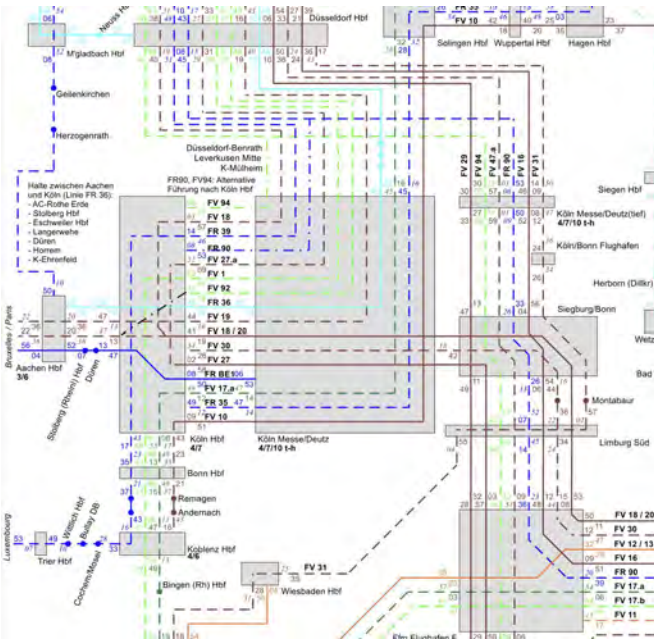
- 1971 InterCity system: two-hourly, 1st class only, same-platform connections in several cities.
- 1979 InterCity 79: hourly service 1st and 2nd class, similar line structure.
- Today all Germany served in a Takt-System for ICE and IC trains.
- Since 1990ies: Federal states introduce regional Takt-systems.

2008-2018: Lobbying for Deutschlandtakt

- Today all relevant rail experts, Deutsche Bahn and official government policy agree: Deutschlandtakt is the target.
- Deutschlandtakt became subject of the federal government program 2018-2021.
- All parties support the realization of Deutschlandtakt in their statements for the election September 2021.

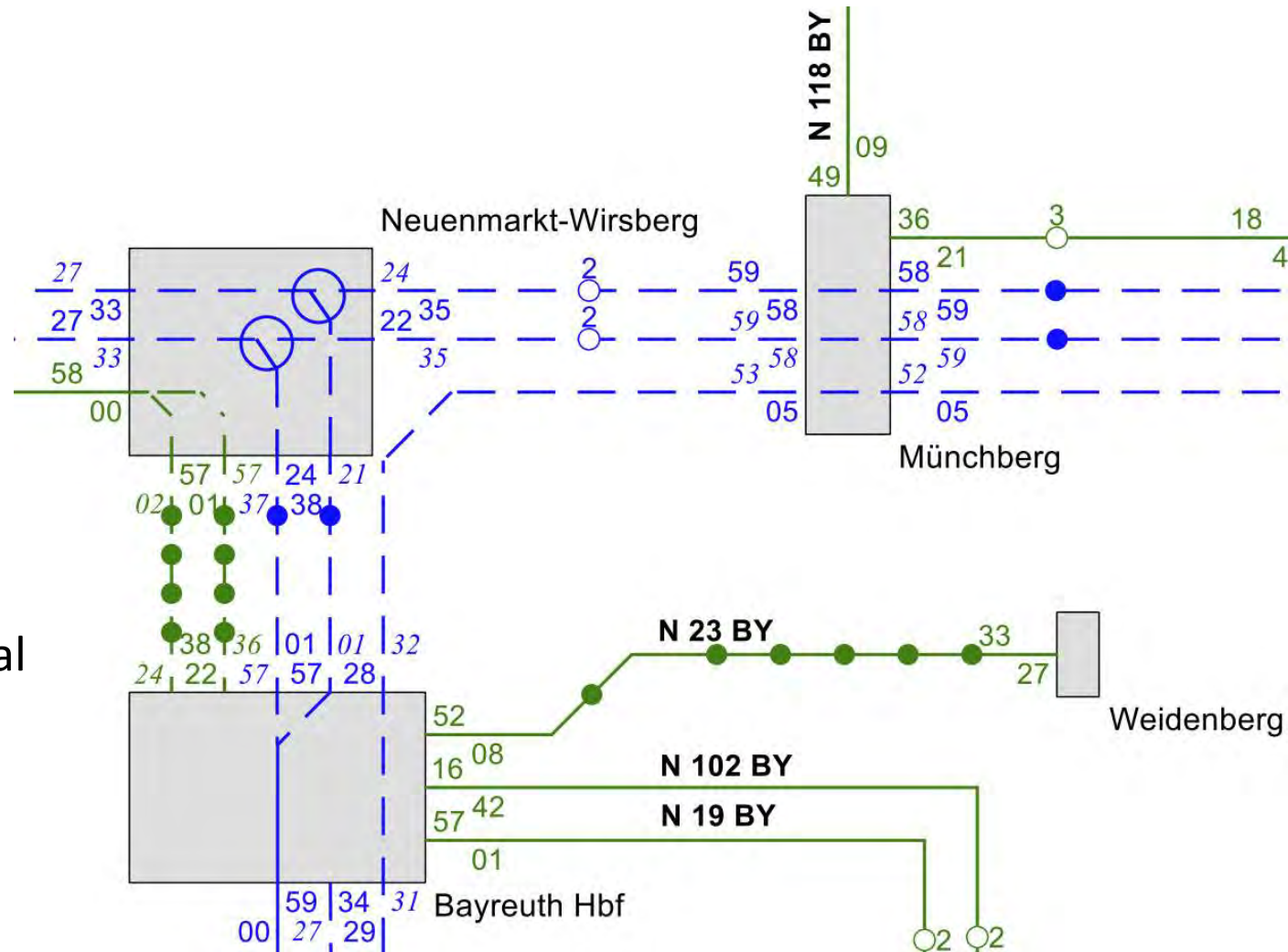
Work on target timetable (Zielfahrplan)

- The draft #3 was published in summer 2020, see www.deutschlandtakt.de, button „News&Downloads“
- All Germany's 2030+ timetable, long distance, regional and cargo.



How to read it?

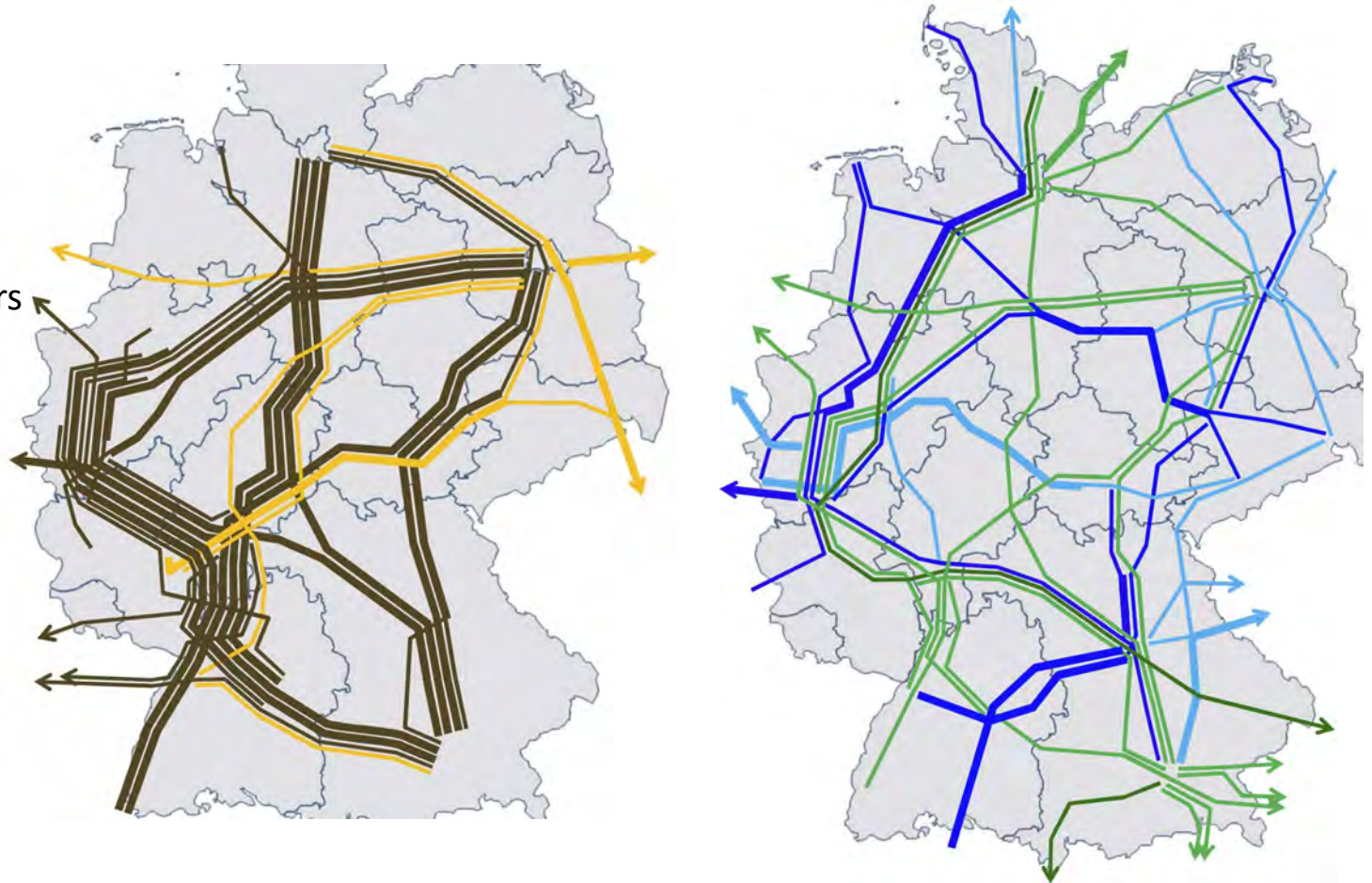
- Lines: hourly service (Stundentakt)
- Minutes of arrival and departure
- Dashed lines: two-hourly service (2 Stunden-Takt)
- Cursive numbers: minutes at odd hours
- Dots on the lines: additional stops
- Green: Local
- Blue: Regional Express
- (Red: Long distance)



Rolling stock types used in the timetable

Part of the existing rolling stock used, additional for 300km/h necessary.

-  Every hour / two hours
-  250 km/h
-  300 km/h
-  160 km/h
-  200 km/h
-  230 km/h
-  230 km/h tilting



Current status of approval

- The target timetable and the related projects of infrastructure improvements for its implementation is subject of economic evaluation. Result in a few weeks.
- If positive: The target timetable becomes part of the „Bundesverkehrswegeplan“, the legal base of planning new infrastructure.
- After that: Target timetable is guideline for all investment in German rail network.

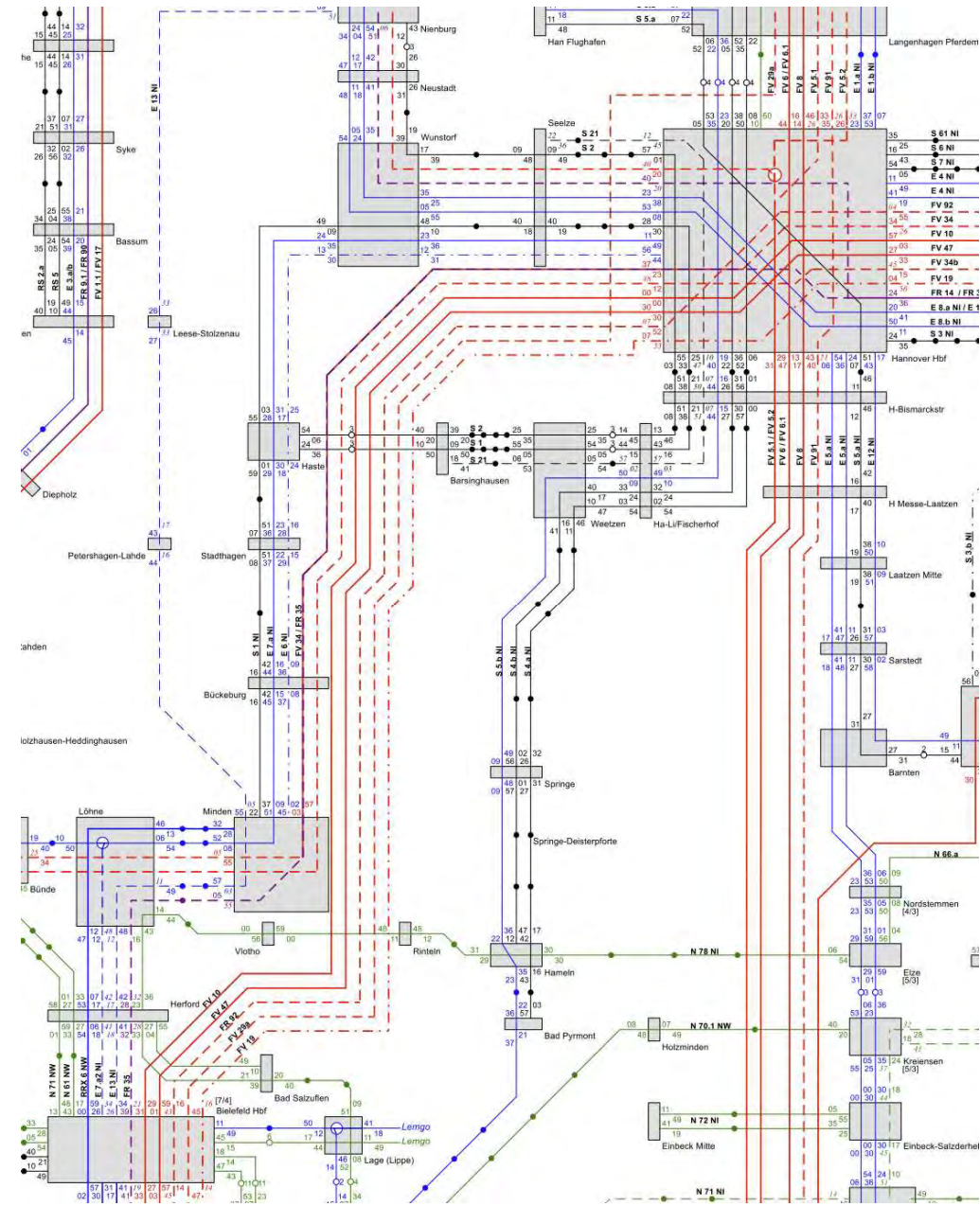
Highlights of the target timetable

- More 300 km/h sections on the network, to meet necessary travel times from hub to hub.
- Remarkable expansion of capacity in major rail junctions.
- Many small and medium projects to improve capacity and save travel time.



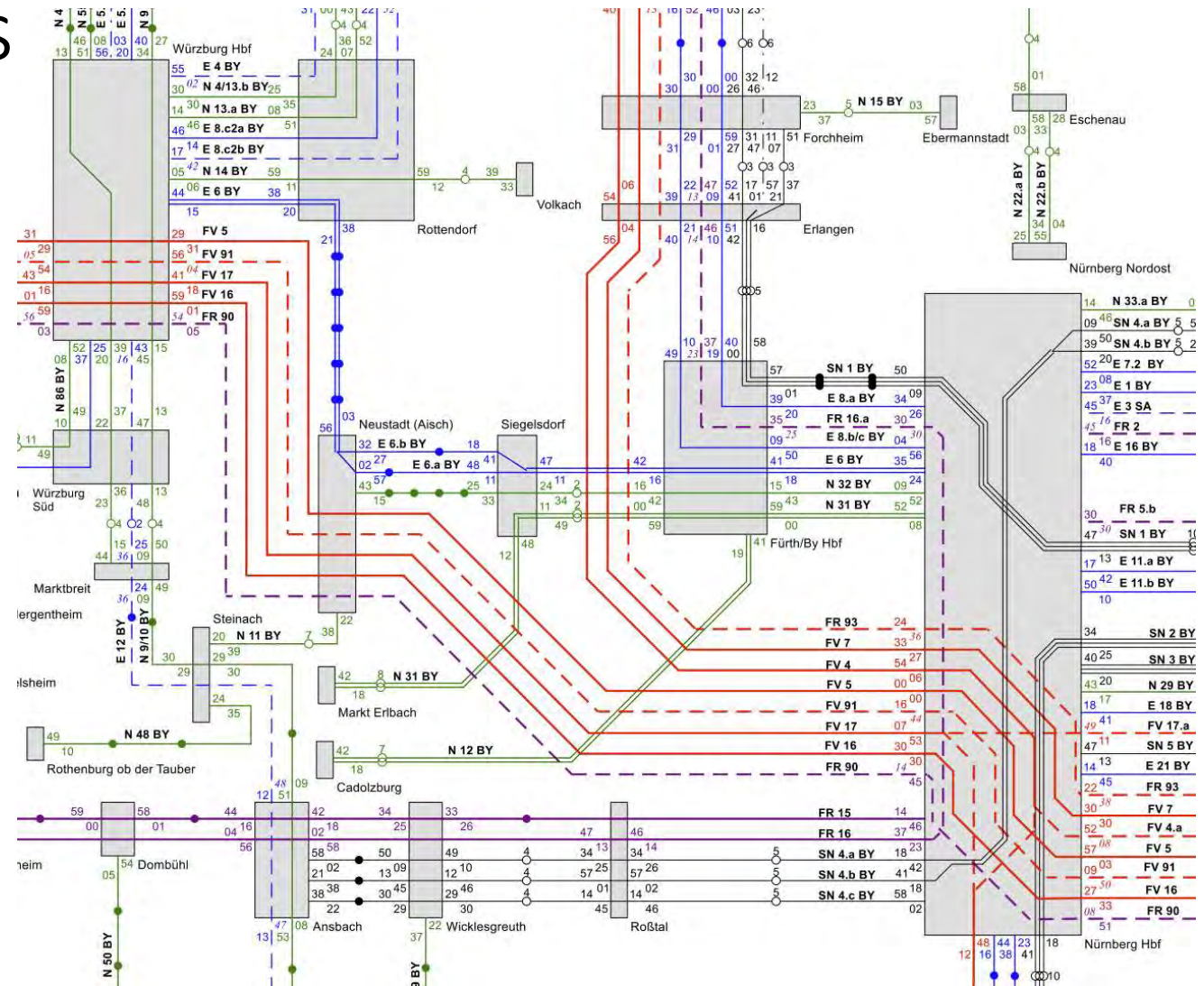
Hamm-Bielefeld-Hannover

300km/h high speed line

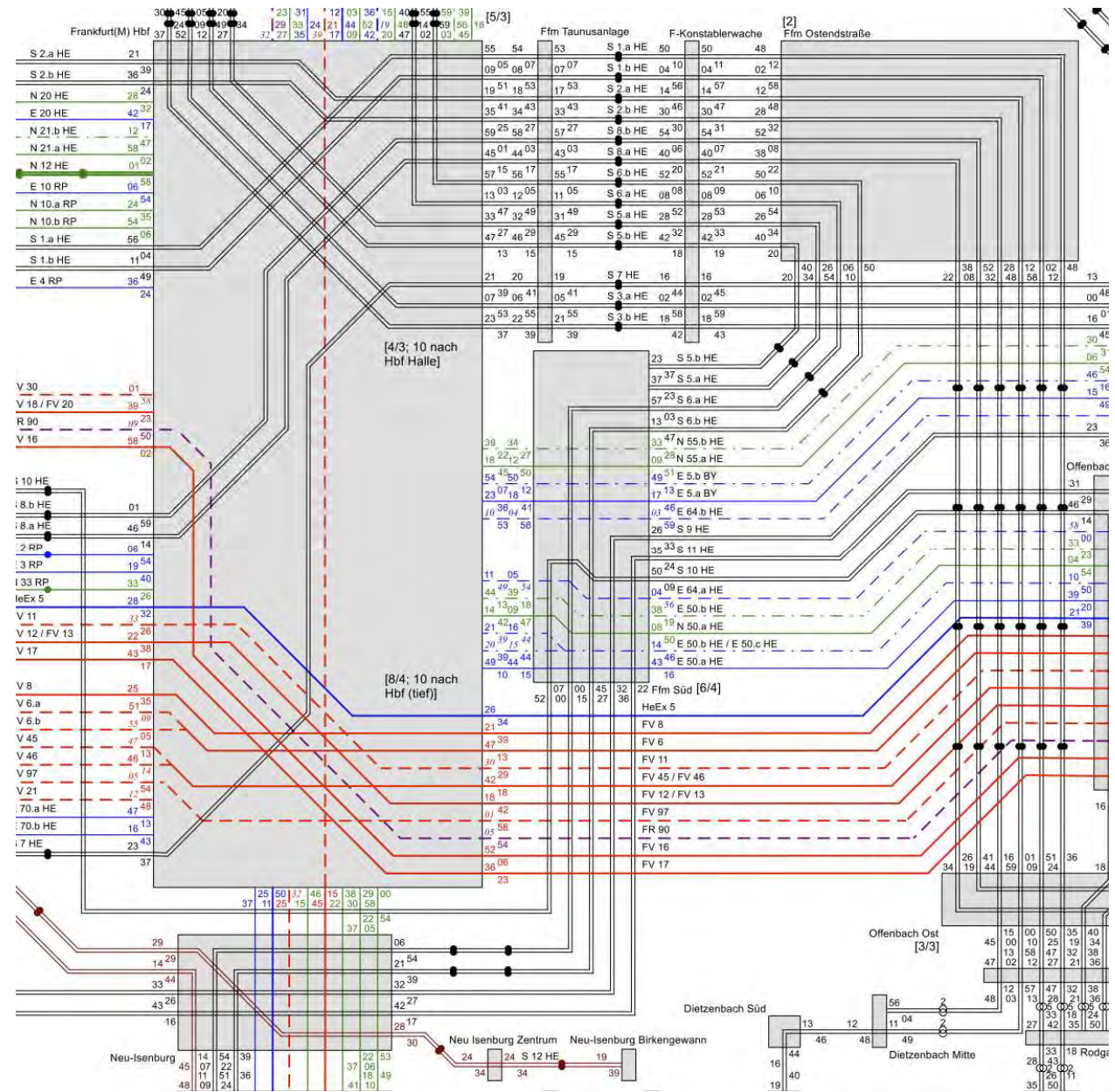


New big projects

Würzburg-Nürnberg
300km/h high speed line

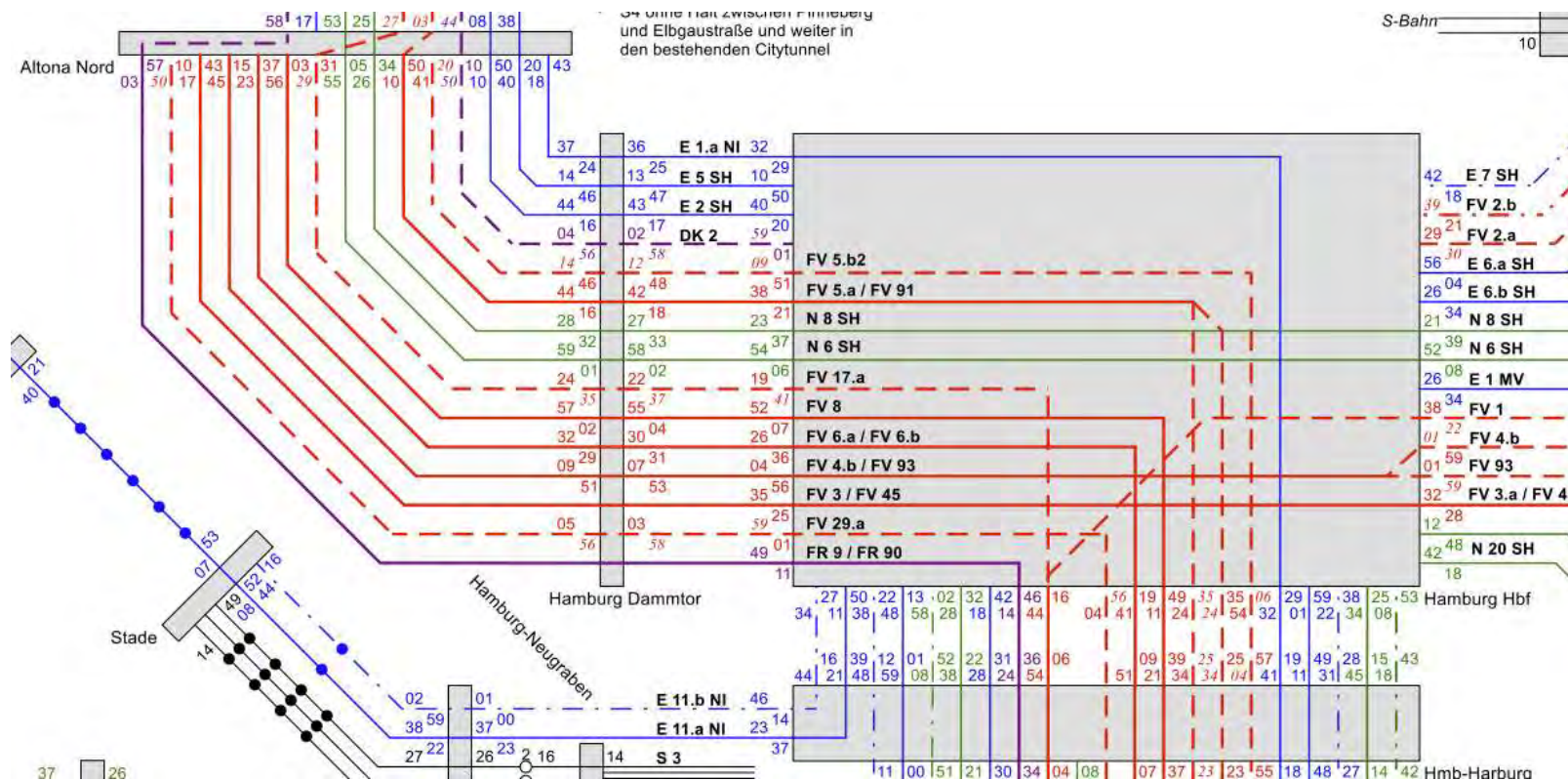


Frankfurt ICE tunnel under the city center



New big projects

- Hamburg: new tunnel for S-Bahn Hauptbahnhof-Dammtor-Altona, all four tracks for regional and ICE trains.

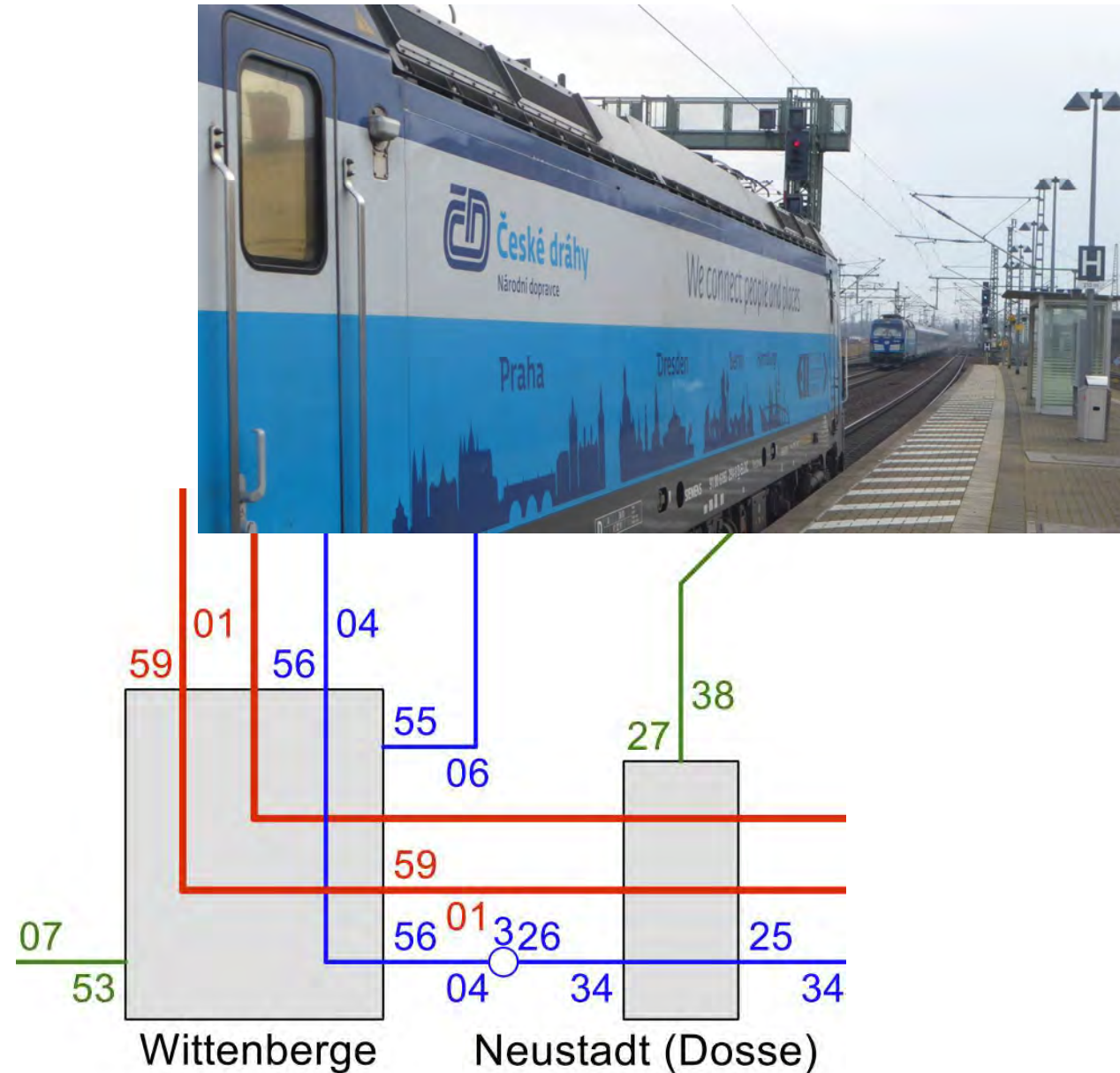


Small and medium projects

- Additional tracks, switches, platforms, capacity, and even passenger subways to connect platforms in major stations – for more capacity and saving travel time.

Difference to Swiss Taktfahrplan

- The German network does not allow perfect hubs in major stations like Berlin, Frankfurt, Köln, with connections in all directions in short intervals.
- Important hubs: The knots at minutes zero or 30 in regional junctions, to allow connections, where train service is hourly.

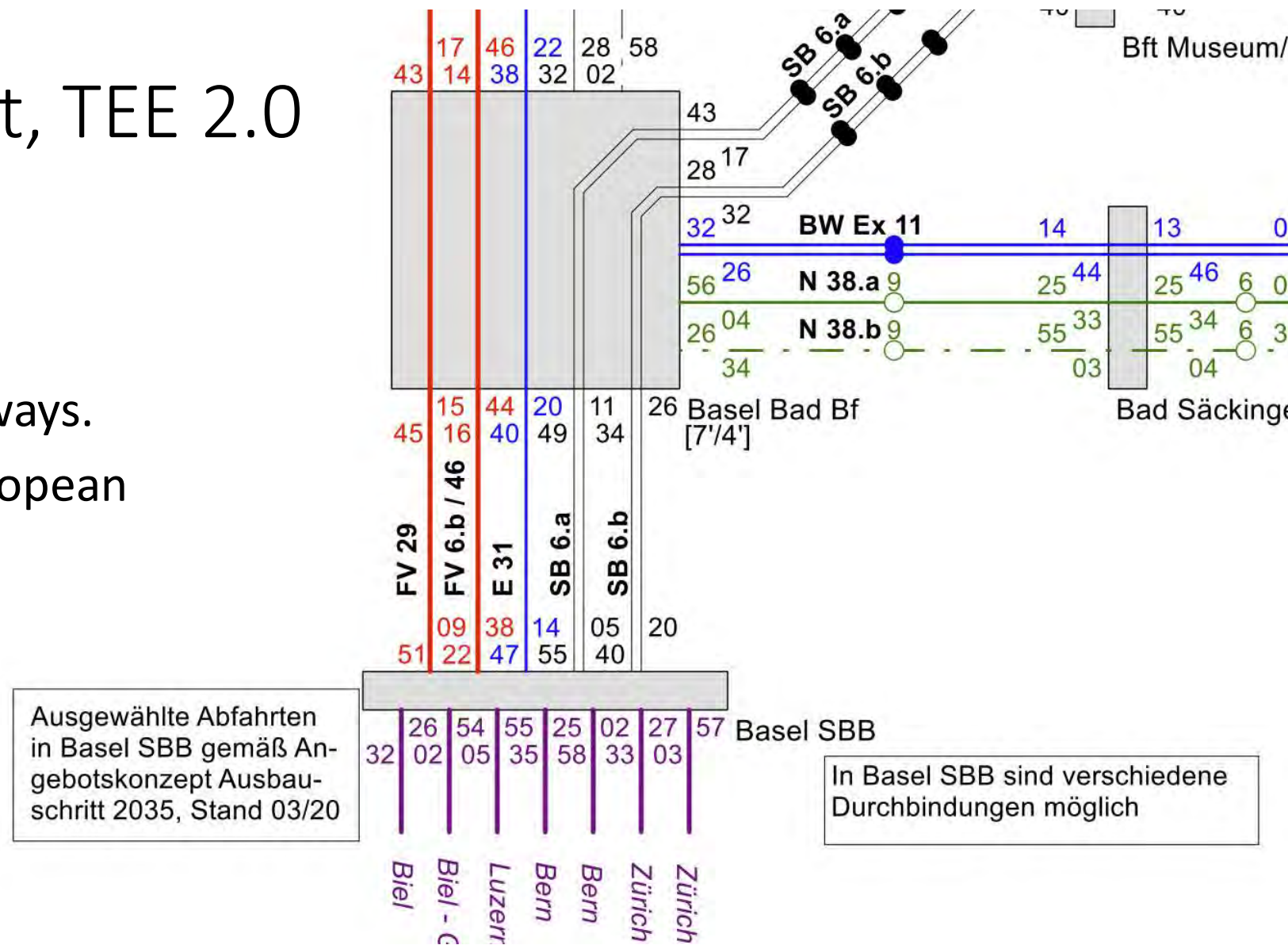


Open issues, to be discussed

- Realization time: 2030, or much later?
- Interim situation, with only part of the projects realized
- Regulation: How to force operators in the systematic timetable?
- Tariff: A systematic timetable needs a tariff supporting the system.
- Competition among operators: Concession system, tendering? Need for changing European rules?
- Solutions to be developed by next government.

Europatakt, TEE 2.0

- Timetable already discussed with neighbouring railways.
- System allows European wide connections.



Intensifying European connections

- German transport minister contacted all colleagues to discuss further the harmonization of timetables.
- Good opportunity to find other supporters for change of European rules in favor of Taktfahrplan.



Future project:

Digitale Schiene ##### Deutschland

Digital Signal boxes (DSTW)

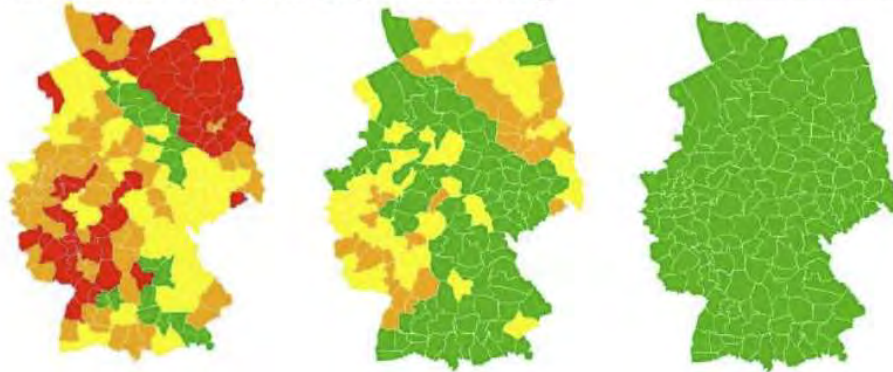
plus

ETCS (European Train Control System)

Ergebnis „DSD-Optimierer“: Wirtschaftlich optimale
Rollout-Sequenz für ETCS/DSTW

Status Infrastruktur/Netzbezirks-Ausrüstung

Karten schematisch



Vielen Dank
fürs Interesse!



Foto: ODEG