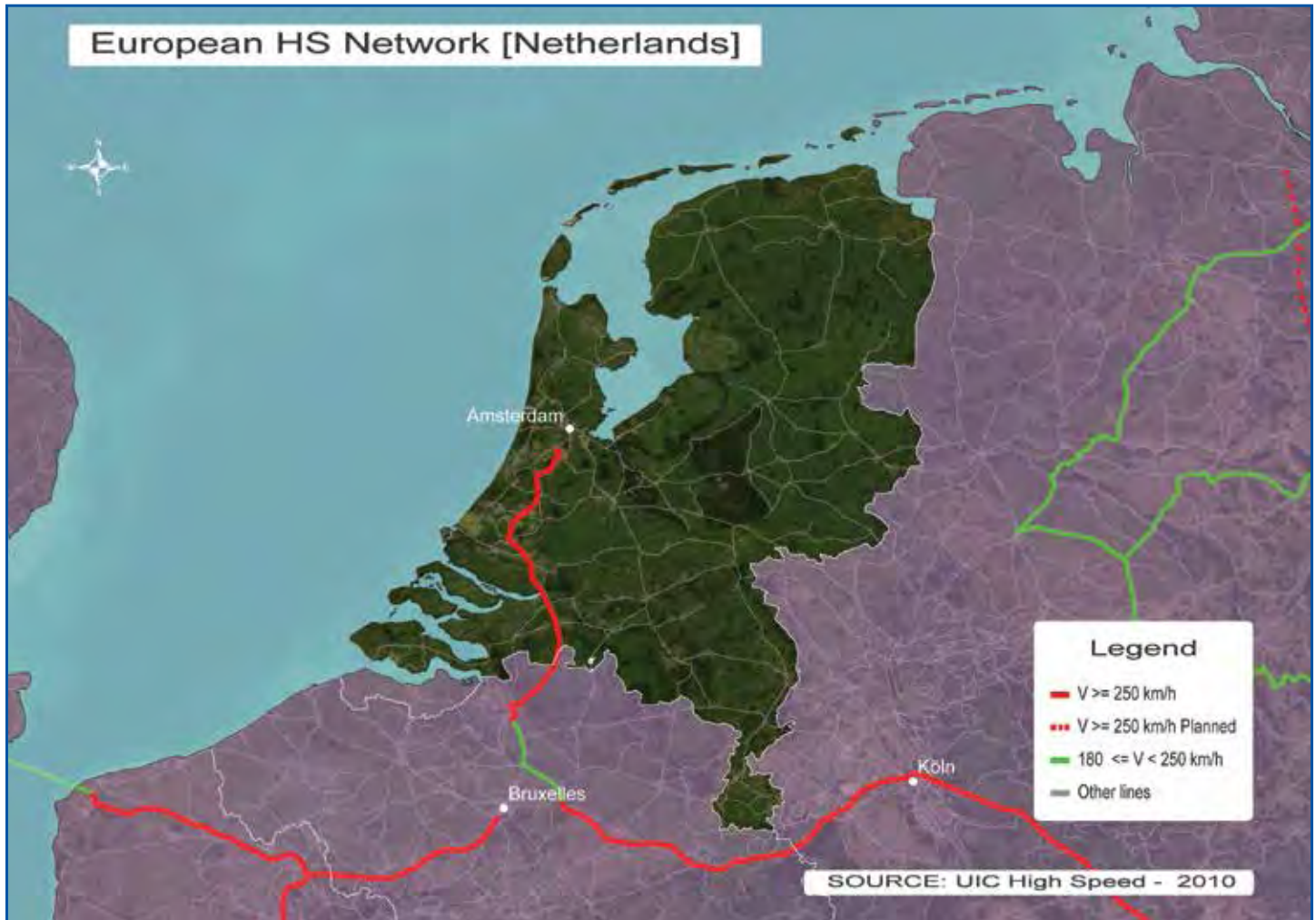




International System Summary: NETHERLANDS



UIC Map of The Netherland's High-Speed Rail Lines

The Netherlands is a coastal country located in Western Europe bordering Belgium and Germany. Almost twice the size of New Jersey, the Netherlands has a population of 16.7 million people, ranking 64th in the world, with 83 percent of the population located in urban areas. Amsterdam is the country's capital and is the largest city with slightly over 1 million people. Rotterdam also has slightly over 1 million people. The Netherlands has a GDP of \$705.7 billion, which ranks as the 23rd largest economy;

the per capita GDP of \$42,300 ranks 17th in the world. Together with Belgium and Luxembourg, the three countries form the Benelux economic union. The Netherlands' high-speed rail network travels 120 km (75 miles) between Amsterdam and the border with Belgium where it continues on to Brussels, Belgium. This alignment runs through densely populated areas, thus serving up to 40 percent of the Netherlands' population. The figure above is a map of the Belgium high-speed rail lines.

SYSTEM DESCRIPTION AND HISTORY

Opening in 2009, the Netherlands HSL Zuid, or High-Speed Line South, is part of a line traveling between Amsterdam and Brussels, Belgium. The table below shows the International Union of Railways (UIC) figures for the Netherlands' portion of the dedicated high-speed line, which spans 120 km (75 miles) from the Schiphol Airport, located just south of Amsterdam, to the Belgian border. Non-high speed service continues north of the Schiphol Airport into Amsterdam.

UIC Table of the Netherlands' High-Speed Rail Lines

Stage	Speed		Year Opened	Length	
	km/h	mph		km	miles
In Operation:					
Schiphol – Rotterdam– Belgian Border	300	185	2009	120	75

The UIC reports five high-speed rail stations in the Netherlands and that in 2009 the high-speed line carried 6.005 million passengers; with a 152 km (94 mile) mean passenger distance.

Sources: *High-Speed Lines in the World*; *HS Train and Trainset Runs*; *High-Speed Traffic*.

ECONOMICS AND FINANCE

European Union directives to separate rail infrastructure ownership and operations resulted in the division of the Dutch National Railway into three separate entities: an infrastructure agency (ProRail), a passenger operating company paying access charges (NS), and a freight operating company. The development of the high speed line to the Belgium border was performed through two separate public-private partnerships (PPP). The new line was constructed by the Infrasppeed consortium under a Design, Build, Finance, and Maintain (DBFM) arrangement. The agreement includes a 30-year concession that includes a 5-year construction period and 25 years of operation and maintenance. After 30 years, ownership of the railway infrastructure transfers to the government. One aspect of the partnership highlighted in several sources is the service operators will pay access charges to ProRail who will



Amsterdam Central Train Station

then pay a fixed annual payment for providing access to Infrasppeed. Ernst & Young reports the total project cost as €7.2 billion (\$8.77 billion).

The government sold the right to run trains on the line to the consortium High Speed Alliance (HSA), a joint venture between NS and Royal Dutch Airlines (KLM), which recently merged with Air France according to several sources. This agreement has a 15-year term. There are multiple train operators on the line including Thalys, Fyra, Eurostar, and Inter-City Express (ICE).

Sources: *High Speed Rail Passenger Services: World Experience and U.S. Applications*; *High-Speed Rail: A Study of International Best Practices and Identification of Opportunities in the U.S.*; *High Speed 2: International Case Studies on Delivery and Financing – A Report for HS2*.

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Table 50 – Revenue-Earning HS Traffic

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