

= Linx ( railway company ) =

Linx AB was a railway company which operated inter @-@ Scandinavian passenger trains between 2001 and 2004 . Established as a joint venture between the Norwegian State Railways ( NSB ) and the Swedish state @-@ owned SJ , Linx operated the routes from Oslo , Norway , to Stockholm , Sweden , and from Oslo via Gothenburg , Sweden , to Copenhagen , Denmark . Services were provided up to ten times per day . However , slow speeds caused by curvy infrastructure in Norway , combined with competition from low @-@ cost airlines , caused the company to lose money , and eventually grounded operations . The services were taken over by NSB and SJ . Linx . The main rolling stock were eleven X2 electric multiple units , although it used Rc @-@ hauled trains on the Gothenburg ? Oslo service . The company was based in Gothenburg .

= = History = =

Linx was established following an informal agreement between the ministers of transport in Norway , Sweden and Denmark to establish high @-@ speed rail connection between the countries ' capitals . Linx was the train operating part of the agreement , while the governments would have to invest in better rail infrastructure to allow higher speeds .

The company was introduced by NSB and SJ on 12 May 2000 . The stated plans were to start with the service from Gothenburg to Copenhagen in January 2001 , from Oslo to Gothenburg in June , and from Oslo to Stockholm in January 2002 . The company would have its head office in Gothenburg and would lease rolling stock from SJ . NSB 's chief executive officer , Osmund Ueland , became the company 's first chair . The company had a share capital of 10 million Swedish krona ( SEK ) and was owned in equal shares by NSB and SJ . The company 's first train ran on 7 January , from Gothenburg to Copenhagen . Service from Oslo to Gothenburg started on 17 June .

Because Linx was only to operate profitable routes , it was decided that the company not take over the night train service from Oslo to Copenhagen . NSB stated that they wanted all inter @-@ Scandinavian passenger transport to be operated by the new company , and therefore decided to terminate the night train as of September 2 . Although the night trains were filled during the summer and parts of the winter , there was a low ridership during the rest of the year . However , it was a lack of engineers that forced NSB to terminate the night train service as of 20 June . There were protests against the ending of the service , particularly in Norway . Marketing Director Øyvind Rørslett of Linx stated that " we are concentrating on the day trains . We want to develop a holistic concept , where new modern trains are a major part . Night trains do not fit into this concept " .

X2 trains were never introduced on the section from Gothenburg to Oslo . Linx stated that investments for NOK 2 billion were needed on the Østfold Line to reach a travel time from Oslo to Gothenburg of 3 hours and 30 minutes , rather than the more than 4 hours at the time . In contrast , the Norway / Väner Line on the Swedish side of the border meets the necessary standards .

The first service from Oslo to Stockholm ran on 16 June 2002 . Initially there were only three daily services , but later that year , two more daily services were introduced . At the same time , travel time was reduced by 20 minutes , as the trains stopped at only three intermediate stations . Linx operated with different prices on the same route , depending on if the ticket was bought in Norway or Sweden . The company stated that this was in part because of a strong Norwegian krone , in part because Norwegians were willing to pay more , and in part because the sales system in Sweden was more automated .

In July 2003 , Linx reduced the number of daily services from Gothenburg to Copenhagen from ten to four . The company stated that this was because of insufficient ridership . Linx had offered tickets with a lower price than Scandinavian Airlines , who operated the airline service between Oslo Airport , Gardermoen and Stockholm @-@ Arlanda Airport . Ryanair also provided an airline service , but with fewer departures and with the same center @-@ to @-@ center transport time because it flew from the secondary Sandefjord Airport , Torp and Stockholm @-@ Skavsta Airport . From 1 September 2003 , Norwegian Air Shuttle started services from Gardermoen to Arlanda , and became a more direct competitor to Linx . From 27 October , Nordic Airlink ( later FlyNordic ) also

started a flight between the same airports . With shorter travel time from center to center and comparable fares , Norwegian and Nordic started taking market shares away from Linx .

Starting on December 15 , NSB took over three of the daily services from Oslo to Gothenburg , by extending three of the InterCity services along the Østfold Line onwards from Halden Station to Gothenburg . On 24 January 2004 , a Linx train derailed at Vestby Station on the Østfold Line . None of the 50 passengers were hurt in the incident .

On 11 June 2004 , NSB and SJ stated that they would discontinue Linx , and would operate the last train on 31 December 2004 . The company had never made a profit , and the new low @-@ cost airlines had reduced ridership by up to 40 % . The only part of the service which was profitable was the service from Stockholm to Karlstad , which SJ intended to continue . NSB stated that if a new Oslo ? Stockholm service was to be introduced , it would require state grants . In September , SJ 's CEO Jan Forsberg stated that the problems lay with the infrastructure in Norway . While the speeds were high enough to operate with a profit in Sweden and to Copenhagen , the slow lines in Norway made services to Norway unprofitable . Linx had by then transported 1 @.@ 3 million passengers , and Forsberg stated that had the company transported 1 @.@ 7 million people , it would have been profitable .

The closing was criticized by two engineers , who stated that the company actually made a profit , but ended up paying 24 % of their revenue in ticket commission to SJ and NSB . In 2003 , the company had a revenue of SEK 426 @.@ 8 million , of which SEK 411 million was from ticket sales . The company had a deficit of SEK 33 @.@ 8 million , of which NSB covered SEK 8 @.@ 1 million and SJ SEK 25 @.@ 6 million . However , NSB took a commission of SEK 10 @.@ 8 million and SJ SEK 58 @.@ 5 million . This gave a profit , before provisions , of SEK 35 @.@ 5 million . In comparison , Narvesen took a commission of 2 @.@ 7 % for tickets sold by NSB .

The closing of the Oslo ? Stockholm service was the first time there was not a train service between the capitals since 1871 , when the line opened . In addition , the service cut occurred at the same time as the centennial of the dissolution of the union between Norway and Sweden . On 4 November , SJ and NSB stated that they would continue the service , but only on weekends . They stated that an increased service would either require financial grants from the states , or introduction of duty @-@ free sales on board .

= = Service = =

Travel time from Oslo to Stockholm was 4 hours and 30 minutes , with stops at Oslo Central Station , Lillestrøm Station , Kongsvinger Station , Karlstad Central Station , and Stockholm Central Station . When the service was launched , a ticket from Oslo to Stockholm cost NOK 563 , or NOK 326 if bought at least seven days before departure . Two people under the age of 16 could travel for free when accompanying an adult . Later , minimum prices of NOK 280 were launched , while maximum price for business class was NOK 1300 . Tickets were slightly cheaper to purchase in Sweden than in Norway . About 185 @,@ 000 passengers took the train from Oslo to Stockholm each year .

Travel time from Gothenburg to Copenhagen was 3 hours and 30 minutes . The X2 trains had a speed of up to 200 kilometres per hour ( 120 mph ) on the West Coast Line from Gothenburg Central Station to Malmö Central Station , and then ran along the Oresund Line via Copenhagen Airport , Kastrup Station to Copenhagen Central Station . A ticket from Gothenburg to Copenhagen cost NOK 1119 in business class , NOK 803 in second class , and with reduced prices down to NOK 342 if bought in advance or for weekend travel .

Travel time from Oslo to Gothenburg was slightly more than four hours . Prices varied from NOK 633 for a business class ticket , NOK 355 for a second class ticket to NOK 187 for pre @-@ booked tickets . X2 trains were never introduced on the section from Oslo to Gothenburg . Instead , conventional Swedish trains from the 1960s hauled by Rc locomotives were used . Passengers traveling from Oslo to Copenhagen had to change train in Gothenburg .

= = Rolling stock = =

On the sections Oslo ? Stockholm and Gothenburg ? Copenhagen , Linx operated X2 electric multiple units owned by SJ . Forty @-@ three units were delivered to SJ by Kalmar Verkstad between 1990 and 1997 . The trains are standard gauge , have a power output of 3 @,@ 260 kilowatts ( 4 @,@ 370 hp ) and a maximum speed of 200 kilometres per hour ( 120 mph ) . Each train consists of a locomotive , a number of middle cars and an end car . The trains use 15 kV 16 2 ? 3 Hz AC power supply in Sweden and Norway , and 25 kV 50 Hz AC in Denmark . Linx had two classes : business and second . On business class , a warm meal and drink was included , while in second class , a restaurant car was provided . Seats had a power outlet for laptops , and free wireless Internet .