

= Berlin Stadtbahn =

The Berlin Stadtbahn (" city railway ") is a major railway thoroughfare in the German capital Berlin , which runs through Berlin from east to west . It connects the eastern district of Friedrichshain with Charlottenburg in the west via 11 intermediate stations including Hauptbahnhof . The Berlin Stadtbahn is often also defined as the slightly longer route between Ostkreuz and Westkreuz , although this is not technically correct .

The line was originally built in the 1880s . It is 12 kilometers (7 @. @ 5 mi) in length , and is entirely elevated above the city 's streets . The four track route carries S @- @ Bahn , Regionalbahn , Regional @- @ Express , Intercity , EuroCity and Intercity @- @ Express trains .

= = Operation = =

= = = Structure and tracks = = =

The Stadtbahn line is an elevated rail line with viaducts totalling 8 kilometers (5 @. @ 0 mi) in length and including 731 masonry viaduct arches . A further 2 kilometers (1 @. @ 2 mi) of the line are situated on 64 bridges , that cross adjoining streets and (three times) the River Spree . The remaining length of the line is on an embankment .

The line carries four tracks , in two pairs . The northern pair are reserved for use by the S @- @ Bahn , and are electrified using a third rail carrying 800V DC . The S @- @ Bahn tracks have platforms at all eleven stations along the Stadtbahn .

The southern pair of tracks are used by Regionalbahn , Regional @- @ Express , Intercity , EuroCity and Intercity @- @ Express trains , and are electrified using the German standard of 15 kV at 16 @. @ 7 Hz AC , supplied by overhead line . Six of the Stadtbahn stations have platforms on these tracks , although not all trains stop at all stations , depending on the class and route of the train .

= = = Stations = = =

From east to west , the Stadtbahn has stations at :

Ostbahnhof

Jannowitzbrücke (S @- @ Bahn only)

Alexanderplatz

Hackescher Markt (S @- @ Bahn only)

Friedrichstraße

Hauptbahnhof

Bellevue (S @- @ Bahn only)

Tiergarten (S @- @ Bahn only)

Zoologischer Garten

Savignyplatz (S @- @ Bahn only)

Charlottenburg

= = = Routes = = =

The S @- @ Bahn tracks of the Stadtbahn currently carry routes S5 (Strausberg Nord to Spandau) , S7 (Ahrensfelde to Potsdam) and S75 (Wartenberg to Westkreuz) .

The longer distance tracks carry Regionalbahn and Regional @- @ Express routes RE1 (Magdeburg to Eisenhüttenstadt) , RE2 (Rathenow to Cottbus) , RE7 (Dessau to Wünsdorf @- @ Waldstadt) and RB14 (Nauen to Berlin Schönefeld Airport) . Although most InterCity and Intercity @- @ Express trains now use the north @- @ south tunnel route via Hauptbahnhof , some trains do still remain on the Stadtbahn 's long distance tracks . These trains , mainly those heading toward

Hanover and Cologne , usually call at Hauptbahnhof and Ostbahnhof .

= = History = =

= = = Planning = = =

In 1871 , eight main line railways existed in Berlin , with terminal stations at the city 's edge or outside the city limits . This was very impractical for many passengers , who were forced to use hackney carriages to transfer from one train to another . Therefore , a railway line was planned to connect these terminuses with each other .

In 1872 , the Deutsche Eisenbahnbaugesellschaft (German Railway Construction Company - DEG) filed the planning application for a railway line through the city , connecting the then @-@ Schlesischer Bahnhof (today Berlin Ostbahnhof) to Charlottenburg , and continuing to Potsdam . In December 1873 , the state of Prussia as well as the private rail enterprises Berlin @-@ Potsdamer Eisenbahn , Magdeburg @-@ Halberstädter Eisenbahn and Berlin @-@ Hamburger Bahn bought shares in the DEG , and jointly founded the Berliner Stadteisenbahngesellschaft (Berlin City Railway Company) . However , things did not go as expected and the DEG went into bankruptcy in 1878 , which forced the Prussian state government to take over operations , pay for the construction of the line with state money and to reimburse the former private owners of the DEG . The state 's interest in the line was attributed to the military , which after the 1870 @-@ 1871 Franco @-@ Prussian War was of the opinion that the railway networks would hinder mobilisation when not properly interconnected .

On 15 July 1878 the Königliche Direktion der Berliner Stadteisenbahn (Royal Directorate of Berlin City Railways) , under the management of Ernst Dircksen , was commissioned to manage the site . The directorate at first reported to the Prussian Ministry of Transport and later became a subsidiary of the Ministry of Public Operations .

The planned railway had two tracks each for freight and passenger traffic . Having taken similar projects in London and New York City into consideration , passenger traffic received priority over freight trains . Furthermore , the new railway line was not only to serve as a connection between the mainline termini in Berlin , but would also offer connections to the Berlin Ringbahn and the suburban rail lines .

The traffic routing was not only influenced by the location of the already existing stations the line was supposed to connect , but also by land availability in the city centre . One of the original drafts , which called for building the line along Leipziger Straße , had to be scrapped because of overly high land prices . The moat of the 17th century Berlin Fortress was filled up between Hackescher Markt and Jannowitzbrücke stations and , since it was public land , was used for building the railway line . This explains some of the curvy sections on the Stadtbahn , especially between Alexanderplatz and Jannowitzbrücke stations .

Its elevated nature sets the Stadtbahn apart from the previous Berliner Verbindungsbahn , built in 1851 , which was built at street level and was a hindrance to travel .

= = = Construction = = =

Work on the line started in 1875 and the Stadtbahn was opened on 7 February 1882 for local traffic ; it opened on 15 May the same year for long @-@ distance trains . The costs of construction , including purchase of the land , were estimated at about 5 million Goldmark per kilometre . The line would later become the core route of the Berlin S @-@ Bahn . The Stadtbahn was originally equipped with longitudinal iron sleepers on the Haarmann system , however these were replaced with wooden sleepers in the early 20th century .

The original stations , seen from west to east , were :

Charlottenburg

Zoologischer Garten

Bellevue

Lehrter Stadtbahnhof (today Berlin Hauptbahnhof)

Friedrichstraße

Börse (Marx @-@ Engels @-@ Platz in period of the GDR , and since 1992 Hackescher Markt)

Alexanderplatz

Jannowitzbrücke

Schlesischer Bahnhof (named Berlin Hauptbahnhof in the 1980s and early 90s , today Ostbahnhof)

Since 1 May 1888 the Stadtbahn also connected to Stralau @-@ Rummelsburg (Ostkreuz since 1933) in the east and Westend (via Westkreuz) in the west .

Two stations were later added

Savignyplatz (1 August 1896) between Charlottenburg and Zoologischer Garten , and

Tiergarten (5 January 1885) between Zoologischer Garten and Bellevue

== Initial operation ==

=== Suburban trains ===

Suburban trains operated on the local tracks , the so @-@ called city track . At first , these were either services to the suburbs or connections to the Berlin Ringbahn , running as " half ring trains " , using the Stadtbahn and either the northern or the southern Ringbahn . The trains were pulled by locomotives , which ran on coke to minimise the smell . Doors on the train compartments had to be opened by the passengers themselves and stations were not called out on the train .

These trains ran from 4 o'clock in the morning to 1 o'clock at night , typically at intervals between two and five minutes , depending on the time of day . Fares in the early 20th century were 10 pfennig in 3rd class and 15 pfennig in 2nd class .

=== Freight traffic ===

The freight traffic to the central market at Alexanderplatz was carried by seven special trains per day , of which four ran at night , two during the day and one in the evening . Apart from this , the Stadtbahn carried no freight ; normal freight traffic instead used the freight stations Charlottenburg , Moabit , Wedding , Zentralviehhof , Weißensee , Frankfurter Allee , Rixdorf , Tempelhof , Wilmersdorf @-@ Friedenau and Halensee on the ring line .

=== Long @-@ distance trains ===

In the first years of the Stadtbahn , many trains previously terminating at the old terminuses Lehrter Bahnhof , Görlitzer Bahnhof or Potsdamer Bahnhof operated via the Stadtbahn to reduce the load on the terminus stations . By the end of the 19th century , however , most of these train runs had to terminate at their old destination stations again due to the increasing local traffic on the Stadtbahn .

The remaining traffic on the Stadtbahn mostly consisted of express trains to Hanover and Cologne via the Lehrter Bahn , Kanonenbahn trains to Dessau , trains to Königsberg and Danzig on the Preußische Ostbahn and trains to Frankfurt / Oder and Breslau . Suburban trains to Spandau and Strausberg also ran on the Stadtbahn 's long @-@ distance tracks until 1928 .

Trains heading west usually left from the Schlesischer Bahnhof station , those heading east from Charlottenburg . Depots were situated in Rummelsburg (then called Bw Karlshorst) and Grunewald .

=== Station expansions and viaducts ===

In 1914 , the Friedrichstraße station was rebuilt ; the long @-@ distance section of the station was

expanded to four tracks and the current station hall was built . Between 1922 and 1932 , the Stadtbahn viaduct was thoroughly modernised in order to handle the ever increasing train weight . Also , the train sheds of Alexanderplatz and Schlesischer Bahnhof were replaced . The suburban line 's platforms were raised to a height of 96 centimetres .

A second long @-@ distance platform and a new hall were built at Zoo station from 1934 to 1940 . The station hall was only glazed in the 1950s , however . The notable terraced vestibule dates from the same time .

= = = Electric operation = = =

On 11 June 1928 the suburban line Potsdam @-@ Stadtbahn @-@ Erkner was fully equipped with DC third rail gear . Five trains of the new DRG Class ET 165 ? the type appropriately named Stadtbahn ? went into service , still sharing the track with steam trains . By November 1928 all lines leading toward the Stadtbahn , namely the lines from Kaulsdorf , Spandau and Grünau as well as the Berlin Ringbahn , were fully electrified . Therefore , suburban services to Spandau could be moved from the long @-@ distance tracks to the local tracks . The last steam trains disappeared in 1929 when the ring became fully operated by electric trains . Half @-@ ring trains operated only as peak time services . In December 1930 the term S @-@ Bahn and the symbol of a white S on a green circle were introduced for the city , ring and suburban services .

= = = Post @-@ War situation = = =

After World War II , the Stadtbahn lay devastated by bombs , but was rebuilt very quickly . Because Joseph Stalin wanted to travel by train to the Potsdam Conference , the Stadtbahn was converted to the Russian 1 @, @ 524 mm (5 ft) broad gauge in 1945 . The national importance had diminished with the loss of eastern Germany ; only a few trains ran towards the western zones . Some trains from the Soviet zone terminated on the Stadtbahn .

During the Berlin Blockade , the long @-@ distance traffic came to an almost complete halt . The Stadtbahn was useful for the re @-@ established S @-@ Bahn , however , now with connections to places line Königs Wusterhausen , Strausberg , Staaken and Falkensee .

From 18 May 1952 , when all Berlin terminal stations and all other long @-@ distance stations in West Berlin were closed , the station Zoologischer Garten remained the only long @-@ distance station for the western part of the city . The last domestic train of the GDR (East German) railways ran on the Stadtbahn in 1953 .

After the Berlin Wall was built in 1961 , Zoologischer Garten became the West Berlin and Ostbahnhof the East Berlin de facto central station . The station Friedrichstraße now was the terminal point of the separated West and East Berlin S @-@ Bahn lines and departure point for the Interzonenzug (Inter @-@ zone train) services between West Berlin and West Germany . Friedrichstraße station was separated into Eastern and Western parts with steel walls , and enabled West Berliners to change to S @-@ Bahn trains running on the Nord @-@ Süd @-@ Bahn and the U6 line of the Berlin U @-@ Bahn without passing through GDR border controls . The station also featured a border crossing into East Berlin . Through trains between Zoo and Ostbahnhof only existed in international traffic , for example the Paris to Warsaw trains . Later , through coaches and shuttle trains connecting to the night trains to Scandinavia crossed the intra @-@ German border on the Stadtbahn as well .

Due to a quirk in legislation , the West Berlin parts of the Stadtbahn belonged to the Deutsche Reichsbahn , which made it (and therefore the GDR government) one of the largest landowners in West Berlin . Regular quarrels erupted between the DR , the GDR government , the West Berlin Senate and the Allied occupation powers .

Prices for the West Berlin S @-@ Bahn were kept slightly below the fares of the West Berlin BVG . In East Berlin , a flat fee of 0 @. @ 20 Mark was charged until 1991 . West Berlin politics and most of the populace fully boycotted the S @-@ Bahn , which was run by the East German railways , and introduced bus and U @-@ Bahn lines running parallel to the S @-@ Bahn network and the

Stadtbahn .

= = = Restoration during the Cold War = = =

Despite problems , the Deutsche Reichsbahn made improvements to the line and reconstructed at great expense the Westkreuz railway station which had been built on swamp land .

Meanwhile , the number of S @-@ Bahn lines running in West Berlin was reduced to just three as a consequence of a strike carried out by the Deutsche Reichsbahn 's West Berlin @-@ based employees in September 1980 .

On 9 January 1984 a treaty between the GDR and the West Berlin Senate came into force and turned over the responsibility for operation of the S @-@ Bahn in West Berlin to the West Berlin transport authority , the Berliner Verkehrsbetriebe . Soon thereafter , talks with the GDR commenced regarding improvements of the Stadtbahn in West Berlin as well as the modernisation of the Zoologischer Garten station . The Lehrter Stadtbahnhof was also carefully restored to its original 1880s look and became a listed building . In East Berlin , the Ostbahnhof was partially rebuilt and renamed to Hauptbahnhof , in time for the 750th anniversary of Berlin 's founding in 1987 .

= = = After reunification = = =

The fall of the Berlin Wall and German reunification made for a sudden spike of importance for the Stadtbahn . The first InterRegio train ran to Cologne in 1990 . Since 1991 , Intercity trains to Karlsruhe , Cologne and Hamburg used the Stadtbahn . The Hamburg line was soon extended to Dresden and Prague , and the former Interzonenzug trains from Munich were converted to InterCity trains and now ran on the Stadtbahn as well .

The western part of the Stadtbahn was electrified on 4 July 1993 up to Zoologischer Garten station . The eastern part of the line up to Ostbahnhof had been electrified since 1987 . As soon as electrification reached the Zoo station , ICE trains began to use the station .

= = = Modernisation from 1994 = = =

In October 1994 a large @-@ scale modernisation programme was started on the Stadtbahn . The viaducts were checked and strengthened , and the tracks were bedded in concrete to improve durability and comfort . Almost all stations saw large financial investments and were thoroughly modernised . Long @-@ distance traffic between Zoo and Ostbahnhof stations was interrupted during the construction period and the S @-@ Bahn trains temporarily used the long @-@ distance line . On 24 March 1998 the Stadtbahn was reopened , now carrying up to three ICE and IC lines as well as five RegionalExpress lines . Part of the Stadtbahn was realigned as part of the construction of the new Berlin Hauptbahnhof , with construction commencing in 2001 and completed in July 2002 . The realigned section consisted of two 450 m @-@ long bridges spanning the station and the adjacent Humboldthafen port .

Until the summer of 2006 , the Stadtbahn was the main thoroughfare for long @-@ distance trains , which usually stopped at Zoologischer Garten and Ostbahnhof (which was renamed in 1998) . When the new Hauptbahnhof opened on 28 May 2006 the importance of the line diminished slightly , as many trains now would use the new north @-@ south line connected to the Hauptbahnhof . The remaining intercity trains on the Stadtbahn , mainly those heading toward Hanover and Cologne , now usually call at Hauptbahnhof and Ostbahnhof .