

# VASAB Study on Accessibility in the Baltic Sea Region

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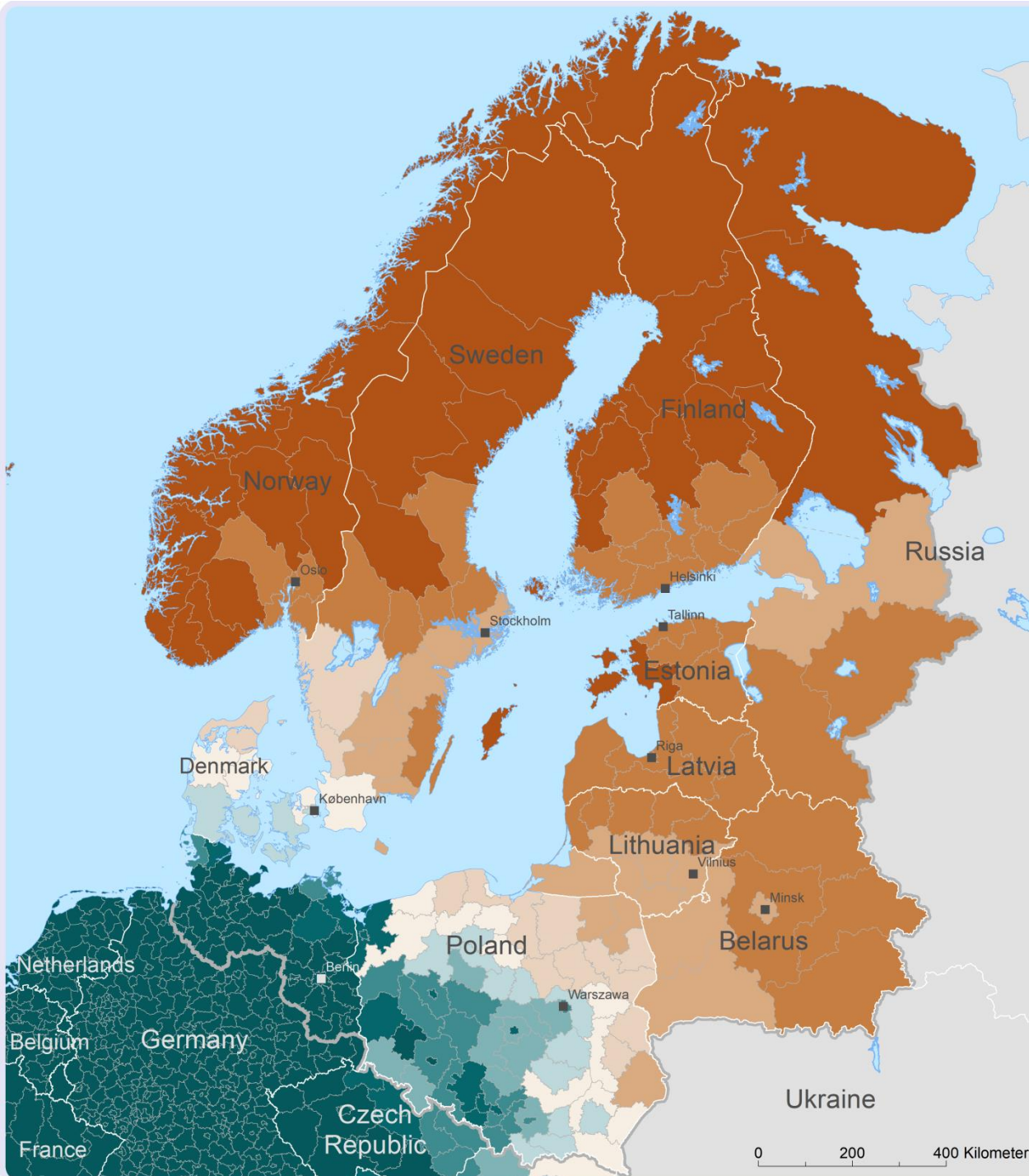
## What is accessibility?

- main "**product**" of the **transport system**
- determines the **locational advantage** of an area relative to all areas
- measures the **benefits** households and firms enjoy from the existence and use **of transport infrastructure**
- areas with **better access** to the locations of input materials and markets will, *ceteris paribus*, be **more productive, more competitive** and **more successful** than remote areas

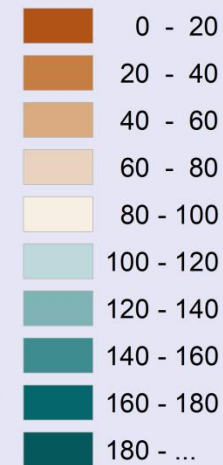
# 1

## Accessibility potential in the BSR 2006-2016

# Accessibility potential, road, 2016



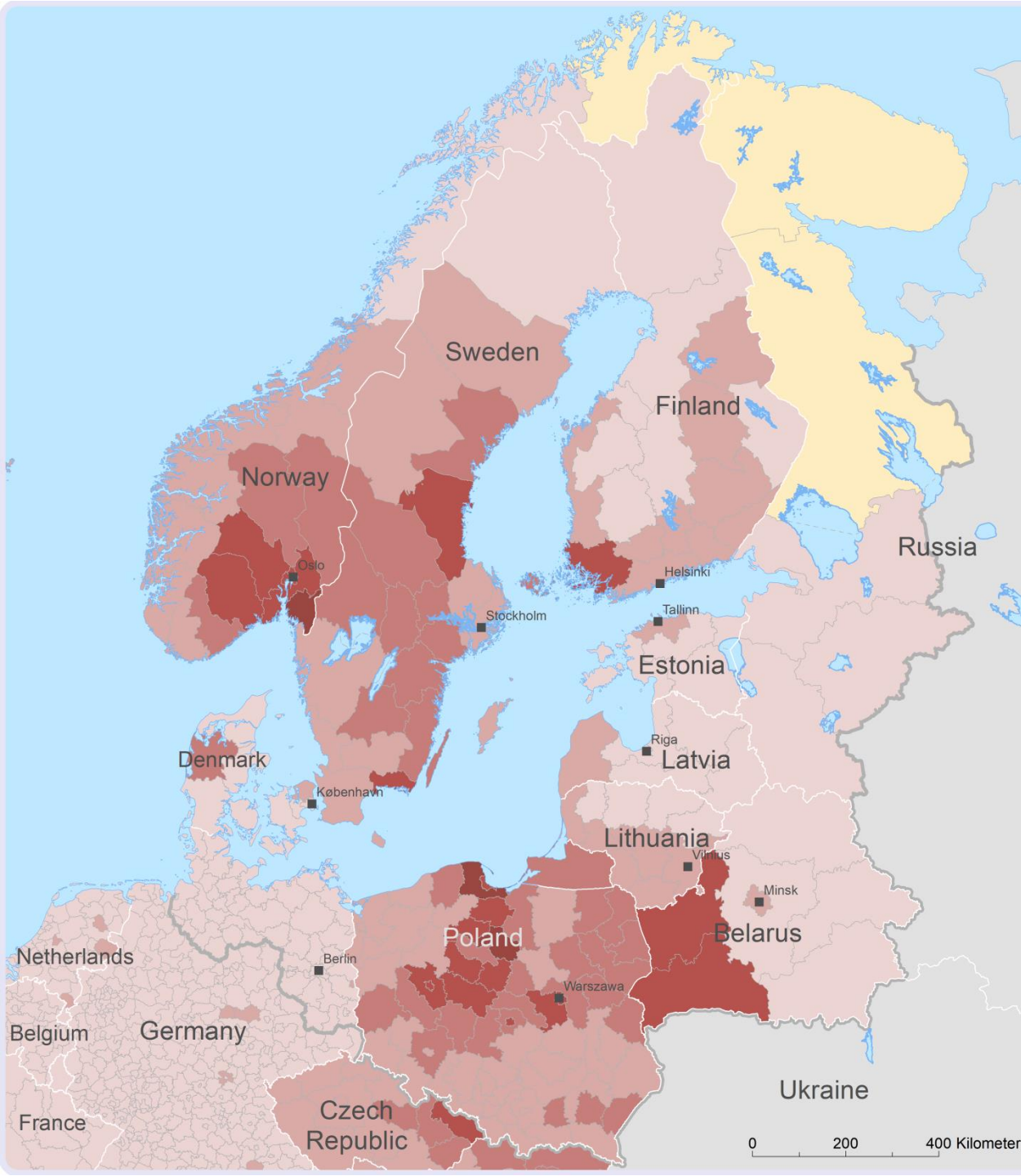
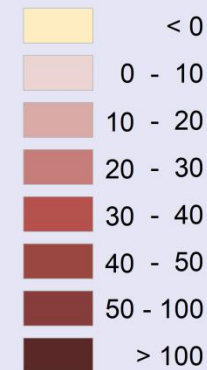
BSR absolute average 2016 = 100



Origin of data:  
Spiekermann and Wegener  
Urban and Regional Research (S&W), 2017  
S&W Accessibility Model, 2017  
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## Accessibility potential, road, relative change 2006 - 2016

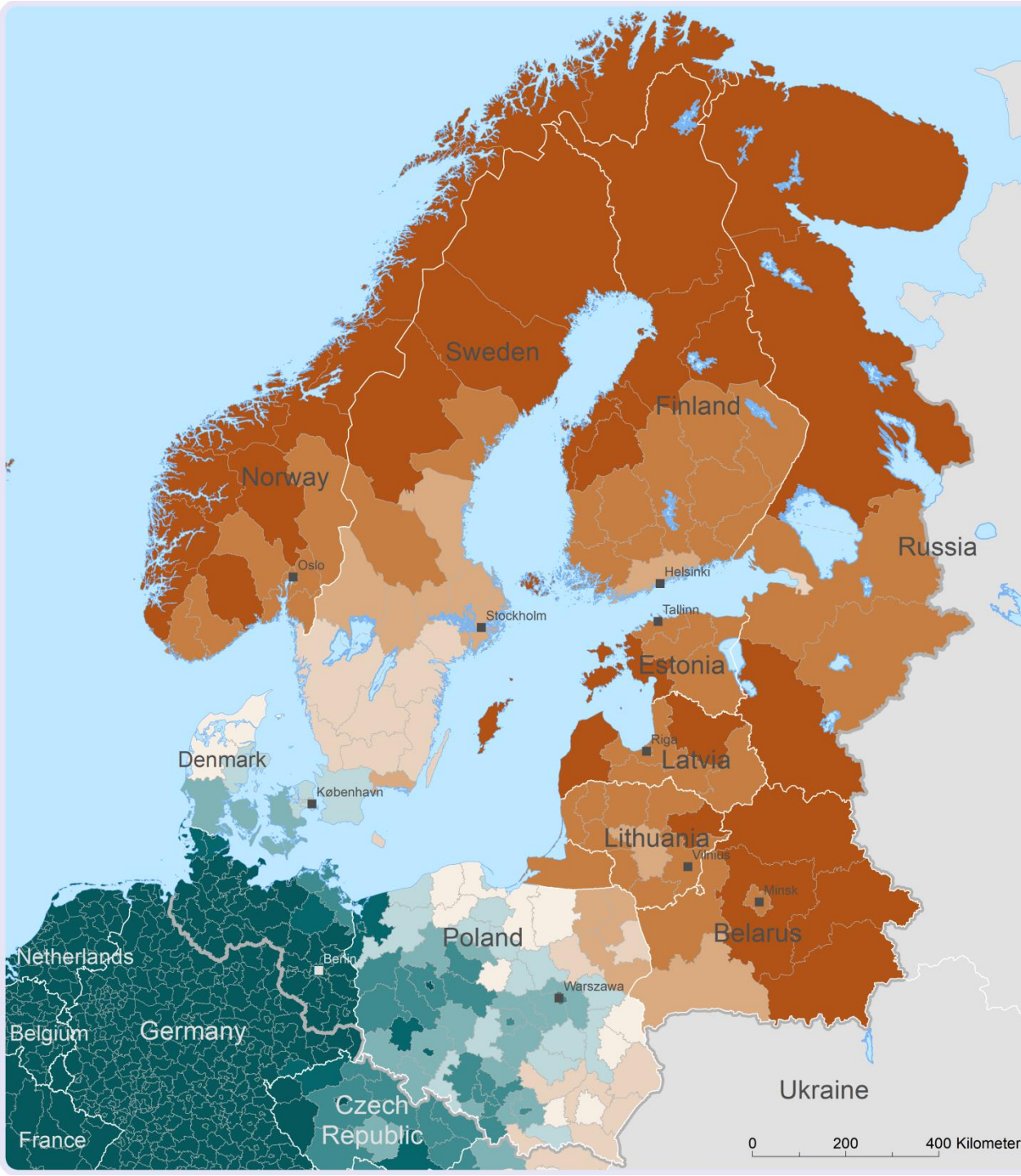
In percent



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0 200 400 Kilometer

## Accessibility potential, rail, 2016



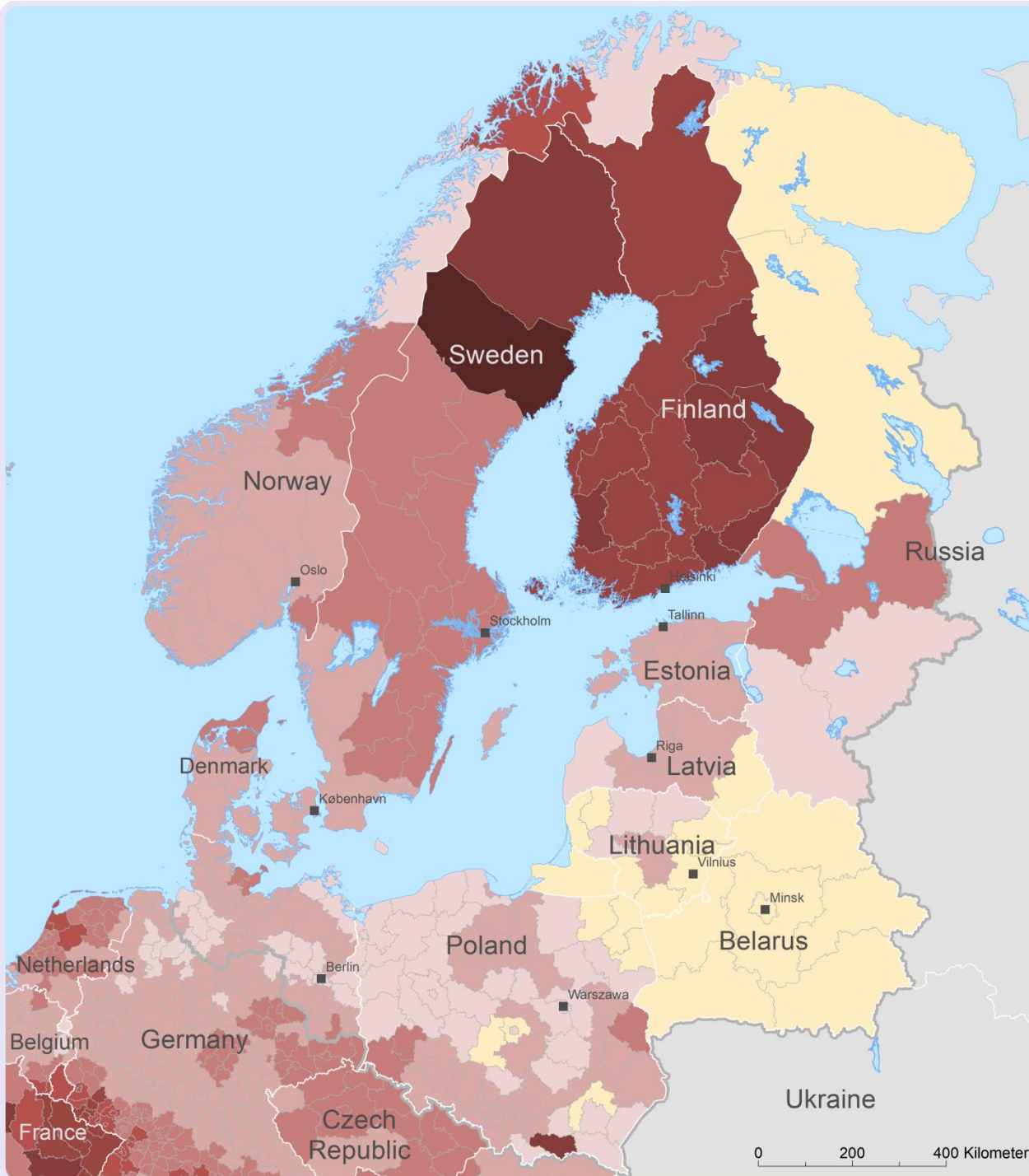
BSR absolute average 2016 = 100



0 200 400 Kilometer

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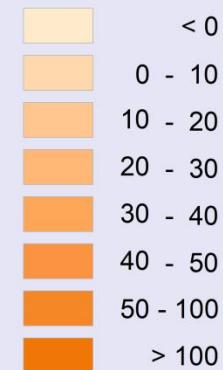
## Accessibility potential, rail, relative change 2006 - 2016



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S&W Accessibility Model, 2017  
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## Accessibility potential, rail, absolute change 2006 - 2016

BSR absolute average 2006 = 100

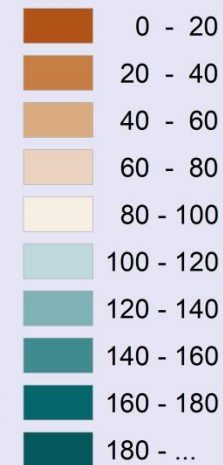


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# Accessibility potential, air, 2016



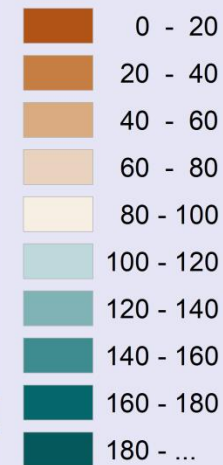
BSR absolute average 2016 = 100



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Urban and Regional Research (S&W), 2017  
S&W Accessibility Model, 2017  
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# Accessibility potential, multimodal, 2016

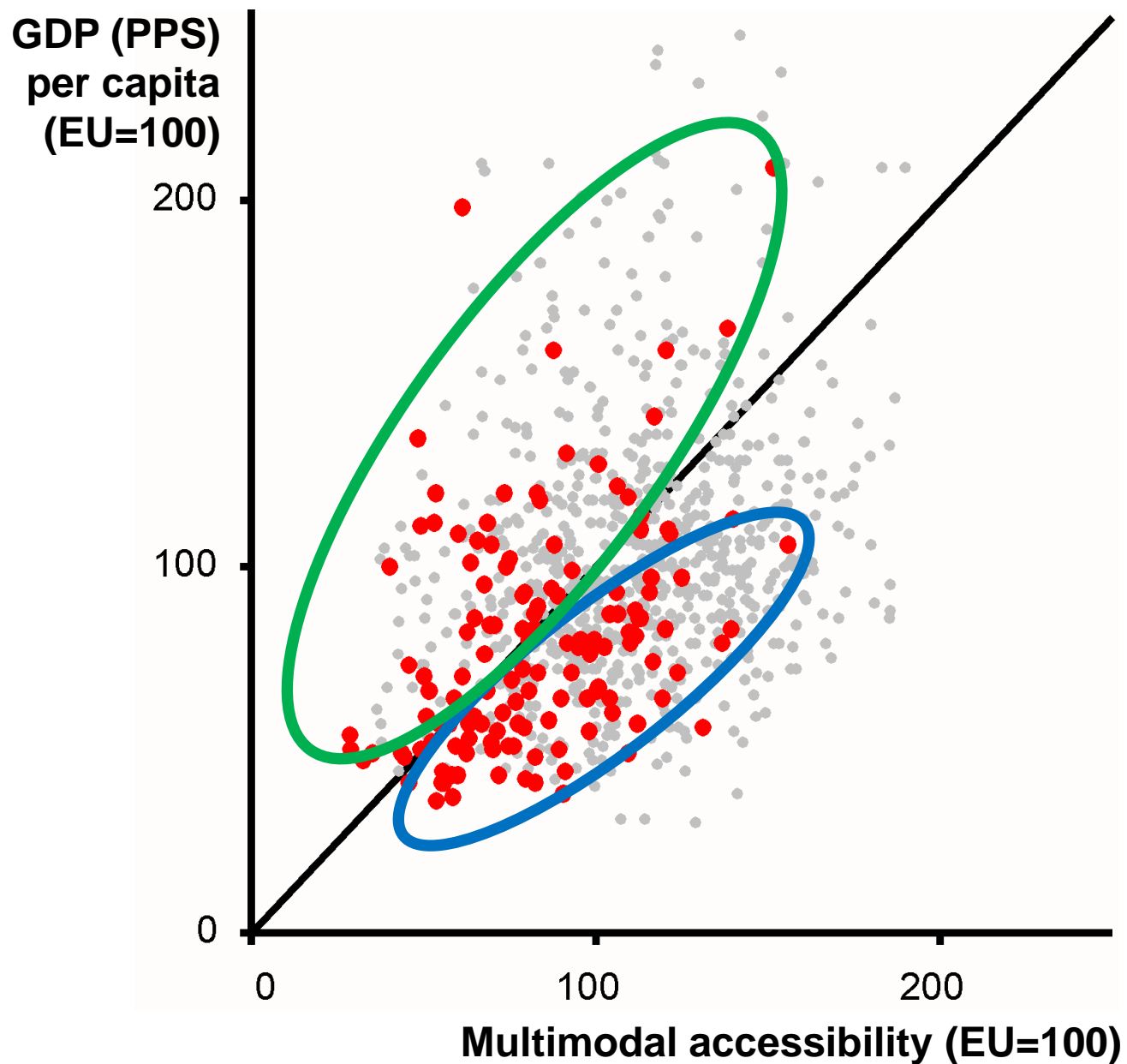
BSR absolute average 2016 = 100



0 200 400 Kilometer

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 Urban and Regional Research (S&W), 2017  
 S&W Accessibility Model, 2017  
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# Accessibility and economic performance



# 2

## Maritime accessibility

# Frequencies of Ferry Routes (August 2016)

- < 2 times per week
- 2 - <7 times per week
- 7 - <14 times per week
- 14 - <35 times per week
- 35 or more times per week
- Port with ferry traffic



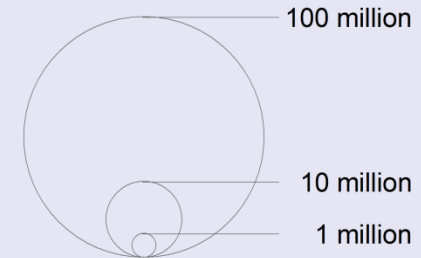
September 2017

Origin of data:  
S&W, 2016  
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administrative boundaries,  
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# Maritime ports, gross weight of goods handled by type of cargo, 2015

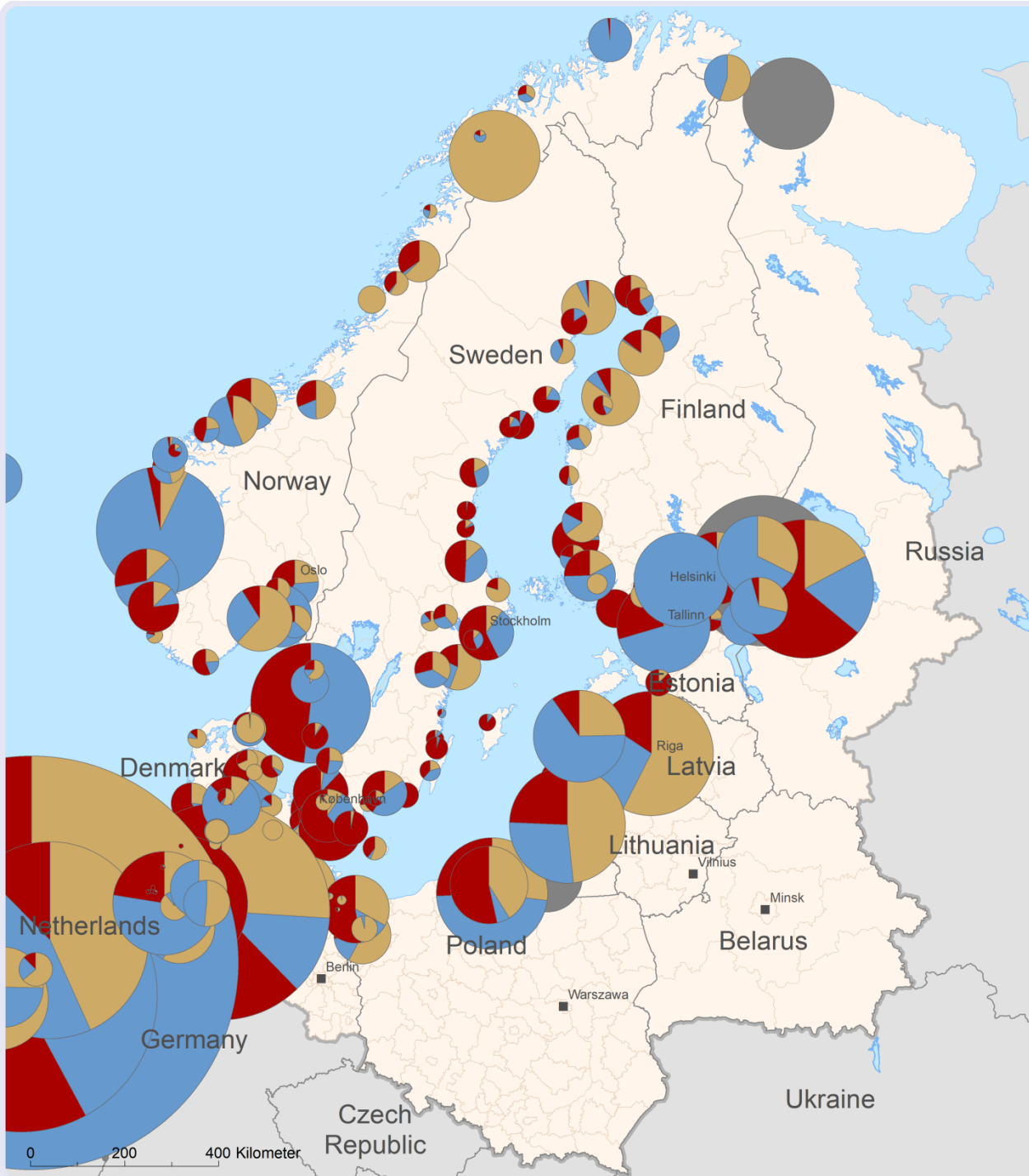
Freight volume (tons)



Type of cargo

- Dry bulk goods
- Liquid bulk goods
- Unitised goods
- No Data

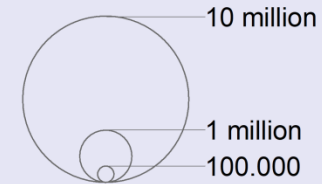
Data for Russian ports partly estimated



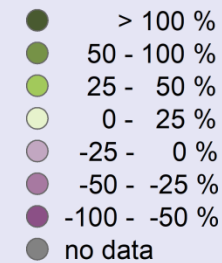
Origin of data:  
Eurostat (online data code: mar\_go\_am\_[country]) 2015  
NCSP GROUP, 2015  
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# Maritime ports, containers handled, 2005 - 2015

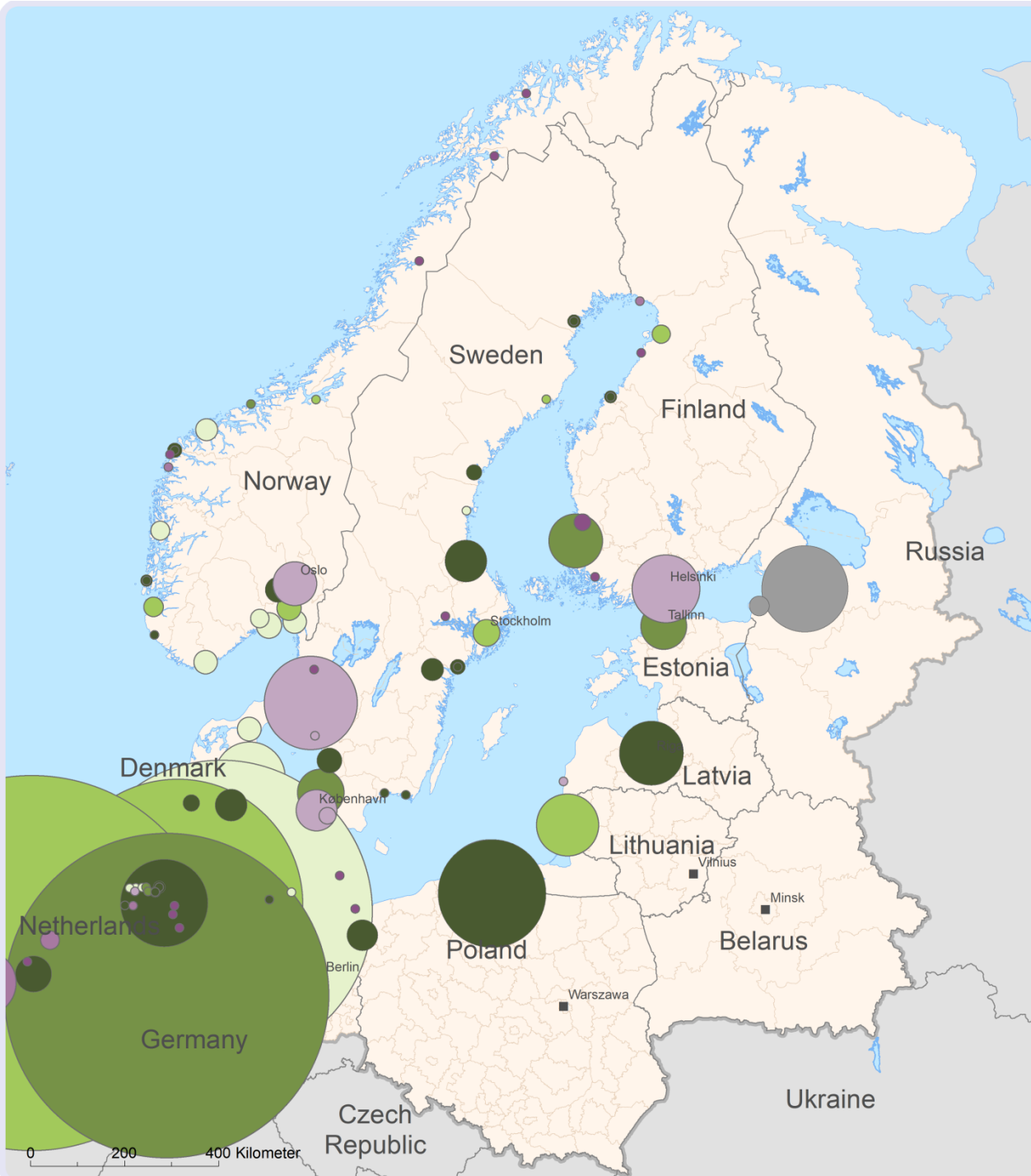
Container volume 2015  
(TEU)



Development 2005 - 2015



incomplete data for Russian ports



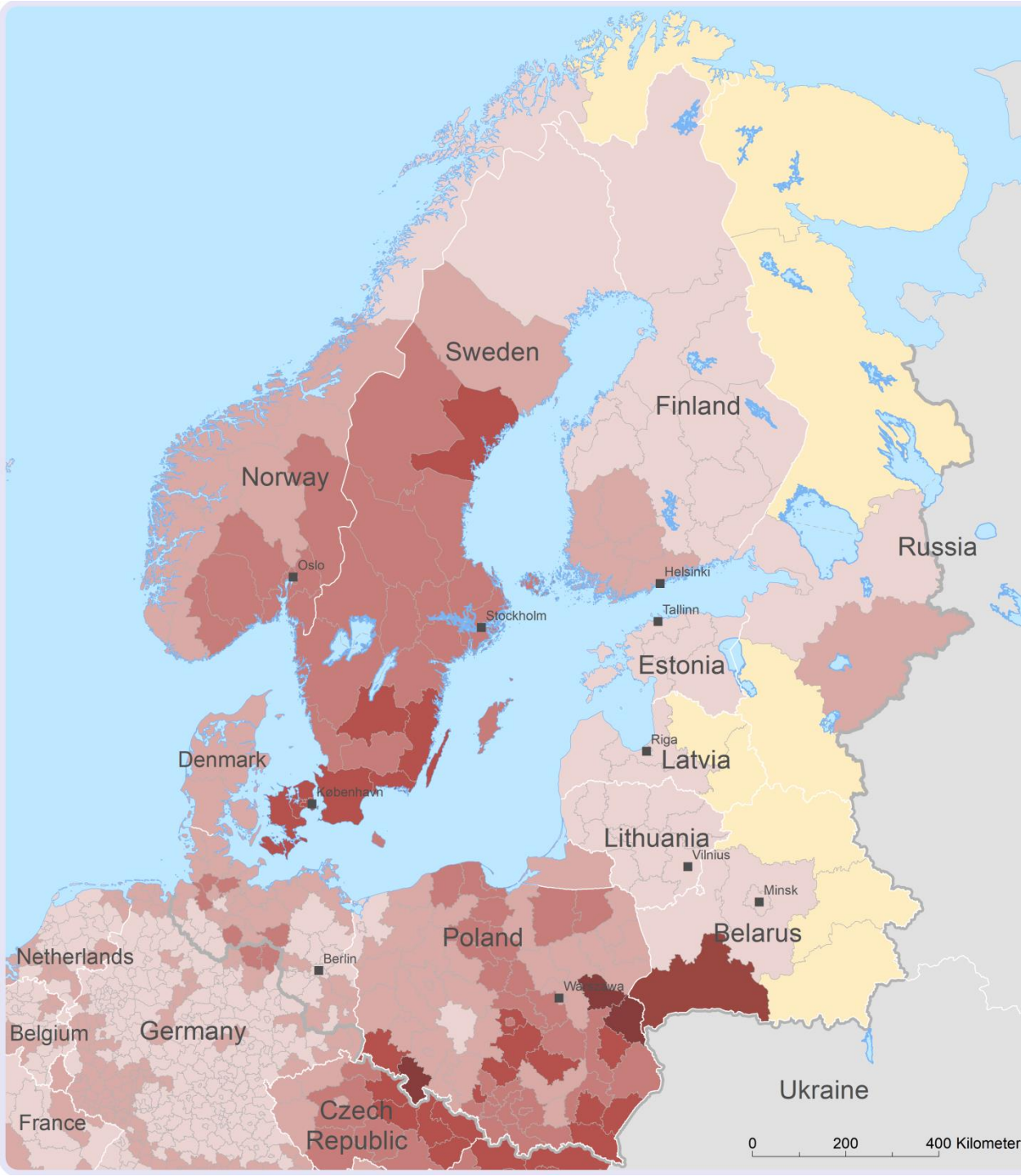
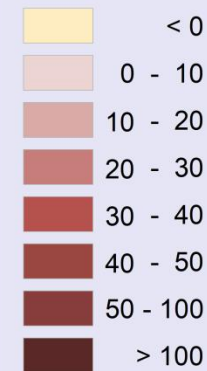
Origin of data:  
Eurostat (online data code: mar\_go\_aa), 2005 & 2015  
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# 3

## **Effects of TEN-T investments on potential accessibility of the BSR**

# Accessibility potential, road, relative change 2016 - 2030

In percent

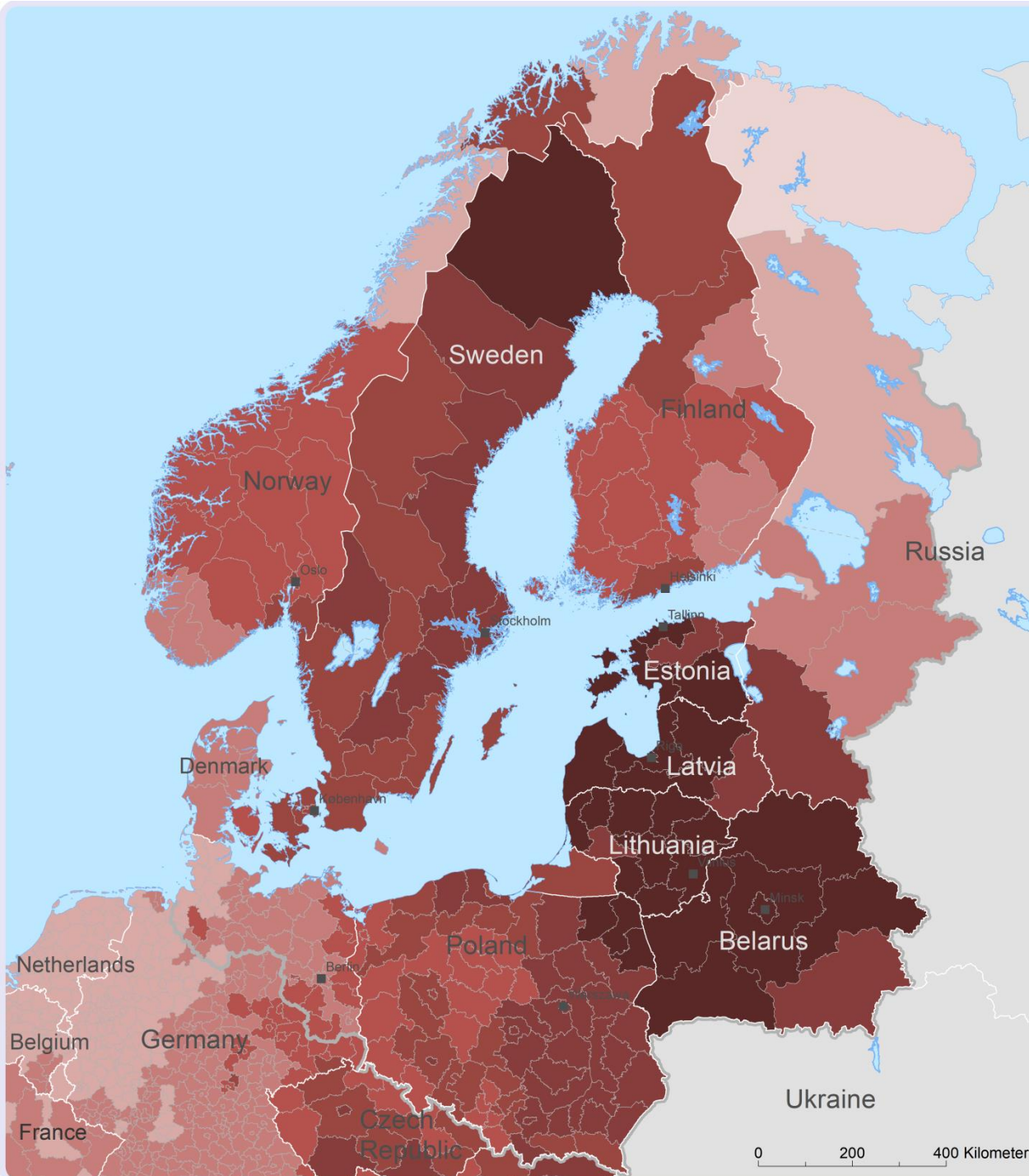
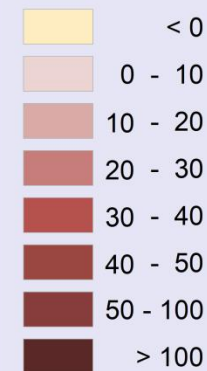


0 200 400 Kilometer

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## Accessibility potential, rail, relative change 2016 - 2030

In percent



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0 200 400 Kilometer

# 4

## Policy conclusions

## General Conclusions (1)

- Accessibility is an **essential location factor**
- Important role of the **TEN-T for territorial development and territorial cohesion**
- Development of the TEN-T will yield a lot of improvements in the regional, national and international **connectivity**
- In particular the investments into a **high-quality rail network** might bring enormous advantages for the affected regions (ex. the strong effects of the future Rail Baltica).
- Improvement are often **territorially selective**.

## General Conclusions (2) maritime

- Relatively dense chain of very **distinct types of maritime ports**: big multipurpose ports, ports having passenger or goods transport only, ports with specialised goods categories, ports having only ferry traffic or pure touristic marinas.
- The **development** of maritime passenger and freight traffic during the last ten years has been very **heterogeneous**. On the Baltic Sea container transport developed rapidly.
- **Container traffic** has a high degree of concentration (St. Petersburg, Gdansk/Gdynia). The role of ports on the southern Baltic coast is growing.
- **Maritime and hinterland accessibility** as enabling factors for handling of passenger (touristic) and maritime freight traffic .

## General Conclusions (3)

- BUT: Transport infrastructure development is **not the only and maybe not the most important issue** to take care of.
  - For territorial cohesion this means that multi-challenged regions need **comprehensive strategies** to develop their assets and to develop them as attractive locations to live and to develop competitive economic activities.
  - The development of **high-quality transport infrastructure and connections** can **only be one element** in such strategies aiming at territorial cohesion.
- Accessibility and BSR infrastructure development strongly depend on **geopolitical and demographic factors**

## Contact

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## Recommendations (1)

- TEN-T corridors along southern Baltic Sea Coast (Via Hanzeatica)
- Rail Baltica important for goods traffic; in case of passenger traffic (high speed connection) decisions should be careful
- Belarus corridors are underused in BSR transport network because of geopolitical reason
- High importance of the CEF mechanism – chance for transborder connectors
- Potential for the high speed rail: Hamburg-Copenhagen-Stockholm; Berlin-Warsaw
- Potential for multimodal solutions (East-West freight rail transport)

## Recommendations (2)

- Cross-Baltic ferry connections should be more frequent (for better use of the new north-South road and rail infrastructure in Central Europe, by Scandinavian flows)
- Development of sea transport (mainly containers) in Gdansk, Klaipeda and Riga should be followed by rail and intermodal solutions inside Poland, Lithuania and Latvia (otherwise road freight traffic will increase significantly)

# Geopolitical factors of BSR transport infrastructure development

- Kaliningrad Oblast gap (lack of modern infrastructure close to the Baltic Sea southern coast – Via Baltica and Rail Baltica routes)
- Main HGV transit (RUS-EU) traffic directions. Concentration on Via Baltica, Belarus bypassing
- Rail Baltica needs Sankt Petersburg potential?
- Grodno rail corridor and Rail Baltica investment
- Ukrainian Crisis and traffic directions

# Demographical factors of BSR transport infrastructure development

- Depopulation of Baltic States and Eastern Poland as well as some oblast's of Belarus and Russia
- In some regions accessibility decreased because of depopulation (road: Eastern Belarus, Russian Keralia, Northern Norway).
- In other depopulation was balanced by transport infrastructure development (Lithuania, Latvia, North-Eastern Poland)
- Population concentration in BSR metropolitan areas
- The accessibility is increasing in the metropolitan areas partly because of the population growth. In the case of multimodal indicator air transport is very important. On the other hand the road and rail transport systems are still insufficient in some big agglomerations.