

# Prospective High-speed Train Connections

Proposal - Application Project – October 4<sup>th</sup>

Group 3: Amelija Ancupane, Koen Groeneveld, Yannick Elsten, Nicholas Alvord, David Eijbergen

## Research question:

Based on the number of air passengers, distance between city centers, and metropolitan population, what city-pairs in Europe could stand to benefit the most from a high-speed rail connection?

## Description:

The data will be taken for 2016-2019. This timeframe was chosen to avoid the Covid-19 pandemic impacting the air travel data. For the geographical scope, we will use the five largest economies in the EU (The Netherlands, Germany, France, Italy, Spain), Belgium and Luxembourg. These countries already have well developed train infrastructure and are likely to invest in further projects.

## Datasets:

- Origin-destination air passenger sets
  - Germany -  
[https://ec.europa.eu/eurostat/databrowser/view/avia\\_par\\_de\\_custom\\_13106674/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/avia_par_de_custom_13106674/default/table?lang=en)
  - Netherlands -  
[https://ec.europa.eu/eurostat/databrowser/view/avia\\_par\\_nl/default/table?lang=en&category=avia.avia\\_pa.avia\\_par](https://ec.europa.eu/eurostat/databrowser/view/avia_par_nl/default/table?lang=en&category=avia.avia_pa.avia_par)
  - Luxembourg -  
[https://ec.europa.eu/eurostat/databrowser/view/avia\\_par\\_lu/default/table?lang=en&category=avia.avia\\_pa.avia\\_par](https://ec.europa.eu/eurostat/databrowser/view/avia_par_lu/default/table?lang=en&category=avia.avia_pa.avia_par)
  - Belgium -  
[https://ec.europa.eu/eurostat/databrowser/view/avia\\_par\\_be/default/table?lang=en&category=avia.avia\\_pa.avia\\_par](https://ec.europa.eu/eurostat/databrowser/view/avia_par_be/default/table?lang=en&category=avia.avia_pa.avia_par)
  - France -  
[https://ec.europa.eu/eurostat/databrowser/view/avia\\_par\\_fr/default/table](https://ec.europa.eu/eurostat/databrowser/view/avia_par_fr/default/table)
  - Spain -

[https://ec.europa.eu/eurostat/databrowser/view/avia\\_par\\_es/default/table?lang=en&category=avia.avia\\_pa.avia\\_par](https://ec.europa.eu/eurostat/databrowser/view/avia_par_es/default/table?lang=en&category=avia.avia_pa.avia_par)

- Belgium -

[https://ec.europa.eu/eurostat/databrowser/view/avia\\_par\\_be/default/table?lang=en&category=avia.avia\\_pa.avia\\_par](https://ec.europa.eu/eurostat/databrowser/view/avia_par_be/default/table?lang=en&category=avia.avia_pa.avia_par)

- Distance between city pairs
  - Distance between NUTS 0, I, II, III, regions:  
[distance\\_data.xlsx](#)
- Population or metropolitan area
  - Population cities and greater cities -  
[https://ec.europa.eu/eurostat/databrowser/view/urb\\_cpop1/default/table?lang=en&category=urb.urb\\_cgc](https://ec.europa.eu/eurostat/databrowser/view/urb_cpop1/default/table?lang=en&category=urb.urb_cgc)
- Railway traffic data
  - By train speed type  
[https://ec.europa.eu/eurostat/databrowser/view/rail\\_pa\\_speed/default/table?lang=en&category=rail.rail\\_pa](https://ec.europa.eu/eurostat/databrowser/view/rail_pa_speed/default/table?lang=en&category=rail.rail_pa)
  - 8-hour train journeys map  
<https://www.chronotrains.com>

### **Sub-questions:**

- Which city pairs have the highest number of air passengers (that don't already have a high-speed rail connection)?
- Which city pairs fall within the set distance range?

### **To be defined:**

- What rail connections can be classified as high-speed?
- Which range (in km) would be considered appropriate for a high-speed rail connection?