



# BOOSTING CROSS-BORDER REGIONS THROUGH BETTER TRANSPORT

14 NOVEMBER 2019 | BRUSSELS, BELGIUM



#EUBorderRegions

Regional and  
Urban Policy

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Socio-economic impacts

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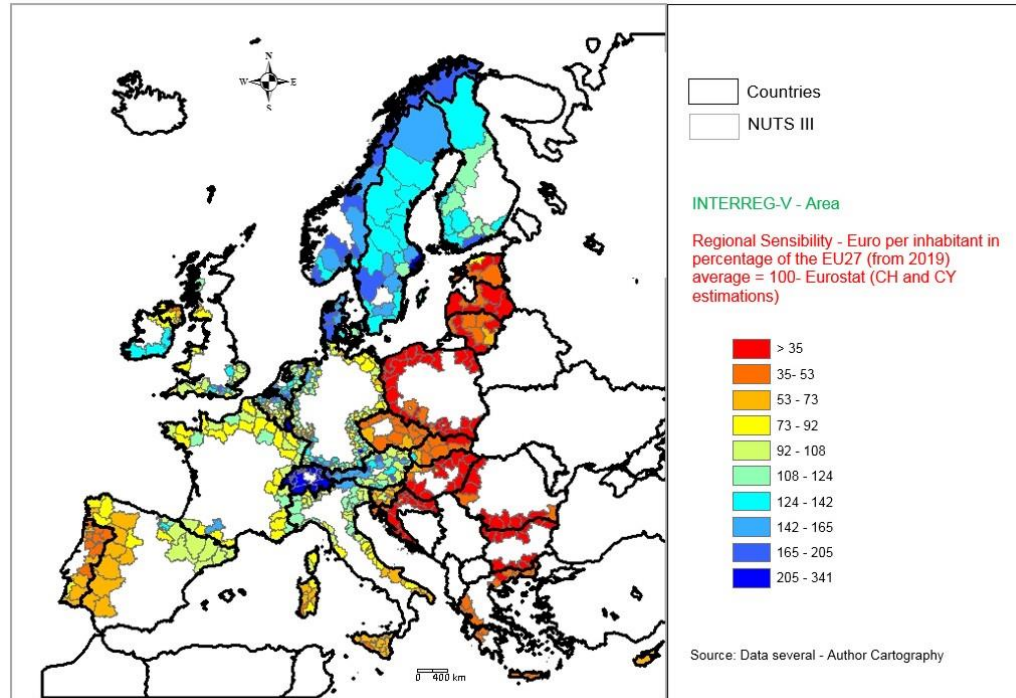
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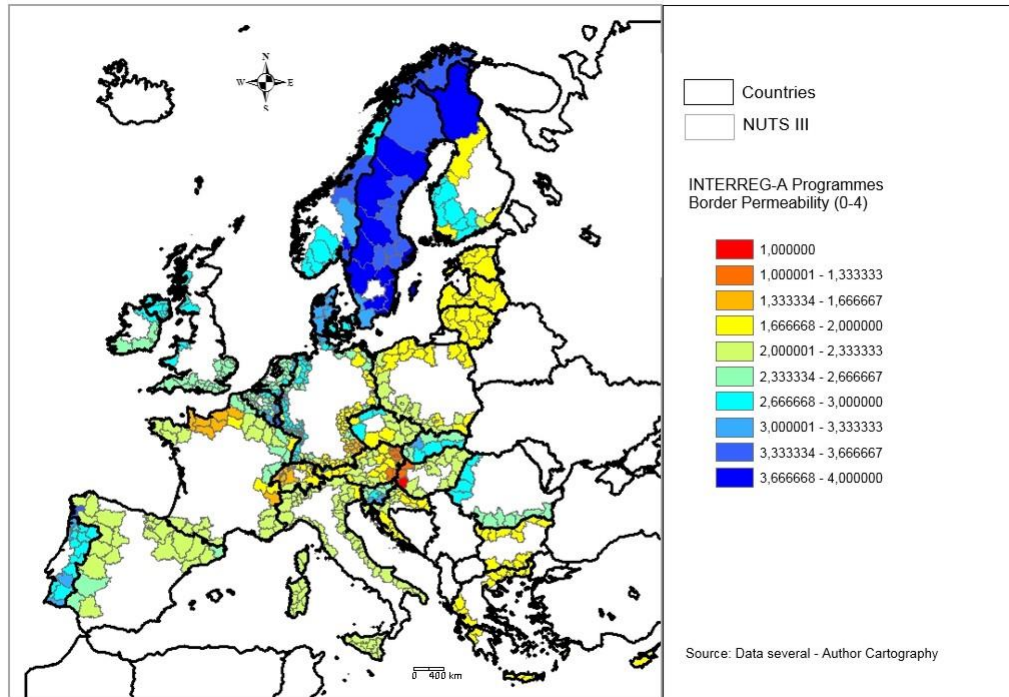
# ECONOMIC IMBALANCES IN EU BORDER REGIONS



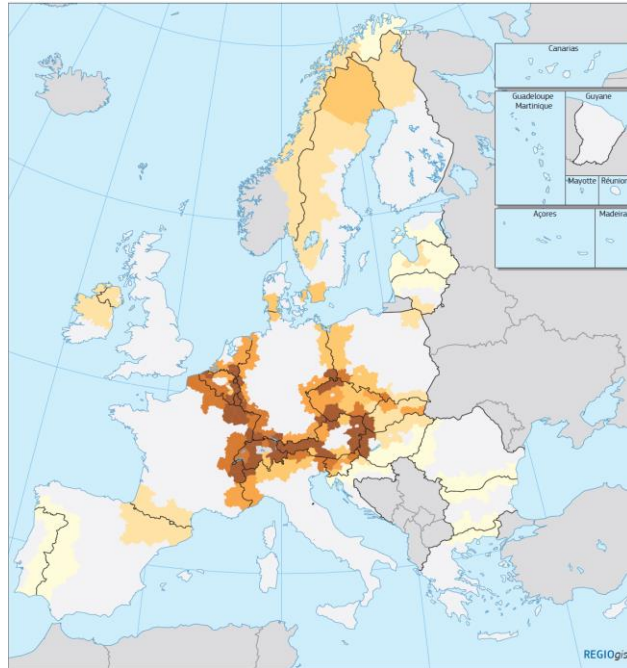
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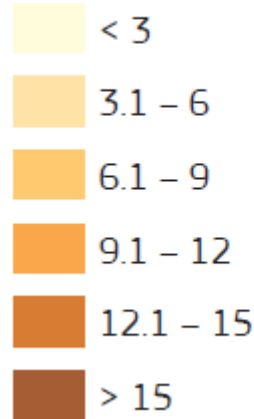
# BORDER PERMEABILITY - GENERAL



# INCREASED SOCIOECONOMIC POTENTIAL FROM OVERCOMING NEGATIVE BORDER EFFECTS



Total GDP loss as % of NUTS 3 GDP



Loss of GDP in EU NUTS 3 land border regions due to cross-border obstacles (Source: 7<sup>th</sup> Cohesion Report)



# GAINS OF EFFECTIVENESS AND COMPETITIVENESS OF PUBLIC TRANSPORT

1. Economic: Less fuel consumption, less car congestion
2. Environmental: Less atmospheric pollutant emissions
3. Social: Enlarge offer to lower income classes

- If there is a big enough population and adequate public transport services, relevant urban policy will realize the compact city that reduces environmental deterioration and improves the efficiency of people's activities.

- However, **financial sustainability of public transport totally depends on population density**

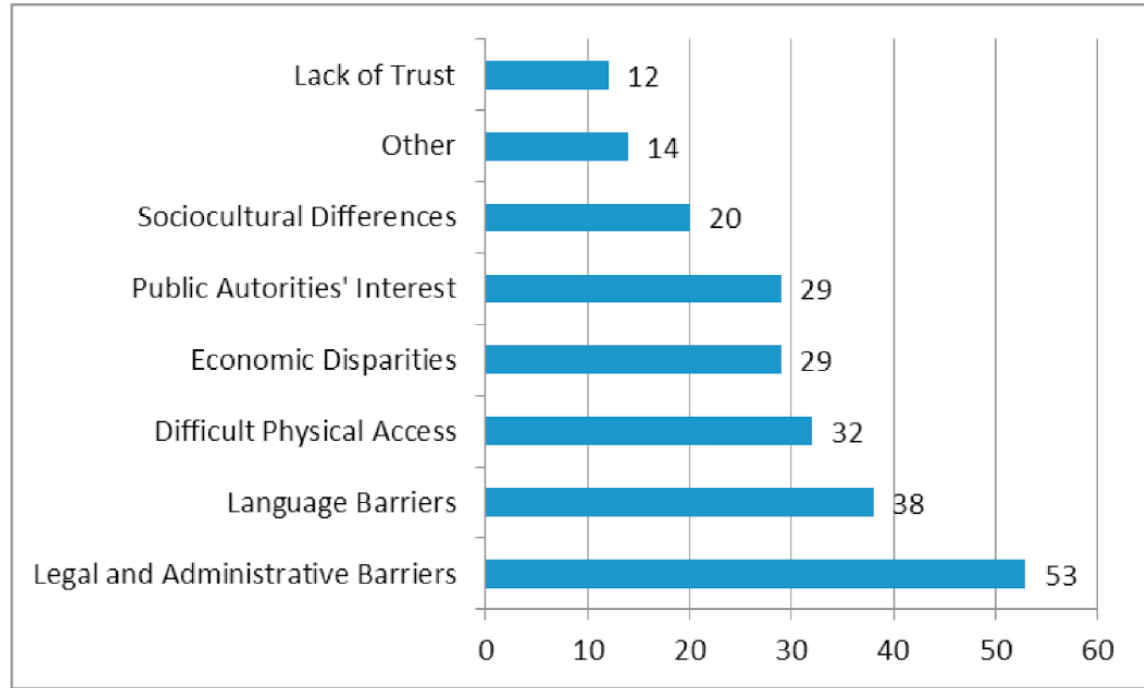
Source: (Masanobu and Hanaoka, 2003)





# CB TRANSPORT – AS A BARRIER

**Relevance and frequency of obstacles for EU citizens – 2016 (%)**



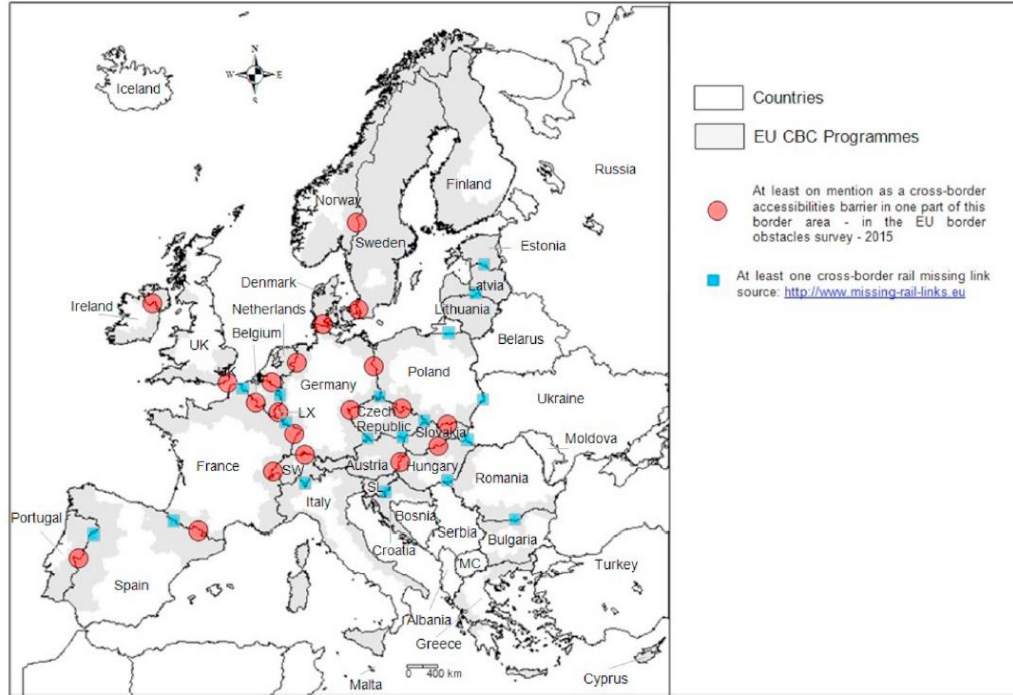
Source: (EC, 2016).



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# CB TRANSPORT – AS A BARRIER



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# CB PUBLIC TRANSPORT – DEMAND VS SUPPLY

TP: CB Transport Permeability index.

TSi: CB Transport Supply index (0-1)

TDi: CB Transport Demand index (0-1)

B: Buses CB intensity (0-1)

T: Trains CB intensity (0-1)

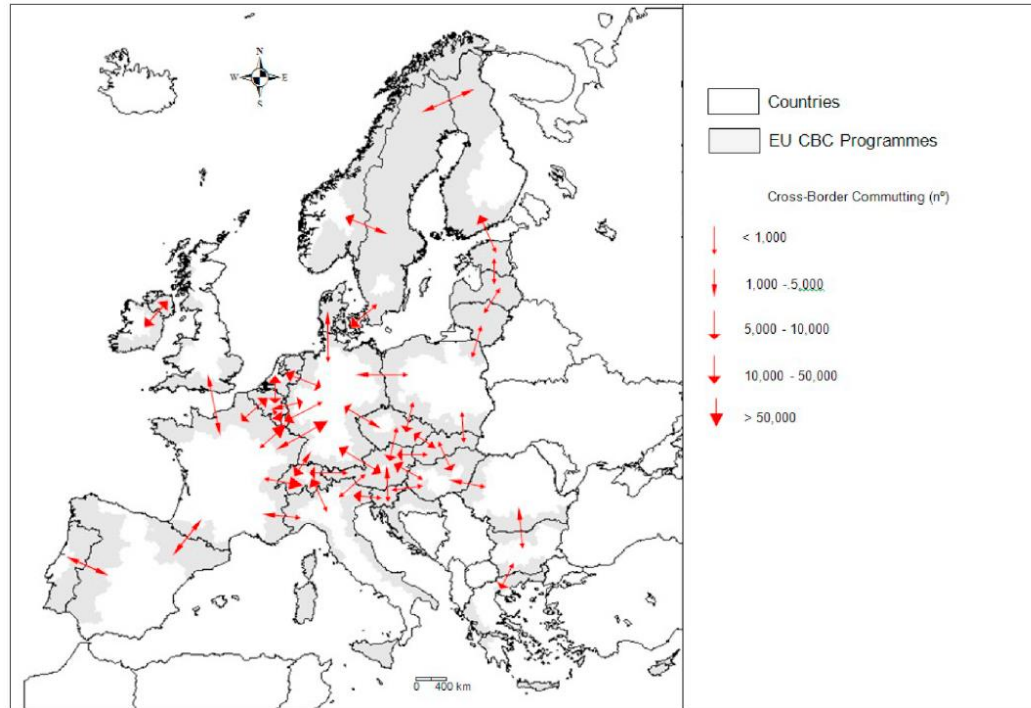
C: Commuters CB intensity (0-1)

P: Population density in the border region (0-1)

D: Demand for CB transports (0-1)

$TSi = (B + T)/2$ ;  $TDi = (C + P + D)/3$ ;  $TPi = (TSi/TDi)$

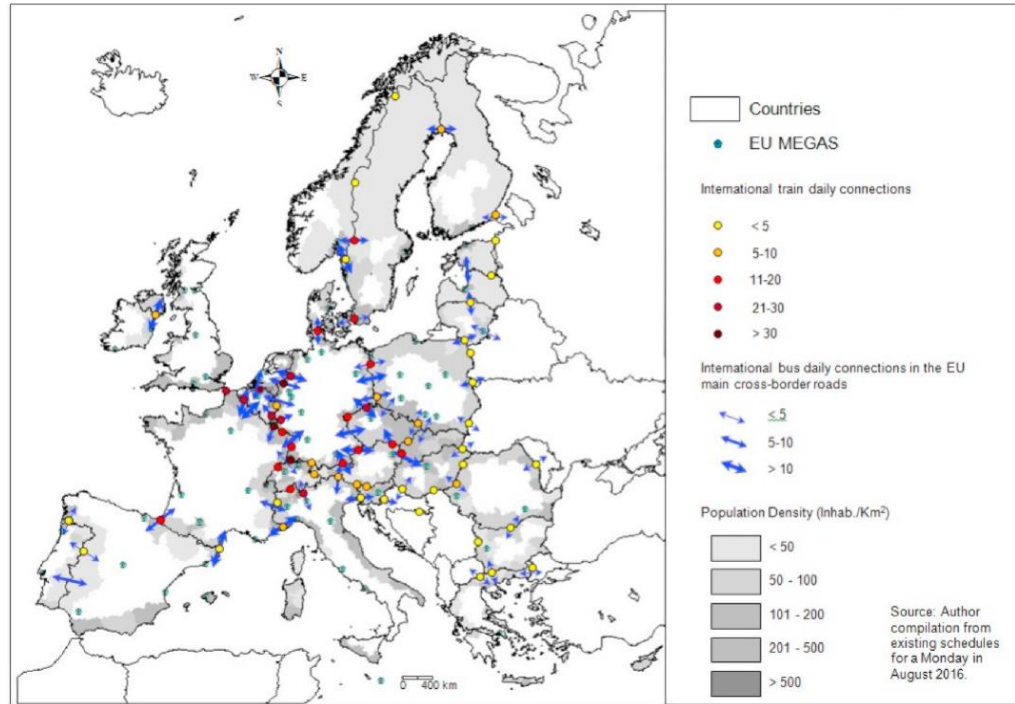
# CB TRANSPORT – DEMAND (CB COMMUTTING)



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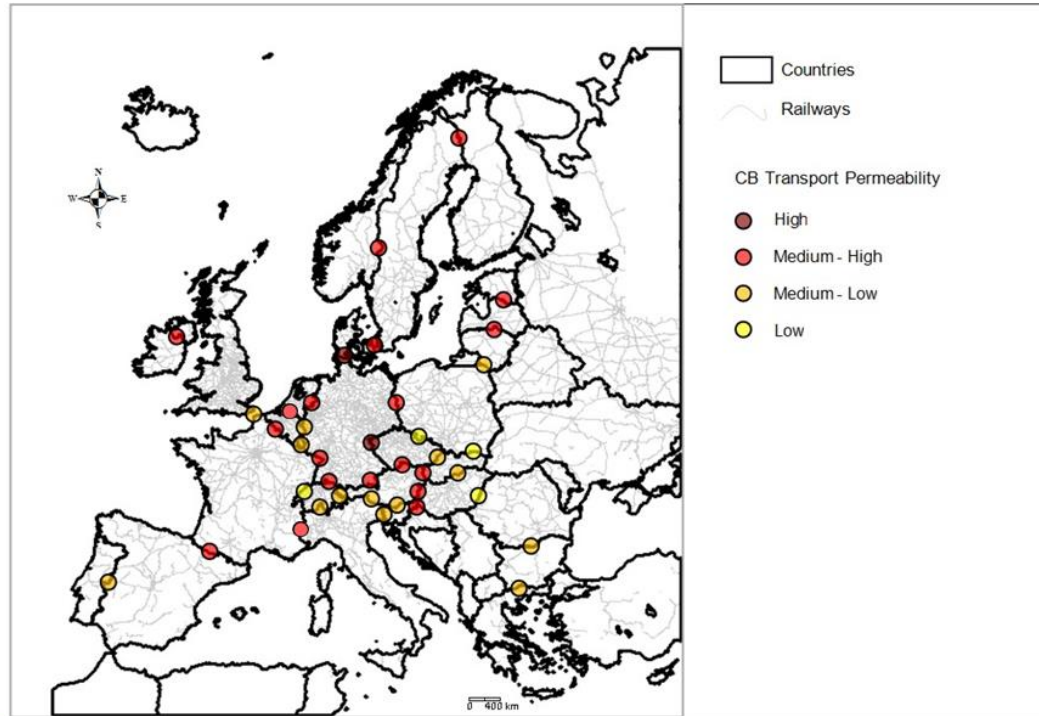
# CB TRANSPORT – SUPPLY (BUS & RAIL)



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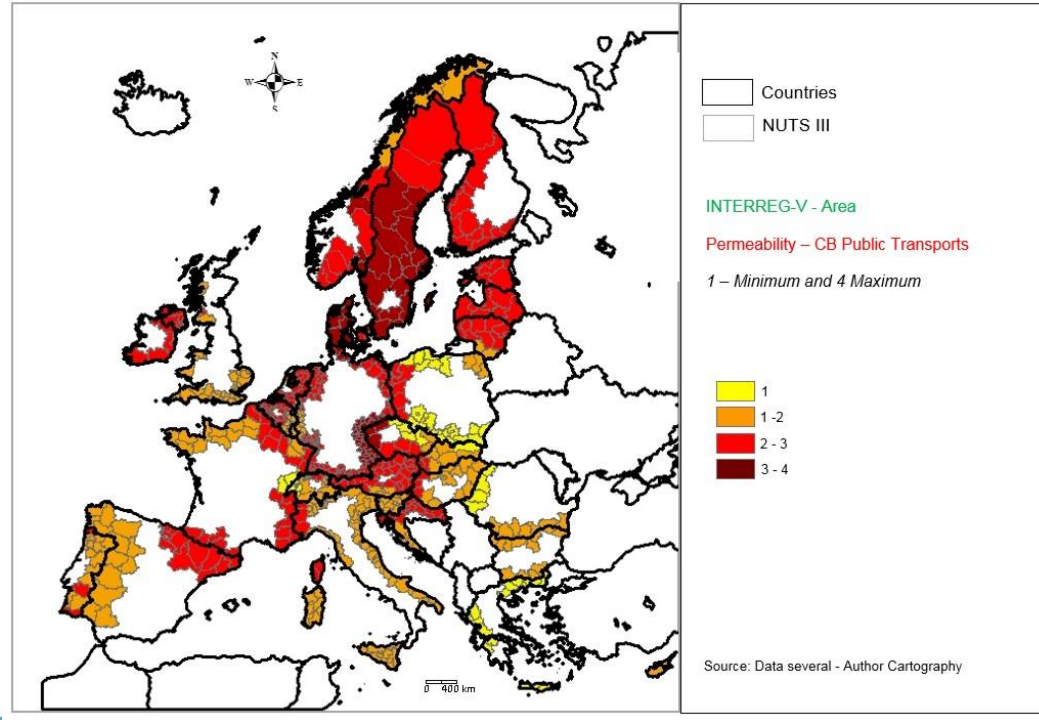
# CB PUBLIC TRANSPORTS – PERMEABILITY INDEX



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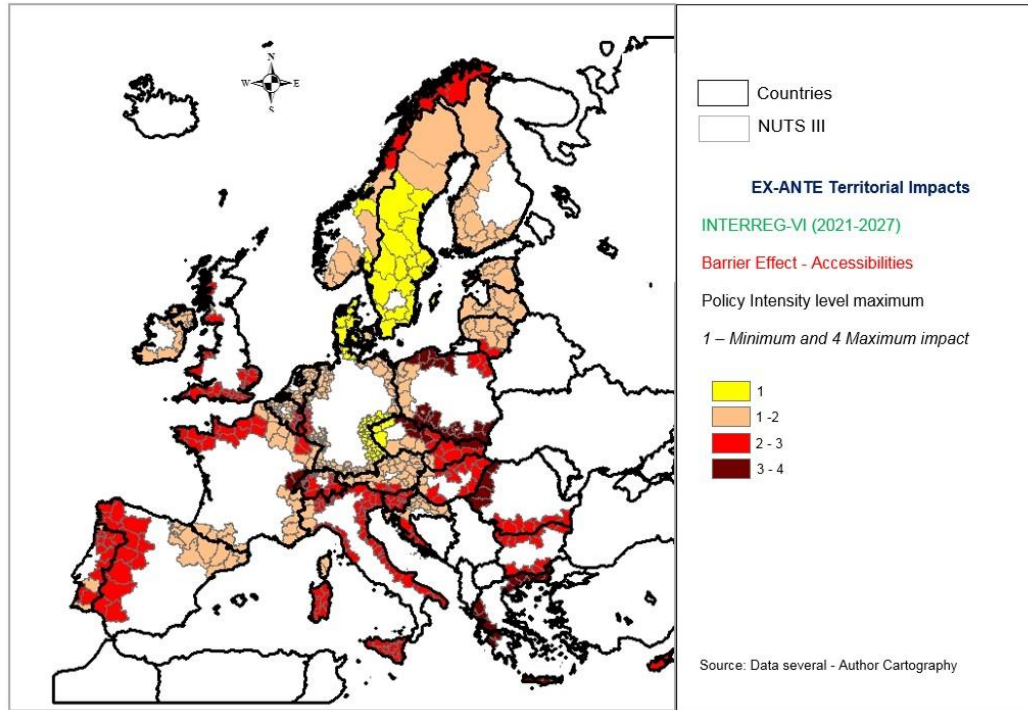
# CB PUBLIC TRANSPORTS – PERMEABILITY INDEX



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# EX-ANTE TERRITORIAL IMPACTS - ACCESSIBILITY



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