Saxony-Anhalt on the Silk Road

The Deutsche Bahn’s new train formation depot in Halle is the most modern of its kind in Europe. Starting from here, freight trains set off for south-eastern Europe and travel as far afield as China.

In the south of Saxony-Anhalt, one of the largest marshalling yards in Germany has recently opened following an investment of 180 million Euros by the DB and the German federal government. The result is one of the most important cargo hubs in Germany and the most modern depots of its kind in Europe, where up to 2,400 freight wagons can be assembled into long trains per day—an almost completely automated basis.

A new era for rail freight transport in Central Germany has begun in Saxony-Anhalt: at the end of June 2018, the Deutsche Bahn (DB) officially opened the Halle-Nord train formation depot (ZBA). The reconstruction and expansion of the former marshalling yard of the city of Halle took four and a half years. With its modernisation, the city in southern Saxony-Anhalt is now one of the biggest freight hubs in Germany. Here in Saxony-Anhalt, the DB isn’t just centralising the freight traffic in Central Germany, it is also replacing the outdated infrastructure in many places on the rail network.

All in all, 180 million Euros were invested in the project by the DB and the German federal government. The train formation depot is located in the immediate vicinity of the central station of Halle (Saale) in the heart of the city. Its dimensions are huge. More than 42 kilometres of track with 133 points and a total of 75,000 sleepers were laid on the 260,000 square metre site, in addition to almost 10,000 tonnes of steel.

With its new facility, Saxony-Anhalt is home to the most modern train formation depots in Europe. The process of assembling the trains at the depot is almost completely automated. Even the shunting locomotives at the Halle-Nord ZBA, which move the arriving freight cars onto the hump, are unmanned, and controlled by the central computer system. The same applies to the wagons: a pillar situated on the track scans the waybill on each wagon, which contains information about its origin, destination, load, weight and speed. The data is transmitted to the electronic signal box, and the process control computer directs it from the hump over several points and onto one of the 36 sorting tracks.

There, the wagons are put together to form new trains which can have a length of up to 650 metres. This kind of bundled transport is both efficient and environmentally-friendly. The process control computer also regulates the speed of the rolling cargo—if the wagons are too fast, they are slowed down with automatic braking systems which have been installed in the track bed. If their momentum is insufficient, they are pulled by yellow locomotives to the finish. The newly created trains then leave Halle on two exit tracks.

Since its opening, 22 trains have been put together at the depot every day, and after the timetable change in December, up to 2,400 freight wagons are set to be sorted per day—or 120 per hour! Night work is indispensable for this goal to be achieved, resulting in another area in which Halle has broken new ground: for the first time ever, LED lamps are illuminating a train formation depot. 653 light masts, 14 metres high, with a total of 1,130 lamps illuminate the maze of tracks in the dark and fulfill the elevated requirements of the German Federal Railway Authority, which require the lanes adjacent to the tracks and between the wagons to have a brightness level of ten lux.

It was in 2006 that DB Cargo, a company of the Deutsche Bahn with responsibility for rail freight transport, reorganised its area of business. Its new plans envisaged the use of nine large train formation depots; there were already eight in Germany, with one lacking in the southern region. The decision was taken in favour of Halle (Saale). Of decisive importance for the investment was the location of the city in the European route network, says Eckart Fricke, Representative of Deutsche Bahn for Saxony, Saxony-Anhalt and Thuringia. The decision in favour of the Halle location was also taken on the basis of the current plans of the DB to construct and extend a third important north-south route through Germany in addition to the two existing routes in western Germany in response to growing traffic flows in Europe: the Eastern Corridor from the northern ports - Stendal - Magdeburg - Halle - Leipzig - Hof - Czech Republic / Munich / Austria.

Halle is now the logistics centre for the DB in Central Germany. It is from here that flows of goods make their way to south-eastern Europe. The freight also travels north to Magdeburg or Berlin and south to Leipzig or Erfurt, where it can then advance to other cities in Europe and the world. Halle is set to become the central distribution point for goods that travel to the Far East and as far afield as China. The city on the river Saale therefore finds itself on the New Silk Road, the infrastructure project of the Chinese government which aims to revive the 500-year-old trade route, connecting Asia, Europe and Africa.

Above all else, Halle is to serve as a transhipment point between the seaports and Eastern and Southern Europe. To achieve this, the DB is upgrading the corresponding freight route known as the Eastern Corridor, the line from Uelzen (Lower Saxony) via Stendal, Halle and Leipzig to Bavaria and on to Southern and Eastern Europe.

Halle is therefore becoming the central freight transport hub in eastern Germany. In the Halle region, key rail routes intersect in the north-south and east-west directions. In the future, DB Cargo intends to bundle the production sequences for single wagon goods transport for Central Germany at the new train formation depot, thereby further reducing the transport times for the customers. “Saxony-Anhalt has both a great past and a great future as a trading hub. The new train formation depot opens up new possibilities in national and international freight transport. This modern marshalling yard is a boost for the whole of Central Germany, providing an important economic impulse and securing jobs throughout our region,” highlighted Thomas Weisel, Minister for Regional Development and Transport in Saxony-Anhalt, at the opening of the depot in June.

The construction of the new train formation depot forms part of the modernisation of the Halle (Saale) transport interchange as well as the “German Unity Transport Project 8”. With the upgrading and reconstruction of its rail hub, the city of Halle is therefore set to be well prepared for the new high-performance network of the Deutsche Bahn.