

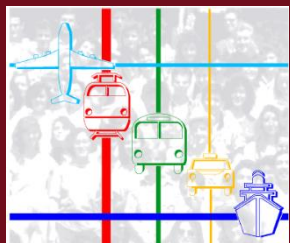
# STUDY TRIP 2017



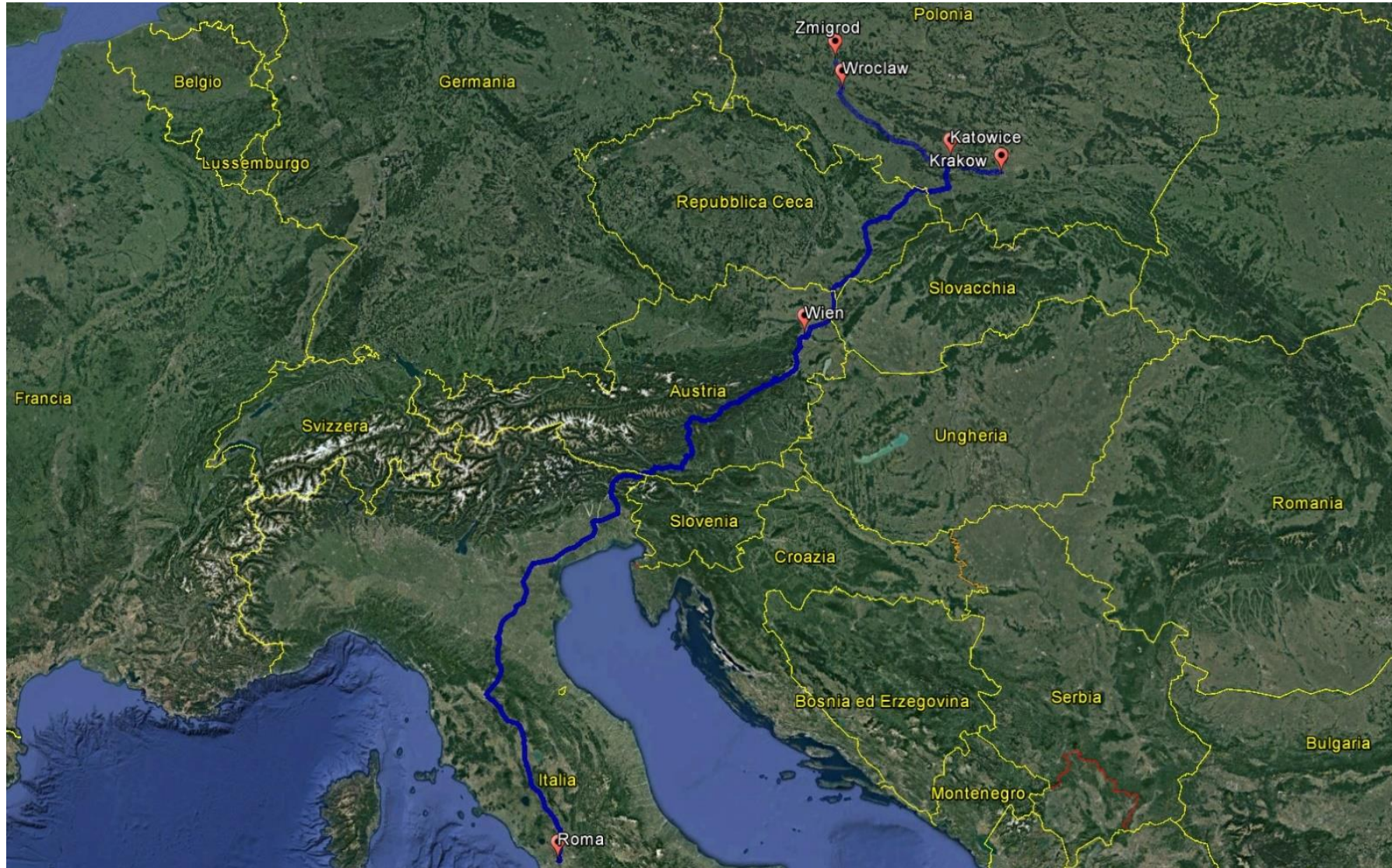
SAPIENZA  
UNIVERSITÀ DI ROMA

Master Degree

TRANSPORT SYSTEMS ENGINEERING

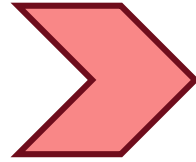


# 12/02/2017 – 18/02/17 - From Italy to Austria and Poland



Day  
1

Wien



Katowice

## Terminal **Wien Sud**

Multifunctional freight center receiving fixed composition trains

Average traffic: 8 trains/day

Loading/unloading time: 120 minutes / 600 m length train

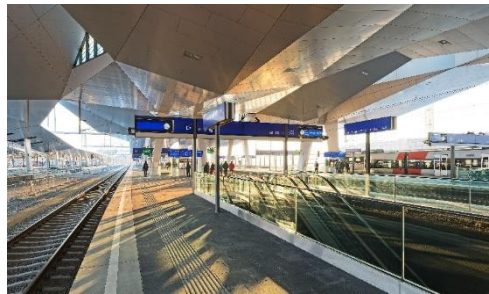
Storage capacity: 3.000 TEU

## **Wien Hauptbahnhof** Station

Main railway station in Wien, replacing the old Südbahnhof and Ostbahnhof terminuses

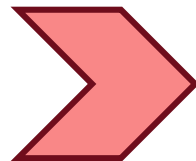
Local, National, International traffic

Directly connected with S-Bahn, U-Bahn, tram and bus lines



Day  
2

Katowice



Krakow

## Silesian University of Technology in **Katowice**

One of the largest universities of technology in Poland

Over 70-years of successful tradition in education, research and development, cooperation with industry

## Suburban tram system **Katowice-Sosnowiec**

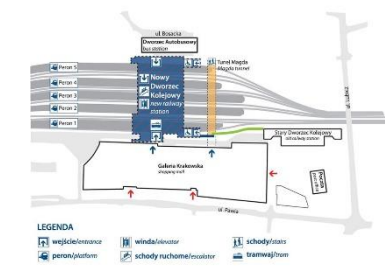
One of the largest tram lines in the world: over 50 km

## **Krakow** Glowny transport hub

Located in the centre of the city

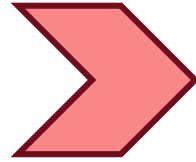
First transport hub in Poland with Local, National and international connections by rail, tram and bus

Average traffic: 280,000 passengers/day



Day  
3

Katowice



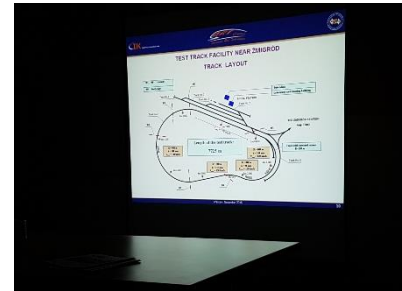
Zmigrod

## Zmigrod Test Track Centre of Railway Institute

7725 m ring circuit with standard gauge with 160 km/h maximum allowed speed

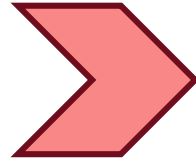
Real scale tests of durability, reliability, strength and dynamic features of railway systems and equipment:

- Rolling stock and traction systems
- Signalling and traffic control
- Crash tests, noise and vibration



Day  
4

Katowice



Wien

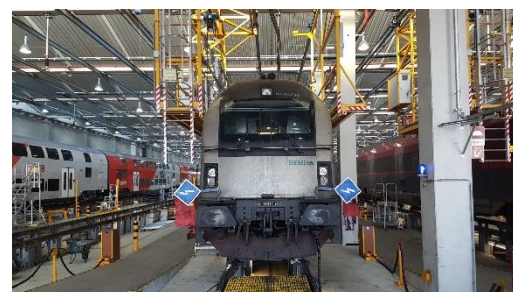
## Wien Matzleinsdorf ÖBB High-Tech Maintenance Centre

Maintenance activities up to 40.000 km (average duration: 3 weeks):

- Re-profiling of wheels
- Check and replacement of braking disks
- Cleaning

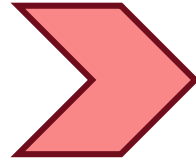
## Wien tramways network

Old and extended tram network (visit by old tram tour)



Day  
5

Wien



Roma

## Wien Metro

Public transport network: 5 metro lines, 29 tram lines, 127 bus lines

Projects of 2 new lines

Dispatching and control center of the whole

U1 line extension: 4.6 km, 5 new stations, including Altes Landgut station, 30 m under street level, the deepest in Wien

## Wien Siemens factory

Several specialised workshops

Preparation of parts of trains, subway cars and light rail vehicles

Assemblage into the final products

