



# MASARYK UNIVERSITY FACULTY OF ECONOMICS AND ADMINISTRATION

## Global View on Logistics

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## Differences in different nations/countries

Logistic performance is limited by aspects:

- political
- social
- economical

Example:

*USA*

90 % of roadways are paved surface roads

*Zimbabwe*

19 % paved surface

35 % unimproved dirt

# USA



Legend:

- Transshipment of goods at leading ports (1,000 TEU/year)
- Transshipment of goods at leading airports (1,000t/year)

Source: Research TU Darmstadt | 2005 / 2006

# Brazil

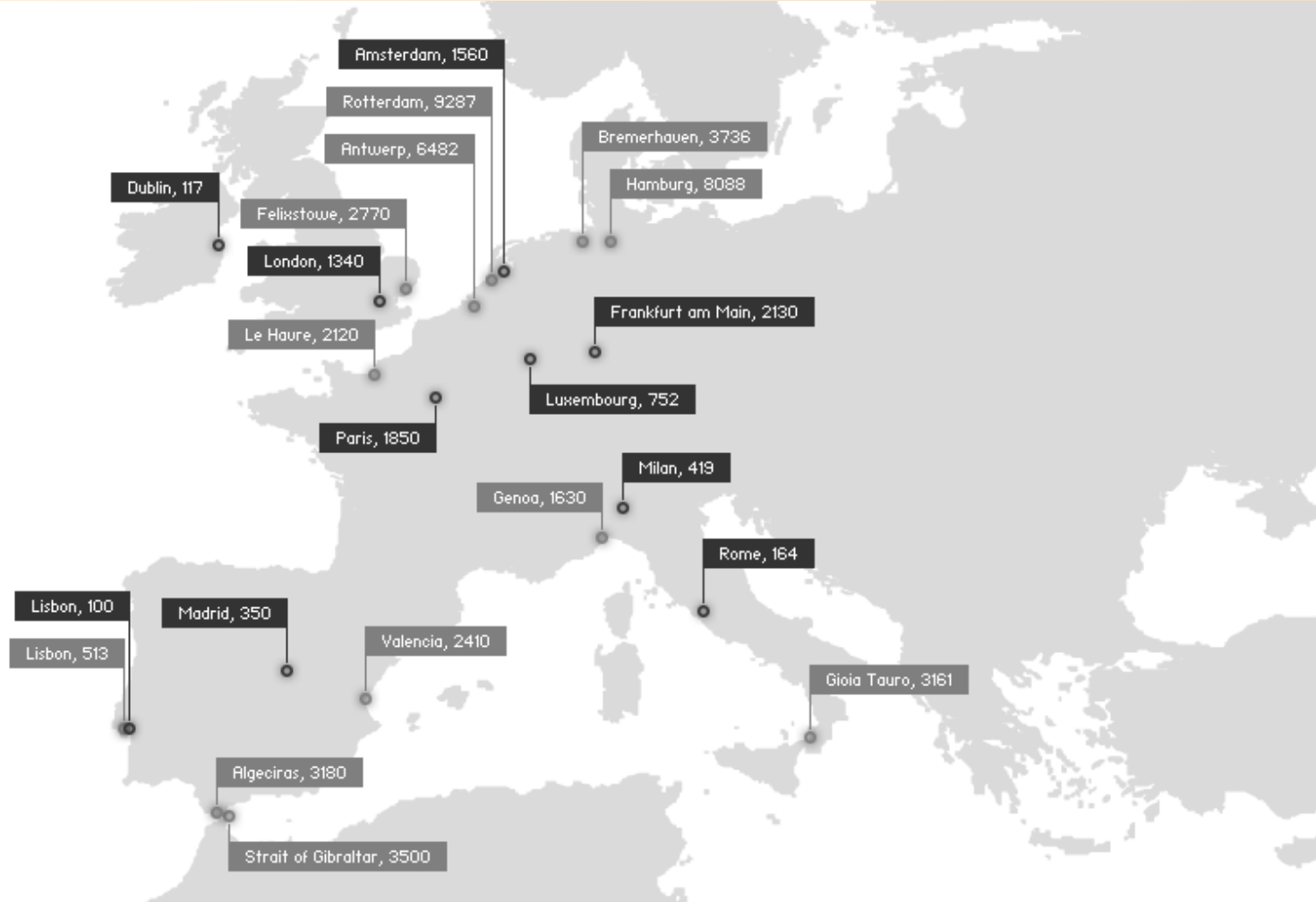


Legend:

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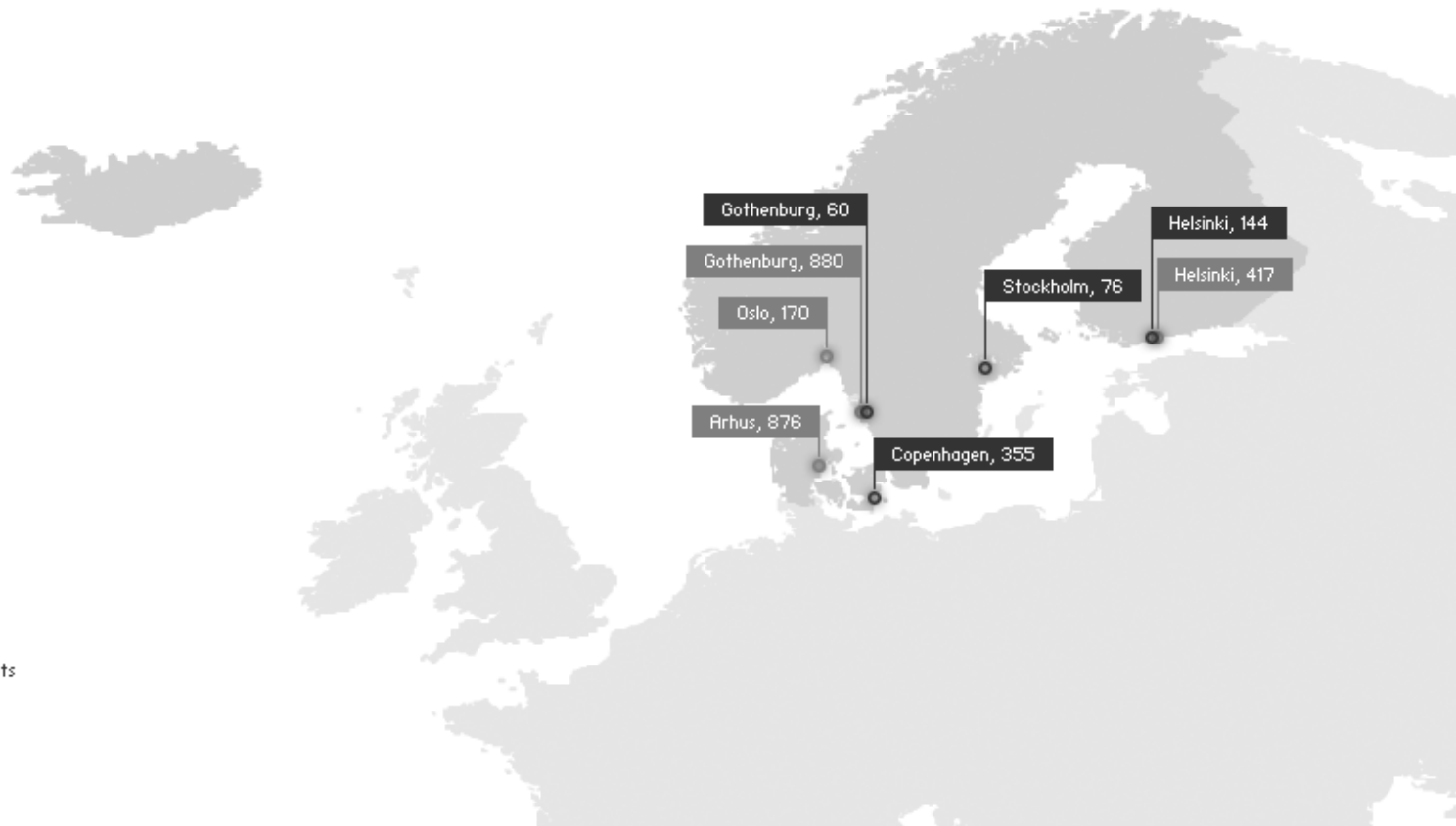
Source: Research TU Darmstadt | 2005 / 2006

# Western Europe



Source: Research TU Darmstadt | 2005

# Northern Europe



Legend:

- Transshipment of goods at leading ports (1,000 TEU/year)
- Transshipment of goods at leading airports (1,000t/year)

Source: Research TU Darmstadt | 2005

# Eastern Europe



Legend:

- Transshipment of goods at leading ports (1,000 TEU/year)
- Transshipment of goods at leading airports (1,000t/year)

Source: Research TU Darmstadt | 2005

# Russia





# TEU

## ■ twenty-foot equivalent unit



# TEU

Length	Width	Height	Volume	TEU
20 ft (6.1 m)	8 ft (2.4 m)	8.5 ft (2.6 m)	1,360 cu ft (39 m <sup>3</sup> )	1
40 ft (12 m)	8 ft (2.4 m)	8.5 ft (2.6 m)	2,720 cu ft (77 m <sup>3</sup> )	2
45 ft (14 m)	8 ft (2.4 m)	8.5 ft (2.6 m)	3,060 cu ft (87 m <sup>3</sup> )	2 or 2.25
48 ft (15 m)	8 ft (2.4 m)	8.5 ft (2.6 m)	3,264 cu ft (92.4 m <sup>3</sup> )	2.4
53 ft (16 m)	8 ft (2.4 m)	8.5 ft (2.6 m)	3,604 cu ft (102.1 m <sup>3</sup> )	2.65

## Drivers of global logistic services

- iron curtain, political situation
- trade barriers (ASEAN, NAFTA, MERCOSUR, CEM)
- standardization (ISO)
- information and communications technology
- deregulation (railway transport in GB, postal services in WE)

Result: new competition and cooperation

Case study: UTEX

Result: number of interfaces and need for communication grows

## Ideas/terms

- from cost- and price-based competition to time-based competition (case of Dell)
  - added value more and more in transportation
- tailored solution – mass customization
- environment and recycling (reverse logistic flows, city logistics)

## Differences in global logistics

- longer distances
- more chain elements
- cultural differences
- political influence

# Global business – Utex company case (Suits production)

## General information

Design has lower importance than price (145 USD) in this segment.

The suit (its parts) travel approximately 100 000 km. However, the transportation costs make only 5 % of the overall costs. Wage costs make 30 %.

There used to be appreciated suits Made in USA or Made in Italy on the US market in the past, nowadays suits Made in Israel etc. are common.

## Global business – Utex company case (Suits production)

Task no.	Location	Task description	Per one suit (in USD)
1.	Paris	Industrial espionage – designs, fabrics. Suit has to look “European”, name has to sound “Italian”.	
2.	Australia	Wool (Merino). Used to be delivered to UK only, nowadays into the whole world.	
3.	India	Spinning mills, world class quality. 100 % production control thanks to the low wages (2.75 – 3 USD/day, which is above average quality) and high end technologies. No child labor – because of the technologies and the demand for quality level. Very bad infrastructure and very rigid state administration.	<b>20</b>

## Global business – Utex company case (Suits production)

Task no.	Location	Task description	Per one suit (in USD)
4.	China	Shoulder pads. It is not possible to produce all suits here because of the import quotas of EU and USA. Wages 3 USD/day, high fluctuation, quality comparable to the European one. Working conditions bad (sweatshops), but it still means improvement of the standard of living of the employees.	
5.	Korea	Lining.	<b>0,35</b>
6.	Canada	Buttons. So small part that it does not pay off to abandon well-proven supplier.	
7.	Hamburg	Logistics. All the parts meet here for the first time.	



## Global business – Utex company case (Suits production)

Task no.	Location	Task description	Per one suit (in USD)
8a.	Russia	<p>Final assembly. Mafia and state administration complicate business. Clothing industry does not have tradition in Russia = problems with quality and appearance of the products. Wages 2 USD/day are rather under average, but reliable. Employees often co-own the factories, but they never get part of the profit.</p> <p>Seamstress (needlewoman) earns 300 CAD/month (= 30,000 rubles) in Canada, but only 500 rubles/month in Russia.</p>	
8b.	Romania	<p>Final assembly. Production of suits of higher quality. Wages 8 USD/day, higher quality, more renowned in the world than Russia.</p>	
		<b>TOTAL COSTS</b>	<b>50 – 60</b>
		UTEX sells (including business margin)	<b>70</b>
		<b>Price in the shop for the end-customer</b>	<b>145</b>

## Global business – Utex company case (Suits production)

It is expected that the production will move again, most likely the final assembly, it is estimated that it will be to Cambodia, Vietnam or Indonesia. Next to the wages, political stability is important (disadvantage of Indonesia) and infrastructure as well (disadvantage of India). Other factors are import quotas (disadvantage of China) and level of quality (Russia provides the minimum quality level which can be accepted in this price range).

Globalization spreads the industrial revolution into the whole world: working for UTEX means introduction of new technologies and increase of standard of living in many countries.

## Czech Republic: D1 reconstruction

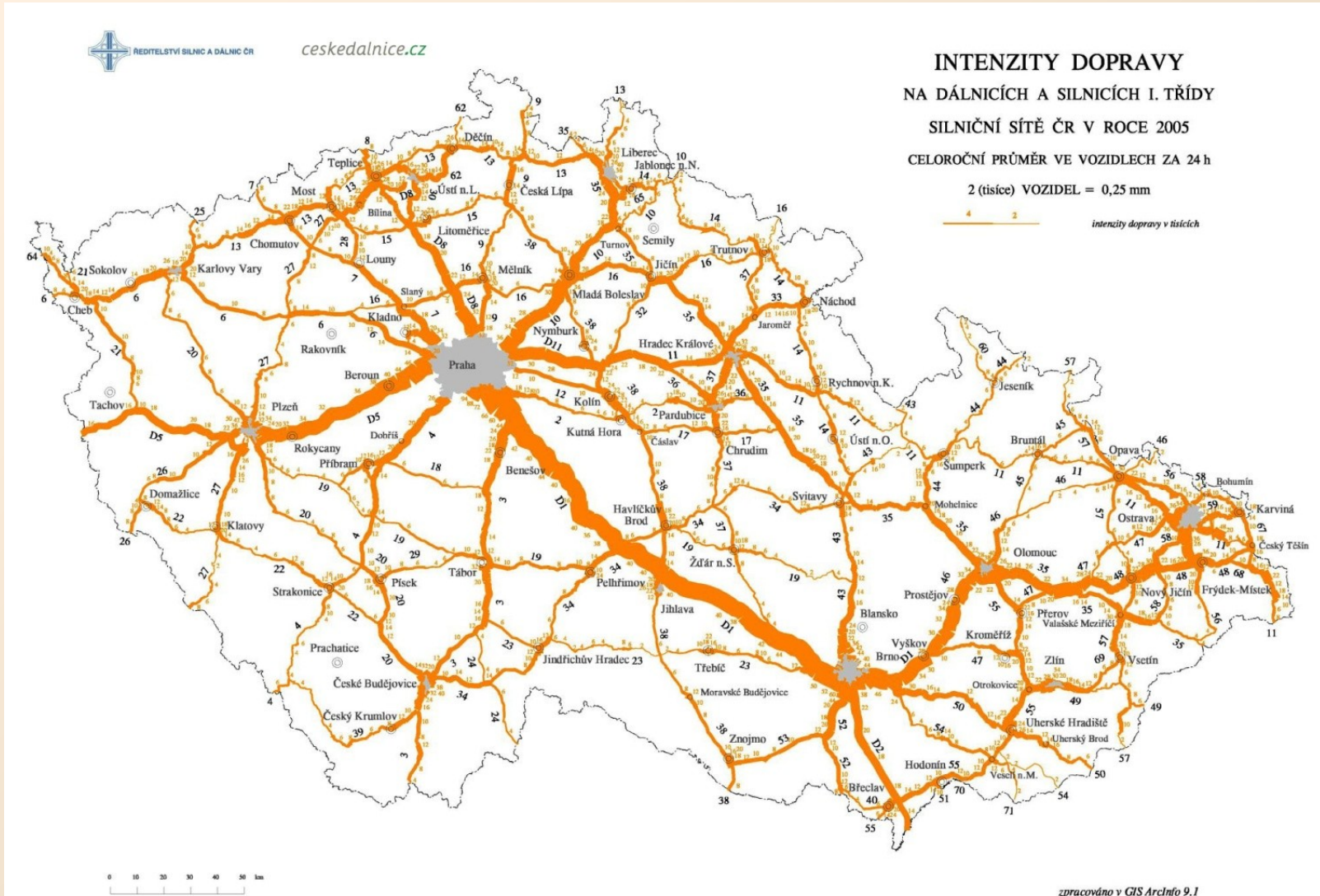
It is planned to consume 22 bil. CZK (880 mil. EUR)

- nobody believes that the budget will be met

It is expected to take 7 years

- but it was delayed already at the start

# Performance in logistics





## Czech Republic: waterways

There is a continental divide of drainage basins of three seas in the Czech Republic:

River Odra leads to Baltic Sea

River Labe (Elbe) to North Sea

River Morava through river Danube to Black Sea

Plans to connect these seas through inland waterways in the Czech Republic are 300 – 400 years old, in Czech legal system present since 1901.

## Czech Republic: waterways

Water transport is cheap and environment-friendly.

It also requires appropriate infrastructure.

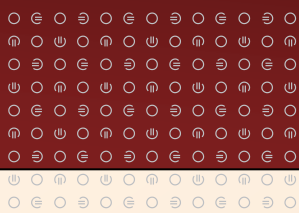
EU supports the waterborne transportation.

EU requests its members to maintain 30 – 50 % of their transportation on railways or waterways.

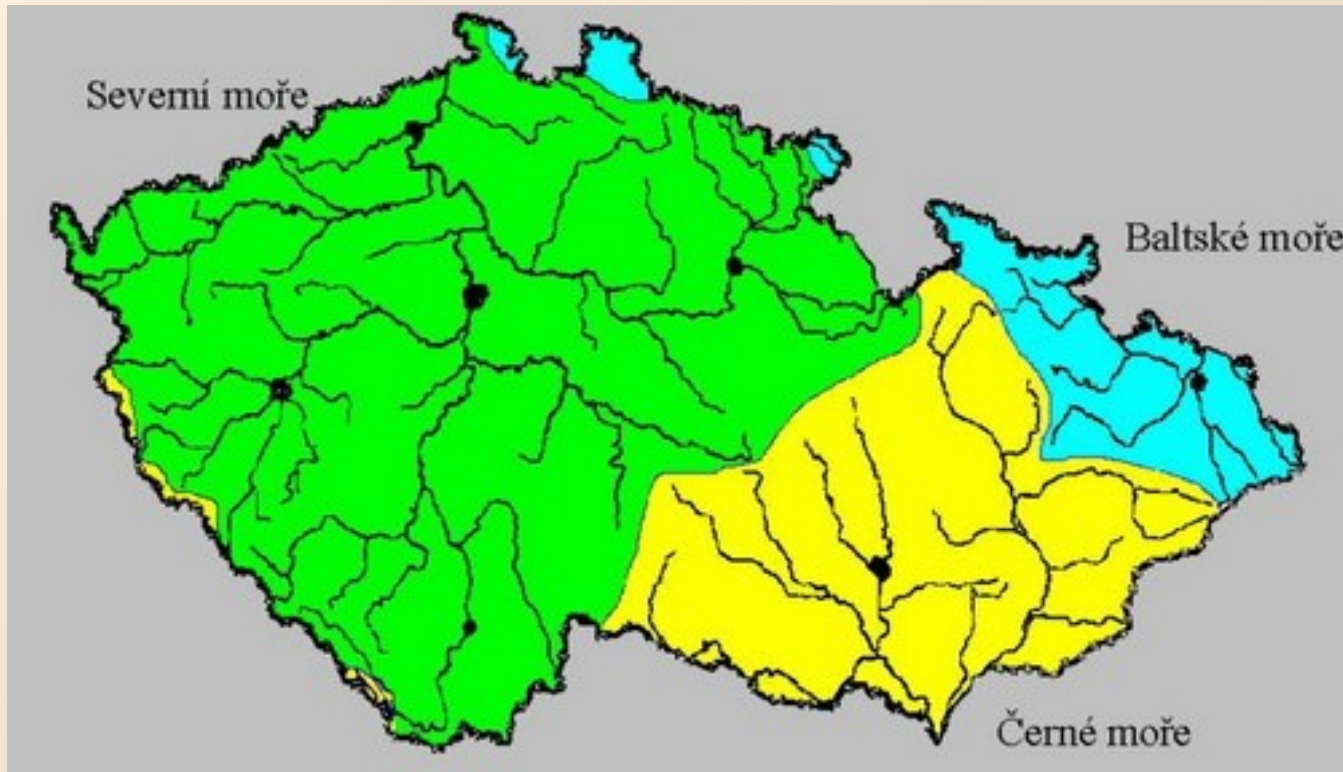
# Czech Republic: waterways







# Czech Republic: waterways



# Czech Republic: waterways





## Czech Republic: waterways

- Estimated budget: 300 bil. CZK (12 bil. EUR)

### Advantages:

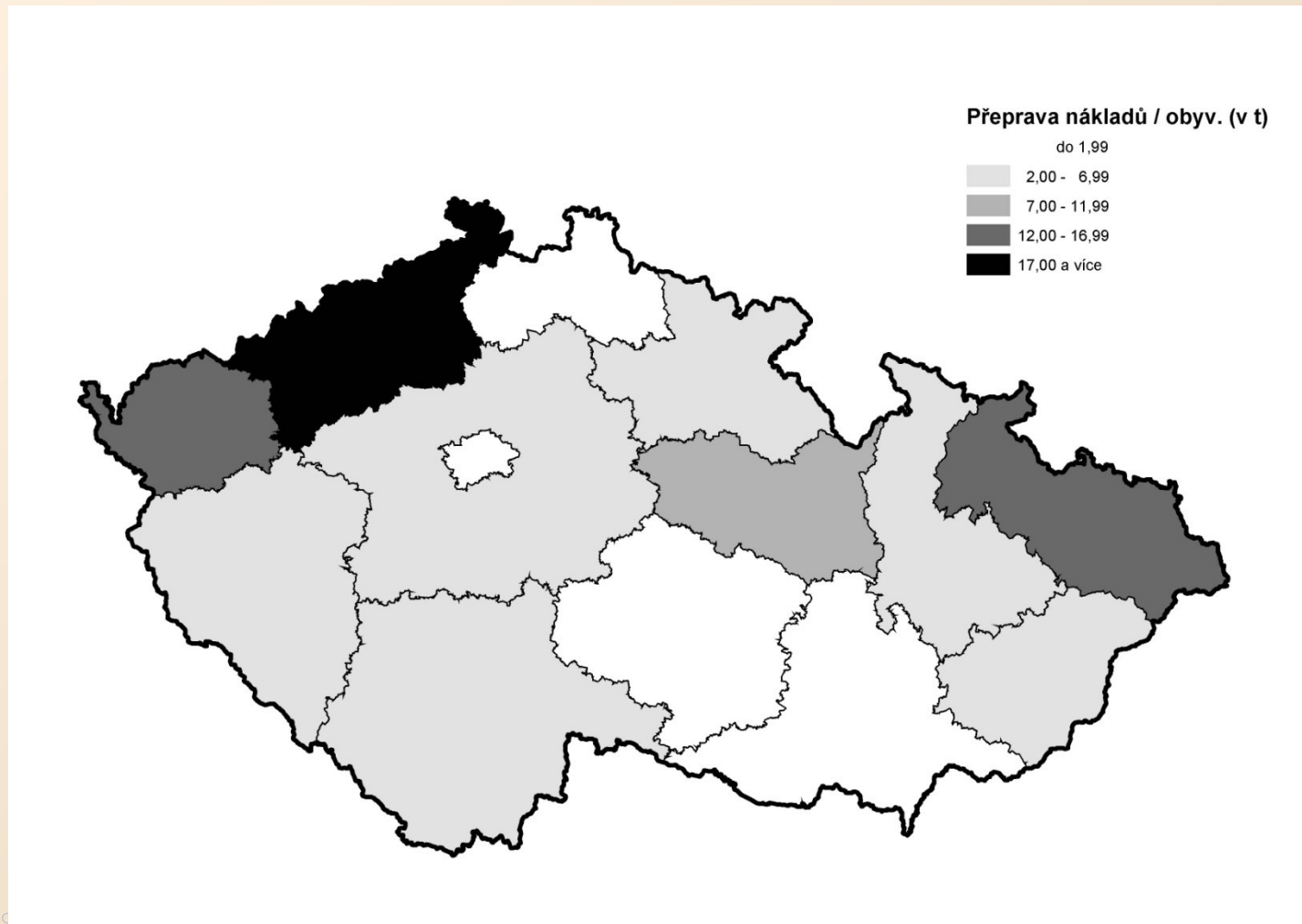
- + transportation
- + flood control
- + water retention
- + national security
- + tourism
- + recreation

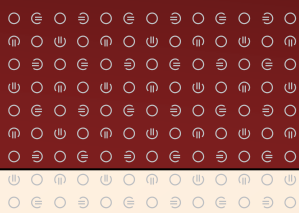
### Disadvantages:

- construction would harm the environment
- public opposition
- costs



# Performance in logistics – freight transport





# Performance in logistics – passenger transport

