

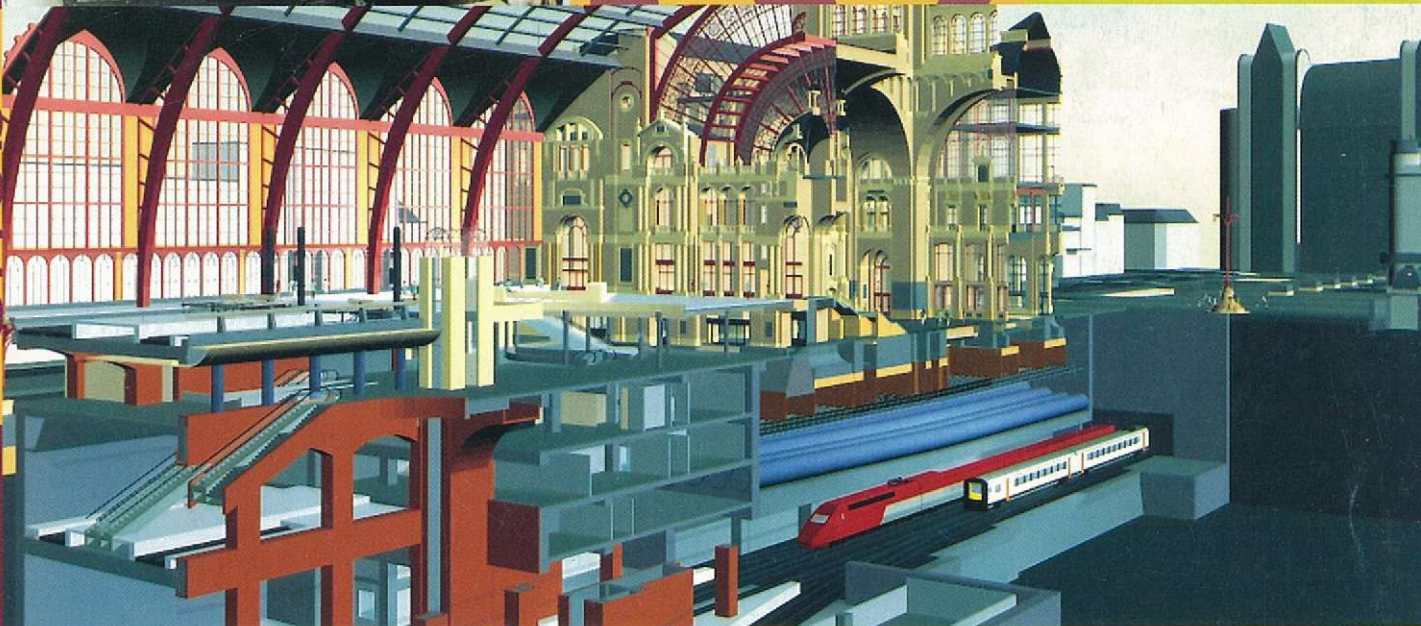
Antwerpen-Centraal

and the north-south connection



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project outline



the north-south connection project

SNCB started the construction of the north-south connection in May 1998. This 3.8 km rail tunnel between Antwerpen-Berchem and the Damplein will allow for trains to cut through directly, under the city, towards the north of Antwerp and vice versa as of the beginning of 2006.



Antwerp Central station was built by the Bruges architect Louis De la Censerie between 1898 and 1905. Before the works it was a terminus station with 10 dead-end tracks.

The Antwerp north-south connection has to solve the capacity problems of the Central Station. Before the works Antwerp Central station or "Antwerpen-Centraal" was a terminus station with 10 dead-end tracks. Moreover the rail tunnel will allow for trains to run through directly, under the city. At present all northbound trains have to take the circle railway.

14 tracks divided over three levels

The construction of the north-south connection and the alteration of the Central Station are scheduled in different phases, in order to keep the station permanently accessible to the passengers during these works.

Rail traffic at the Central Station is currently possible on three tracks. By mid-2003 level +1 will be completed with six operational tracks.

The shopping promenade on the ground level between levels +1 and -1 will be ready by the end of 2004. This promenade will constitute a pedestrian area between the central station hall and the future second station entrance.

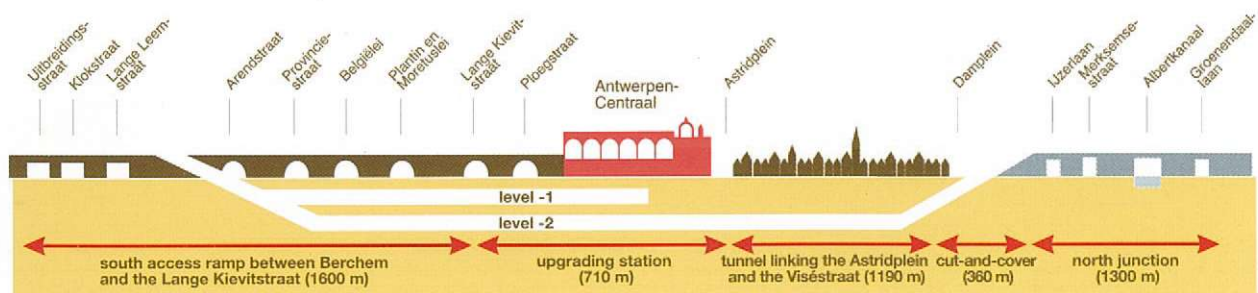
After the completion of the north-south connection project in 2006, the lower tracks (levels -1 and -2) will also become operational, which means that the new station of Antwerpen-Centraal shall be operating 14 tracks divided over three levels.

Second station entrance

Not only will there be more tracks, the platforms are extended too (375 to 425 m), allowing SNCB to operate longer train sets. Thanks to all these measures the current station becomes twice as long and its capacity will be doubled. That calls for the opening of a second station entrance at the Lange Kievitstraat.

The north-south connection consists of a 3.8 km rail tunnel between Antwerpen-Berchem and the Damplein. This connection will allow for direct rail traffic from north to south and vice versa as of the beginning of 2006.

Together with the construction of the north-south connection, the Koningin Astrid square will be renewed as well. Trains shall be running under the Astridplein to the Damplein through two 20 m single-track tunnel tubes.



New high-speed line Antwerp – Dutch border

Upon exiting the tunnel at the Damplein, the trains enter a new railway line that runs to the Groenendaallaan where the new station Antwerpen-Luchtbal is to be built.

A new high-speed line of 35.2 km will be built from Antwerp along the motorway E19 Antwerpen-Breda. The high-speed line between Antwerp and the Dutch border is part of the northern branch of the Belgian high-speed network. The Belgian high-speed project consists of three main arteries: the western, eastern and northern branches.

Better mobility in Antwerp

The construction of the north-south connection is part of the 'STAR 21' modernisation project of the Belgian railways. The total cost of the north-south connection amounts to BEF 28 billion. The north-south connection is SNCB's contribution to the improvement of mobility in and around Antwerp.

The Antwerp north-south connection project is indeed a blessing for rail traffic. Not only domestic, but also international trains and high-speed services shall be running through this rail tunnel. Thus it will only take 1.08 hrs to travel from Antwerp to Amsterdam as of 2006 instead of the current 2.03 hrs.

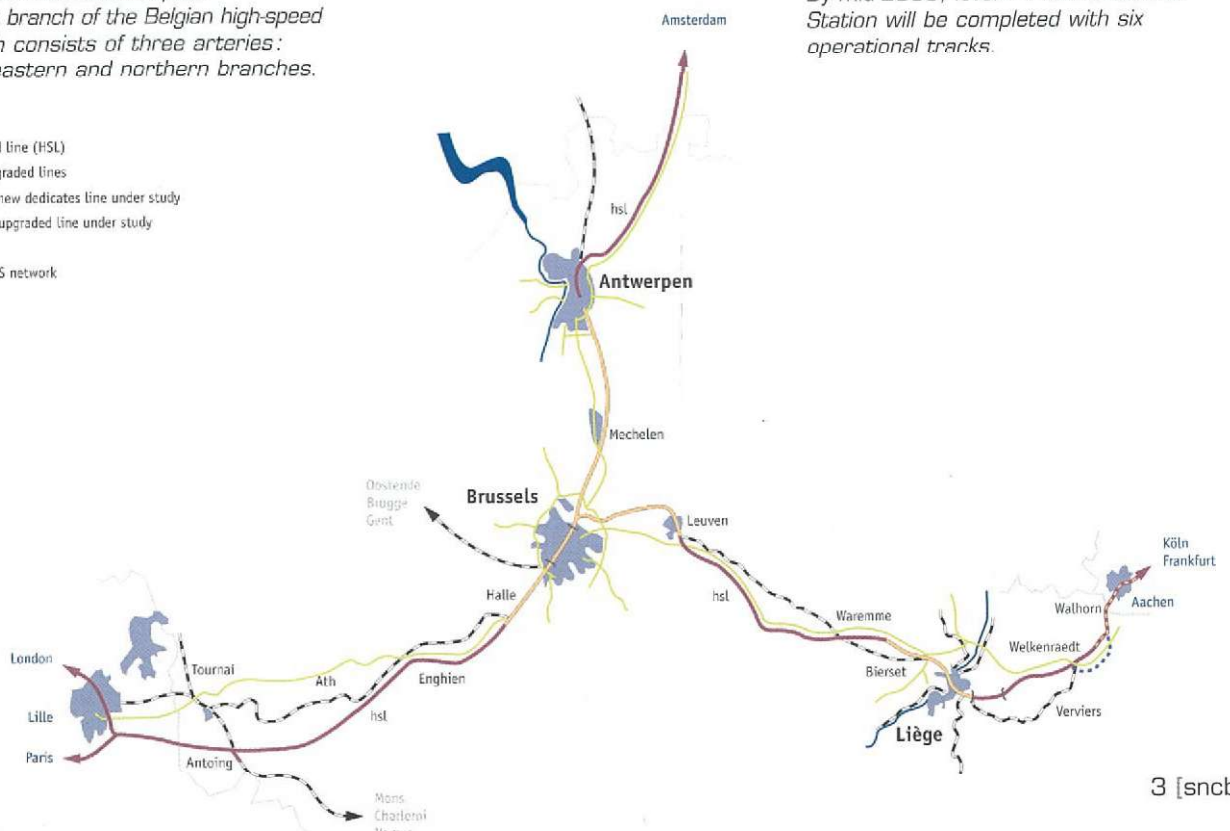


By mid-2003, level +1 of the Central Station will be completed with six operational tracks.

The north-south connection is part of the northern branch of the Belgian high-speed network, which consists of three arteries: the western, eastern and northern branches.

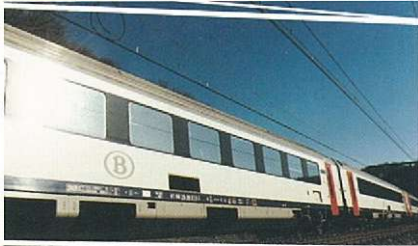
Legend

- High-speed line (HSL)
- TGV on upgraded lines
- Project of new dedicated line under study
- Project of upgraded line under study
- Tunnel
- SNCB/NMBS network
- Motorway
- Border



suburban traffic around Antwerp

SNCB is investing heavily in the Antwerp rail infrastructure with the construction of the north-south connection and the high-speed works between Antwerp and the Dutch border. On top of that, a second rail access to the port is also on the agenda. As soon as the 2nd rail access and a number of other infrastructure projects are completed, Antwerp shall be able to develop a full-fledged suburban network.



A new stopping point is to be built in the municipality of Brecht, which will only be served by domestic trains.

The guiding principle of this suburban network consists of running an extra omnibus train on the different railway lines around Antwerp (within a radius of +/- 30 km).

Moreover the aim is to offer a number of new IC/IR connections to Antwerp on the stretches Antwerpen – Roosendaal and Antwerpen – Turnhout.

New stations Luchtbal and Brecht

The journey from the new station Antwerpen-Luchtbal at the Groenedaallaan to the city centre will only take a few minutes by train.

As soon as the new high-speed line between Antwerp and the Dutch border is completed, the international and high-speed services will run on this railway line, as well as the new IC service (Brussels) – Antwerpen – Breda, which will call at the new station in Brecht.

Other advisable connections such as Antwerpen – Brussel-Nationaal-Luchthaven (National Airport) and Antwerpen – Brussels-Schuman are still under study. These require a number of major infrastructure works around Brussels.

Better mobility in Antwerp

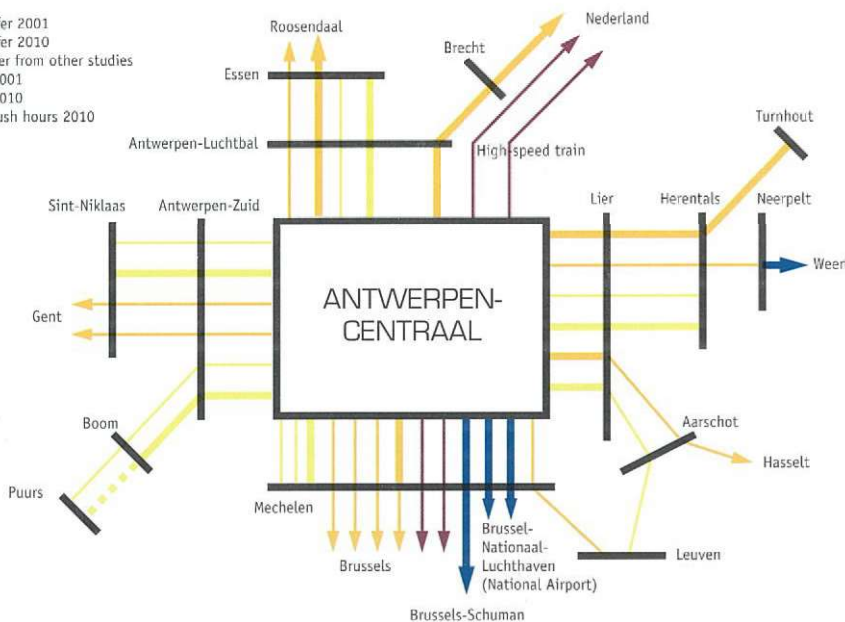
The Antwerp suburban network has to be seen in the light of the suburban policy around other major cities. Likewise the increase of the train offer is one of a range of mobility improving measures: a straightforward parking policy, better cycling and walking facilities to reach the station and smooth transfer to trams and buses.

The methodical development of the suburban network around Antwerp will allow passengers to benefit from an extensive rail offer and the comfort of an efficient public transport service.

SNCB is investing heavily in the Antwerp rail infrastructure and will keep doing so during the coming years.

Legend

- IC/IR offer 2001
- IC/IR offer 2010
- 2010 offer from other studies
- L-offer 2001
- L-offer 2010
- During rush hours 2010

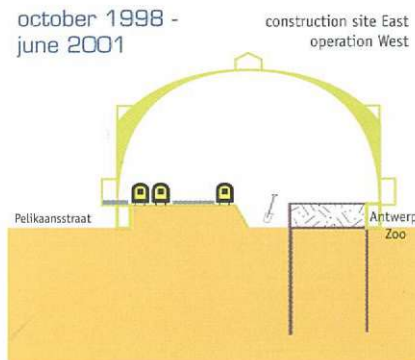


phased alteration of Antwerpen-Centraal

➤ In order to guarantee unhindered train traffic between Antwerpen-Berchem and Antwerpen-Centraal and to keep the Central Station open during these works, the construction of the Antwerp north-south connection and the alteration of the Central station have been scheduled in various phases.

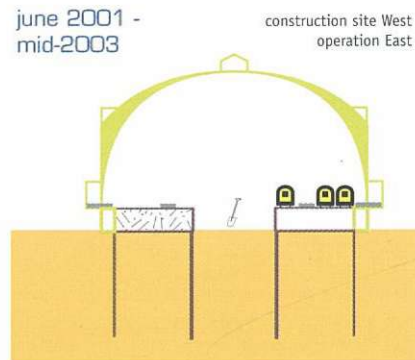
Phase 1

During the first phase three tracks will be operational on the Pelikaansstraat side (west), whereas the new level +1 is being completed on the side of the Zoo (east).



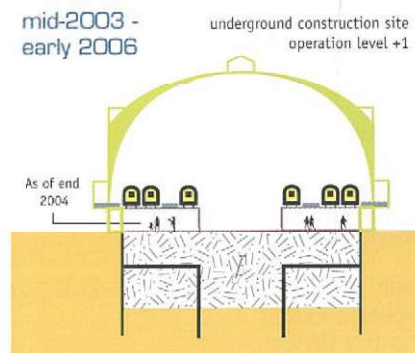
Phase 2

The three new platform tracks side Zoo will be ready by June 2001 and the trains will enter the station at the eastside. Side Pelikaansstraat then becomes a construction area where the necessary foundations will be laid.



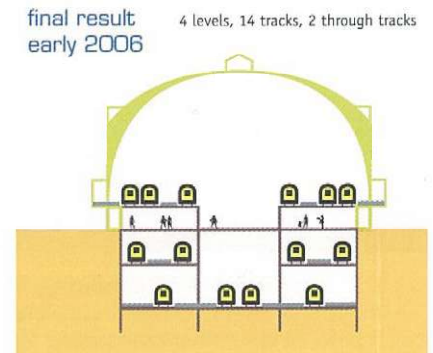
Phase 3

By mid-2003 level +1 of the Central station will be completed with trains entering the station on six operational tracks. The shopping promenade on the ground level will be ready by the end of 2004 with access to the shops from the Pelikaansstraat.



Phase 4

The underground tracks (levels -1 and -2) become operational as soon as the north-south connection project is completed early 2006. Antwerpen-Centraal will thus have fourteen tracks divided over three levels.



the new station of Antwerpen-Centraal

> The new station is gradually starting to take shape under the tracks hall and also at the Lange Kievitstraat. Two important aspects need to be taken into account for this new station, viz. respecting the original architecture of this classified building and the free incidence of daylight



The new underground part of Antwerpen-Centraal will link up as fluently as possible with the old, existing station building.

Antwerp Central station is a classified monument, which implies that the alteration has to respect the existing architecture. A striking element are the arc elements that are also present in the existing station building. These will later be covered with a stone revetment, in order to avoid a breach of style with the monumental station. The renewed Antwerp railway cathedral will be ready by the beginning of 2006.

Atrium: daylight at level -2

The central area under the tracks hall is to be opened up entirely so that passengers can enjoy daylight even at the lower levels. Daylight reaches the passengers through an atrium or open structure and gives both passengers and visitors to Antwerpen-Centraal a pleasant and safe feeling. This method is increasingly being applied by architects in monumental buildings all over the world.



Escalators, lifts and fixed staircases will channel the passengers smoothly to the various levels of the new Central Station as of the beginning of 2006.



High-speed trains as well as domestic shall be using the Antwerp north-south connection as of the beginning of 2006.

second station entrance

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➤ Antwerpen-Centraal will be extended with a second station entrance at the Lange Kievitstraat. It will be a full-scale station that will improve the appearance of the rear side of the railway cathedral and at the same time a new and pleasant square will be laid out here.

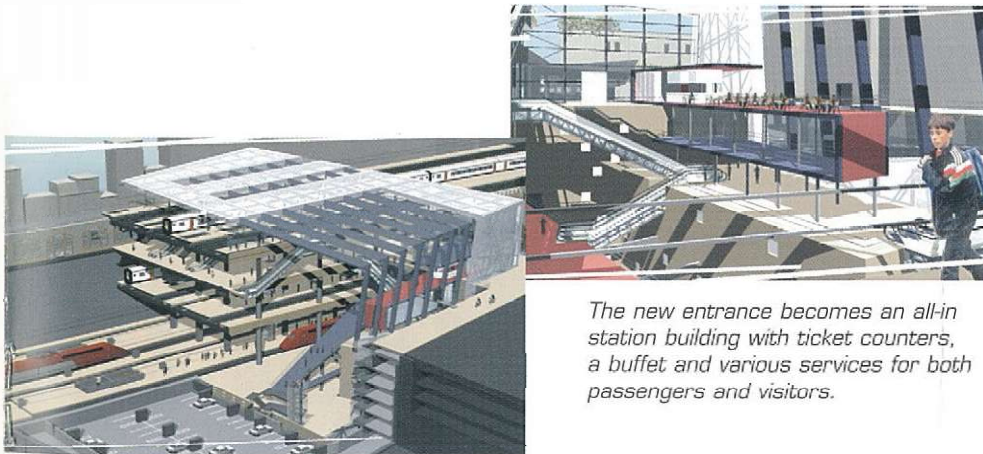
The new entrance is more than just a backdoor. The atrium or underground rail hall does not only admit lots of light but also enough fresh air. This underground atrium constitutes the central hub for departing or arriving passengers.

The aboveground level of the station building centralises the station activities. Bicycle sheds and a parking garage with a capacity of 600 cars will be built below and around the new station building.

Urban development

The new station entrance is also a great opportunity to brush up and to revive the surrounding area Lange Kievitstraat – Van Immerseelstraat. The Rotterdam consultancy MVRDV was asked to conduct a study and to integrate the station entrance into a new urban entity.

A steering committee will be charged with the drafting of a special planning scheme on the basis of the aforementioned study. The plan can serve as a guideline for the elaboration of the urban development project.



The new entrance becomes an all-in station building with ticket counters, a buffet and various services for both passengers and visitors.

The construction of the second station entrance starts in August 2002. The new station at the Lange Kievitstraat will be ready by mid-2006.



The Moretus Park, in the heart of the buzzing city centre, can become an oasis of rest with all kinds of facilities and activities.

new Astrid square

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Together with the construction of the north-south connection, the Koningin Astrid square will be renewed as well. The square will have a completely new look by May 2005. The Astrid square will undergo a complete metamorphosis, both above and under the ground. The design is by the Spanish architect and square designer Jordi Farrando.

Despite various attractive assets, the Astrid square is only partly animated. Too much of its space is taken up by car, bus and tram traffic and there is too little room for pedestrians. Moreover the green zone is not accessible and blocks the pedestrian flows.

Metamorphosis below and above

The aboveground square will be split in two. The southern part of the station building will be entirely reserved for pedestrians with access to the lifts and staircases toward the underground square. The northern part of the square becomes a green area that is open to the public and a junction for public transport (buses and trams). Through car traffic will be barred from the square.

Four new underground levels will be created. A pedestrians-only area and bicycle sheds, a kiss-and-ride zone where people can easily get in or out of their cars and two floors to be used as a multi-storey parking garage with a capacity of about 400 cars. The metro station Diamant and Astrid will be interconnected and smooth connections to the Central Station will be provided.



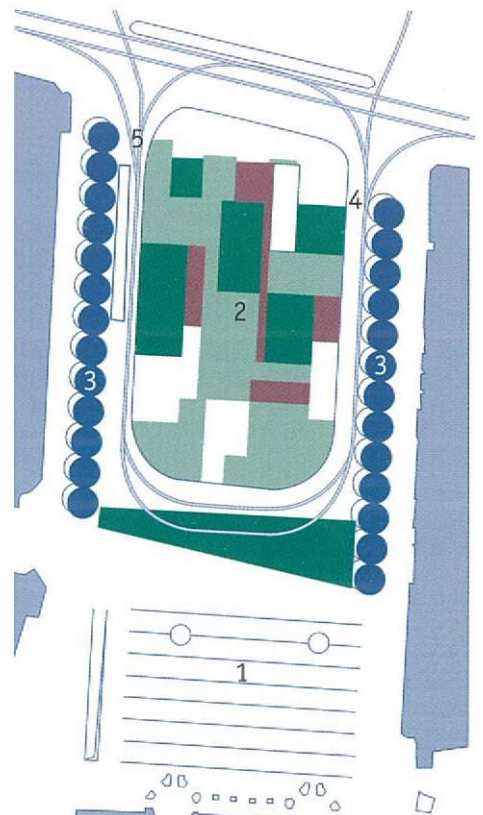
The aboveground Astrid square will be renewed and four underground levels will be created.

1. Pedestrian area and bicycle shed
2. Kiss-and-ride zone
3. Car park
4. Rail tunnel
5. Metro tunnel

Timing of the work

The preparational work for the new square will start mid-2001. Early 2002 the tram and bus stops will move to the other side of the square. The building of the underground car park is scheduled from August 2001 until December 2003. The construction of the underground arrival complex will start in the spring of 2002. This will be the connection point to the future tunnel tubes.

The work aboveground for the new Astrid square will start in the autumn of 2003. The new Astrid square should be ready by May 2005. This Koningin Astridplein will become, together with the Roosevelt-plaats, one of the major mobility hubs for public transport in Antwerp.

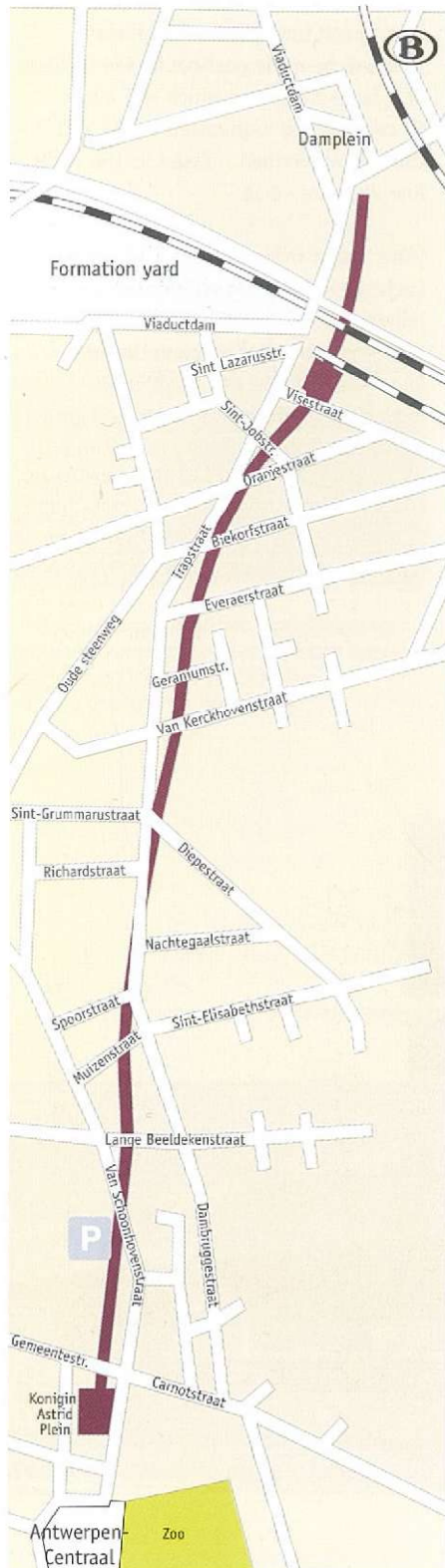


Groundplan of the new Astrid square

1. The southern part, side station
2. The northern part, side Gemeentestraat - Carnotstraat
3. A colonnade of trees separating the pavement from the tram and bus waiting areas
4. The east side, where the tram stops
5. The west side, where the bus stops

rail tunnel Astridplein - Damplein

› The tunnel under the Antwerpen-Centraal station building will be completed by September 2001, but the actual tunnelling works between the Koningin Astridplein and the Damplein still have to start.



The rail tunnel offers quite some advantages as compared with the building of an aboveground railway line. Expropriations only bear on the underground, except for two houses in Nachtegaalstraat where an evacuation exit will be made.

Moreover the work will be carried out under the ground, which limits the construction site nuisance. A range of measures will be taken, so that possible vibrations and noise nuisance will be reduced to the minimum.

Two single-track tunnel tubes

The drilled tunnels run from the Astrid metro station to the north of the city, in the direction of the Damplein. The trains surface just past the Damplein. The rail tunnel will be completely integrated into the square and the Damplein will be refurbished. The accent will be on a green zone and traffic-friendly solutions.

The preparational work for the building of the Astridplein – Damplein tunnel will start mid-2001. Two single-track tunnel tubes will be drilled toward the Astridplein starting from a shaft at Viséstraat (north of Antwerp). This work will start at the end of 2002. The 1200 m tunnels will be used by both domestic and international passenger services, but never for goods transport.

The trains come to the surface and leave the north-south connection at the Damplein. The rail tunnel will be integrated in the Damplein, which is to be refurbished completely.



The drilled tunnels run from the Astrid metro station and parallel to the Dambruggestraat toward the north of the city, in the direction of the Damplein.

Antwerpen-Luchtbal

› The concept of the new station Antwerpen-Luchtbal at Groenendaallaan is currently under study. The basic structure has already been agreed. The new station will feature six platforms of 350 m each, a spacious car park and all necessary facilities.

Other important points of interest are the accessibility for passengers with reduced mobility and the level of comfort that has to meet the present-day standards. The new station will open its doors in April 2003 and will replace the present stopping point Luchtbal.

The north-south connection and the station Antwerpen-Luchtbal allow SNCB to develop a full-scale suburban network on which passengers travel only in a few minutes directly from Luchtbal to the centre of Antwerp. The station has to become a traffic hub offering smooth transfers to other transport modes and comfortable connections to the city centre.

Work in the Luchtbal area

Here at Luchtbal the tracks of the north-south connection join the Antwerpen-Essen railway line as well as the future high-speed line to the Netherlands. That will be made possible by the building of a huge track lead which will allow to connect the high-speed traffic and the line Antwerpen – Essen to the circle line and vice versa.

Other major infrastructure works near Luchtbal include the building of a new railway bridge over the Albertkanaal, the construction of a supporting wall and a viaduct and the completing of the new station. The work at Luchtbal started in December 1999 and should be completed by the end of 2004.

A huge construction site has been set up in the Luchtbal area to build a complex track lead system for crossing the high-speed lines and the other tracks.



The new station Antwerpen-Luchtbal at the Groenendaallaan has to become the heart of a suburban network with smooth connections to the city centre.



new high-speed line

between Antwerp and the Dutch border

Work started in October 2000 for the construction of a new high-speed line (hsl) alongside the E19 motorway between Antwerp and the Belgian-Dutch border. As of 2005 high-speed trains (HSTs) and international trains will be running to the Netherlands on this line and domestic IC trains will be running toward the Kempen and Breda.



The construction of the high-speed line between Antwerp and the Dutch border started in October 2000. The new railway line will be completed by the end of 2005.

The high-speed line between Antwerp and the Belgian-Dutch border is part of the northern high-speed branch Brussels-Dutch border. The northern branch has an overall length of 87 km, including the lines Brussel-Antwerpen, the Antwerp north-south connection and the high-speed line between Antwerp and the Belgian-Dutch border.

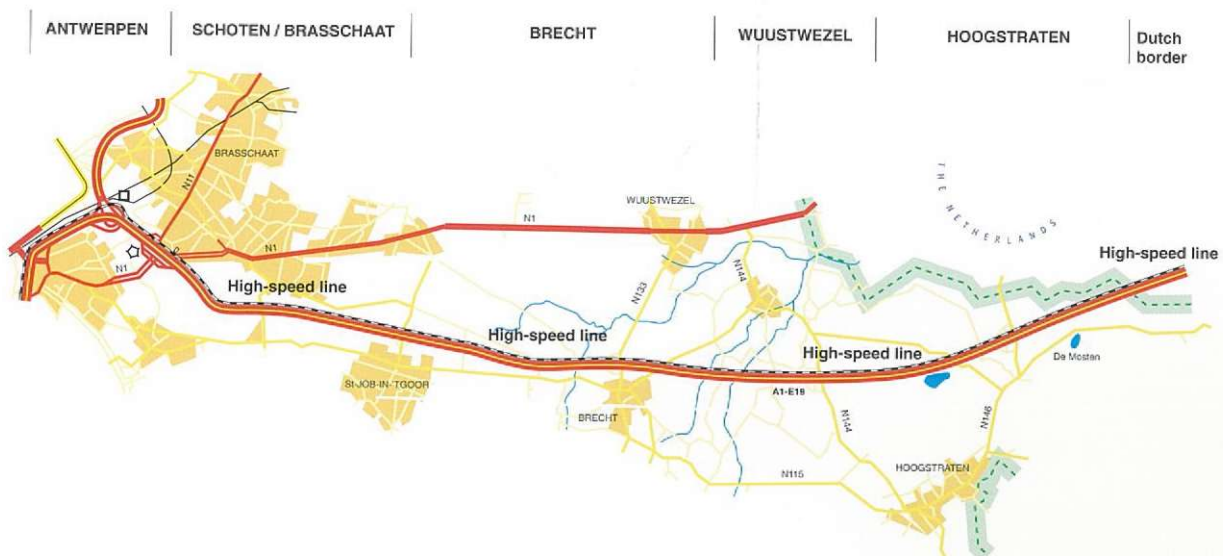
A new high-speed line of 35.2 km will be built from Antwerp along the motorway E19 Antwerpen-Breda. This high-speed line starts at a tube tunnel under Havanastraat (Antwerpen-Luchtbal). Past the cloverleaf E19/A12 the new railway line runs west of the E19 motorway, through the municipalities of Merksem/Ekeren (Antwerpen), Schoten, Brasschaat, Brecht, Wuustwezel and Hoogstraten.

New stopping point in Brecht

A new stopping point is to be built in the municipality of Brecht. It will only be served by domestic trains. This will allow to further develop suburban traffic north of Antwerp and passengers will only need 20 minutes to travel from the Kempen to the city centre of Antwerp by train.

The Antwerp north-south connection and the high-speed line along the E19 motorway allow to limit the distance to cover between Antwerp and Amsterdam to one hour and eight minutes (which is no less than one hour faster than the present journey time). The building of the northern high-speed branch is therefore a blessing for the international connections, but domestic traffic too will benefit from the new railway line.

The 35.2 km high-speed line runs parallel to the E19 motorway Antwerpen-Breda and runs through seven municipalities toward the Dutch border.



More info ?

Do you have further questions or are you interested in the north-south connection project, please dial **03 204 20 34** or contact the SNCB project information line at **078 15 48 04**.

More detailed information about the on-going work can also be found on the SNCB website (www.sncb.be) or on the site of TUC RAIL (www.tucrail.com). Send your e-mails to frederic.petit@sncb.be or geert.dierckx@sncb.be.

Letters can be sent to **SNCB Communication, Info centre north-south connection, Koningin Astridplein 27, 2018 Antwerp.**

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