



Passenger Stations

Railway stations in Germany -Completed Projects and projects under design/construction
Deutsche Bahn AG - Passenger Stations

DB AG

Mr. Hansen,

Boardmember Operations/Development, Passenger Stations

DB Station&Service AG

Operations * Development

DB Station&Service



Passenger Traffic

- Passengers 4.65 million per day
- Visitors 6.60 million per day
 - ➔ Population of Germany 80 million
- Length of lines 36,600 km
- Number of passenger trains 30,000 per day
- Passenger kilometers 70 billion Pkm per year

DB Station&Service



Data and facts

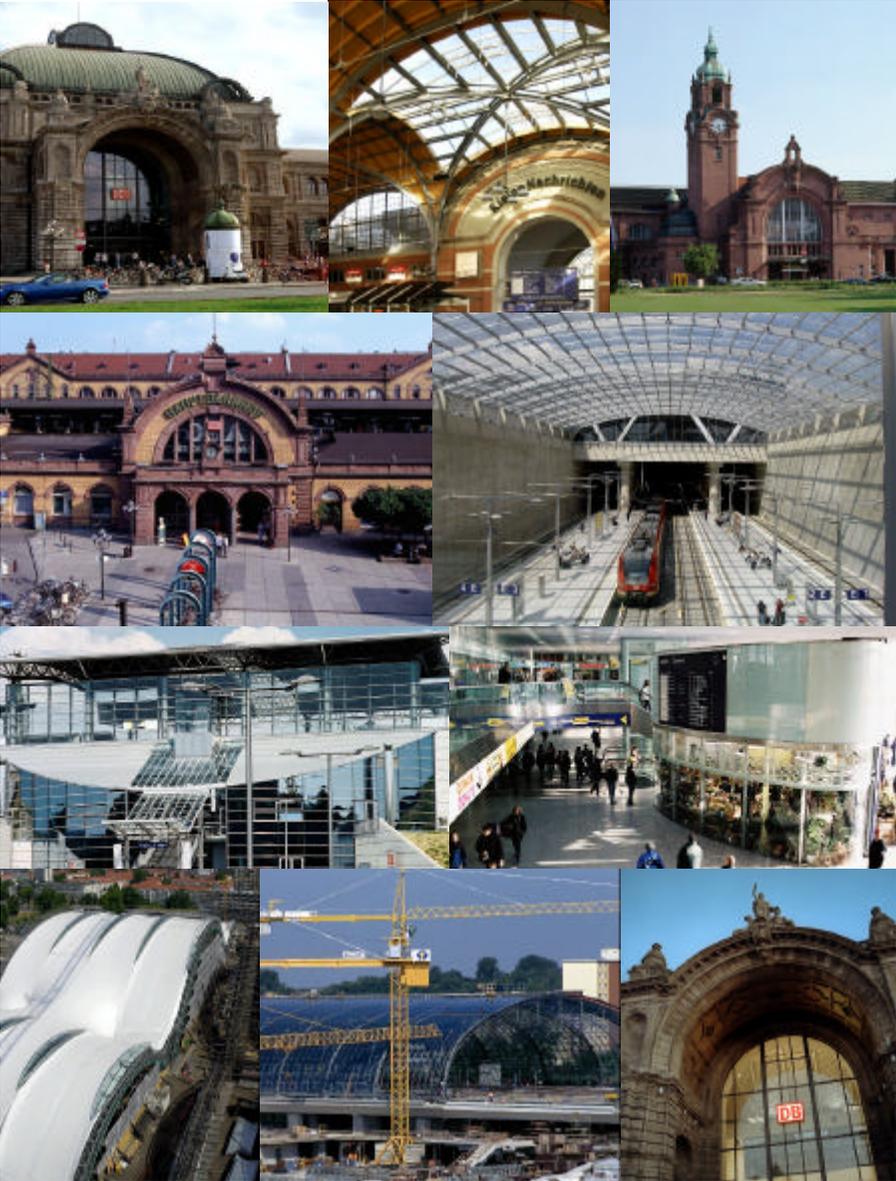
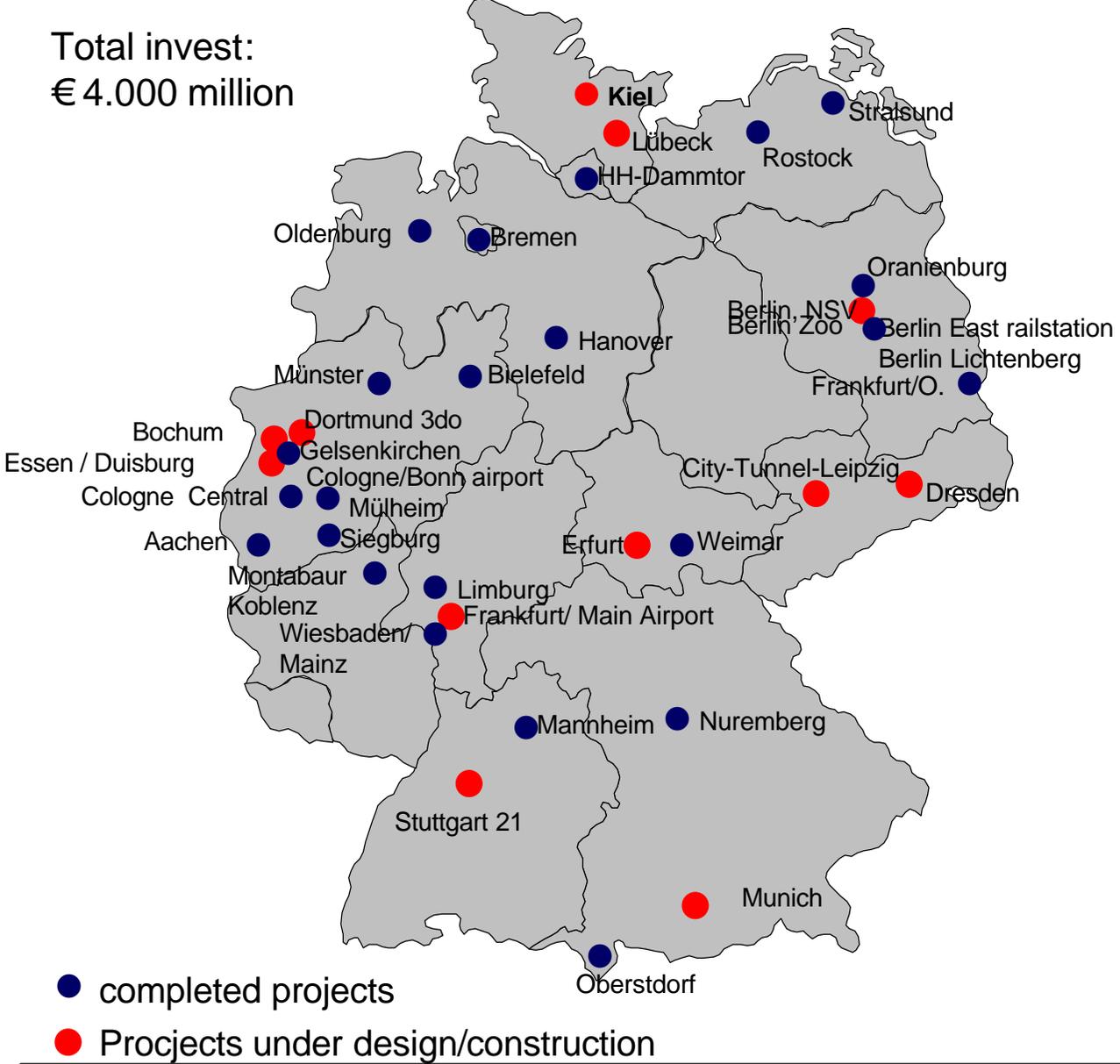
DB Station&Service AG is in business to run and manage the passenger train stations, this means providing general services for train operators, travelers and station visitors.

Major tasks include developing new stations and maintaining and optimizing existing ones including planning and managing the construction process.

- Stations ~ 5,400
- Stations with passenger buildings ~ 2,400
- Commercial floor space ~ 1,500,000 sqm
- Turnover 2003 € 851 million
- Rental fees 2003 € 259 million
- Employees 5,000

Important large-scale projects (a selection)

Total invest:
€ 4.000 million



Important large-scale projects



Station Building Weimar

Opening 1999



Train Station Hall Weimar

Important large-scale projects



Opening 2000

Opening 2005



Important large-scale projects



Station Building Stralsund

Opening 2000



Train Station Hall Stralsund

Important large-scale projects



Opening 2000



Important large-scale projects



Station Building Frankfurt/Oder

Opening 2000



Platform Hall Frankfurt/Oder

Important large-scale projects



Station Building Bremen

Opening 2000

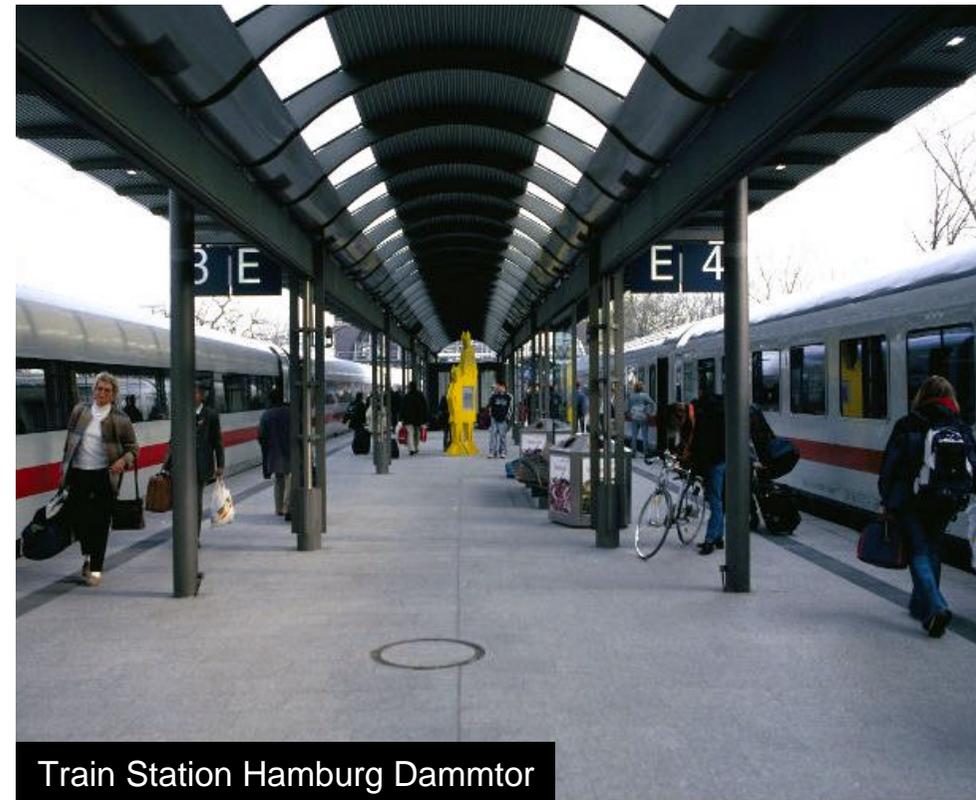


Train Station Hall Bremen

Important large-scale projects



Opening 2002



Important large-scale projects



Station Building Mannheim

Opening 2001



Train Station Hall Mannheim

Important large-scale projects



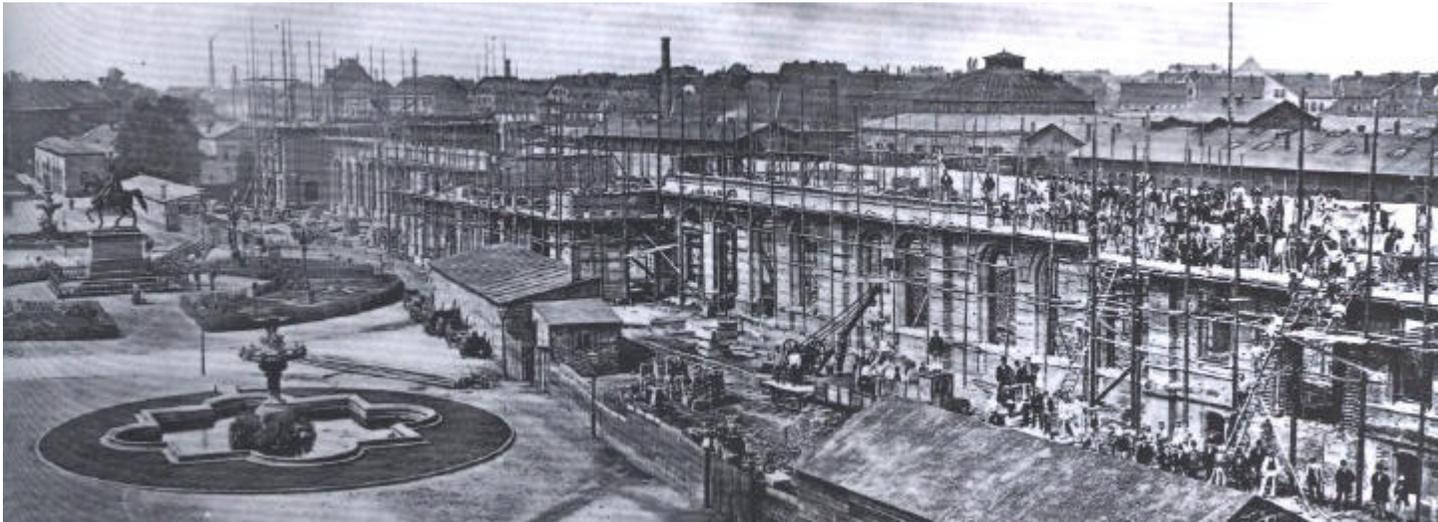
Opening 2002



Redevelopment of Hanover Central Railway Station

History

- Built 1877-1879
- First major through station in any German city
- Station almost completely destroyed in World War 2
- Passenger building rebuilt 1948
- Tram lines relaid in 1957 to improve means of interchange
- 1973: tunnel built for underground/station converted



Redevelopment of Hanover Central Railway Station



Aims of the project

- A holistic development, comprising Hanover central station and its environs.
- The interior of the terminal building was completely rebuilt, being modernized – in close consultation with the office responsible for national monuments – for the creation of top quality office premises and service areas.
- An attractive link was created between the square situated behind the station and Hanover's city center.
- Number of shops: 44

Redevelopment of Hanover Central Railway Station



Contents of project

- Creation of 3,500 sq.m of floorspace for service provision, including:
 - Travel Centre
 - Traveller's Aid Society
 - DB Lounge
- 7,200 sq.m of new floorspace for catering and retail outlets
- 12,300 sq.m of office and other floorspace
- 10,000 sq.m of new circulating space
- Wayfinding system
- Access for the mobility-impaired



Redevelopment of Hanover Central Railway Station



Key figures

- Construction costs: 101.5 million euros
- Duration of project: 1997 to 2001

Rentals

- Travelers and visitors per day: 250,000
- Rented commercial premises: 8,000 square meters
- Opening times: 6 am to 10 pm (core opening hours 8 am to 8 pm)



Thorough overhaul of trainshed roof at Frankfurt/Main Central Railway Station



History

- 1884-1888: building of three massive halls accommodating 18 tracks
- 1912-1924 further halls added to north and south for 6 tracks
- 1944 station partially destroyed during bombing
- Rebuilt in period to 1954
- Listed building since 1972

Thorough overhaul of trainshed roof at Frankfurt/Main Central Railway Station



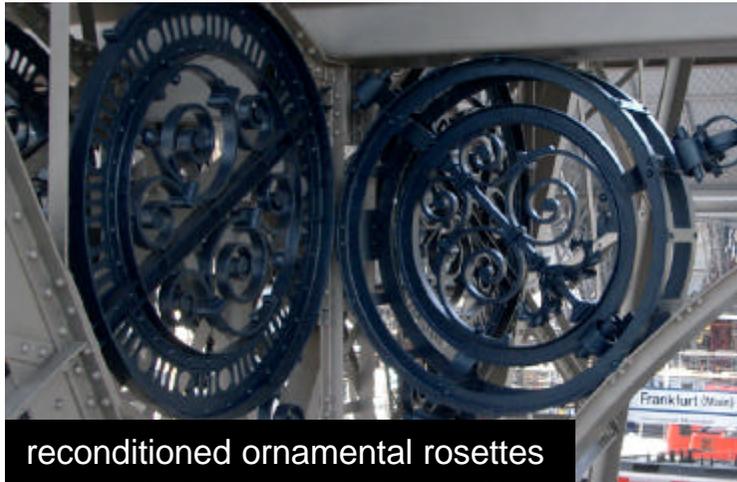
General

- 24 tracks
- 350,000 passengers and visitors daily
- 1,100 trains daily
- Total area: 149,832 sq.m
- Covered area: 42,800 sq.m
- Glazed area: 50,000 sq.m
- Metal sheeting for roof: 25,000 sq.m
- Max. height 31 m

Thorough overhaul of trainshed roof at Frankfurt/Main Central Railway Station

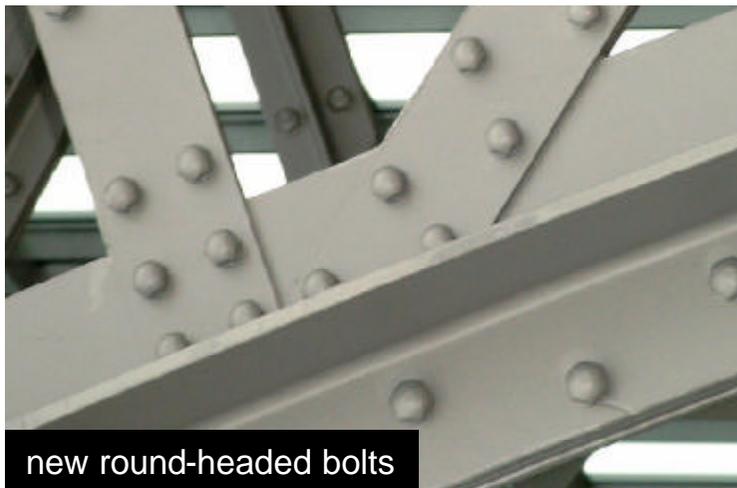


Thorough overhaul of trainshed roof at Frankfurt/Main Central Railway Station



Special features of the project

- Consideration given to original form and colour scheme when designing the structure
- Rivet-head bolts used in compromise with the Conservation Department



Thorough overhaul of trainshed roof at Frankfurt/Main Central Railway Station



Key Dates

09/2002:	start of construction
12/10/2004	50,000th rivet-head bolt fastened at halfway stage
03/04/2006:	Overall completion

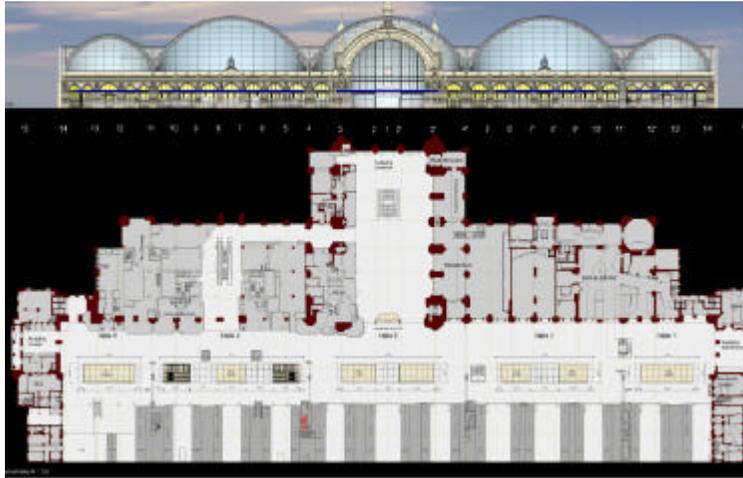
Cost

Total outlay: €117.5 million



Frankfurt/Main Central Railway Station

Restructuring of concourse platform

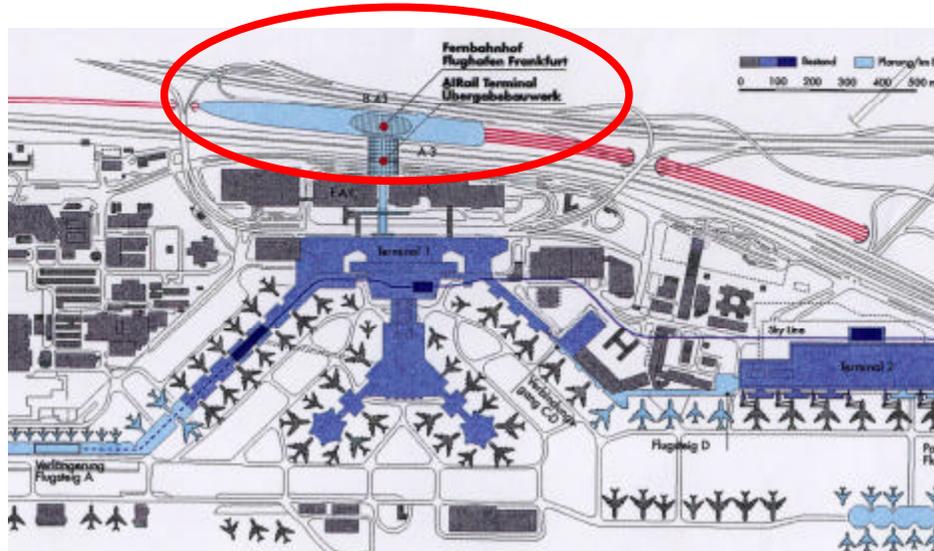


Aims of the project

- To enhance the quality of time spent at the station
- To improve customer information and orientation
- To raise rental income



Frankfurt Airport Long distance Train Station



Frankfurt am Main Airport main line station is a completely new station, built in connection with the construction of high speed link between Cologne and Frankfurt.

Aims of the project

- To interconnect the DB AG high-speed rail network with the airport
- To switch short-haul domestic flights to rail

Important points

- A special feature is the glass cupola that crowns the entrance hall and creates a light-bathed and generous ambiance.
- Passages at the comfort level of the airport, with temperature controls throughout, provide an easy transit from plane to train and vice versa.

Frankfurt Airport Long distance Train Station



Services

- Travelers can check in for their flights while they are still at the station
- DB lounge, travel center
- one restaurant and a conference center

Key figures

- Construction costs: 360 million euros
- Duration of project: 1996 to 2002

Frankfurt Airport Long distance Train Station



Frankfurt Airport Long distance Train Station



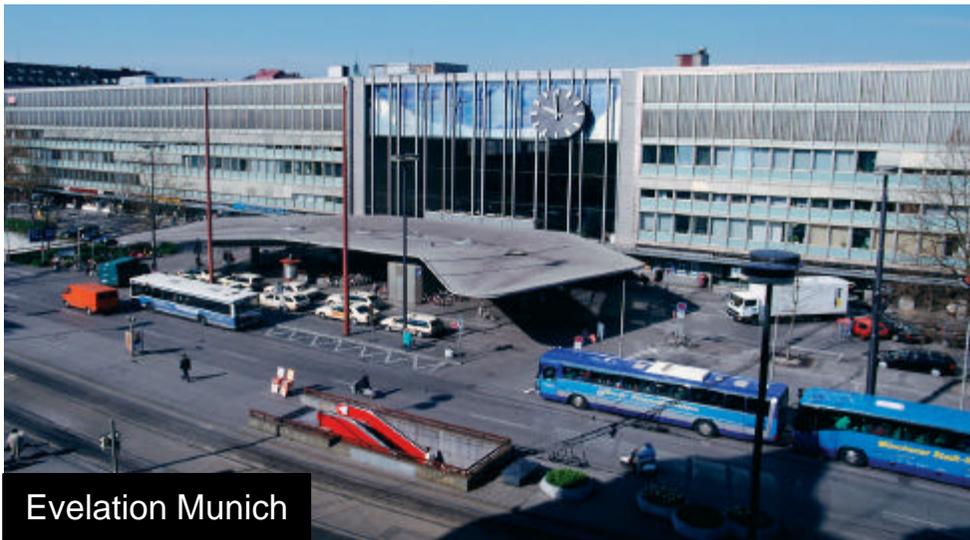
- A further nine storeys are being built above the actual station
- These include two parking floors, hotel and conference facilities as well as officing
- length of the building: 675 Meter
- area: 175.000-225.000m²



Major Projects Munich Central Railway Station



Aerial view Munich



Elevation Munich

Munich main station more and more doesn't correspond with actual commercial and traffic demands.

Traffical parameter

- Integration and connection of a second line of the regional fast train system
- Integration of the transrapid-high-speed-system to the airport

Planned measures in the field of public-transportation- infrastructure will lead to a high number of functional renewals in and outside the station area.

Major Projects involving Munich Central Railway Station

Second dedicated urban rapid transit line



Course of line from west to east, right through the heart of Munich.

Scope of project

- Construction of approx. 9 km of a new two-track dedicated urban rapid transit line - approx. 80 % of it underground (at depths of up to 42 m)
- Serves Munich Central along with stopping points at:
 - Laim
 - Marienhof
 - Leuchtenbergring

Facts and figures

- Statutory public enquiry initiated in December 2004
- Invitation to tender/contract award in 2005
- Construction targeted to commence in 2006
- Entry into service targeted for 2010

Major Projects involving Munich Central Railway Station

Maglev



Project aim

To build the Maglev pilot-project line from Munich's central train station to the city's airport



Major Projects Munich

Architectural Competition Munich Central station



Basis

- Joint concept DB AG and city authorities
- Involvement of city authorities is necessary to obtain planning permission

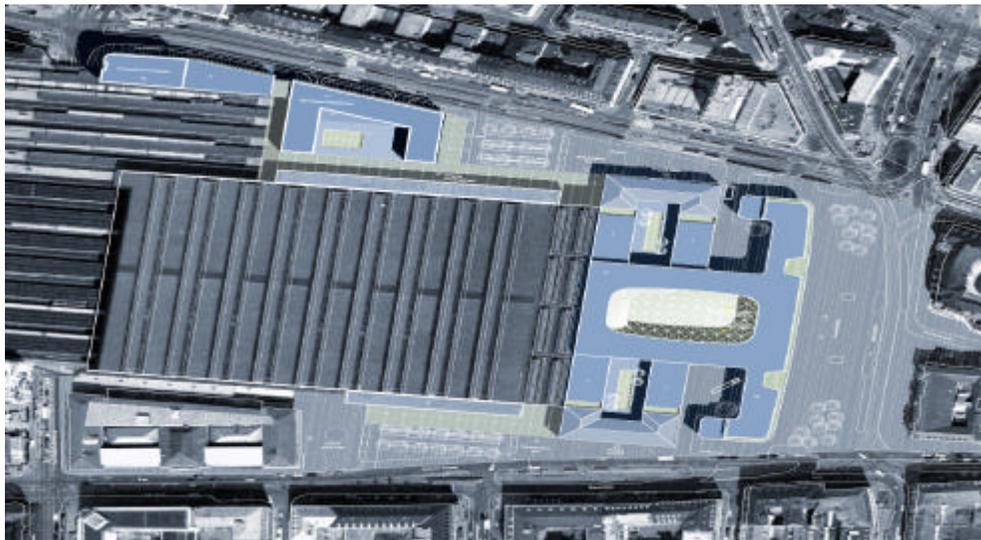
Prerequisites for proposal

- Economically viable proposal
- Construction in partial sections
- Construction ongoing during operation



Major Projects involving Munich Central Railway Station

Winner of Munich Central Station competition



Opportunities

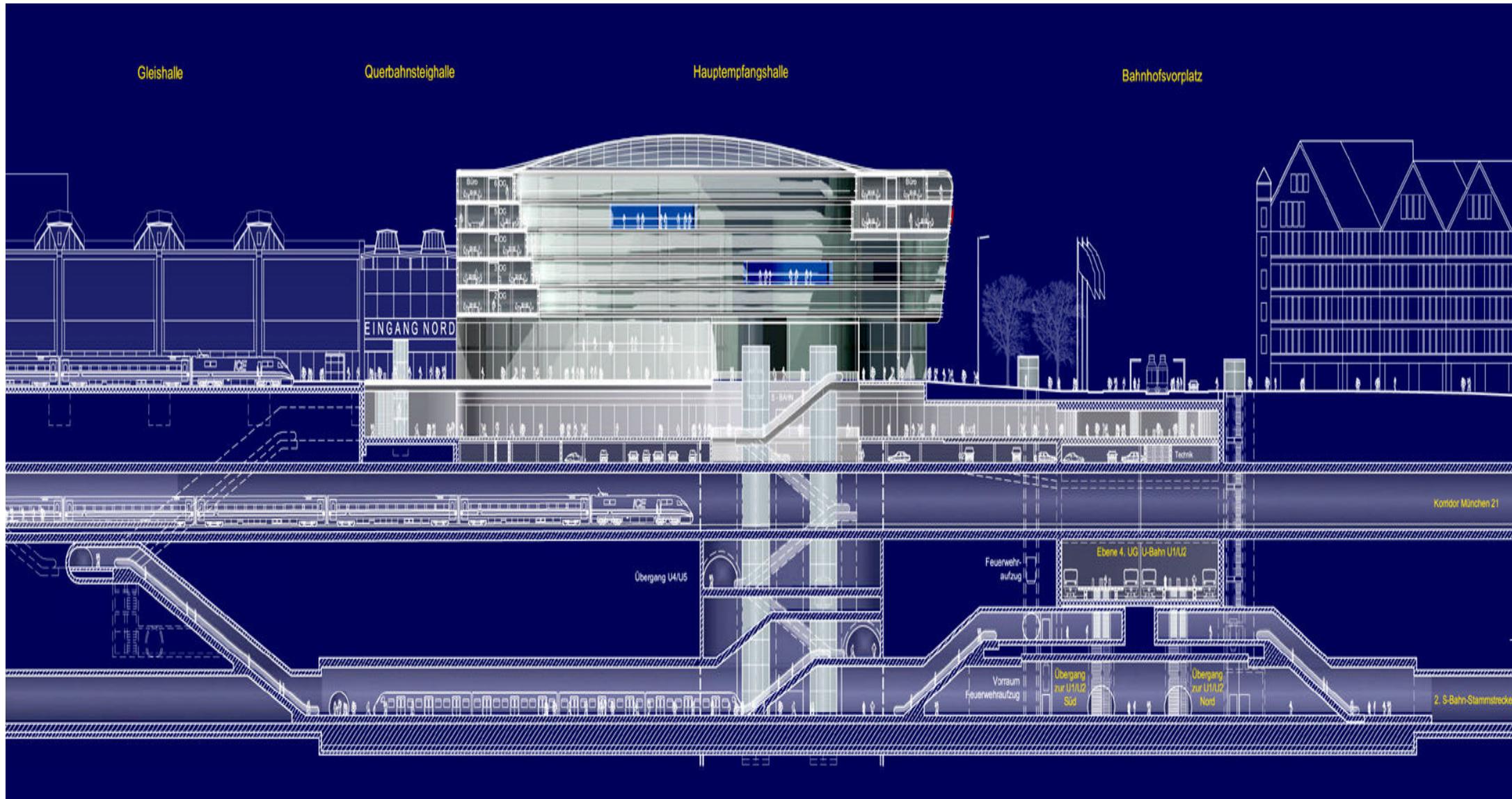
- Good opportunities for gradual optimisation through clear construction-stage assessments
- Some retention of functionality coupled with slight losses of appeal and earnings during the construction period

Estimated cost

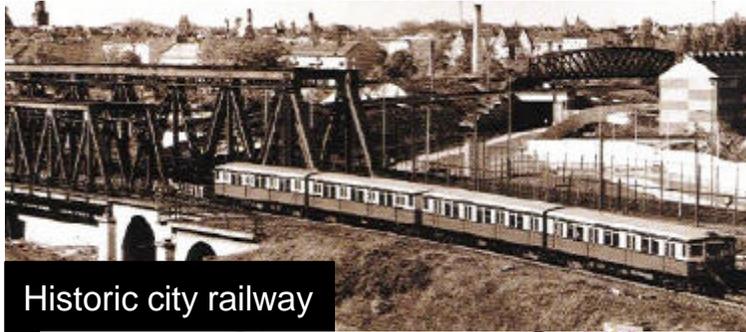
Approx. €250 million excluding railway infrastructure

Major Projects involving Munich Central Railway Station

Winner of Munich Central Station competition



Berlin North-South Link



Historic city railway



History

- Rail transport system suffered heavy damage in Second World War
 - Division of Germany:
 - organically evolved rail links were torn asunder
 - stations and sections of line fell into decay
- ⇒ properly functioning rail service impossible

After Germany's reunification

- Rebuilding of rail infrastructure
- Re-establishment of through urban rapid transit services (S-Bahn) via Friedrichstraße station
- 1993: connected up to the ICE network
- 1998: entry into service of the Hanover-Berlin high-speed line and the Berlin-Frankfurt/M ICE "Sprinter".

Berlin North-South Link

Papestraße Station



Project contents

- Papestraße is to be turned into a key interchange station for the Berlin city motorway
- The Anhalt and Dresden lines will dovetail here to form the new North-South Link serving Berlin's new central and Lehrter Bahnhof station
- The lines forming the city's inner S-Bahn ring will cross the North-South S-Bahn lines here
- Mainline and regional services are being intermeshed with public transport within Berlin
- Link-up with the Berlin city motorway and numerous bus routes
- Around 500 mainline and regional trains will stop here daily
- Forecast ridership: 200,000 passengers per day

Berlin North-South Link Papestraße Station



Berlin North-South Link

Potsdamer Platz Regional Station



Project contents

- Development of new Potsdamer Platz district in the centre of Berlin
- Potsdamer Platz being traversed below ground
- Direct means of interchange being established with urban rapid transit, underground and bus services
- Forecast ridership: around 50,000 passengers per day

Berlin North-South Link Potsdamer Platz Regional Station



- Multi-storey subterranean structure
- Dimensions: length 260 m; width: 50 m
- Number of tracks: 4
- Number of platforms: 2

Berlin North-South Link

Central Station/Lehrter Bahnhof



Berlin North-South Link

Central Station/Lehrter Bahnhof



Project contents

- Glass hall 321 metres in length on east-west axis
- Train hall on north-south axis 180 m long, 27 m wide and 10 m high housing 3 platforms and 6 tracks
- Train hall straddled by two gantry-like buildings 36 metres high
- Transparent, friendly atmosphere due to daylight serving all levels
- The 4 platforms and 8 tracks of the North-South link are at a depth of 15 m
- Intermediate floors access parking building, with space for 900 motor cars, and retail premises
- Forecast ridership: 300,000 passengers per day