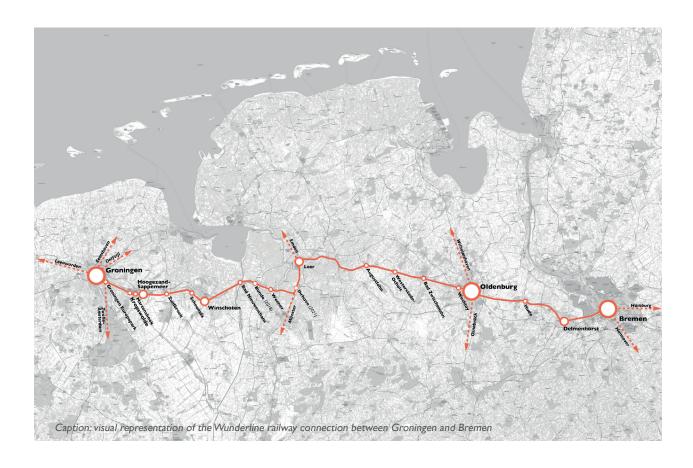




Introduction

Wunderline, the cross-border railway connection between Groningen (the Netherlands) and Bremen (Germany), forms a strategic link on the TEN-T comprehensive network and plays an important role in boosting the socio-economic development and liveability of the German-Dutch northern border regions. In order to meeting evolving environmental and societal challenges, the European Year of Rail should be used as an opportunity by EU policymakers to fully unlock the potential of this cross-border railway connection in many fields.

In the coming years, the Wunderline project partners (Province of Groningen, State of Lower Saxony, Free Hanseatic City of Bremen, ProRail, DB Netze, the German Federal Ministry of Transport and Digital Infrastructure and the Dutch Ministry of Infrastructure and Water Management), will perform various infrastructural works (e.g. track-doubling, improving railway stations, adjusting signalling systems) to further upgrade the existing railway connection. These works will result in a reduction of travel times between Groningen and Bremen (and vice versa) by 37 minutes in 2030, cutting back the total travel times between these two cities to 2 hours and 11 minutes. With the support of the EU, Wunderline can become a frontrunner in the transition towards a climate-neutral economy. The project partners believe there are two unique propositions that demonstrate the added value of Wunderline. In February 2019, an all in political Package Deal to realise this was signed between the Wunderline partners.



I. Cross-border connections: enablers of the European Green Deal

Following the COVID-19 crisis and the publication of the latest report by the Intergovernmental Panel on Climate Change, it has become clear that green mobility is the license to grow. The EU's transport sector is currently responsible for a quarter of all EU greenhouse gas (GHG) emissions. However, rail transport is only responsible for 0,4% of the EU GHG in the transport sector, while it accommodates 8% of all European travellers. As rail transport already complies with the EU's climate objectives for 2030, it is the most effective way to decarbonise the transport system and achieve zero-emission transport in the long run.

It is clear, based on research by Prognos (2021), that cross-border railway connections are a good alternative to short-haul flights. According to their study, "Opportunities of the Amsterdam-Noord Nederland-Hamburg railway link" (study soon to be published) a shift from air travel to rail transport between the cities of Amsterdam and Bremen, both located on the North Sea-Baltic TEN-T Corridor, would result in a 85% CO2 emission reduction per day (from 34,800 to 5,200 tons of CO2, based on 470 passengers per day). As such, Wunderline has the potential to accommodate a modal shift from carbon-intensive modes to rail transport and hence contribute to the objectives as set out in the EU's Sustainable and Smart Mobility Strategy, e.g. realising carbon-neutral scheduled collective travel under 500 kilometres.

Upon completion of the infrastructural works, the travel time between Groningen and Bremer will be reduced to 2 hours and 11 minutes, similar to taking a car or bus. Moreover, the northern regions in Germany and the Netherlands, as well as the Wunderline project partners, have the ambition to deploy sustainable rolling stock (e.g. hydrogen-powered and battery-powered trains) on the trajectory, thereby offering a zero-emission alternative to road transport. As such, cross-border connections play a crucial role in realising the climate objectives as put forward in the European Green Deal. The Wunderline project partners ask EU policymakers to prioritise investments in key cross-border connections located on the TEN-T network to fully unlock their potential.

2. Stimulating connectivity and socio-economic development in the German-Dutch northern border regions

Cross-border connections are more than just railway connections. They establish seamless traveling across borders, thereby connecting EU citizens and stimulating socio-economic activities. Hence, the benefits of such connections reach far beyond shorter travel times. Wunderline accommodates cross-border commuting and contributes to the accessibility and liveability of the northern border region by establishing an integrated chain mobility (see Box I below). Moreover, the Groningen-Bremen trajectory forms a linking pin towards the North-Sea Baltic TEN-T Corridor. Upon completion of the infrastructural works, the Wunderline railway connection can serve as a gateway to Scandinavia and strengthen theconnectivity towards the Nordic countries.

Box I: Wunderline and chain mobility

The project partners of Wunderline share the perception that the potential of Wunderline can only be fully exploited if a robust and efficient infrastructure ecosystem around Wunderline is in place. Through various project and initiatives related to the mobility chain, the project partners hope to establish a seamless door-to-door experience that encourages passengers to use the train more frequently. Recent projects and initiatives include:

- Improving public transport connections to and from the train stations
- · Developing digital "all in transport tickets"
- Strengthening routes and services for (e-) bikes connecting to the train stations
- Introducing the Wunderline GO-app to improve (cross-border) travel experience.

Over the past years, these projects have contributed to an increase in the use of public transportation, reduced traffic jams and parking problems, and has increased accessibility of the wider northern border regions. In June 2021 the Implementation Programme on Chain Mobility was signed by the State of Lower Saxony, the province of Groningen and over twenty Dutch and German municipalities along the railway line as well as several organisations responsible for public transport. They all participate in a cross-border network in which they will work together over the next three years to improve chain mobility. This form of regional cooperation in the context of a railway improvement project makes the Wunderline unique in Europe.

Furthermore, cross-border connections are drivers of economic growth. Wunderline connects three major economic hubs (Groningen, Oldenburg and Bremen). A faster and more comfortable railway connection will create opportunities for exchanging scientific research between universities, boosting tourism in the border regions and realising a labour market without border barriers.

3. Enabling innovations to unlock the potential of cross-border connections

In order to fully exploit the potential of cross-border connections, the Wunderline project partners call upon EU policymakers to create a stimulating regulatory framework that enables high-quality rail passenger services. Passengers are not travellers from station to station, but from door to door, and therefore would benefit from integrated ticketing services that transcend national boundaries. This would best be coordinated at an EU level, e.g. by embracing initiatives such as Full Service Model (FSM) and Open Sales and Distribution Model (OSDM) that aim to harmonize ticketing tariffs and governance models.

In addition, in order to achieve seamless cross-border connections, the deployment of the European Railway Traffic Management System (ERTMS) on the TEN-T Rail Corridors should be stimulated. ERTMS, in combination with Autonomous Train Operation (ATO), can expand rail capacity and boost interoperability.

Box 2: Current state of play of Wunderline

The goal of Wunderline - an EU Flagship project - is to realise a faster and more comfortable train connection from Bremen to Groningen (and vice versa). This will be done by means of a step-by-step approach consisting of three building phases. The first building phase (to be finished in 2024) focuses on a faster stopping train in the Netherlands. The goal of the second building phase (due in 2030) is an additional fast train in the Netherlands to Leer every two hours, as well as a stopping train every hour. The third building phase will ensure a direct connection (no transfer in Leer) via an additional fast train in the Netherlands and Germany every two hours, with a total travel time of two hours and 11 minutes. These three consecutive construction phases should improve the quality of the rail connection: shorter travel time, more comfort and better accessibility.

Wunderline received a CEF Transport grant in 2014 (studies) and 2019 (works - for part of building phase 1). The Wunderline project organisation will submit a works application during the CEF 2 Transport call 2021. This application covers the remaining part of building phase 1 (works) and the preparation for building phase 2 (studies).



MORE INFORMATION ABOUT THE WUNDERLINE?



wunderline.nl/de



@Wunderline_NL @Wunderline_DE

MORE INFORMATION

For more information on Wunderline, please visit our website or send an e-mail to wunderline@provinciegroningen.nl

October 2021
Bremen
Groningen
Hannover







