

ESPON



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Interreg

Interregional freight and passenger transport flows in Europe

24th - 25th November 2022 // Baluarte Palacio de Congresos,
Pamplona (NAVARRA)

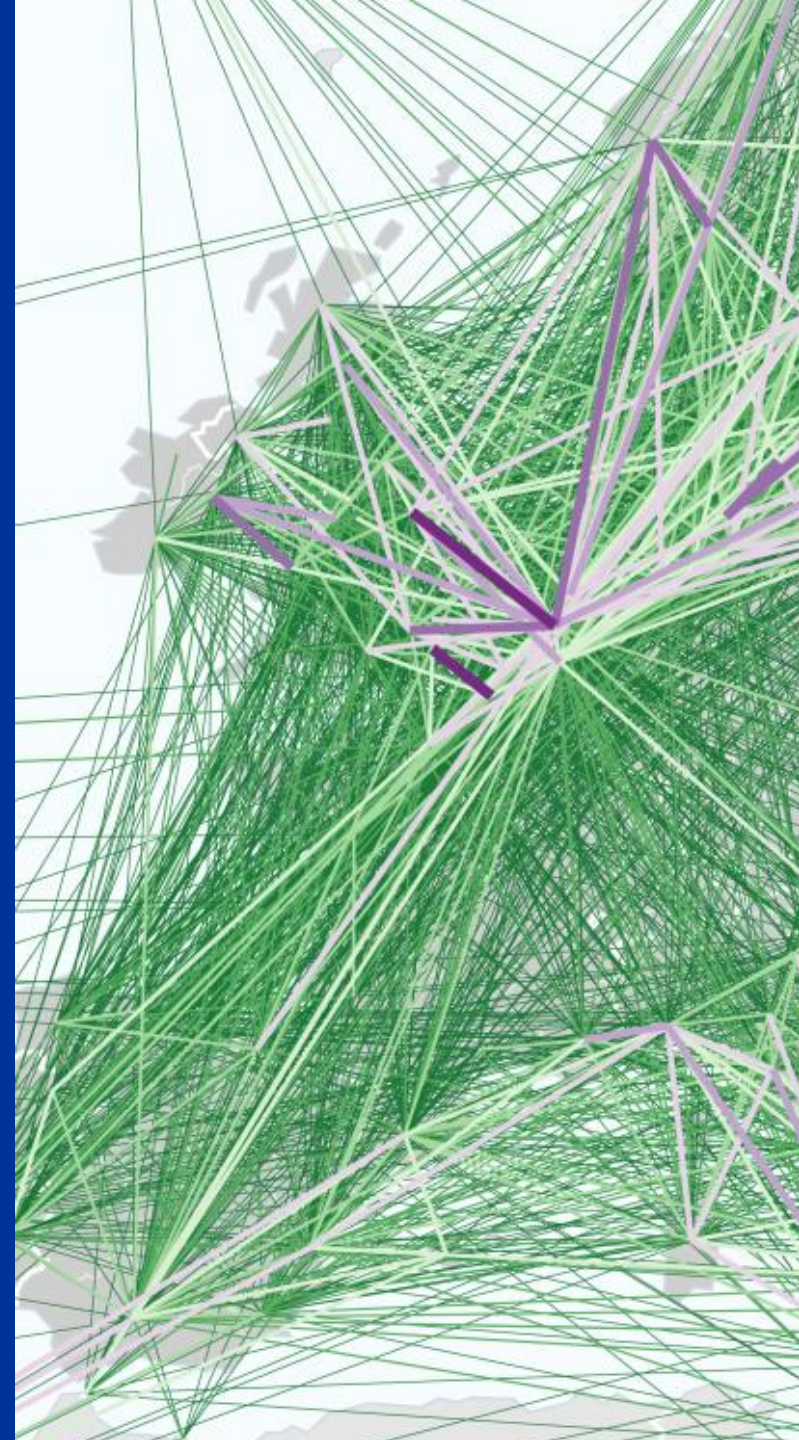
Björn Schwarze & Klaus Spiekermann
Spiekermann & Wegener, Urban and Regional Research (S&W)
Dortmund, Germany

Structure

- 1 Freight transport flows
- 2 Passenger transport flows
- 3 Impacts of the COVID-19 pandemic on air passenger flows

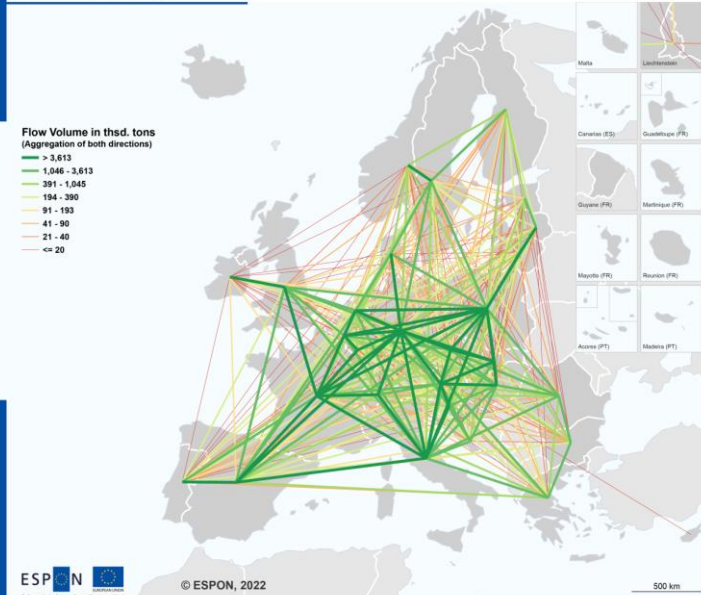
1

Freight transport flows

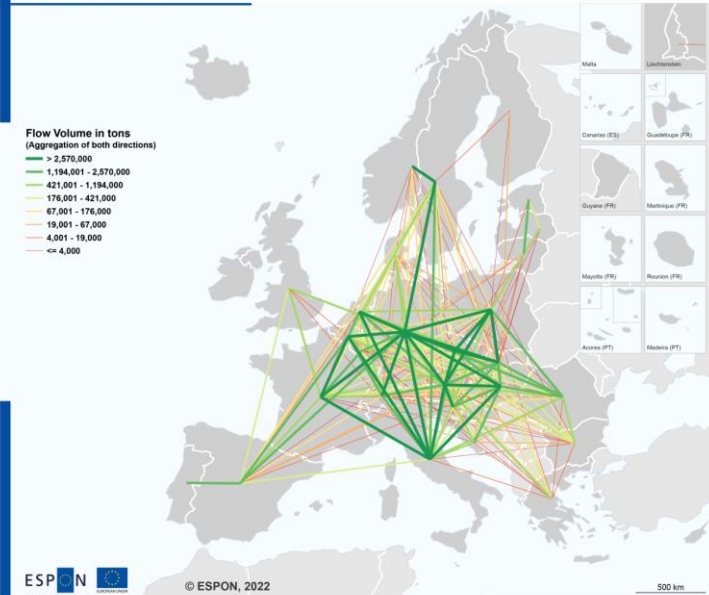


International freight flows at country level

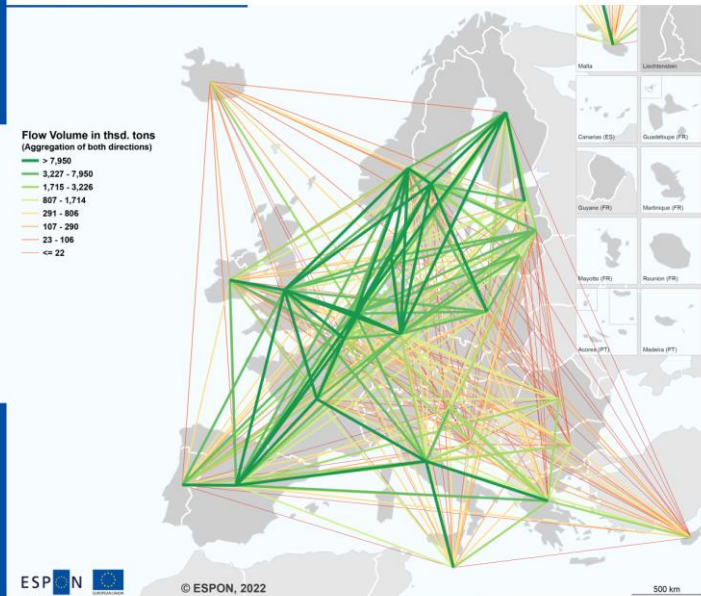
Road Freight, 2018



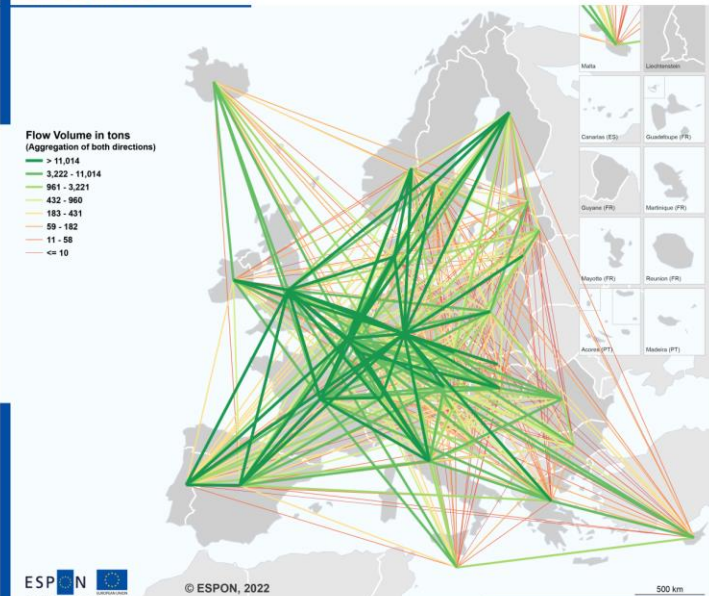
Rail Freight, 2018



Maritime Freight, 2018

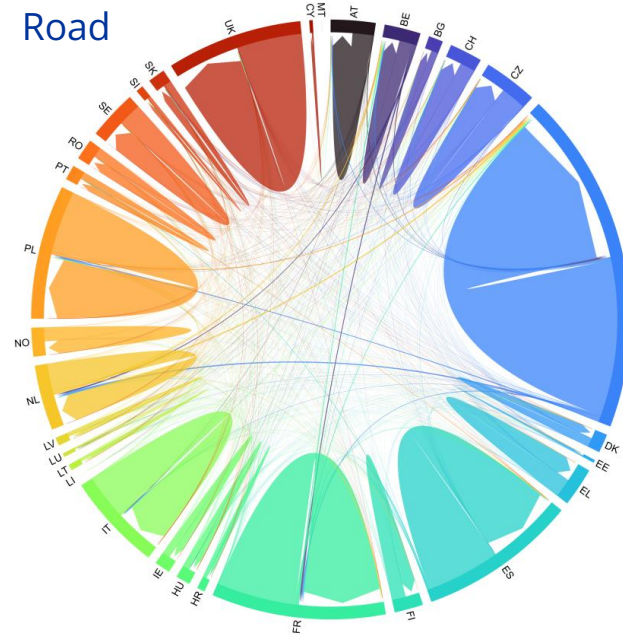


Air Freight, 2018

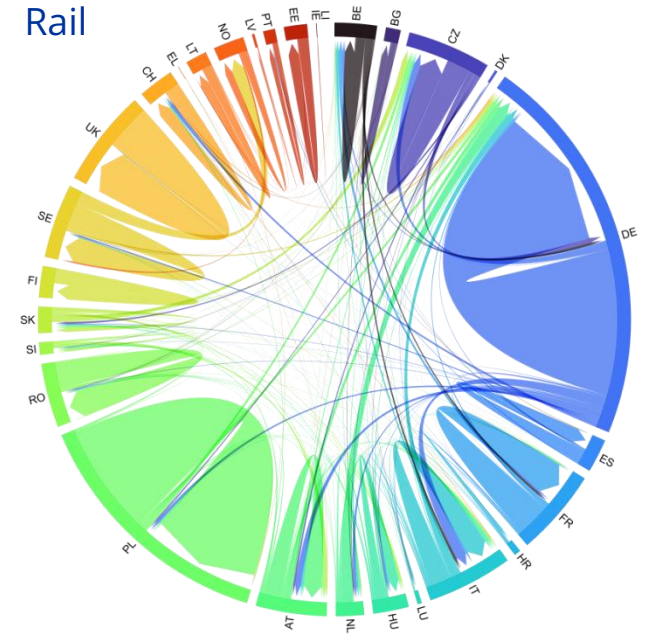


International and national freight flows at country level

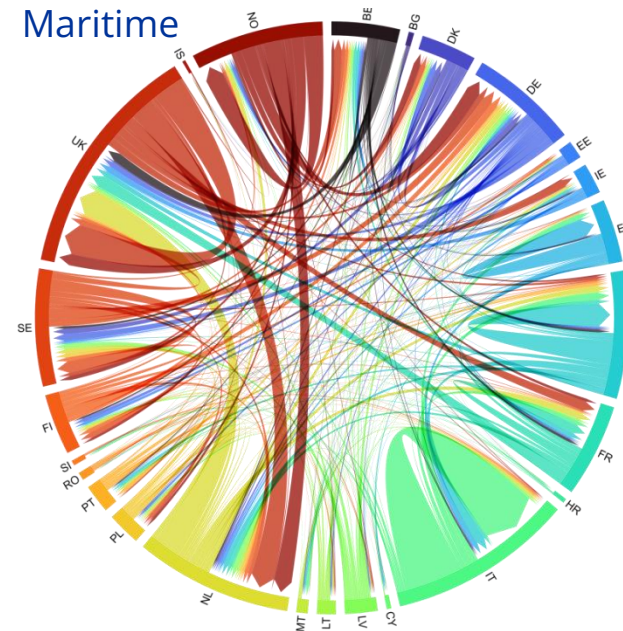
Road



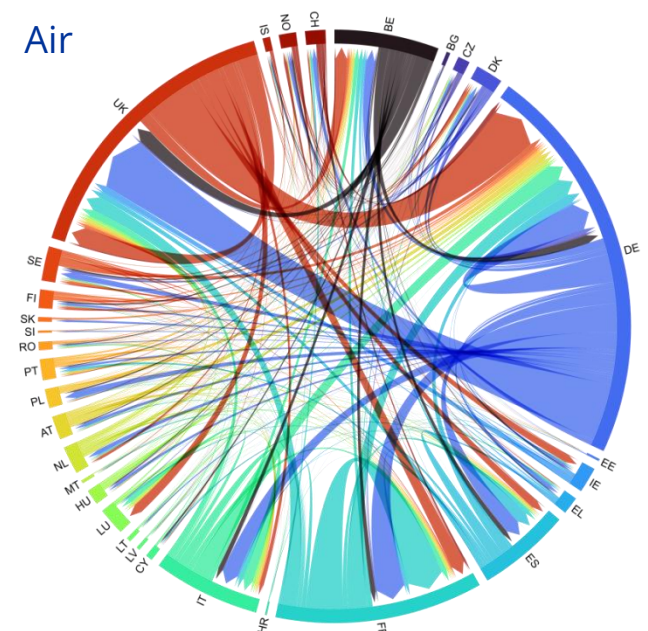
Rail



Maritime

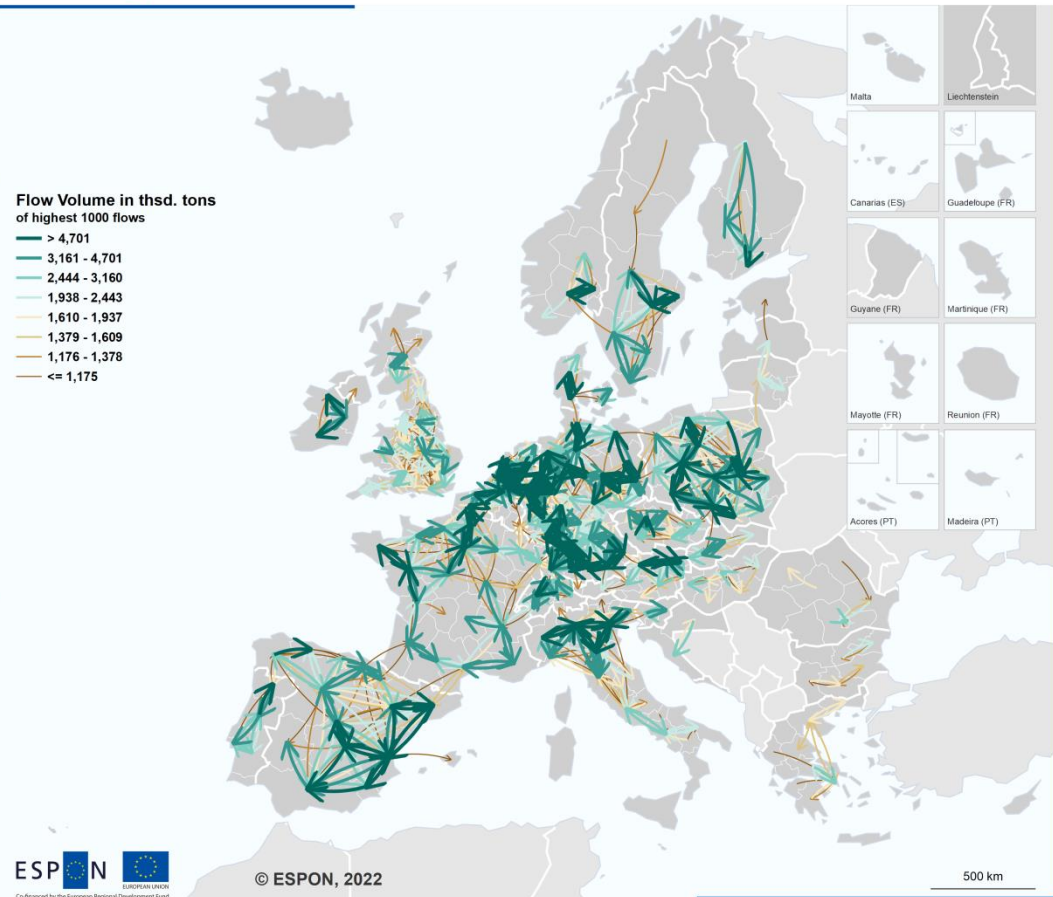


Air



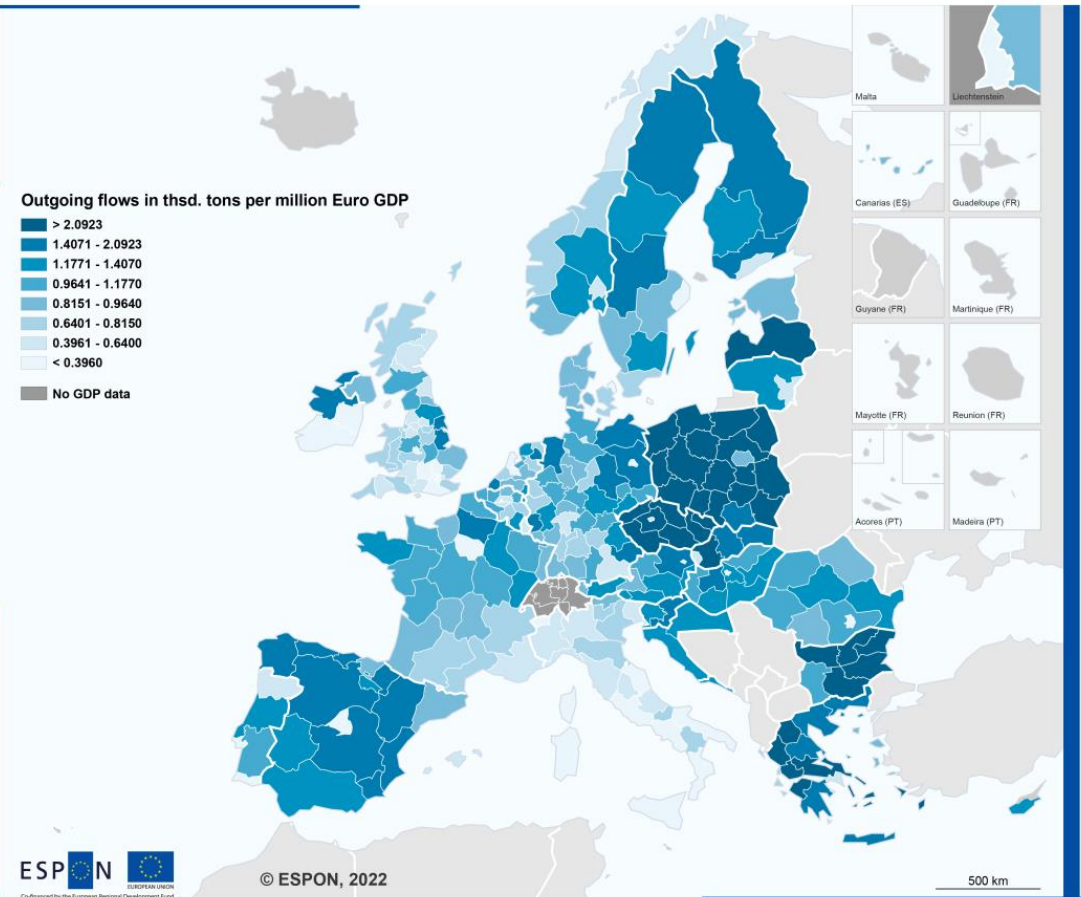
Freight transport flows by road at regional level

Road Freight, 2018



Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2021
Origin of data: CEPREDE, 2021
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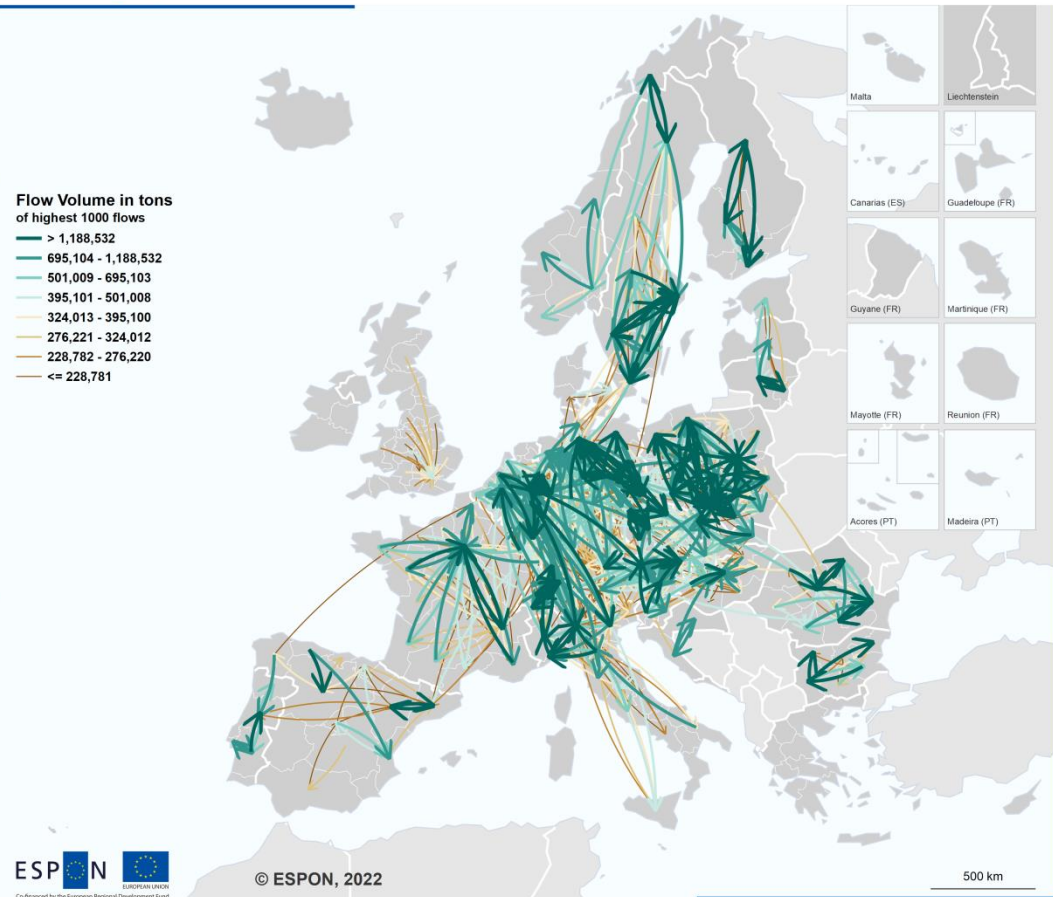
Road Freight, 2017



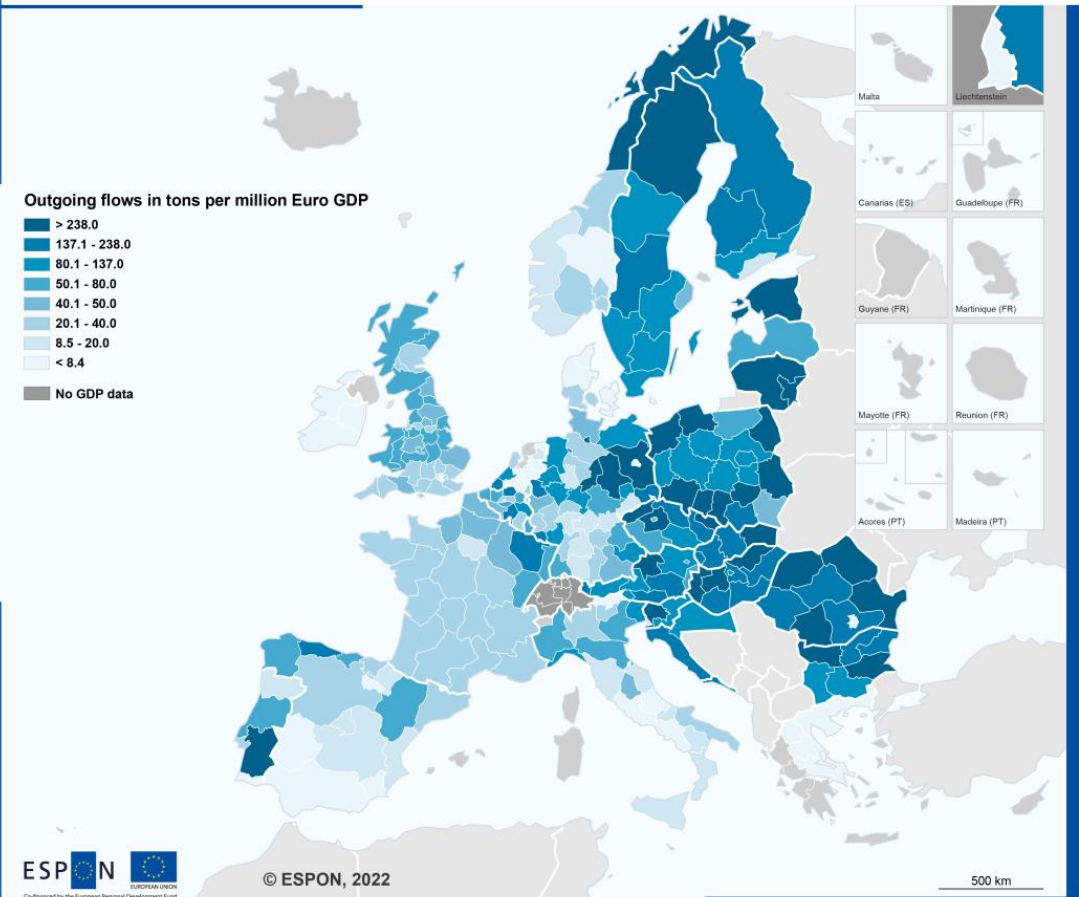
Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: CEPREDE, 2022
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Freight transport flows by rail at regional level

Rail Freight, 2018



Rail Freight, 2017

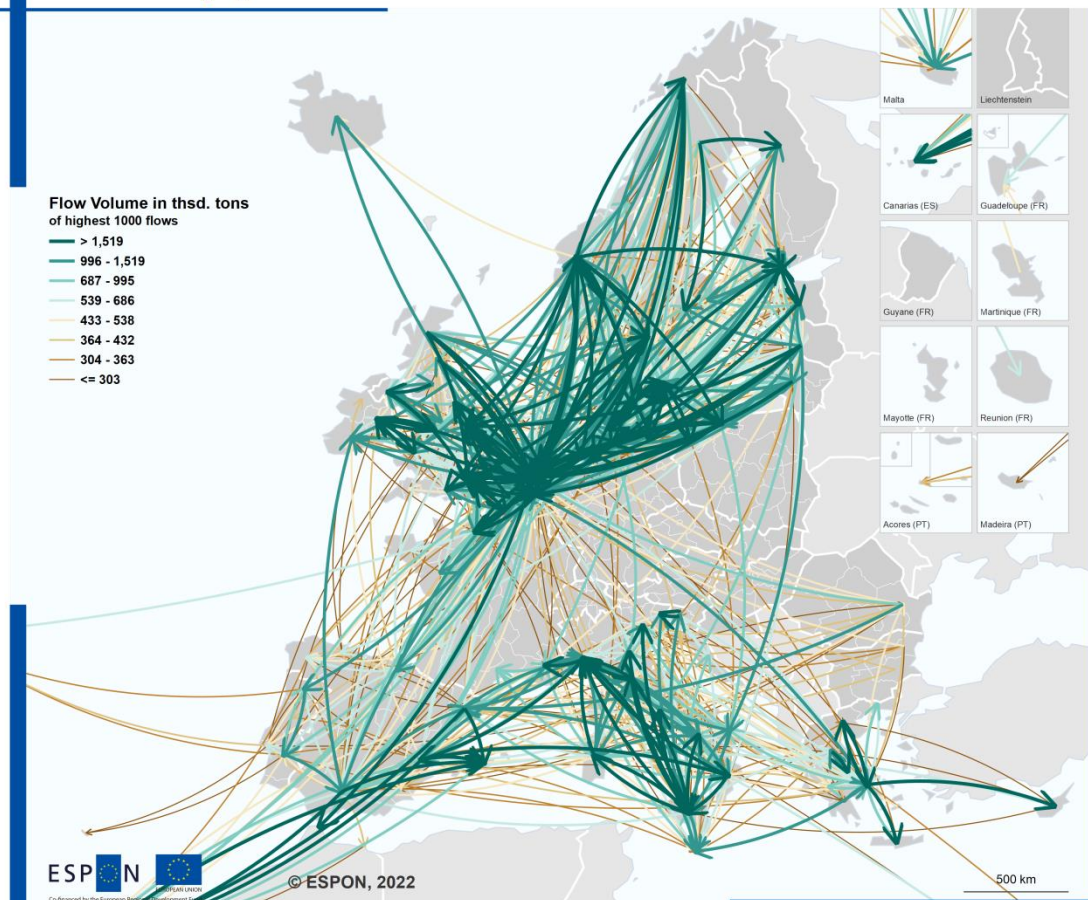


Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2021
Origin of data: S&W based on Eurostat, 2021
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Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: S&W based on Eurostat, 2022
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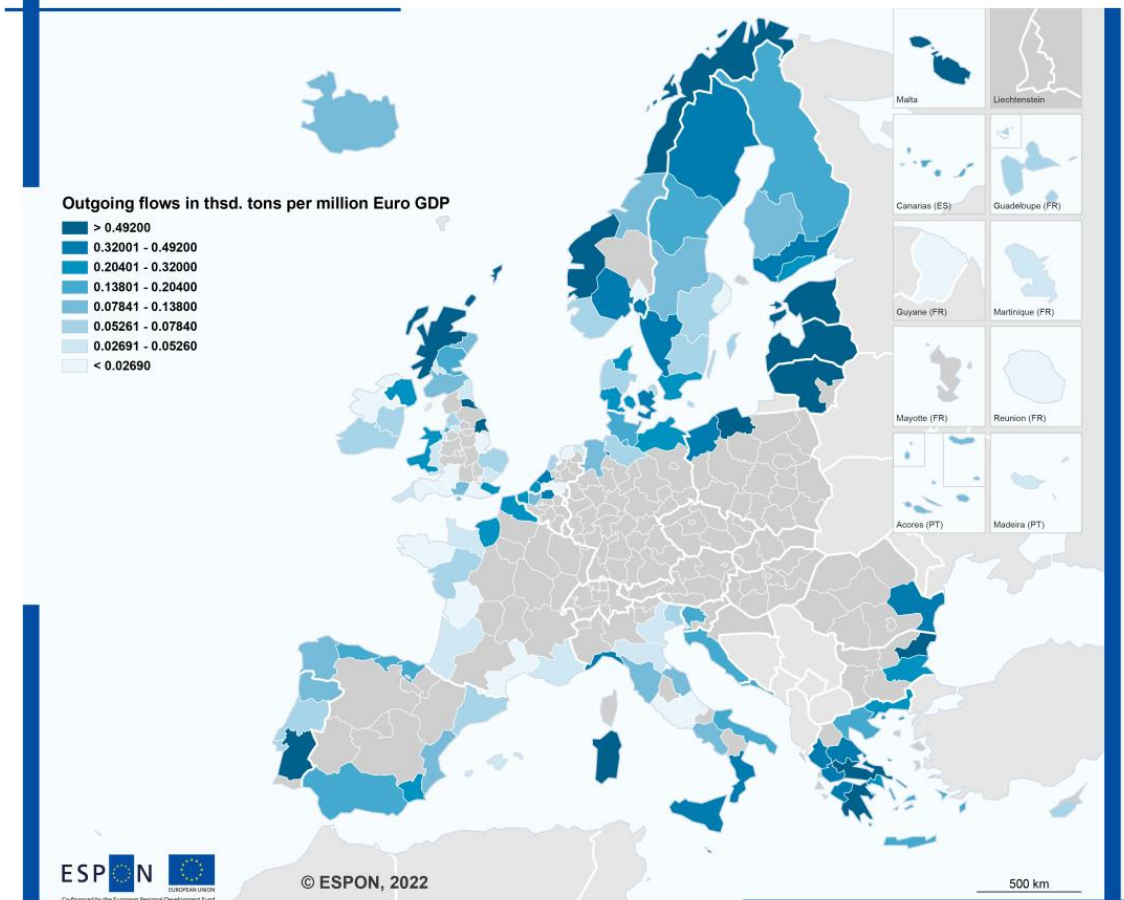
Maritime freight transport flows at regional level

Maritime Freight, 2018



Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2021
Origin of data: S&W based on Eurostat, 2021
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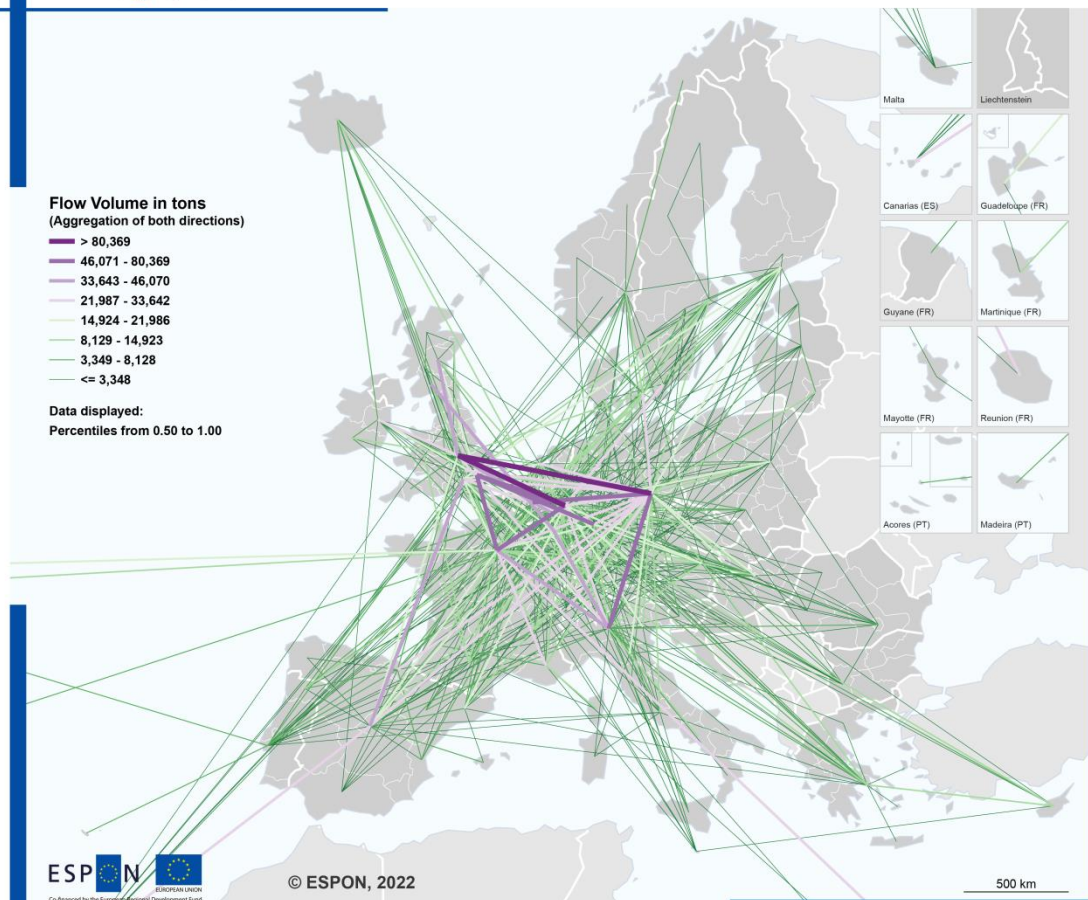
Maritime Freight, 2017



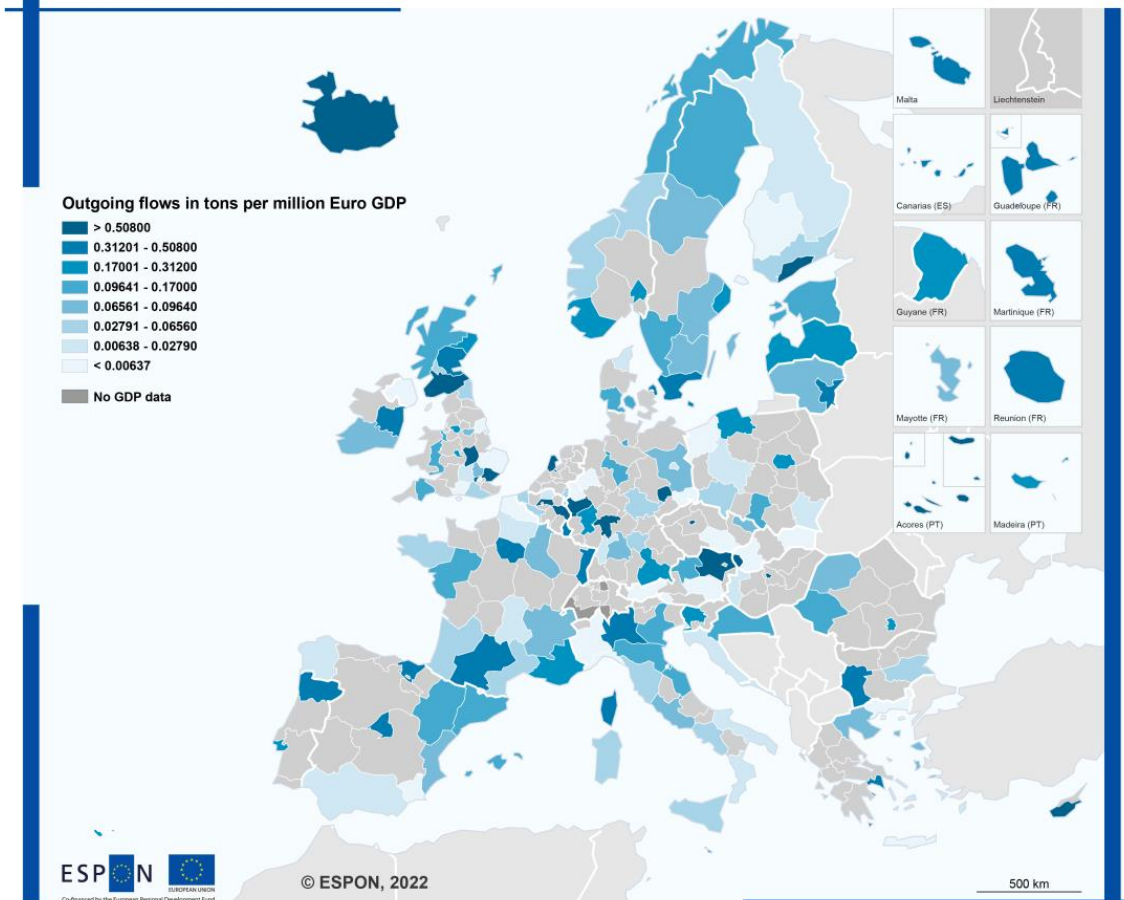
Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: S&W based on Eurostat, 2022
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Freight transport flows by air at regional level

Air Freight, 2018



Air Freight, 2017

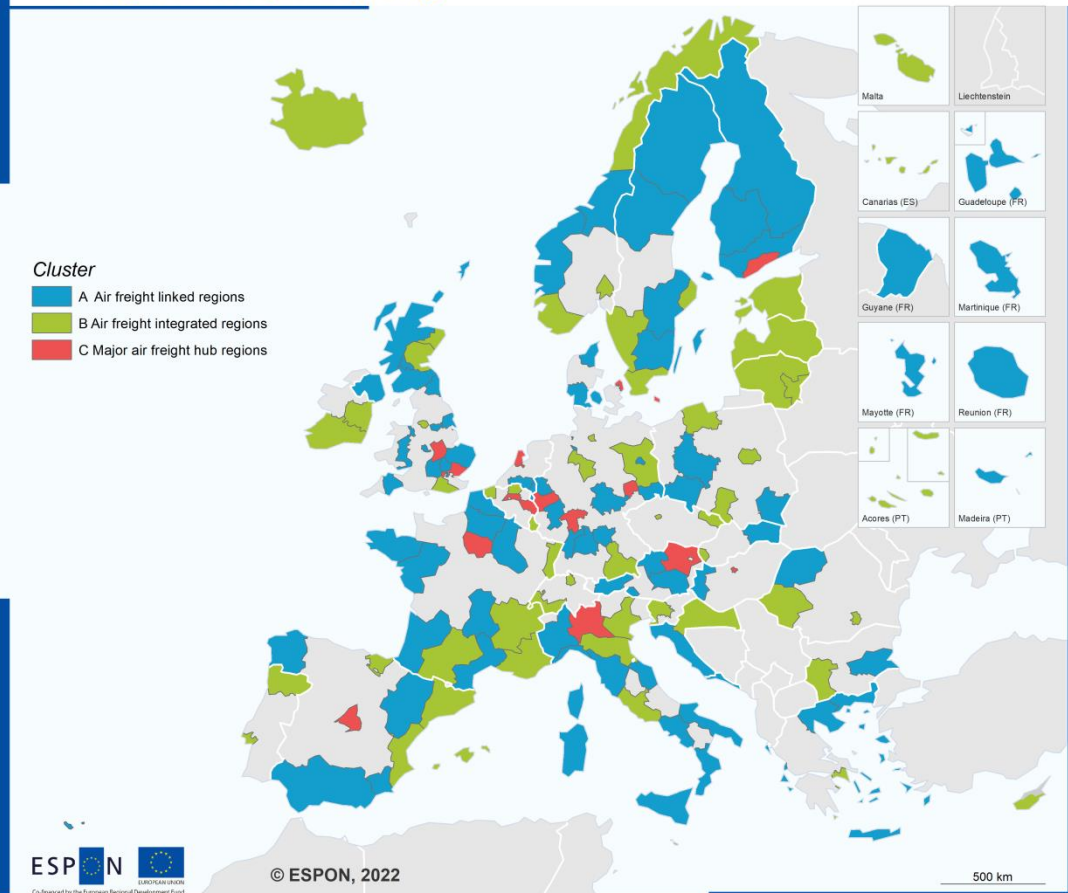


Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2021
Origin of data: S&W based on Eurostat, 2021
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Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: S&W based on Eurostat, 2022
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Regional typology based on freight transport by air

Air freight, 2018, regional typology



Standardised average indicator values for air freight transport clusters

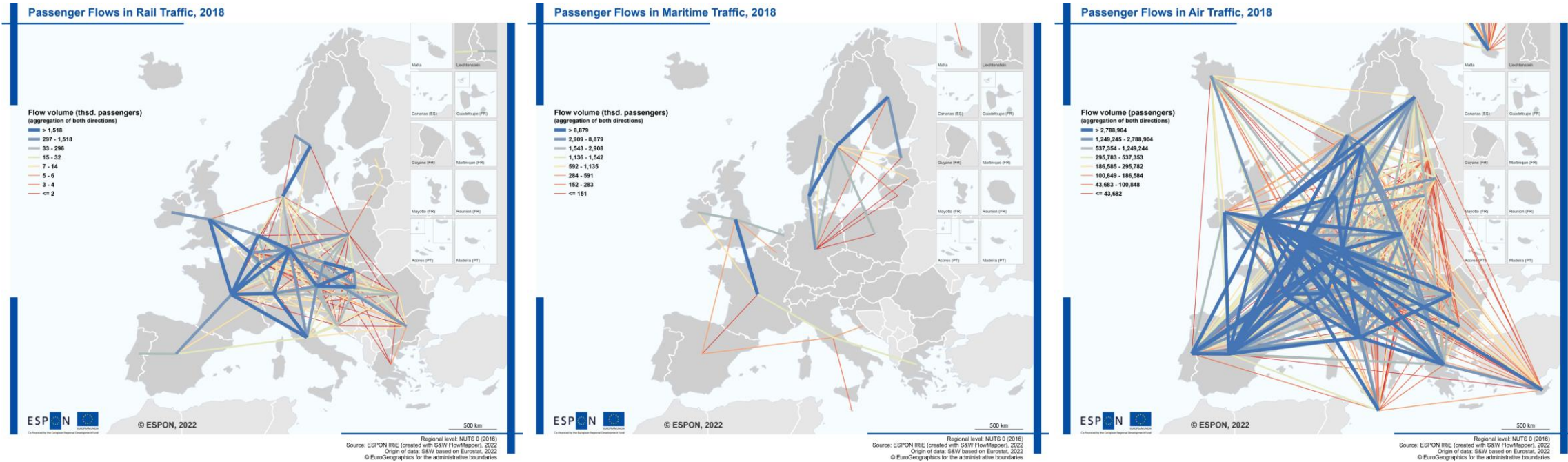
Cluster	Connectivity	Intensity	Weighted Intensity	Inter-regional Balance	Network Selectivity	External Influence	Send-Receive Balance
A Air freight linked regions	-0.69	-0.35	-0.26	-0.36	0.67	-0.12	0.10
B Air freight integrated regions	0.32	-0.09	-0.06	0.04	-0.43	-0.01	-0.08
C Major air freight hub regions	0.37	0.44	0.32	0.31	-0.24	0.13	-0.02

2

Passenger transport flows

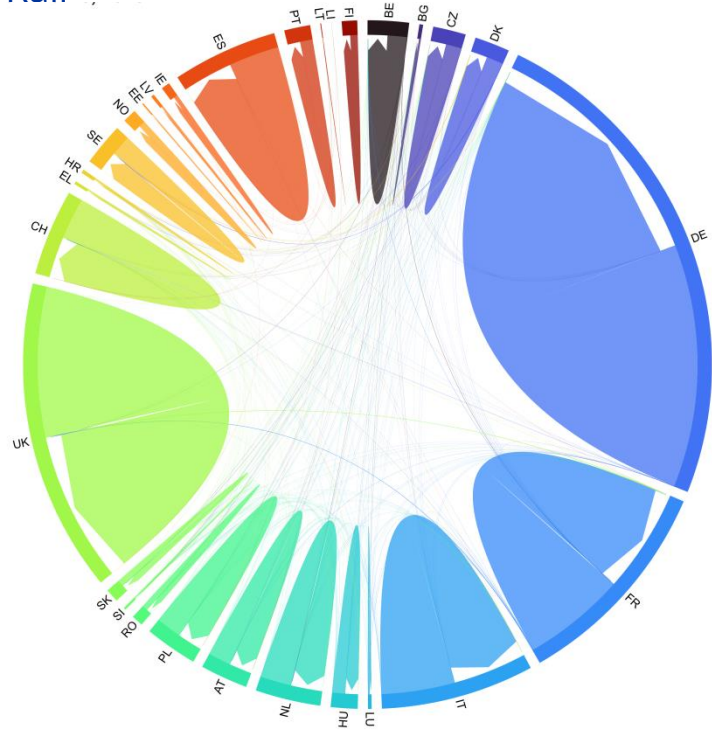


International passenger flows at country level

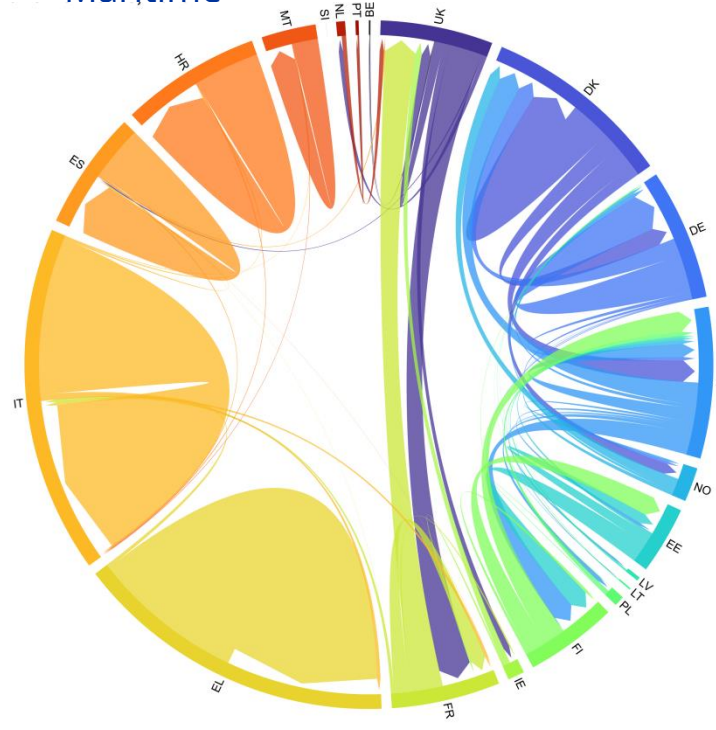


International and national passenger flows at country level

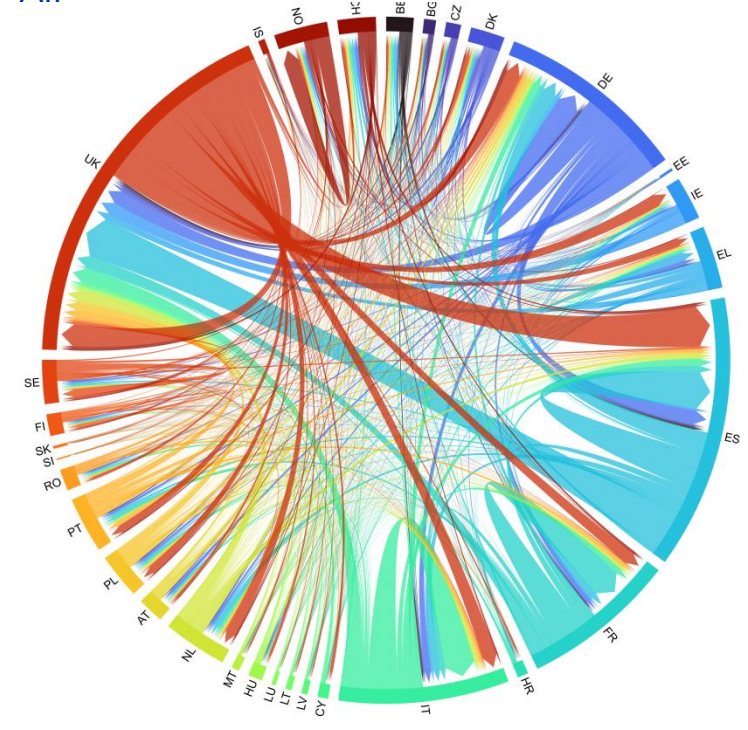
Rail



Maritime

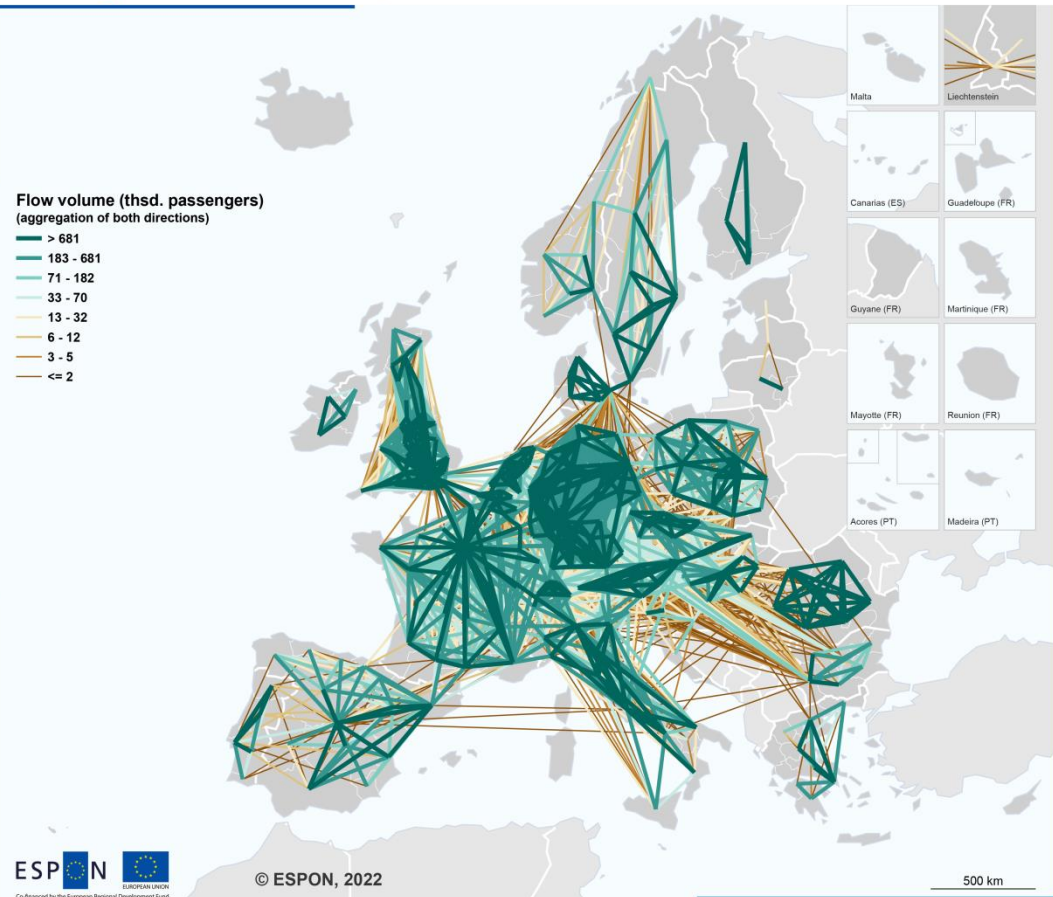


Air



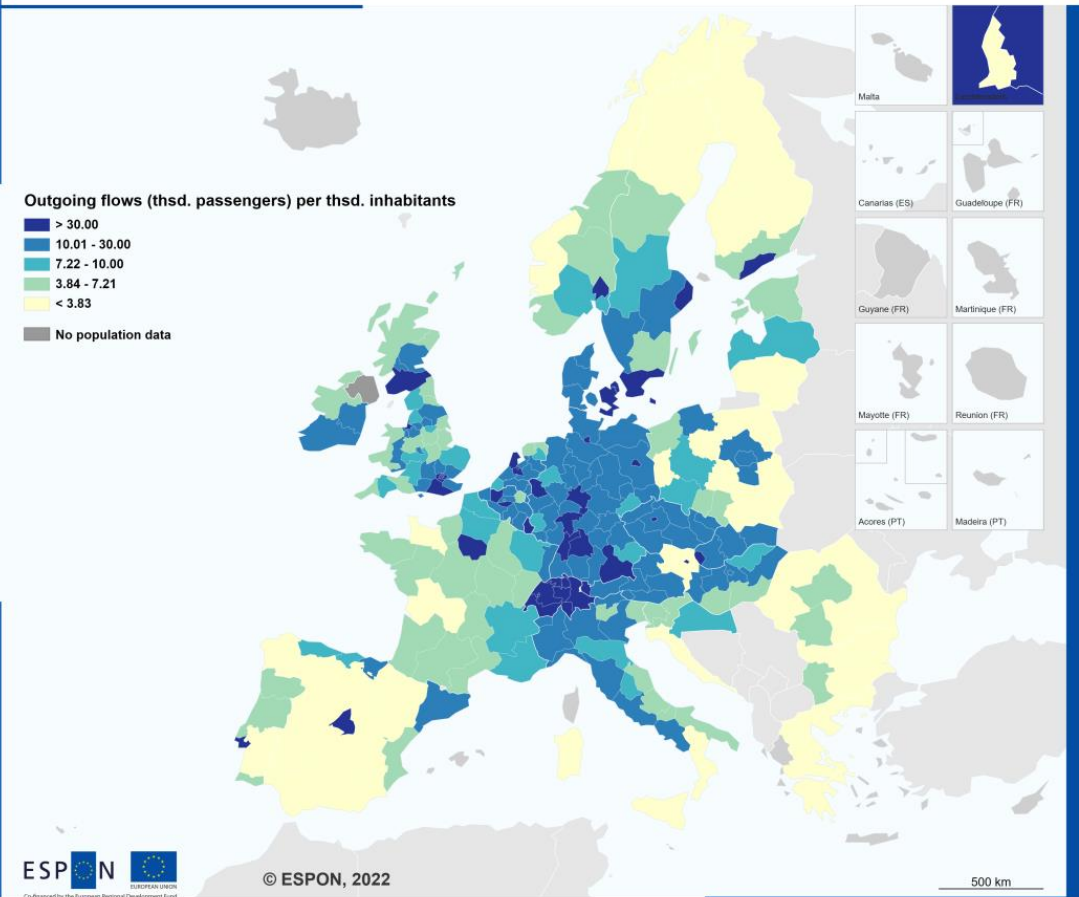
Passenger transport flows by rail at regional level

Passenger Flows in Rail Traffic, 2018



Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: S&W based on Eurostat, 2022
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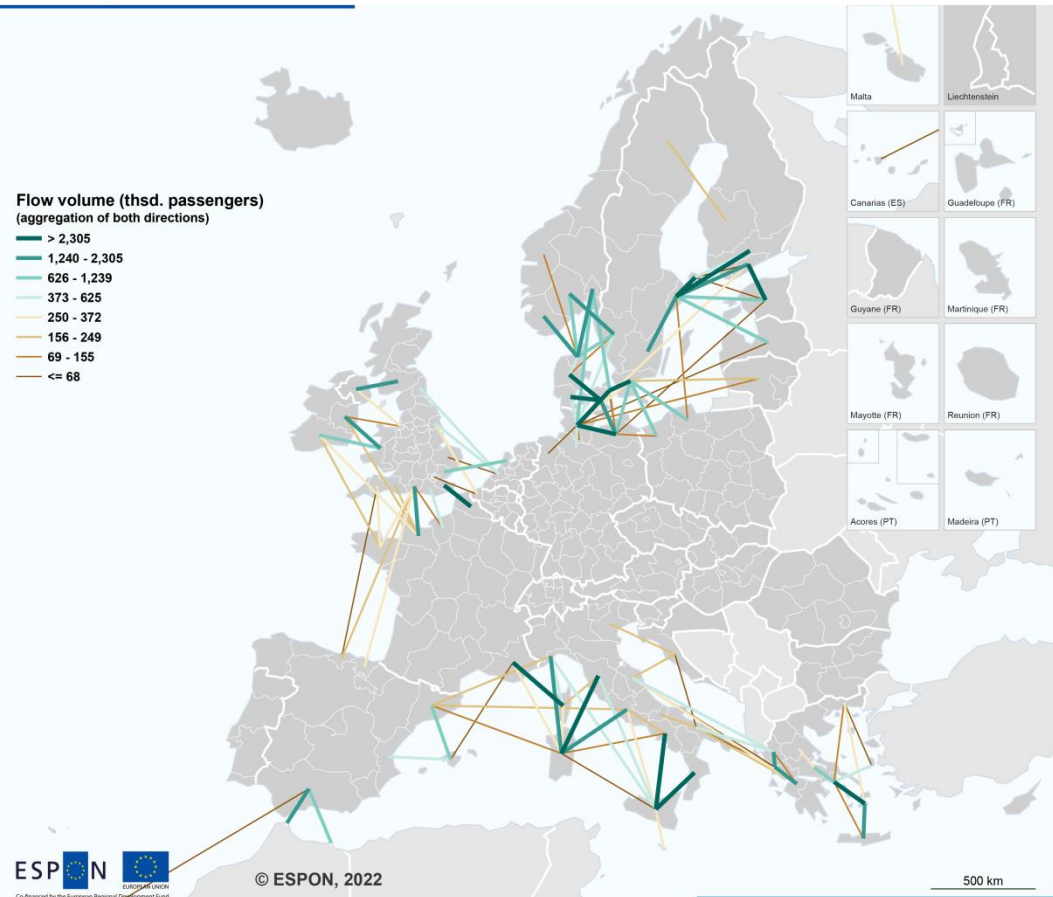
Passenger Flows in Rail Traffic, 2018



Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: S&W based on Eurostat, 2022
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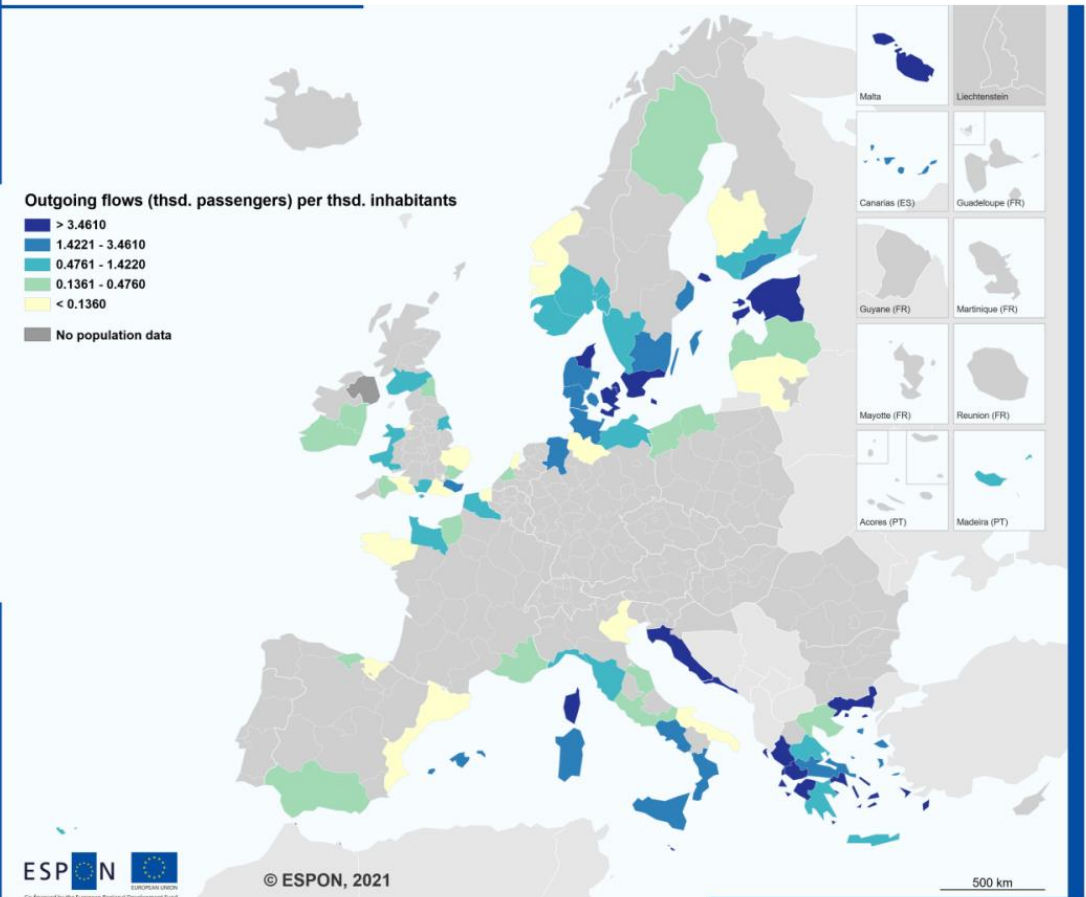
Maritime passenger transport flows at regional level

Passenger Flows in Maritime Traffic, 2018



Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: S&W based on Eurostat, 2022
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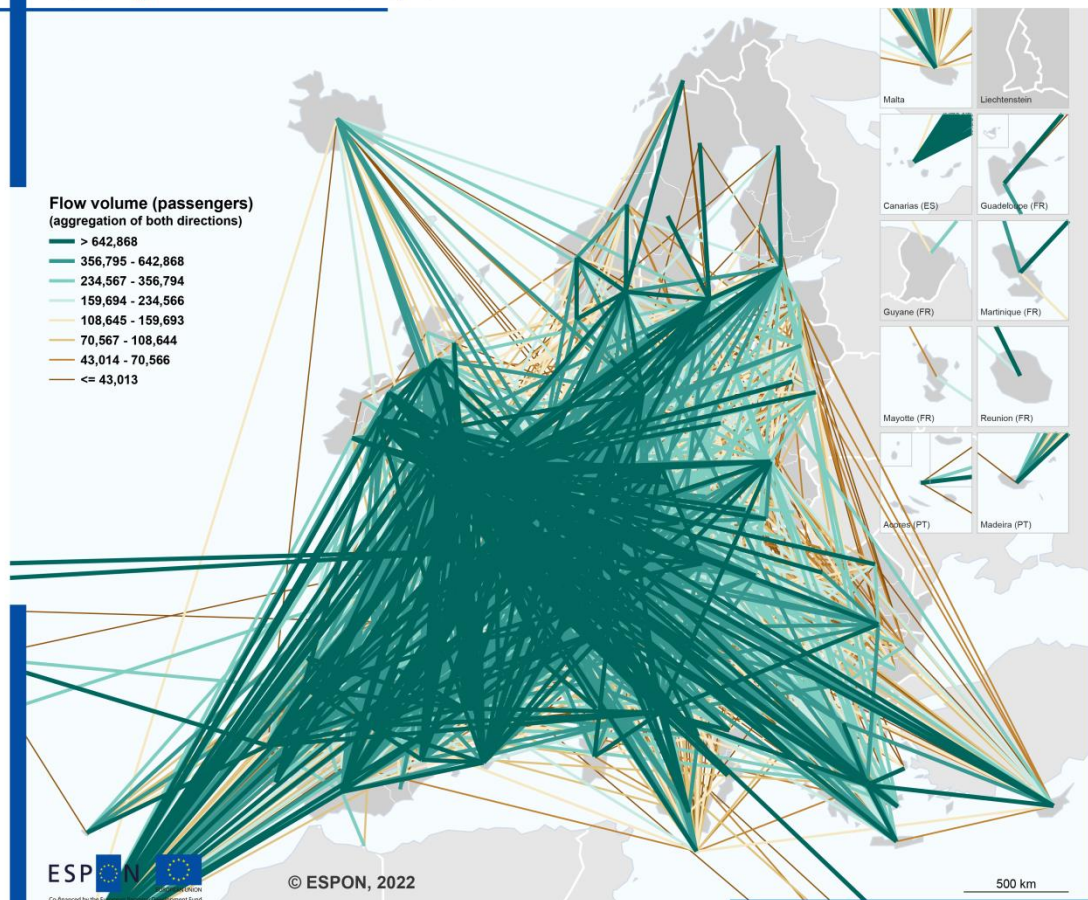
Maritime passenger flows, 2018



Regional level: NUTS 2 (2016)
Source: ESPON IRIE (S&W FlowMapper), 2021
Origin of data: Eurostat, 2021
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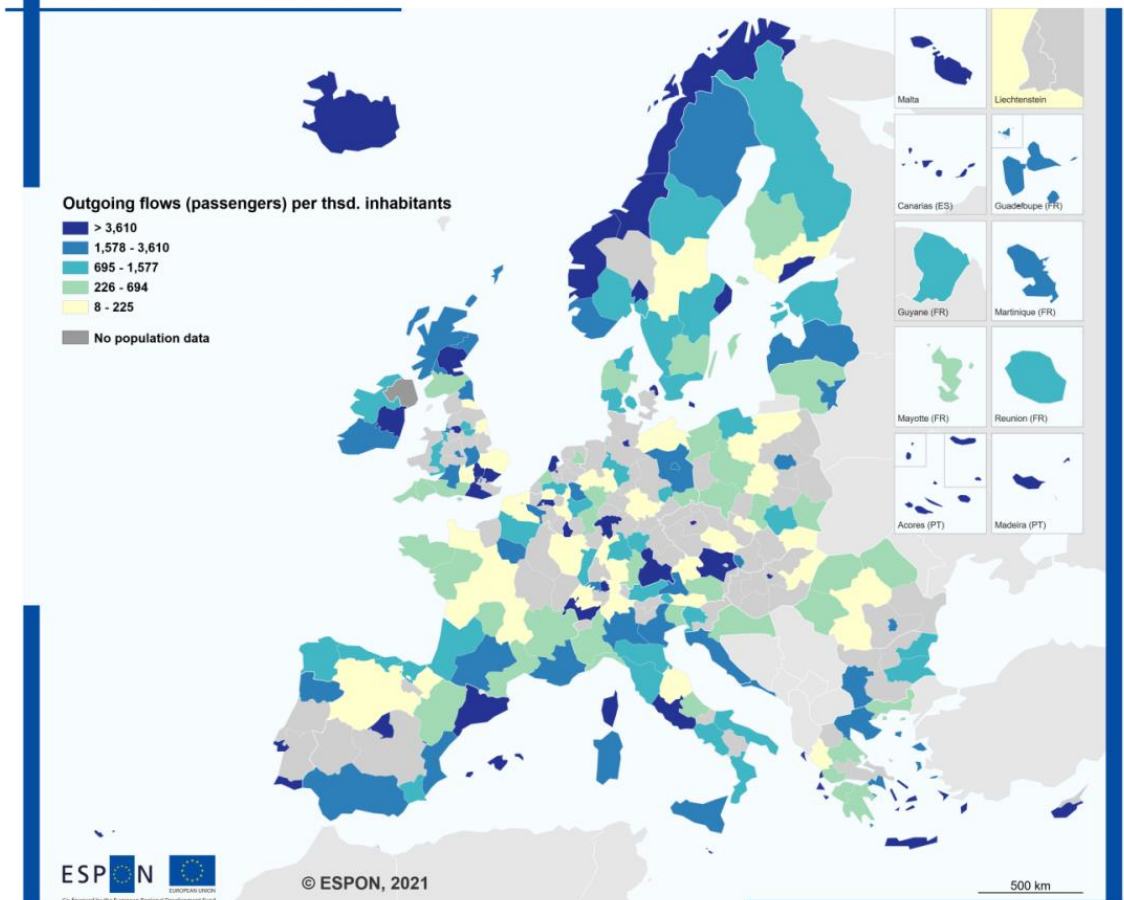
Passenger transport flows by air at regional level

Passenger Flows in Air Traffic, 2018



Regional level: NUTS 2 (2016)
Source: ESPON IRIE (created with S&W FlowMapper), 2022
Origin of data: S&W based on Eurostat, 2022
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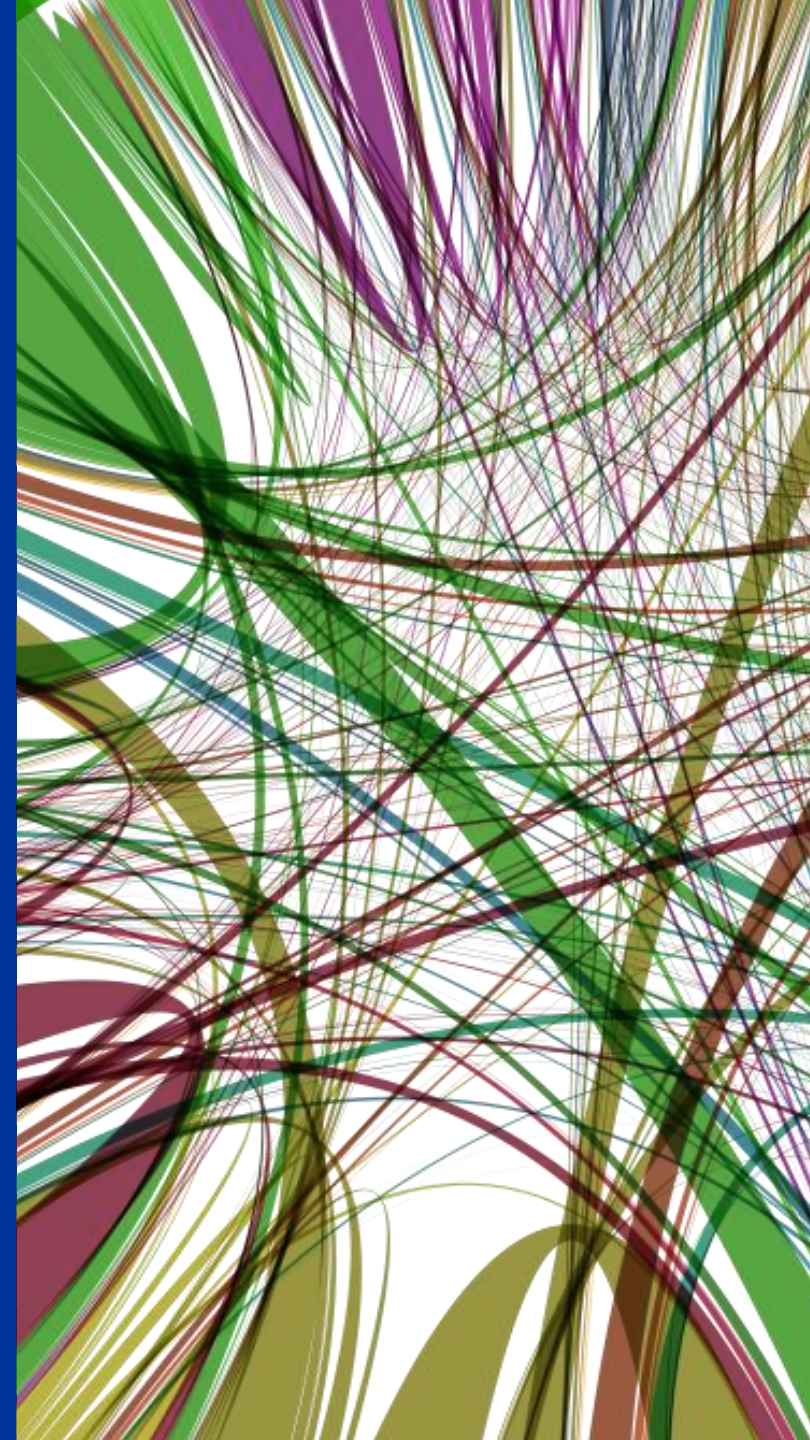
Air passenger flows, 2018



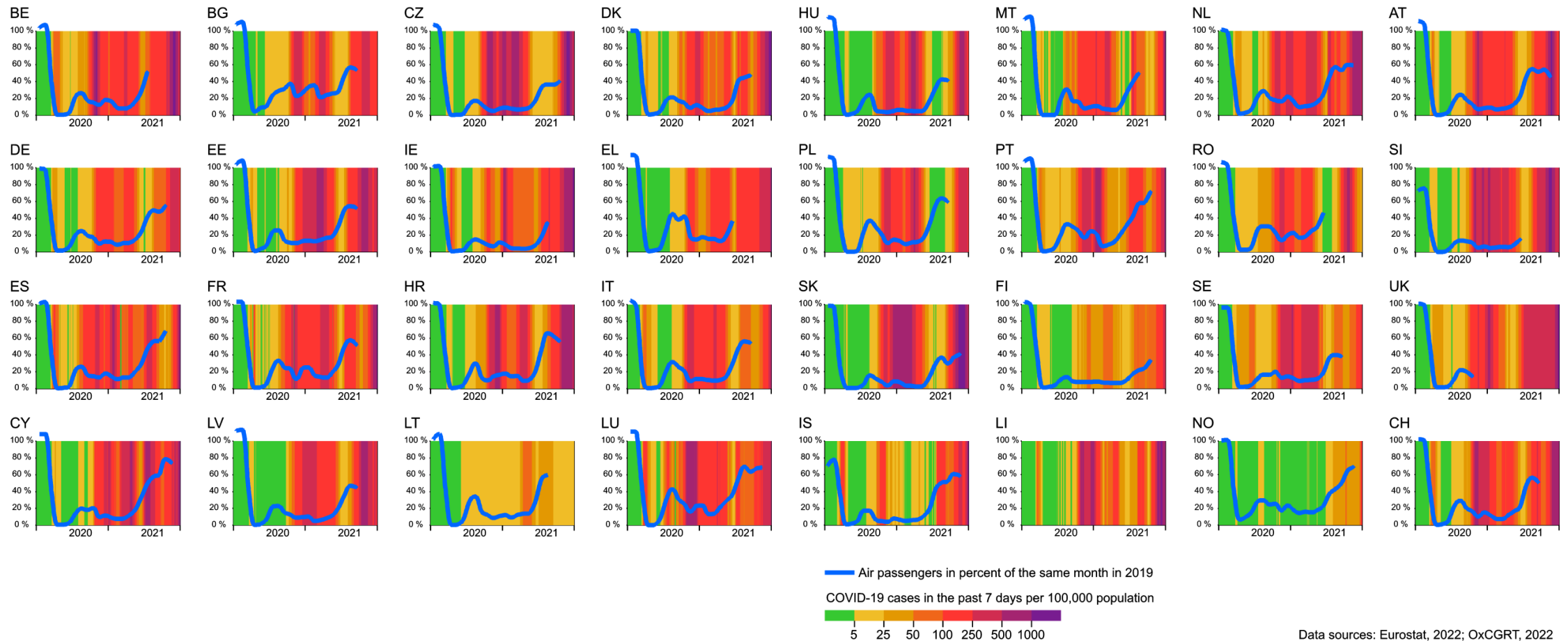
Regional level: NUTS 2 (2016)
Source: ESPON IRIE (S&W FlowMapper), 2021
Origin of data: Eurostat, 2021
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3

Impacts of the COVID-19 pandemic on air passenger flows

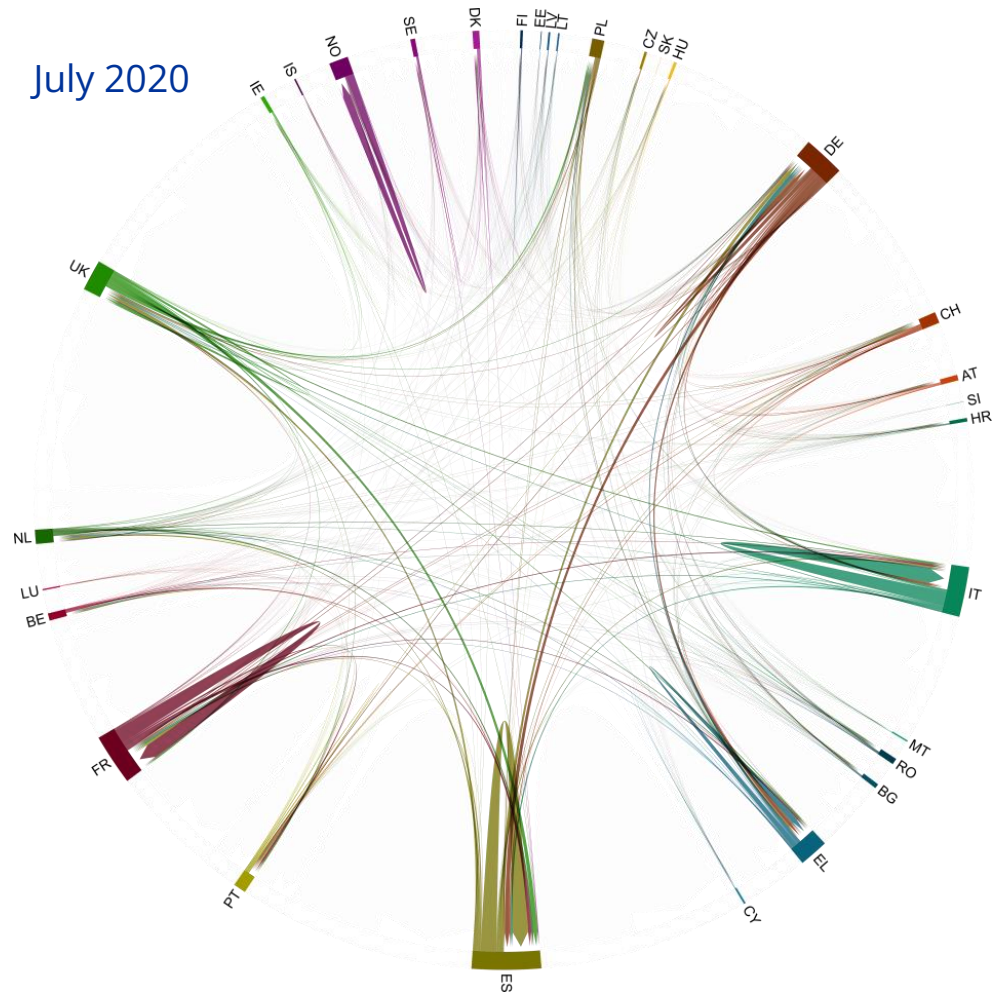
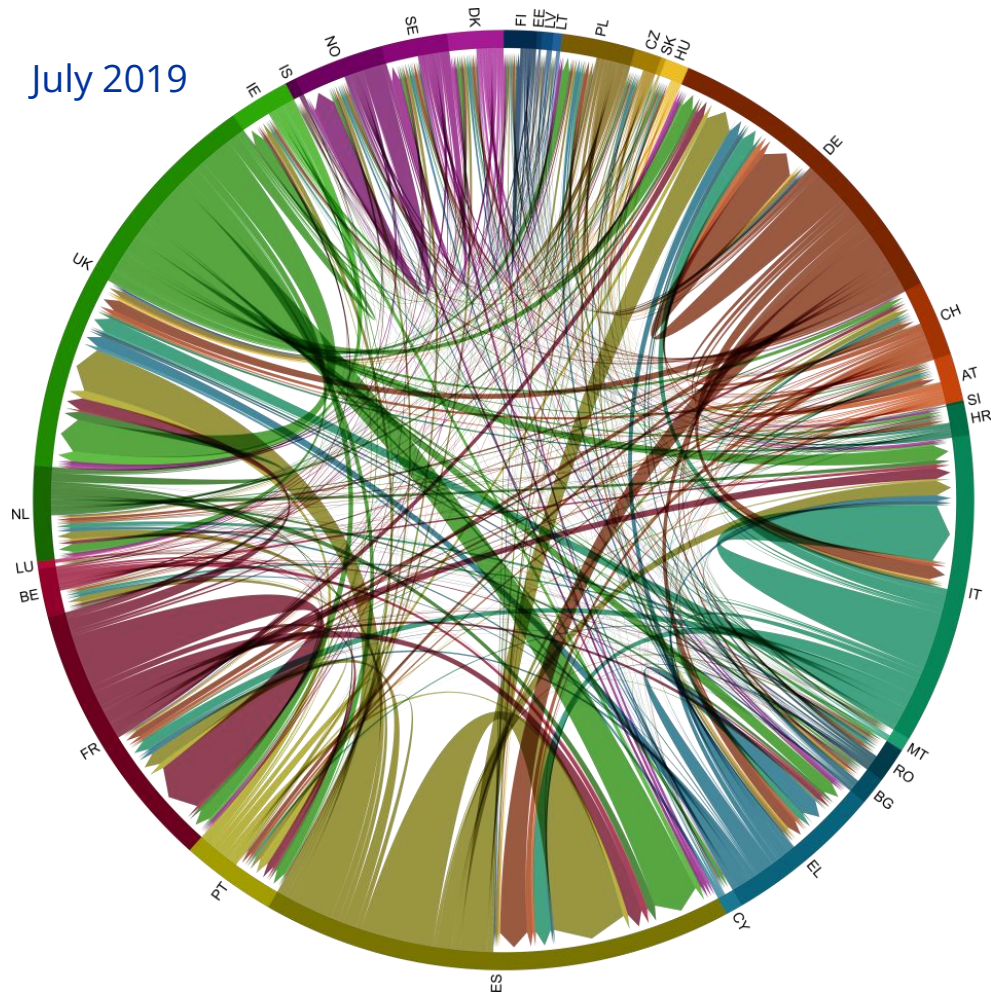


Monthly air passenger traffic during the COVID-19 pandemic by country

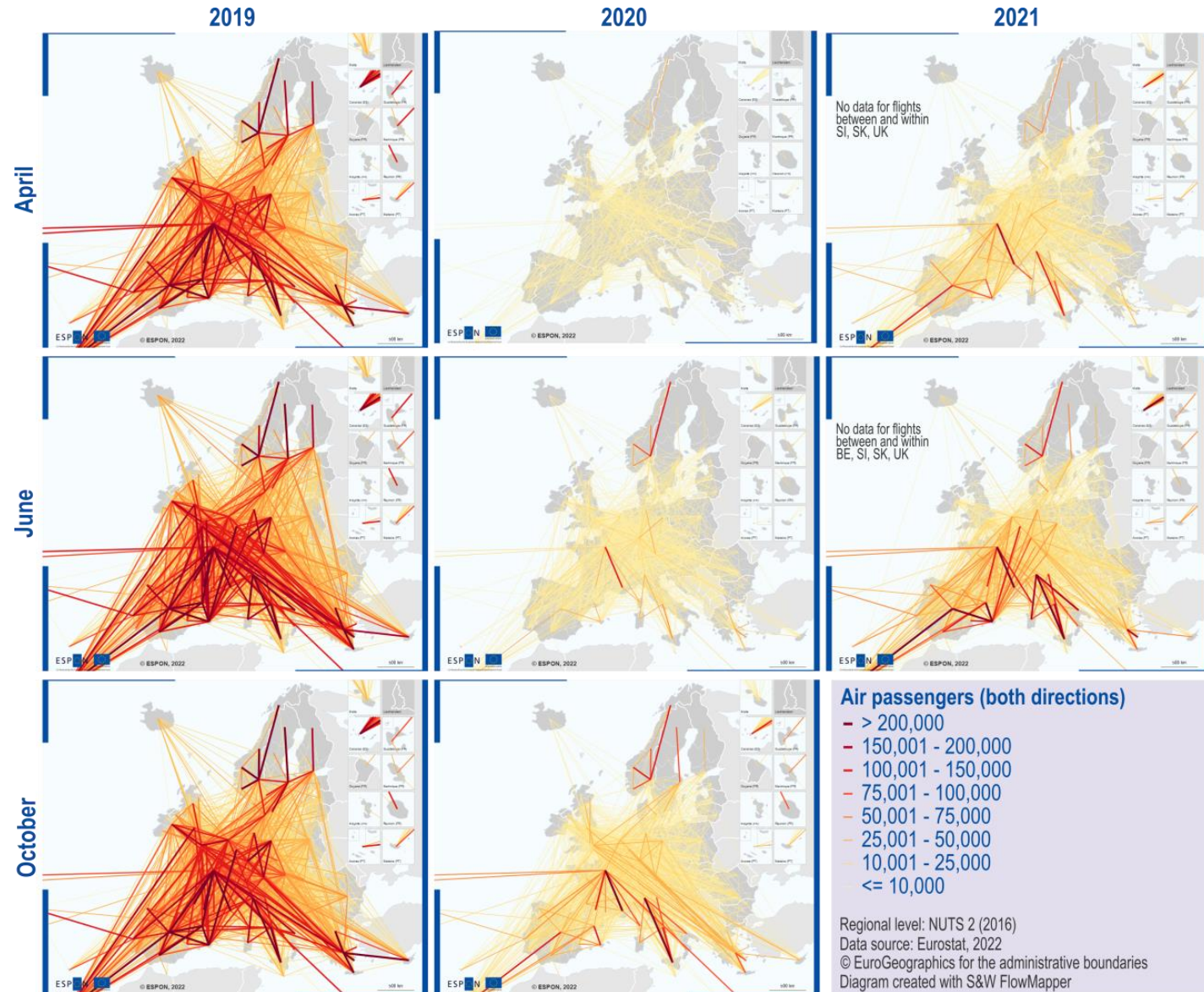


Data sources: Eurostat, 2022; OxCGRT, 2022

Air passenger flows between European countries



Regional air passenger flows 4/2019 to 6/2021



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