

The Core Network TEN-T has a gap and services only the southern part of the economic zone Paris – Hamburg. The Northern part of the Netherlands has been left out of the framework TEN-T and this gapping region does not benefit of the core network and its economic benefits.

The gap in the framework does not comply with the White Book Transport of the European Union, stating, that all European regions must be connected through a TEN-T core line. And stating, that the rural areas in between have a direct connection to the major economic centers on both sides. For the North of The Netherlands the major economic centers are Amsterdam-Rotterdam and Bremen-Hamburg.

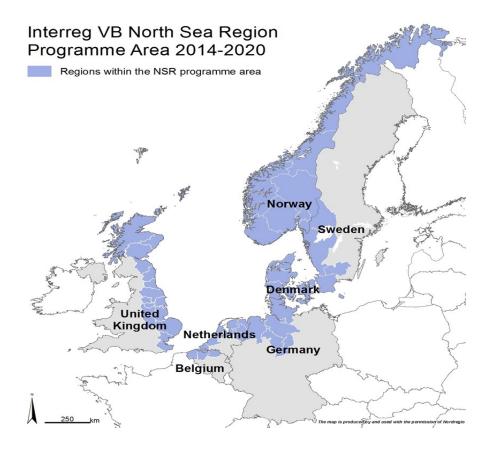
The average transport time between Amsterdam and Hamburg by train is 6 hours. The transport time can be reduced with 50%, building a direct Core Network line with Highspeed rail via the North of The Netherlands and Northwest Germany. In logistic term the most efficient design for the Core Network.

As you can see on the top map on the left, there is an economic zone from Paris to Hamburg and Kiel. On the top map on the right with the TEN-T Core network, you can see that this does not comply with the whole economic zone Paris – Hamburg. The direct line Amsterdam to Hamburg is missing.

Taking a closer look to several TEN rail projects that do comply with the economic zone like: https://www.rfc-northsea-med.eu/.

A direct line Amsterdam – Hamburg fits also within the mapping of the European Regional Development Zone Northsea Region: <a href="http://www.northsearegion.eu/">http://www.northsearegion.eu/</a> (see map below).

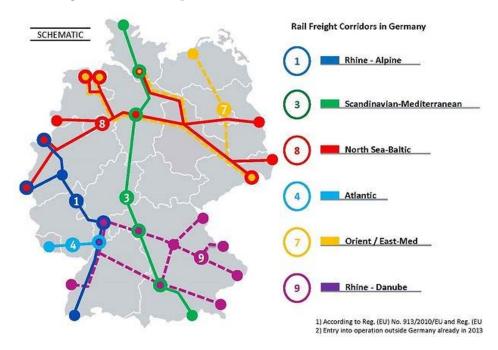
TEN-T Core Network missing link: The gap Amsterdam – Groningen – Hamburg



As you can so on the map of the Rail Freight Corridor Med - North Sea below, the line ends in the southern part of the Northsea Region. The same happened with the Highspeed Line Paris - Amsterdam. The line stops in Amsterdam and is not extended to Hamburg.



On the map below, you can see how the TEN-T Core Network is processed within the German Rail Freight Corridors map of Deutsche Bahn's DB Netze.



This German Corridors map shows that the European Railfreightcorridor Med – North Sea or number 2 is missing. Why is that corridor not extended to Denmark? The logistic smartest corridor is via the North of the Netherlands, connecting in economic zones in the North or The Netherlands and Germany, in a German view: the East – West axle from Hamburg – Bremen/Bremerhaven – Wilhelmshaven to Emden by crossing the Ems and connect with the Dutch Rail Freight Network in Delfzijl.



On above map, the **red line** is the existing Rail Freight Corridor from Amsterdam to Germany. The **green line** is the missing Rail Freight Corridor between Amsterdam/Rotterdam and Northern Germany, which connects further with Scandinavia.

An alternative green line will connect Groningen to Hamburg on the line with industrial and logistic sites of Delfzijl, Emden, also bi-connecting Aurich, Wilhelmshaven and Bremerhaven.

The rail tunnel under the Ems between Delfzijl and Emden should not be an issue, looking at the rail tunnel which Denmark and Sweden are planning now in between Helsingør (DK) and Helsingborg (S).



The realisation of the green line via the North of the Netherlands has extra benefits for Europe. Because of re-routing between Scandinavia through The Netherlands, freight capacity will fall free to arrange more freight on rail to the south and southeast of Europe from Duisburg.

Groningen, September 2018, Frank Menger, Onno van der Kuip

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