10

Transport

Introduction

Transport policy is at the heart of efforts to reduce regional inequality and improve cohesion within the European Union (EU). The EU's transport policy endeavours to foster clean, safe and efficient travel throughout Europe, underpinning the right of citizens to travel freely throughout the EU (for both work and pleasure) and the internal market for goods (transferring them between their place of production and consumption). An efficient and well-functioning passenger and freight transport system is considered vital for the population at large and for the competitiveness of enterprises.

Regional transport statistics aim to quantify the flows of passengers and freight between, within and through regions; differences between regions are often closely related to levels of economic activity. This chapter focuses on passenger transport statistics; the focus of the next edition of Eurostat's regional yearbook will alternate to cover freight transport. This chapter is divided into two main sections covering road passenger transport (including subsections on the stock of vehicles and equipment rates and on road safety) and other forms of passenger transport (with subsections on air, rail, inland waterway and maritime transport).

Transport policy in the EU

The European Commission's Directorate-General for Mobility and Transport is responsible for developing transport policy within the EU. Its remit is to ensure mobility in a single European transport area, integrating the needs of the population and the economy at large, while minimising adverse environmental effects. It aims to do so by:

- completing the European internal market: so as to ensure the seamless integration of all modes of transport into a single, competitive transport system, while protecting safety and security, and improving the rights of passengers;
- developing an agenda for innovation: promoting the development of a new generation of sustainable transport technologies, in particular for integrated traffic management systems, intelligent transport systems and low-carbon vehicles;
- building trans-European networks that will form the backbone of a multimodal, sustainable transport system capable of delivering fast, affordable and reliable transport solutions;
- projecting these mobility and transport objectives and defending EU political and industrial interests on the world stage, within international organisations, and with strategic partners (for example, by highlighting a list of airlines that are banned from flying within the EU).

In March 2011, the European Commission adopted a White paper titled 'Roadmap to a single European transport area — Towards a competitive and resource efficient transport system' (COM(2011) 144 final). This comprehensive strategy contained 40 specific initiatives for the next decade, designed to build a competitive transport system that endeavours to increase mobility, remove major barriers in key areas and fuel growth and employment. The proposals also seek to reduce dramatically Europe's dependence on imported oil and to cut carbon emissions, with a set of goals to be achieved for 2050, including:

- no more conventionally-fuelled cars in cities;
- 40 % of the fuel being used in the aviation sector to come from sustainable low-carbon fuels;
- a reduction of at least 40 % in shipping emissions;
- a 50 % shift in medium-distance inter-city passenger and freight journeys away from roads to either rail or waterborne transport;
- all of which should contribute to a 60 % cut in transport emissions by the middle of the century.

Trans-European Transport Networks (TEN-T)

At the beginning of the 1990s, the EU agreed to set up an infrastructure policy at Community level in order to support the functioning of the internal market through continuous and efficient networks in the fields of transport, energy and telecommunications. Trans-European networks (TENs) aim to interconnect national infrastructure networks and ensure their interoperability, linking European regions with each other and connecting Europe with other parts of the world.

In the transport sector, the first guidelines were adopted by the European Parliament and the Council in 1996. Successive enlargements of the EU resulted in a reassessment of priorities.

A substantial policy review was launched in 2009 and this led to a new legislative framework that came into force in January 2014 when the EU agreed on a new transport infrastructure policy which aims to close the gaps between transport networks of the individual EU Member States, removing bottlenecks, and overcoming technical barriers (for example, incompatible standards for railway traffic).

This new policy framework is based on a set of Union guidelines for the development of the trans-European transport network (Regulation (EU) No 1315/2013) which set out objectives, priorities and measures for establishing and developing networks, so as to create a framework for identifying projects of common interest. It seeks to create a core network which will connect 94 main European ports with rail and road links, 38 key airports with rail connections into major cities, upgrade 15 000 km of railway line to high speed track, and establish 35 cross-border projects.

Work is foreseen over nine implementing corridors on the core network, two north–south corridors (the North Sea–Mediterranean and Scandinavian–Mediterranean corridors) and seven with an east–west dimension (the Baltic–Adriatic, North Sea–Baltic, Mediterranean, Orient/East–Med, Rhine–Alpine, Atlantic, and Rhine–Danube corridors). The core network is due to be completed by 2030, with a comprehensive regional and national network feeding into it. The aim is to ensure that progressively, and by 2050, the vast majority of Europeans will be no more than 30 minutes travel time from this network.

A European Parliament and Council Regulation establishes the Connecting Europe Facility (CEF) ((EU) No 1316/2013) which governs EU funding in the transport, energy and telecommunications sectors during the period 2014–20; this provides funding of just over EUR 26 billion for the period 2014–20. The CEF provides the EU with an infrastructure fund to support projects of common interest, which are prepared and implemented following the subsidiarity principle. It sets out the rules for awarding EU financial support, priority projects and the maximum limits of EU co-financing per type of project and also includes a list of projects where most CEF investments will be placed. Aside from the CEF, the cohesion fund and the European Regional Development Fund (ERDF) may also be used as funding instruments for supporting the development of regional transport infrastructure projects.

TRANSPORT — COHESION POLICY FUNDING

Transport infrastructure is one of the most visible examples of what can be achieved at a regional level with aid from structural and cohesion funds: regional investment initiatives cover transport strategies that aim to strike a balance between road, rail and sustainable transport modes, while promoting clean transport in urban areas. Such investment is generally designed to enhance accessibility, which is seen as a key determinant for strengthening the competitiveness of regional economies.

During the programming period 2007–13, total cohesion policy funding of almost EUR 82 billion was programmed for regional transport initiatives; this equated to almost one quarter (23.8 %) of the total cohesion policy budget. The vast majority of this investment came from the cohesion fund and the European Regional Development Fund (ERDF) and was concentrated in convergence regions. One of the main priorities for regional transport initiatives is trans-European transport networks (TEN-T); these accounted for almost 11 % of total cohesion policy investments in the period 2007–13.

Analysing cohesion policy funding for transport by the various modes of transport, more than half of the budget foreseen for the period 2007–13 was allocated to road infrastructure (including TEN-T), while rail infrastructure accounted for slightly more than a quarter of the total, urban transport for nearly 10 %, ports and inland waterways for approximately 5 %, multimodal transport and intelligent transport systems for about 4 % and airports for just over 2 %.

For more information:

Cohesion policy and transport: http://ec.europa.eu/regional_policy/activity/transport/index_en.cfm

Road safety

Whatever technical measures are in place, the effectiveness of a road safety policy depends, to some degree, upon the behaviour of road users. Road safety systems should ideally take into account human error and inappropriate behaviour and correct it as much as possible (for example, by making components in vehicles as forgiving as possible, so they limit the consequences of driving errors).

In a Communication titled Towards a European road safety area: policy orientations on road safety 2011–20 (COM(2010 389 final), the European Commission set out a framework for road safety policy orientations to 2020. It considered three priority actions: the establishment of a structured and coherent cooperation framework as a necessary condition to implement, in an effective manner, road safety policy orientations for 2011–20; developing a strategy for injuries and first aid to address the need to reduce the number of road injuries; improving the safety of vulnerable road users, in particular, motorcyclists. With the goal of creating a common road safety area, the European Commission proposed a target of halving the overall number of road deaths in the EU by 2020 (starting from a base year of 2010). Among the objectives identified in the communication, there were calls to: improve the education and training of road users; develop safer road infrastructures (for example, improving the quality of tunnels); promote safer vehicles and the use of modern technology to increase road safety.

ROAD TRANSPORT SAFETY

Safety and security are of primary concern for any transport system. Transport security is a sensitive issue that affects the whole world: although extremely scarce, the risk of terrorist attack remains, and exposes the vulnerabilities of entire transport supply chains.

Road transport is the most widely used means of travel: it is perhaps therefore not surprising that it is also the primary cause of transport accidents. There are a range of actions that many drivers could take to make Europe's roads safer, such as keeping their attention focused on driving, avoiding tiredness and speeding, or wearing a seat belt. The European Commission has been active in promoting rules, technical standards, and awareness campaigns to decrease the number of fatalities on Europe's roads. For example, since 2006, wearing seatbelts is compulsory in all vehicles throughout the EU.

In the 2011 White paper on transport, the EU proposed setting a target for reducing serious traffic injuries alongside its goal of halving fatalities by 2020. The first step towards this target was taken in 2013 when EU Member States agreed on a new definition for serious injuries to be used in EU road safety statistics; this is based on a scale commonly used by medical professionals.

To produce comparable statistics, each EU Member State has been advised to do one of the following: collate the relevant information from both police and hospital records; use only hospital records; use police records, but correct the figures to allow for probable under-reporting. In 2014, Member States started collecting data using the new definition and it is expected that the first data sets will be released during 2015.

For more information:

Directorate-General for Mobility and Transport: http://ec.europa.eu/transport/road_safety/index_en.htm

Main statistical findings

Road passenger transport

The road network generally provides a flexible means of moving between two points, linking all regions in the EU to each other and to Europe's other principal transport networks for passenger and goods traffic. The EU's objective is to create the conditions whereby road transport can operate efficiently, safely and with a minimum impact on the environment.

The 2011 White paper on transport defined some of the challenges facing the road transport sector. It highlighted a range of goals for European policy, including: increasing mobility on an ever-congested road network; reducing road fatalities, lowering carbon and other emissions to lessen the impact of climate change; and decreasing fossil fuel consumption.

Motorisation rate for passenger cars

The number of passenger cars per inhabitant (also known as the motorisation rate) was estimated at 484 passenger cars per thousand inhabitants across the EU-28 (excluding information for Denmark and Portugal) in 2012. The latest data, generally available for 2012, shows that an east-west divide in motorisation rates remains in the EU, with more passenger cars per inhabitant generally registered in western European regions — see **Map 10.1**.

Motorisation rate in Valle d'Aosta/Vallée d'Aoste was almost 2.5 times as high as the EU-28 average

The highest regional motorisation rate within the EU-28 was in the Valle d'Aosta/Vallée d'Aoste region of northern Italy, at 1 205 passenger cars per thousand inhabitants in 2012; note this figure is influenced by a specific tax arrangement and therefore does not necessarily reflect the actual number of passenger cars per inhabitant in the region. The motorisation rate in Valle d'Aosta/Vallée d'Aoste was more than eight times as high as in the Nord-Est region of Romania (148 passenger cars per thousand inhabitants; data are for 2011), where the lowest regional motorisation rate was recorded.

The second highest motorisation rate in the EU-28 in 2012 was recorded in the Dutch region of Flevoland (816 passenger cars per thousand inhabitants), which was followed by Åland in Finland (733) and another northern Italian region, namely, the Provincia Autonoma di Trento (711); these were the only regions to record motorisation rates of more than 700.

High reliance on passenger cars across much of Italy, Austria, Germany and Luxembourg …

The highest regional motorisation rates in the EU were systematically registered across regions from the EU-15 Member States: there was a relatively high concentration of passenger cars per inhabitant across much of Italy and Austria, several regions from the south and the west of Germany, as well as in Luxembourg (a single region at this level of analysis).

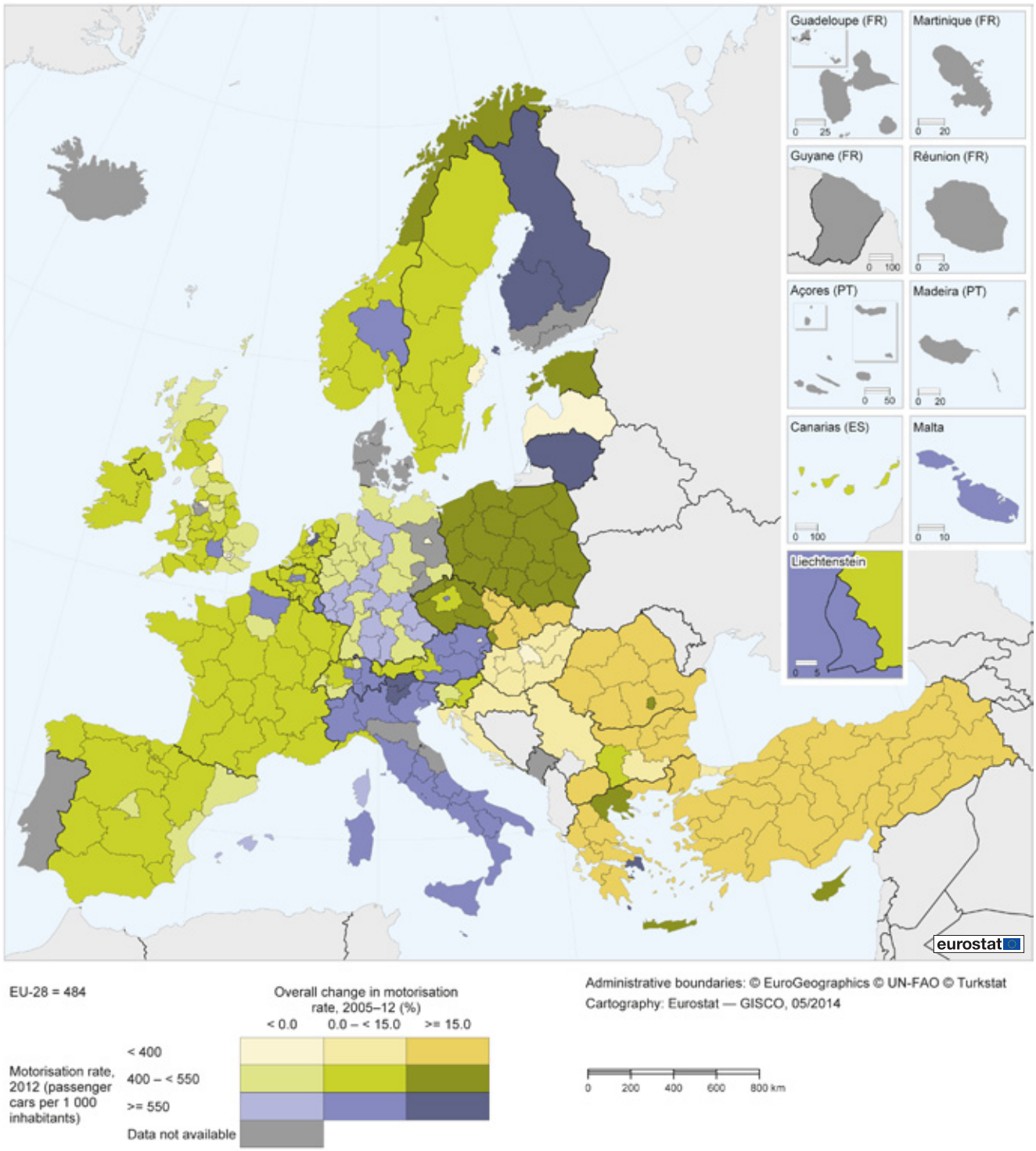
… and in island regions (where there may be few alternative modes of transport)

Several island regions reported relatively high motorisation rates, including Åland in Finland (which had the third highest regional motorisation rate across NUTS 2 regions), Sicilia and Sardegna in Italy, Corse in France, the Illes Balears in Spain, and Malta (a single region at this level of analysis). These relatively high figures for islands may, in part, be explained by a lack of alternative modes of transport for inland travel; for example, most of these islands had relatively underdeveloped rail infrastructures or no rail services at all. Malta recorded the 30th highest motorisation rate across all NUTS 2 regions, which was highest rate among any region from one of the Member States that joined the EU in 2004 or more recently. The motorisation rate for Malta was 592 passenger cars per thousand inhabitants in 2012, which was slightly higher than the ratio recorded for Lithuania (also a single region at this level of detail; 32nd place), while the next highest ratios for any region from one of the Member States that joined the EU more recently were recorded for the capital region of the Czech Republic (Praha; 51st place) and another island, namely, Cyprus (55th place; also a single region at this level of detail).

Western European capital regions often characterised by low motorisation rates …

Within individual EU Member States, several capital regions registered lower than average motorisation rates; this pattern is probably linked to congestion, with people living in some of Europe's largest cities choosing not to own a car and instead to rely on public transport. The only capital regions which appeared among the 20 regions with the highest motorisation rates (see **Figure 10.1**) were those of Lazio (Italy), Attiki (Greece; data are for 2010) and Luxembourg, with averages in the range of 650–700 passenger cars per thousand inhabitants in 2012. The case of Attiki was particularly interesting insofar as the Greek capital region recorded a much higher motorisation rate than any other Greek region, in contrast to the pattern observed in many of the other capital regions.

Map 10.1: Motorisation rates, by NUTS 2 regions, 2005–12 (1)
(number of passenger cars per 1 000 inhabitants in 2012, % overall change in motorisation rate from 2005–12)



(1) EU-28: estimate based on latest available national information (excluding Denmark and Portugal). The overall growth rate for the motorisation rate of the EU from 2005–12 was 6.1 %. Serbia: national level. Közép-Magyarország (HU31), Åland (FI20) and Turkey: 2006–12. Slovenia: 2007–12. Romania, Sweden and the United Kingdom: 2005–11. The former Yugoslav Republic of Macedonia: 2008–11. Greece: 2005–10. Serbia: 2008–10. France: 2005–09 (other than Île de France (FR10), 2006–08). Greece: provisional. Valle d'Aosta/Vallée d'Aoste (ITC2) is influenced by a specific tax arrangement and therefore does not necessarily reflect the actual number of passenger cars per inhabitant in the region.

Source: Eurostat (online data codes: tran_r_vehst and road_eqs_carhab)

Along with Inner London (which had the 7th lowest motorisation rate across NUTS 2 regions), the capital regions of most of the other EU-15 Member States in western and northern Europe also had relatively low motorisation rates: Berlin (Germany), Hovedstaden (Denmark), Stockholm (Sweden), Wien (Austria), Noord-Holland (the Netherlands), Île de France (France), Southern and Eastern (Ireland) and the Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest (Belgium) each recorded ratios of passenger cars per inhabitant that were below the EU-28 average.

… although commuting patterns led to many regions bordering capital regions having high motorisation rates

However, in regions that were adjacent to those containing capital or large cities it was quite common to find relatively high motorisation rates. This suggests that these regions were characterised by large numbers of people commuting to work (in neighbouring regions). Examples include: Flevoland in the Netherlands; Niederösterreich in Austria; Berkshire, Buckinghamshire and Oxfordshire in the United Kingdom (data are for 2011); and Trier in Germany (from where many commuters cross the border to work in Luxembourg).

Car use was particularly prevalent across Italy

Figure 10.1 provides an alternative presentation of the highest motorisation rates across EU regions. It shows that 14 of the top 20 regions were located in Italy. Every Italian NUTS 2 region (including those which do not appear in **Figure 10.1**) recorded a motorisation rate that was above the EU-28 average. The highest motorisation rates in Italian regions were spread along the length of the country from Valle d'Aosta/Vallée d'Aoste and the Provincia Autonoma di Trento in the north, through Umbria and Lazio in the centre, down to Sicilia and Calabria in the south.

By contrast at the other end of the ranking, seven out of eight NUTS 2 Romanian regions were present among the 20 regions in the EU with the lowest motorisation rates (the capital region of Bucureşti - Ilfov was the only exception; all Romanian data are for 2011). They were joined by five out of seven Hungarian regions, four Greek regions (data are for 2010), two Slovakian regions, Latvia (a single region at this level of analysis) and Inner London (data are for 2011).

Gap in motorisation rates between east and west Europe was closing rapidly

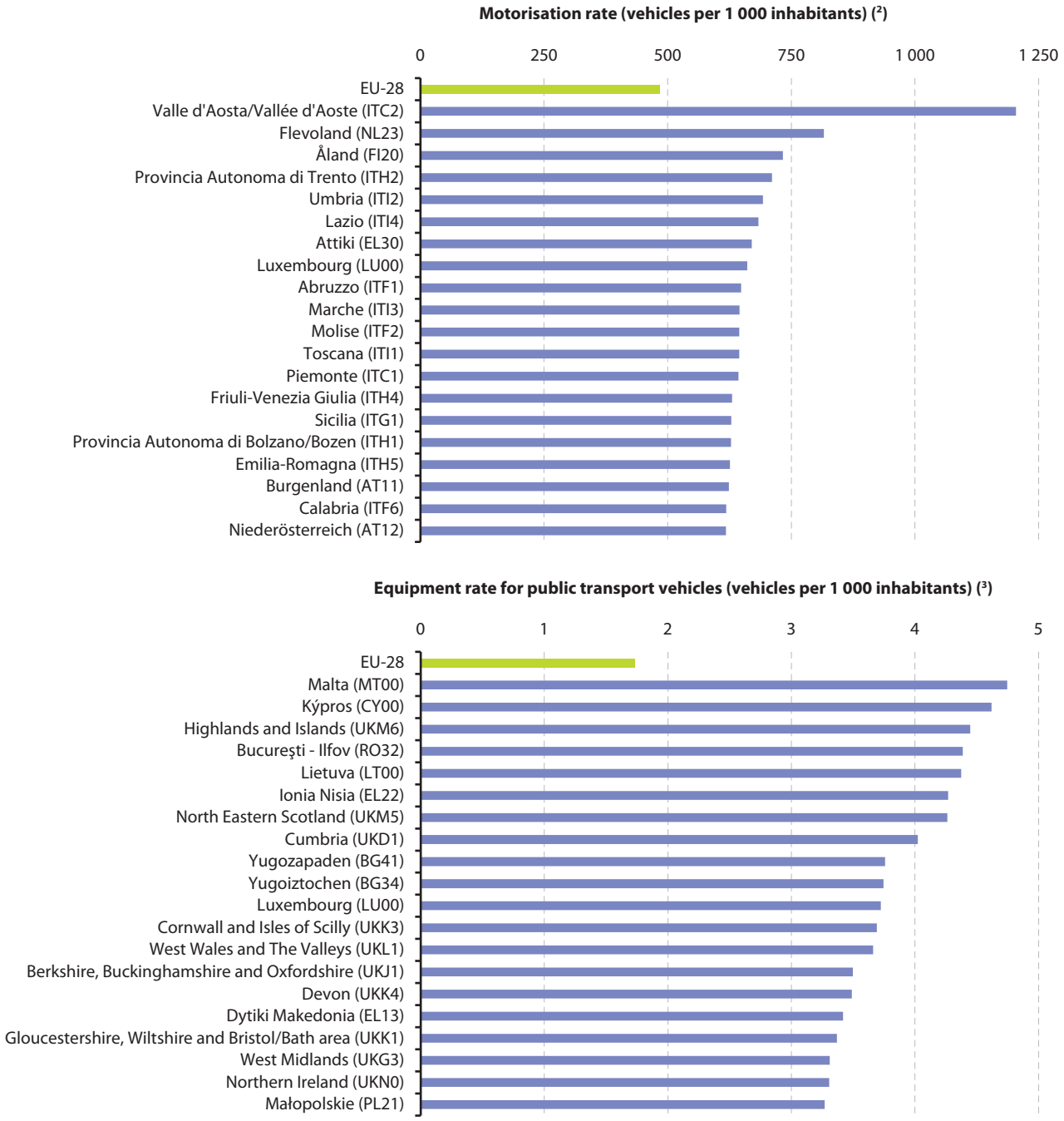
East-west differences in motorisation rates have narrowed, as illustrated by **Map 10.1** which also presents information as to the change in motorisation rates between 2005 and 2012. All 16 NUTS 2 regions across Poland saw their respective motorisation rates increase by more than 40 % during this relatively short seven-year period under consideration, while in Slovakia gains of more than 30 % were recorded for each region. High growth was also apparent in Romania, nowhere more so than in the Nord-Est region, as its motorisation rate increased by 57.4 % during the period 2005–11. Otherwise, among the remaining eastern European countries, double-digit growth rates were recorded in: all of the Czech regions (the lowest increase being recorded for the capital region of Praha); for all but one of the Bulgarian regions (the exception being the capital region of Yugozapaden); and for two Hungarian regions (Közép-Dunántúl and Nyugat-Dunántúl). Estonia and Lithuania (both single regions at this level of analysis) also recorded double-digit growth rates. This pattern of low but rapidly increasing motorisation rates was replicated across the candidate countries, for example, a majority of the regions in Turkey recorded growth rates in excess of 40 % during the period 2006–12.

The fastest growth in motorisation rates during the period 2005–12 among EU-15 Member States was often recorded in Italian or Greek regions, the former consolidating their position among those regions with the highest motorisation rates in the EU. While motorisation rates were relatively high across most of the level 2 EFTA regions, they also continued to rise during the period 2005–12; the only falls were recorded in the two Swiss regions of Région lémanique and Zürich.

Declining motorisation rates in Germany and the United Kingdom

By contrast, although motorisation rates were relatively high in most German regions, these rates declined systematically across all German regions (for which data are available) during the period 2005–12. This pattern may, in part, be linked to an ageing society, whereby a higher proportion of the population is reaching an age when they no longer drive. Among the 66 NUTS 2 regions which recorded a reduction in motorisation rates, the vast majority (53 regions) were either from Germany or the United Kingdom (where the comparison covers the period 2005–11). Some of the largest declines were recorded in large cities and conurbations, such as Hamburg, Inner London, Greater Manchester, Berlin and Köln. The 13 other regions that registered a fall in their motorisation rates included: the capital regions of Belgium, France, Hungary, Sweden, Spain, Austria and Slovenia; Latvia (a single region at this level of analysis); four other Spanish regions (including the Comunidad Valenciana and Cataluña); and the French island of Corse (data are available for 2005–09).

Figure 10.1: Transport equipment rates, selected NUTS 2 regions, 31 December 2012 (1)
(vehicles per 1 000 inhabitants)



(1) The figure shows the 20 EU regions with the highest rates for each of the indicators. Départements d'outre mer (FR9), Cheshire (UKD6) and Merseyside (UKD7): not available.
(2) EU-28: estimates based on latest available information (excluding Denmark and Portugal). Romania, Sweden and the United Kingdom: 2011. Greece: 2010. France: 2009 (other than Île de France (FR10), 2008; départements d'outre mer (FR9), not available). Valle d'Aosta/Vallée d'Aoste (ITC2) is influenced by a specific tax arrangement and therefore does not necessarily reflect the actual number of passenger cars per inhabitant in the region. Greece: provisional.
(3) EU-28: estimates based on latest available information. Population data for 1 January of the year following the reference year for the vehicle stock data. Ireland and Portugal: national level. Romania, Sweden and the United Kingdom: 31 December 2011. Greece: 31 December 2010. France: 31 December 2009. Greece: provisional. Denmark: also not available.
Source: Eurostat (online data codes: tran_r_vehst and demo_r_d2jan)

Equipment rate for public transport passenger vehicles

Public service provisions in remote and rural regions

To some extent the information shown in **Map 10.2** for public transport passenger vehicles (such as motor coaches, buses and trolleybuses) mirrors that shown in **Map 10.1** for passenger cars; in those regions where car ownership is relatively low there is likely to be a higher demand for public transport as a means of ensuring mobility. Note that the figures presented only concern public transport services on the roads and therefore will be influenced, to some degree, by the availability of alternative means of public transport (principally the provision of rail, metro and ferry services).

There are a range of barriers to improving and developing public transportation systems in remote and rural areas, as these regions are characterised by dwellings being distributed over large areas, with the number of potential passengers limited and a level of demand that is often unpredictable. This may result in limited services, as the provision of frequent and widespread commercial services may be financially unviable. As a result, some governments and regional/local authorities choose to subsidise public transport services in remote and rural areas, or alternatively to bundle minimal service provisions on such routes with the operation of more lucrative services.

In particularly remote and rural areas, the provision of public transport services is considered to be of even greater importance for some groups (such as the young, the elderly, low-income families, or the disabled), as a well-organised public transport can stimulate economic growth and social inclusion through improving accessibility and mobility.

Highest equipment rates for public transport passenger vehicles in Malta, Cyprus and Lithuania, as well as in three remote regions of the United Kingdom

Map 10.2 presents the equipment rate for public transport passenger vehicles, which provides a measure of the number of vehicles on the road in each region in relation to the number of inhabitants. For the EU-28 as a whole, there was an average of 1.7 public transport passenger vehicles on the road for each thousand inhabitants at the end of 2012.

Eight NUTS 2 regions reported equipment rates for public transport passenger vehicles of at least 4.0 per thousand inhabitants (as shown by the darkest shade in **Map 10.2**). The highest rates were recorded in Malta (4.7 public transport passenger vehicles per thousand inhabitants), Cyprus and Lithuania (all three of these are single regions at this level of analysis); note there are no rail services on either Malta or Cyprus. The other five regions with rates of at least 4.0 public transport passenger vehicles per thousand inhabitants included the capital region of București – Ilfov (data are for 2011), the Greek island region of Ionia Nisia (data are for 2010), and three relatively remote regions of the United Kingdom (the Highlands and Islands; North Eastern Scotland; Cumbria; data for all three regions relate to 2011).

Among the candidate countries, public transport equipment rates were particularly high across Turkey in 2012, as each of the 26 level 2 Turkish regions recorded an equipment rate that was higher than in Malta (which had the highest ratio among EU-28 regions). Turkish equipment rates ranged from 4.8 up to 14.1 vehicles per thousand inhabitants, the highest ratio being recorded in the Black Sea region of Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane.

Of the 46 regions in the EU-28 with fewer than 1.0 public transport vehicles per thousand inhabitants at the end of 2012 (as shown by the lightest shade), all except two were located within EU-15 Member States; the exceptions were Podkarpackie in south-east Poland and Vzhodna Slovenija (eastern Slovenia). The lowest concentration of public transport services ran in a band from the Netherlands, through Germany and into Austria, while low rates were also recorded in several Spanish regions.

SPOTLIGHT ON THE REGIONS: MALTA (MT00), MALTA

Valetta, Malta

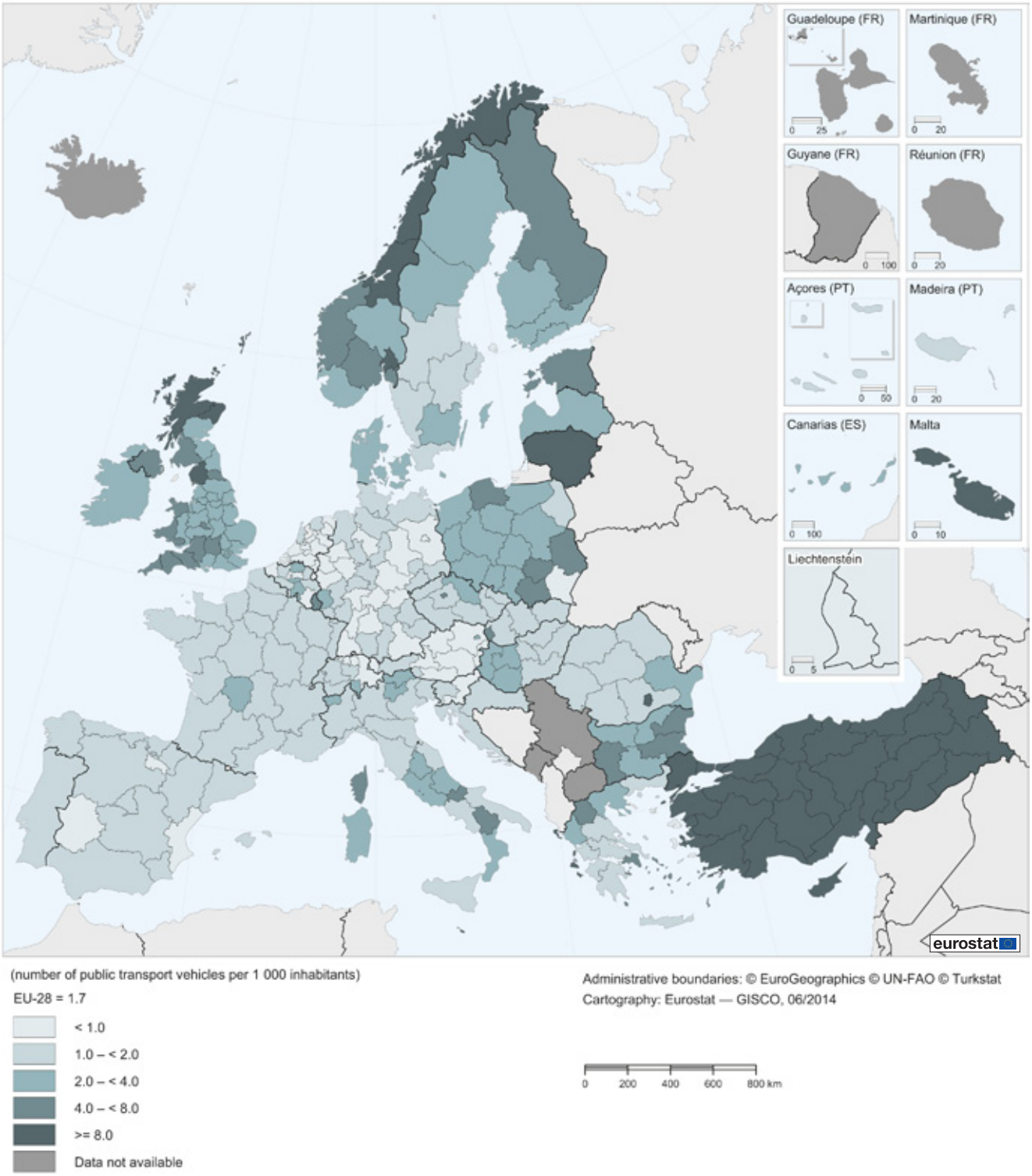
Inland passenger transport in Malta is highly dependent on its roads, as there is no railway network on the island.

Malta recorded the highest equipment rate for public transport vehicles among any of the NUTS 2 regions in the EU, averaging 4.7 per thousand inhabitants in 2012.

Malta recorded the 30th highest motorisation rate in the EU, and the highest rate among any of the NUTS 2 regions from one of the Member States that joined the EU in 2004 or more recently; the motorisation rate in Malta was 592 passenger cars per thousand inhabitants in 2012.

Photo: Väsk

Map 10.2: Equipment rate for public transport vehicles (motor coaches, buses and trolleybuses), by NUTS 2 regions, 31 December 2012 (1)
(number of public transport vehicles per 1 000 inhabitants)



(1) EU-28: estimate based on latest available information. Denmark, Ireland and Portugal: national level. Romania, Sweden and the United Kingdom: 31 December 2011. Greece: 31 December 2010. France: 31 December 2009. Denmark: 31 December 2008. Population data for 1 January of the year following the reference year for the vehicle stock data. Greece: provisional.
Source: Eurostat (online data codes: tran_r_vehst and demo_r_d2jan)

Road safety

The likelihood of a road accident can be linked to a number of factors, such as the extent of vehicle ownership (motorisation rate), the number of kilometres driven, the extent and quality of the road infrastructure, the characteristics of the vehicle stock (such as the average age and engine size, as well as the presence/absence of safety features), climatic and geographic conditions, population density, and national regulations that apply to vehicles and drivers. Driver behaviour can also be linked to the number of road accidents, for example, inadequate training or experience, a lack of concentration, speeding or drink-driving.

Almost 30 thousand deaths on the EU's roads in 2012

The total death toll on the EU-28's roads has more than halved over the last two decades and stood at an estimated 29.2 thousand fatalities in 2012. In the same year there were an estimated 1.4 million persons injured across the EU in road accidents.

Map 10.3 presents information on the number of persons injured in road accidents relative to population size, by NUTS 2 region. The highest ratio (19.2 persons per thousand inhabitants) was recorded in La Rioja (Spain), where the chance of being injured in a road accident was 2.6 times as high as in any other region of the EU. There were 17 NUTS 2 regions where at least 6.0 persons per thousand inhabitants were injured in road accidents in 2012 (as shown by the darkest shade in **Map 10.3**); these included all but two of the Austrian regions (the exceptions were the capital region of Wien and the relatively flat easternmost region of Burgenland). The other regions with relatively high incidences of persons injured in road accidents were generally spread across Belgium, Germany and Italy.

Low incidence of persons injured in road accidents in the Netherlands

By contrast, there were 33 regions in the EU where less than 1.0 person was injured in road accidents per thousand inhabitants; note that the latest data available for Dutch and Danish regions refers to 2008, while the latest information for Greek regions is for 2010 and that for French regions is for 2011. All 12 of the regions in the Netherlands recorded a ratio of persons injured in road accidents per thousand inhabitants of less than 1.0. The incidence of injuries from road accidents was also relatively low in many rural regions of France, across most of Denmark and in several Polish regions. Furthermore, the third lowest ratio of persons injured in road accidents per thousand inhabitants was recorded in the northerly Spanish region of the País Vasco (0.4 persons injured per thousand inhabitants), which borders La Rioja (which had the highest incidence of injuries from road accidents across all regions of the EU).

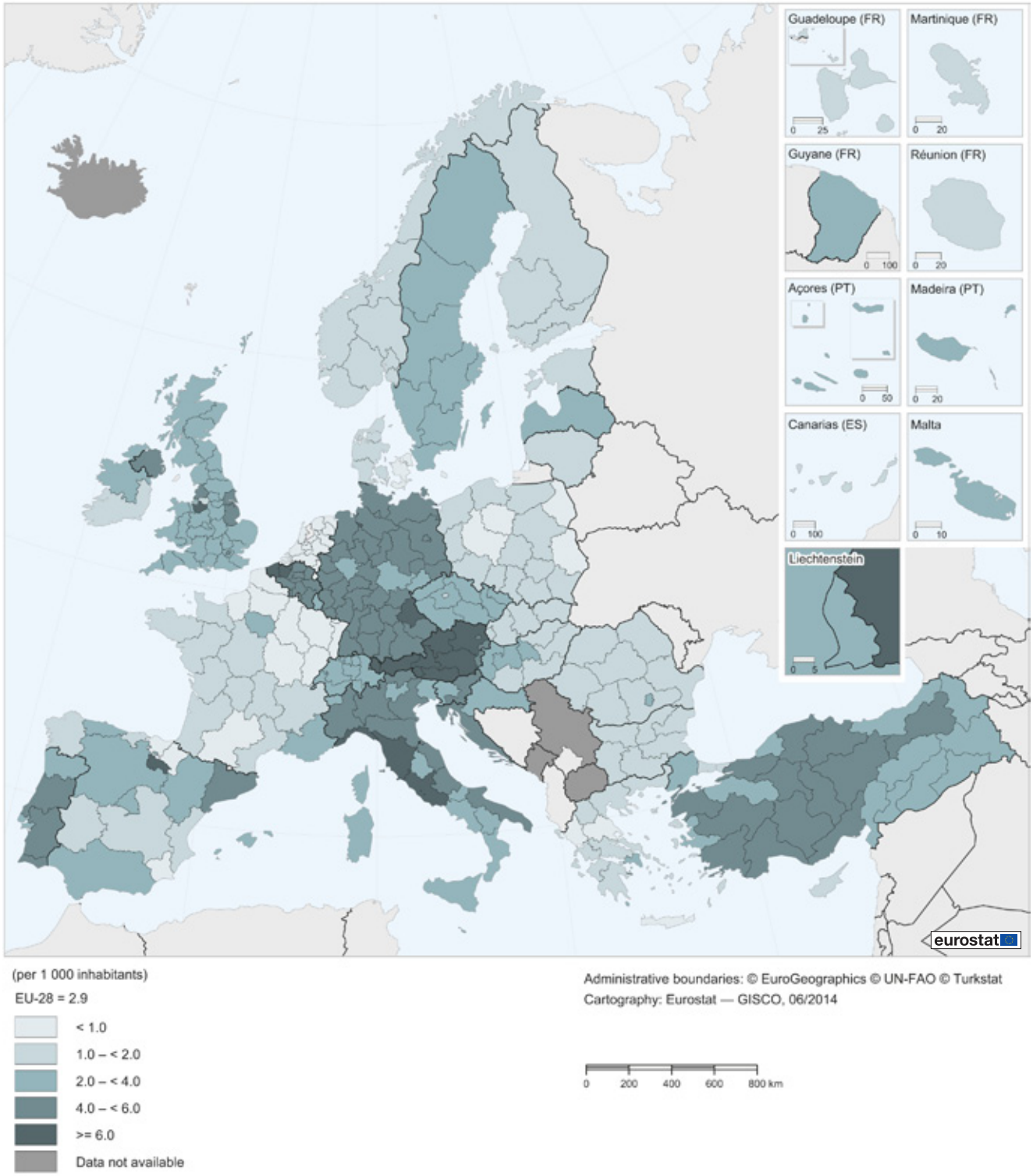
An alternative analysis of road fatalities and persons injured in road accidents is presented in **Table 10.1**; the ranking employed for each part the table is based on the absolute number of fatalities or persons injured and is therefore influenced by the size of each region. The remainder of the table seeks to 'normalise' these absolute values by adjusting the data to take account of the size of the population, the number of passenger cars and the area of each region. Nevertheless, the results should be interpreted with care as, for example, road accidents may involve non-residents travelling through a region or staying in a region on holiday, or vehicles which are in transit through a region. As such, and other things being equal, regions that have transit corridors or regions with high numbers of tourists may well experience a higher frequency of injuries and fatalities.

Highest absolute number of road fatalities in the Polish capital region

Almost one quarter of the total number of deaths from road accidents in the EU in 2012 resulted from an accident that took place in one of the 20 regions shown in the top half of **Table 10.1**. The highest number of road fatalities in 2012 was recorded in the Polish capital region of Mazowieckie where 587 people were killed. Three other Polish regions were among the 20 regions with the highest absolute number of road fatalities, which also featured six Italian regions, three regions from each of France and Romania, and one region from each of Greece, Spain and Lithuania (a single region at this level of detail). The vast majority of these regions had high population densities and they were often capital regions or regions that contained significant urban areas, for example, those regions including Rome, Milan, Paris, Marseille, Athens or Barcelona.

Adjusting these absolute figures to take account of population size, the regions with the highest number of road fatalities per million inhabitants tended to be located in eastern Europe; the same regions also tended to record the highest number of fatalities per million passenger cars. This was notable in the three Romanian regions (Nord-Est, Sud - Muntenia and Sud-Est) and in the central Polish regions of Lódzkie and Mazowieckie (the capital region that contains Warsaw). Although the absolute number of deaths from road accidents was high in Lombardia, the Île de France, Cataluña and Andalucía, the relative likelihood — in terms of the number of fatal road accidents relative to the population size — of being involved in a fatal car accident in one of these regions was below the EU-28 average (57.7 fatalities per million inhabitants).

Map 10.3: Persons injured in road accidents, by NUTS 2 regions, 2012 (1)
(per 1 000 inhabitants)



(1) EU-28: estimate based on latest available information. France (other than the départements d'outre mer (FR9)): 2011. Greece and the départements d'outre mer (FR9): 2010. Denmark and the Netherlands: 2008. Greece: provisional.

Source: Eurostat (online data codes: tran_r_acci and demo_r_d2jan)

Table 10.1: EU regions with highest number of victims in road accidents, selected NUTS 2 regions, 2012 (1)

Fatal accidents — deaths	(number)	(per million inhabitants)	(per million passenger cars)	(per 1 000 km² of total area)
EU-28	29 199	57.7	119.6	6.5
Mazowieckie (PL12)	587	111.1	206.8	16.5
Lombardia (ITC4)	540	55.7	91.9	22.6
Emilia-Romagna (ITH5)	376	86.6	:	16.8
Lazio (ITI4)	376	68.4	96.8	21.8
Veneto (ITH3)	367	75.6	123.6	19.9
Île de France (FR10)	366	30.9	75.1	30.5
Rhône-Alpes (FR71)	366	58.3	112.7	8.4
Provence-Alpes-Côte d'Azur (FR82)	363	73.8	136.4	11.6
Cataluña (ES51)	336	44.7	100.0	10.5
Slaskie (PL22)	336	72.6	152.2	27.2
Nord-Est (RO21)	332	100.8	645.9	9.0
Sud - Muntenia (RO31)	325	103.9	576.2	9.4
Wielkopolskie (PL41)	315	91.2	166.6	10.6
Sud-Est (RO22)	314	123.7	629.3	8.8
Attiki (EL30)	313	76.2	113.6	82.2
Lietuva (LT00)	302	100.5	172.3	4.6
Lódzkie (PL11)	296	116.8	239.5	16.2
Andalucía (ES61)	295	35.2	78.3	3.4
Piemonte (ITC1)	284	65.2	101.2	11.2
Puglia (ITF4)	264	65.2	115.4	13.6
Accidents — persons injured	**(number)**	**(per 1 000 inhabitants)**	**(per 1 000 passenger cars)**	**(per km² of total area)**
EU-28	1 447 590	2.9	5.9	0.3
Lombardia (ITC4)	48 759	5.0	8.3	2.0
Lazio (ITI4)	32 903	6.0	8.5	1.9
Cataluña (ES51)	31 568	4.2	9.4	1.0
Emilia-Romagna (ITH5)	24 823	5.7	:	1.1
Oberbayern (DE21)	24 525	5.5	10.0	1.4
Île de France (FR10)	23 525	2.0	4.8	2.0
Toscana (ITI1)	22 780	6.2	9.4	1.0
Düsseldorf (DEA1)	21 658	4.2	8.4	4.1
Köln (DEA2)	20 585	4.7	9.2	2.8
Veneto (ITH3)	19 524	4.0	6.6	1.1
Darmstadt (DE71)	18 010	4.7	8.5	2.4
Comunidad de Madrid (ES30)	17 955	2.8	5.5	2.2
Sicilia (ITG1)	17 633	3.5	5.6	0.7
Piemonte (ITC1)	17 560	4.0	6.3	0.7
Andalucía (ES61)	17 495	2.1	4.6	0.2
Berlin (DE30)	16 853	4.8	14.8	18.9
Puglia (ITF4)	16 453	4.1	7.2	0.8
Stuttgart (DE11)	16 335	4.1	7.3	1.5
Outer London (UKI2)	14 944	4.3	8.1	11.8
Schleswig-Holstein (DEF0)	14 931	5.3	10.0	0.9

(1) EU-28: estimate based on latest available information. France (other than the départements d'outre mer (FR9)): 2011. Greece and the départements d'outre mer (FR9): 2010. Denmark and the Netherlands: 2008. Greece: provisional.

Source: Eurostat (online data codes: tran_r_acci and demo_r_d2jan)

Almost one third of those injured in road accidents in the EU had an accident that took place in one of the 20 regions shown in the bottom half of **Table 10.1**. In absolute terms, the highest numbers of injuries from road accidents often took place in those regions which recorded the highest number of fatal accidents; these were principally located across Italy and Germany. When adjusted to take account of population size, the relative likelihood of being injured in a road accident remained high in the Italian regions of Toscana, Lazio, Emilia-Romagna and Lombardia, as well as in Oberbayern and Schleswig-Holstein in Germany. By contrast, despite a high overall number of injuries in the Île de France, Andalucía and the Comunidad de Madrid, the ratios of injuries from road accidents compared with population size or vehicle stock in these regions were below the EU-28 averages (2.9 victims per thousand inhabitants and 5.9 victims per thousand passenger cars).

Passenger transport other than by road

Air transport

The rapid growth of air transport has been one of the most significant developments in transport services in recent years, both in the EU and around the rest of the world. There were three successive packages of liberalisation measures adopted at EU level covering air carrier licensing, market access and fares, designed to open-up the air transport market. Their effects have been most apparent in the growth of low-cost airlines and the expansion of several smaller regional airports which are generally less congested and charge lower landing fees than the main international airports.

As air traffic continues to increase so do concerns about safety and security. Airspace congestion and the strain on airport capacity have been addressed through the Single European Sky (SES) initiative and its subsequent revisions, while the EU has prioritised work on effective aviation safety standards and publishes a list of airlines banned from EU skies.

There were almost 832 million air passengers in the EU-28 in 2012

While many airports experienced a sharp decline in passenger and freight transport in 2009, reflecting the global financial and economic crisis, these reductions were relatively short-lived and by 2012 the number of air passengers carried (including passengers on domestic flights as well as international flights) in the EU-28 had reached 831.9 million passengers, some 3.6 % above its pre-crisis peak from 2008.

Air passenger transport was concentrated in western Europe

Map 10.4 shows the absolute number of air passengers and the average number of air passengers per inhabitant in 2012; note earlier reference periods are used for some regions. The top-ranking regions in terms of the number of air passengers tended to be capital regions in western Europe; in other words, those regions in which Europe's largest airports were located. These relatively large airports often serve as hubs for intercontinental air traffic and this is especially true for Heathrow, Paris-Charles de Gaulle, Frankfurt airport and Schiphol Amsterdam airport.

The regional ranking of air passenger numbers in 2012 was headed by the French capital region of Île-de-France, with a total of 88.6 million passengers for Paris-Charles de Gaulle and Paris-Orly airports, followed by Outer London (Heathrow) with 70.0 million passengers, Darmstadt (Frankfurt) with 57.2 million passengers, Noord-Holland (Schiphol) with 51.0 million passengers and the Comunidad de Madrid (Madrid-Barajas airport) with 45.1 million passengers. Other than Madrid-Barajas airport, the number of passengers rose for each of these airports in 2012.

The 24 regions which reported at least 15 million air passengers in 2012 (as shown by the largest circles on **Map 10.4**) were located exclusively in EU-15 Member States. Five of these regions were in Spain — reflecting both popular holiday destinations as well as a relatively developed national market for regional air travel — and there were also four regions from each of Germany and the United Kingdom, two regions from each of France and Italy, and a single region from each of Belgium, Denmark, Ireland, the Netherlands, Austria, Portugal and Sweden.

MOST POPULAR FLIGHT ROUTES

Sub-national statistics are also available for the air transport sector in relation to the most popular flight routes for air passengers: these show the volume of passenger traffic between specific pairs of airports. An analysis for the five regions with the highest numbers of air passengers provides an insight into the relative specialisations of each airport.

Heathrow is an international hub and Europe's largest airport. This was confirmed as the most popular flight route was between Heathrow and John F. Kennedy International (New York), a journey that was taken by 2.84 million passengers in 2012. The second most popular airport served by Heathrow was Dubai International with almost two million passengers carried in 2012. There were eight airports outside of the EU served by Heathrow which each accounted for upwards of one million passengers in 2012: these were in the United States and south-east Asia. The most popular route within the EU served by Heathrow was in the Irish capital, with 1.58 million passengers carried between Heathrow and Dublin in 2012.

Within the French capital region of Île-de-France there are two major airports. The most popular route served from one of these was that between Paris-Orly and Toulouse-Blagnac (2.33 million passengers carried in 2012), while the second most popular route was also a domestic flight, that between Paris-Orly and Nice-Côte d'Azur (2.17 million). More than one million passengers were carried between Paris-Orly and Guadeloupe (one of the French overseas regions in the Caribbean). Paris-Charles de Gaulle generally offers more business and long-haul destinations and its most popular route in 2012 was to and from John F. Kennedy International (1.36 million), followed by some of Europe's main cities. Montréal-Pierre Elliott Trudeau International Airport (Canada) was the only other non-EU destination served by Paris-Charles de Gaulle which accounted for more than one million passengers.

The three most popular routes from Madrid-Barajas airport in 2012 were all domestic. This reflected the distance between Spain's two largest cities as 2.55 million passengers were carried between Madrid-Barajas and Barcelona El Prat airport, and the comparative comfort of using a plane to reach some of Spain's most popular tourist destinations: 1.44 million passengers carried to and from Palma de Mallorca airport and 1.30 million to and from Gran Canaria). The 10 most popular routes from Madrid-Barajas airport — each of which accounted for upwards of one million passengers in 2012 — connected to airports within the EU, with London Heathrow recording the highest number of passengers (1.20 million passengers) among those destinations outside of Spain. The most popular route connecting Madrid-Barajas to an airport outside of the EU was to the Argentinian capital, as almost 782 thousand passengers were carried to and from Ezeiza Ministro Pistarini in Buenos Aires.

There were six routes from Frankfurt airport which accounted for at least one million passengers in 2012. The most popular of these was the domestic flight connecting to Berlin-Tegel airport (1.81 million passengers carried), while there were two other domestic destinations — Hamburg and München airports — which also accounted for upwards of one million passengers each. The three other destinations were all within the EU and concerned flights between Frankfurt and the capitals of the United Kingdom (Heathrow), Austria (Wien-Schwechat) and France (Paris-Charles de Gaulle). Concerning non-EU destinations, the most popular flight was between Frankfurt and Istanbul Atatürk airport, with 801 thousand passengers carried in 2012.

There were four routes from Schiphol Amsterdam airport which accounted for at least one million passengers in 2012; these were all within the EU — connecting Schipol with Heathrow (1.43 million passengers carried), Barcelona El Prat (1.25 million), Paris-Charles de Gaulle (1.12 million) and Madrid-Barajas (1.00 million). The most popular route outside of the EU from Schiphol Amsterdam was Antalya airport (701 thousand passengers carried), a popular holiday destination on the Turkish Riviera.

For more information:

Eurostat (online data code: avia_par)

High number of air passengers could lead to environmental pressures, particularly in popular holiday destinations

The regions with the highest average number of air passengers per inhabitant were often characterised as being popular tourist destinations or alternatively regions which contained some of the main airport hubs within the EU. These regions face a range of environmental pressures associated with their relatively high number of flights and volume of air passengers. There were 22 regions in the EU which recorded an average density of at least 8.5 air passengers per inhabitant in 2012 (as shown by the darkest shade in **Map 10.4**). This ratio peaked in the island destinations of Illes Balears (Spain) and Notio Aigaio (Greece), with 27.3 and 20.9 air passengers per inhabitant, which was 17 and 13 times as high as the EU-28 average. The third and fourth highest average numbers of air passengers per inhabitant were recorded in Noord-Holland and Prov. Vlaams-Brabant (18.8 and 17.1 air passengers per inhabitant); these two regions host the principal airports of the Netherlands and Belgium, countries with high population densities, therefore increasing the likelihood that their catchment areas contain a large number of inhabitants. The list of regions with the highest number of air passengers per inhabitant also included the island regions of Ionia Nisia and Kriti (both Greece), the Canarias (Spain), Corse (France), the Região Autónoma da Madeira (Portugal), as well as Cyprus and Malta (both single regions at this level of analysis), where the considerable influx of tourists (which is often highly seasonal) is likely to put pressure on the environment.

Rail transport

Over the last 20 years the EU has sought to restructure the European rail transport market and to strengthen the relative position of railways as a transport mode. Efforts have concentrated on three major areas: opening-up the rail transport market to competition; improving the interoperability and safety of national networks; and developing rail transport infrastructure.

Railway networks are concentrated in some of the most densely populated regions

The density of railway lines — as measured by the length of railway lines per thousand square kilometres of total area — is generally highest in capital regions and other built-up areas, as these are generally characterised as having a relatively high number of railway lines converging on city centres, while their high population density means that they tend to be relatively small regions. **Map 10.5** shows that Europe's rail network was concentrated on those areas with some of the highest population densities, in particular, in a band running from the Benelux countries into Germany, before splitting to run south into Switzerland and east into Poland, Hungary, the Czech Republic and Slovakia. Rail network density was considerably lower in the peripheral areas of the EU.

In total, there were 36 regions (of which eight were capital regions) in the EU with more than 100 km of railway lines per thousand km² of total area; note that German data are only available for NUTS 1 regions. The highest network densities were recorded in the capital regions of Germany, Belgium and the Czech Republic, followed by the city-state regions of Hamburg and Bremen. While these cities have traditionally had an extensive railway infrastructure due to their roles as capital cities or ports, the strikingly high values are to a large extent due to the small size of these regions within the NUTS classification combined with the fact that the density of urban infrastructure tends to be much higher than the density of inter-urban networks. The regions with the next densest rail networks were Severozápad in the north-west of the Czech Republic — which is at a major rail junction between the Berlin–Vienna and the Berlin–Sofia lines — and the former industrial heartlands of the Prov. Hainaut in Belgium and Slaskie in Poland (where rail freight still plays an important role).

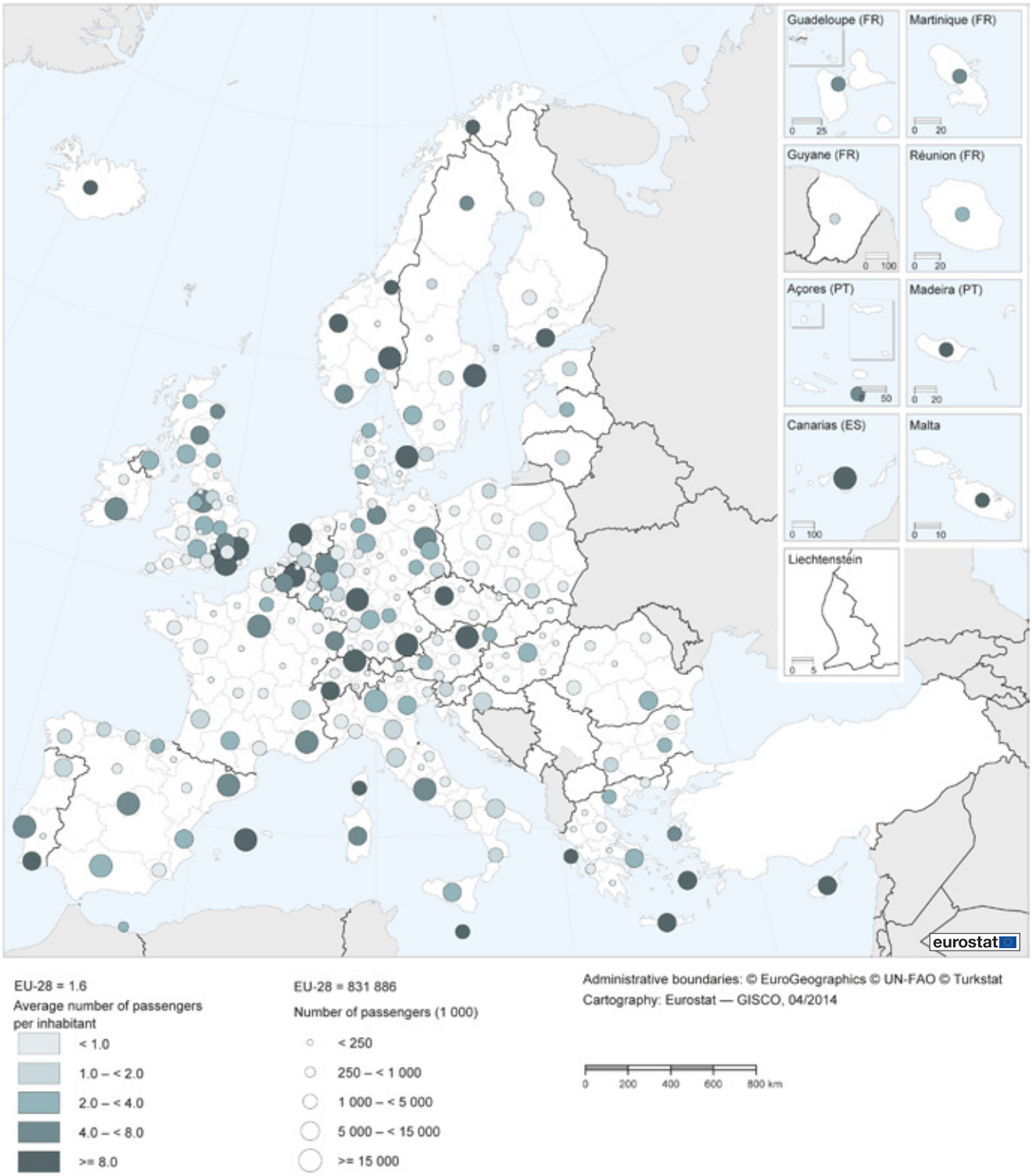
Inland waterways

More than 46 000 kilometres of inland waterways connect hundreds of cities and industrial regions across the EU. There are 20 EU Member States that have inland waterways, 12 of which have an interconnected waterway network. Inland waterway transport plays an important role for the transport of goods in Europe, but its use for passenger transport services is generally restricted to leisure activities, rather than as a substitute for road, air or rail services.

Compared with other modes of transport, which are often confronted with congestion and capacity problems, inland waterway transport is characterised by its reliability, its relatively low environmental impact and its potential for increased use. The European Commission aims to promote and strengthen the competitive position of the inland waterway transport system, and to facilitate its integration into inter-modal transport solutions, for more details see the 2011 White paper detailing a 'Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system' (COM(2011) 144 final).

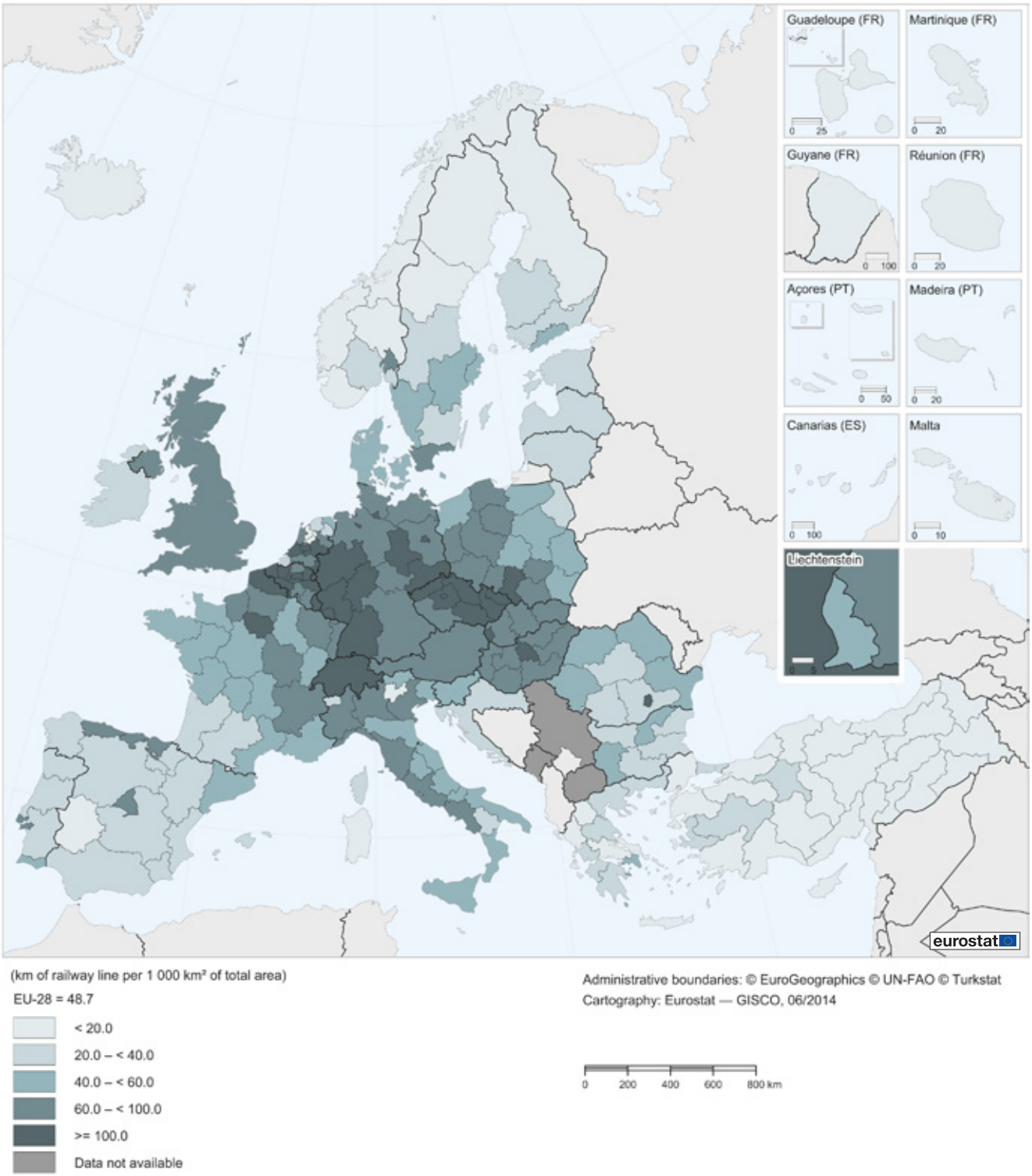
The information presented in **Table 10.2** shows information on those EU regions with the largest inland waterway networks in 2012; note that the data refer to NUTS 1 regions and that care should be taken when interpreting these results, as some of the statistics are likely to be subject to double-counting, especially when waterways act as natural divisions to demarcate regional or national borders (in these cases it is common for the length of the waterway to be counted for both regions/countries).

Map 10.4: Number of air passengers, by NUTS 2 regions, 2012 (1)
(average number of passengers per inhabitant and total number of passengers)



(1) Croatia: national level. Haute-Normandie (FR23), Basse-Normandie (FR25) and Bourgogne (FR26): 2011. Freiburg (DE13), Niederbayern (DE22), Oberfranken (DE24), Kassel (DE73), Braunschweig (DE91), Weser-Ems (DE94), Trier (DEB2), Sachsen-Anhalt (DEE0) and Franche-Comté (FR43): 2010. Cornwall and Isles of Scilly (UKK3) and Hedmark og Oppland (NO02): 2008.
Source: Eurostat (online data codes: tran_r_avpa_nm and demo_r_d3avg)

Map 10.5: Density of rail networks, by NUTS 2 regions, 2012 (1)
(km of railway line per 1 000 km² of total area)



(1) This density measure is based on the total area of each region (not the land area). EU-28: estimate based on latest available information. Germany: by NUTS 1 regions. Denmark, Ireland, Austria, Slovenia, the United Kingdom and Switzerland: national level. France (other than Île de France (FR10)), Provincia Autonoma di Trento (ITH2) and the United Kingdom: 2011. Greece and Switzerland: 2010. Île de France (FR10): 2009. Belgium and Denmark: 2008.

Source: Eurostat (online data codes: tran_r_net and demo_r_d3area)

Mainland Finland had the greatest length of navigable rivers …

The relative importance of navigable inland waterways is often seen to be at its highest in those regions through which the Danube and Rhine (as well as their tributaries) run. As such, the highest propensity to use navigable rivers is generally concentrated in a band that runs from south-east Europe up to the North Sea ports of the Netherlands. However, Manner-Suomi (mainland Finland) had by far the highest length of navigable rivers among NUTS 1 regions in 2012, with almost 8 000 km of navigable river, which equated to approximately a quarter of the EU-28 total. Poland (data are only available at a national level) and Croatia (which is covered by a single region at this level of analysis) were the only other regions to record in excess of a thousand kilometres of navigable river.

… while France had the greatest length of navigable canals

Navigable canals are principally located in western Europe, in particular across the regions of France (which has the longest network of inland waterways in the EU), the Netherlands (which has the densest network of inland waterways in the EU), Belgium and Germany. The longest length of navigable canals was recorded in the French region of the Bassin Parisien (which covers a large part of northern France). Together, the four Dutch NUTS 1 regions accounted for almost one third of the total length of navigable canals in the EU-28 (almost 5 000 km).

Maritime passengers

Maritime transport has been a catalyst of economic development and prosperity in Europe for centuries. It facilitates trade and contacts between all of the European nations and ensures the security of supply of energy, food and commodities from all over the world, while providing European exporters with a means of reaching international markets; indeed, almost 90 % of the EU's international freight trade is transported by sea.

The quality of life on many European islands and in peripheral maritime regions depends, to a large extent, upon the provision of maritime transport services. The total number of maritime passengers that embarked or disembarked in EU-28 ports in 2012 was just over 398 million, marking a reduction of almost 10 % when compared with the pre-financial and economic crisis peak of 438.9 million in 2008.

Highest number of maritime passengers pass through the Greek capital region

Map 10.6 identifies the regions within the EU-28 with the highest number of maritime passengers (those regions with the largest circles in **Map 10.6**); there were 19 NUTS 2 regions which had at least 5 million passengers in 2012. By far the highest number (25.2 million) passed through the Greek capital region of Attiki, which includes the port of Piraeus near Athens (often a starting point for visiting the Greek islands) as well as the ports of Paloukia and Perama which connect the island of Salamína to the mainland near Athens. The volume of passengers passing through Attiki was approximately twice as high as in the region with the second highest number of maritime passengers, namely the Croatian region of Jadranska Hrvatska which had 13.1 million maritime passengers in 2012. The main ports in this coastal Croatian region include Dubrovnik, Split and Zadar, which act in a similar fashion to Piraeus, as hubs for reaching the Croatian islands.

There were eleven NUTS 2 regions which reported between 10.0 and 13.0 million passengers: these included the Channel port regions of Kent (the United Kingdom) and the Nord - Pas-de-Calais (France); and the Baltic sea ports contained within the capital regions of three northern Member States, Sjælland (Denmark), Sydsverige (southern Sweden) and Estonia (a single region at this level of detail). Otherwise, there were five Italian regions that figured among the 19 NUTS 2 regions with the highest numbers of maritime passengers (as shown by the largest circles in **Map 10.6**); these included the islands of Sicilia and Sardegna.

Åland islands had by far the highest ratio of maritime passengers per inhabitant

The average number of maritime passengers per inhabitant provides an indication of the pressures faced in EU regions which have a high dependence on maritime services. Many

SPOTLIGHT ON THE REGIONS: ESTONIA (EE00), ESTONIA

Tallinn, Estonia

The port of Tallinn is one of the most important ports in the Baltic Sea, with regular departures to Finland, Sweden, Germany and Russia; it is also an important cruise destination.

Estonia is considered as a single region at the NUTS 2 level. It received 10.6 million maritime passengers in 2012, which was an average of 8.0 passengers per inhabitant.

Photo: Gunnar Bach Pedersen

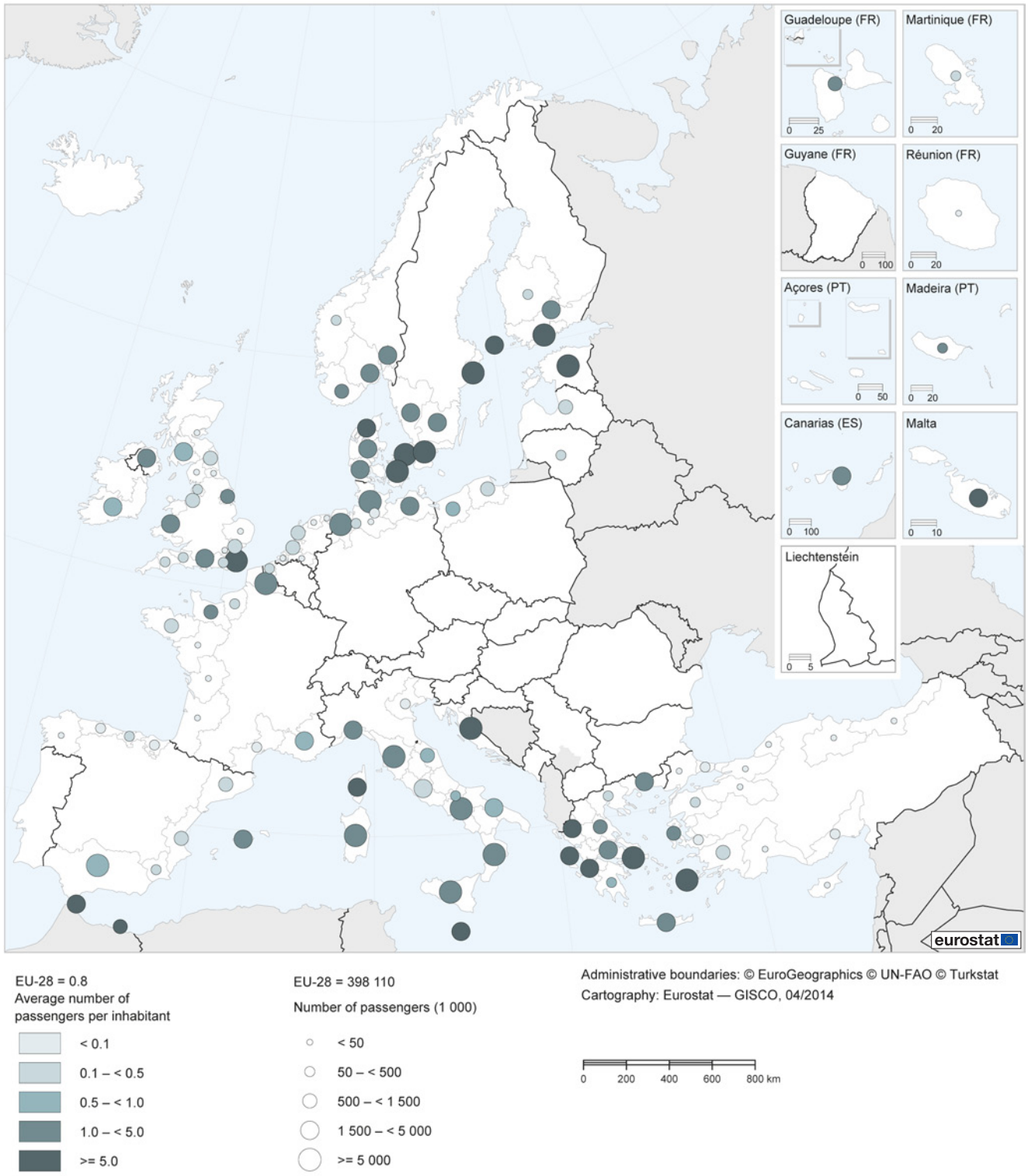
of the regions with the highest absolute number of maritime passenger transport also recorded some of the highest densities of passenger numbers in relation to inhabitants; this may reflect relatively short maritime journeys (such as the 15 minute crossing between Paloukia and Perama) or alternatively maritime journeys where there is little or no competition from other modes of transport, for example between many of the Croatian islands. Otherwise, maritime services may appeal to travellers as they often allow a car to be taken on-board, thereby allowing travellers to make

Table 10.2: EU regions with largest inland waterway networks, selected NUTS 1 regions, 2012 (1)

Navigable rivers (2)	(length, km)	(km per million inhabitants)	(km per 1 000 km² of total area)	(per 1 000 km² of total area)
EU-28	31 311	62.3	7.0	6.5
Manner-Suomi (FI1)	7 889	1 468.3	23.4	16.5
Poland	3 315	86.0	10.6	22.6
Hrvatska (HR0)	1 017	237.8	11.6	16.8
Mecklenburg-Vorpommern (DE8)	943	576.9	40.7	21.8
Niedersachsen (DE9)	940	118.8	19.7	19.9
Ouest (FR5)	877	102.0	10.3	30.5
Dunántúl (HU2)	782	261.1	21.4	8.4
Brandenburg (DE4)	719	288.1	24.4	11.6
Rheinland-Pfalz (DEB)	716	179.0	36.1	10.5
Macroregiunea doi (RO2)	716	122.7	9.9	27.2
Alföld és Észak (HU3)	700	175.2	14.1	9.0
Belgium	641	60.1	21.0	9.4
Ceská republika (CZ0)	637	60.6	8.1	10.6
Oost-Nederland (NL2)	619	174.7	56.4	8.8
Italy	612	10.3	2.0	82.2
Södra Sverige (SE2)	577	140.3	7.2	4.6
Macroregiunea trei (RO3)	521	96.3	14.4	16.2
Sud-Ouest (FR6)	514	74.5	5.0	3.4
Östra Sverige (SE1)	513	139.8	10.7	11.2
Bayern (DE2)	507	40.3	7.2	13.6
Navigable canals (3)	**(length, km)**	**(km per million inhabitants)**	**(km per 1 000 km² of total area)**	**(per km² of total area)**
EU-28	15 325	30.4	3.4	0.3
Bassin Parisien (FR2)	2 246	208.6	15.4	2.0
West-Nederland (NL3)	2 091	265.3	175.8	1.9
Noord-Nederland (NL1)	1 334	776.1	117.1	1.0
Est (FR4)	1 146	213.2	23.9	1.1
Italy	950	16.0	3.2	1.4
Belgium	875	82.0	28.7	2.0
Oost-Nederland (NL2)	782	220.7	71.3	1.0
Zuid-Nederland (NL4)	629	175.4	86.3	4.1
Île de France (FR1)	612	51.6	50.9	2.8
Niedersachsen (DE9)	539	68.1	11.3	1.1
Nord - Pas-de-Calais (FR3)	478	118.3	38.5	2.4
Nordrhein-Westfalen (DEA)	476	26.7	14.0	2.2
Méditerranée (FR8)	428	54.2	6.3	0.7
Schleswig-Holstein (DEF)	390	137.4	24.7	0.7
Brandenburg (DE4)	341	136.6	11.6	0.2
Sud-Ouest (FR6)	316	45.8	3.1	18.9
Ouest (FR5)	313	36.4	3.7	0.8
Bayern (DE2)	171	13.6	2.4	1.5
Manner-Suomi (FI1)	125	23.3	0.4	11.8
Berlin (DE3)	121	34.6	135.7	0.9

(1) This density measure is based on the total area of each region (not the land area). The table shows the 20 EU regions with the highest length of naviagble rivers and canals. EU-28: estimates based on latest available information (excluding Slovenia). Belgium, Italy and Poland: national level. Slovenia: not available.
(2) France, Lithuania, Austria and the United Kingdom: 2011. Belgium: 2008.
(3) France, Croatia, Lithuania, Romania, Sweden and the United Kingdom: 2011. Greece: 2010. Belgium: 2008.
Source: Eurostat (online data codes: tran_r_net and demo_r_d3area)

Map 10.6: Number of maritime passengers, by NUTS 2 regions, 2012 (1)
(average number of passengers per inhabitant and total number of passengers)



(1) Total number of passengers embarked and disembarked. Poitou-Charentes (FR43) and Aquitaine (FR61): 2011. Bremen (DE50) and Cumbria (UKD1): 2009. Lüneburg (DE93): 2008.
Source: Eurostat (online data codes: tran_r_mapa_nm and demo_r_d3avg)

use of their own vehicle to and from the coast. The region with by far the highest number of maritime passengers per inhabitant was the Åland islands (Finland) which are situated between Finland and Sweden; they had an average of almost 144 passengers per inhabitant in 2012. A number of other island regions also recorded relatively high numbers of maritime passengers per inhabitant, for example, Corse, reflecting a large-scale influx of tourists during the summer months, and Malta, reflecting not just tourist arrivals and departures by sea but also transport within the Maltese islands, principally between Malta and Gozo.

Data sources and availability

Legal basis

Regional data on road and railway infrastructure, inland waterways, vehicle stocks and road accidents are currently collected by EU Member States, EFTA and candidate countries on a voluntary basis. Data for air, rail and maritime transport are derived directly from statistics collected under legal acts.

Air statistics

Regional air transport statistics show passenger and freight movements by NUTS 2 region, measured in relation to the number of passengers and the quantity of freight in tonnes. Passenger data are divided into passengers embarking, disembarking and in transit. The data are collected according to Regulation (EC) No 437/2003 on statistical returns in respect of the carriage of passengers, freight and mail by air and its implementing legislation that is currently in force, such as European Commission Regulation (EC) No 158/2007 as regards a list of Community airports; these data are aggregated to NUTS 2 regions. Regional air transport data cover main airports, in other words those registering more than 150 000 passenger units (per year) where a passenger unit is either a passenger or 100 kilogrammes of freight and mail.

Rail statistics

In a similar vein, regional rail transport statistics also provide information on passenger and freight movements by NUTS 2 region. The collection of data for rail transport is based on Regulation (EC) No 91/2003 on rail transport statistics and its implementing legislation that is currently in force, for example, European Commission Regulation (EC) No 1192/2003 on rail transport statistics, which foresees the collection (every five years) of passenger data in relation to national, transit and international passengers.

Maritime statistics

The collection of maritime transport statistics is based on Directive 2009/42/EC on statistical returns in respect of carriage of goods and passengers by sea, an amending Regulation ((EU) No 1090/2010) and a Commission Delegated Decision (2012/186). The information is collected for a list of the most important sea ports in the EU and then aggregated to NUTS 2 regions. A main port is a statistical port which has annual movements of no less than 200 000 passengers or records more than one million tonnes of cargo.

Indicator definitions

Road transport

A road is defined as a line of communication (travelled way) open to public traffic, primarily for the use of road motor vehicles, using a stabilised base other than rails or air strips. Included are paved roads and other roads with a stabilised base, for example, gravel roads. Roads also cover streets, bridges, tunnels, supporting structures, junctions, crossings and interchanges. Toll roads are also included. Excluded are dedicated cycle lanes.

Passenger cars are road motor vehicles, other than mopeds or motorcycles, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver). Included are: passenger cars, vans designed and used primarily for the transportation of passengers, taxis, hire cars, ambulances and motor homes. Excluded are light goods road vehicles, as well as motor coaches and buses, and minibuses/mini-coaches. The number of passenger cars per inhabitant (sometimes referred to as the motorisation rate or equipment rate) is calculated on the basis of the stock of vehicles as of 31 December and population figures as of 1 January of the following year.

A minibus/mini-coach is a passenger road motor vehicle designed to carry 10–23 seated or standing persons (including the driver); it may carry seated passengers or both seated and standing passengers. A bus is a passenger road motor vehicle designed to carry more than 24 persons (including the driver); it may be constructed with areas for standing passengers, to allow frequent passenger movement, or designed to allow the carriage of standing passengers in the gangway. A motor coach is a passenger road motor vehicle designed to seat 24 or more persons (including the driver) and constructed exclusively for the carriage of seated passengers.

A trolleybus is a passenger road vehicle designed to seat more than nine persons (including the driver), which is connected to electric conductors and which is not rail-borne; this term covers vehicles which may be used either as trolleybuses or as buses, if they have a motor independent of the main electric power supply.

The equipment rate for public transport vehicles is calculated in the same manner as for passenger cars, based on the stock of vehicles as of 31 December and population figures as of 1 January of the following year.

Road safety

An injury accident is any road accident involving at least one road vehicle in motion on a public road or private road to which the public has right of access, resulting in at least one injured or killed person. A suicide or an attempted suicide is not an accident but an incident caused by a deliberate act to injure oneself fatally. However, if a suicide or an attempted suicide causes injury to another road user, then the incident is regarded as an injury accident. Included are: collisions between road vehicles; between road vehicles and pedestrians; between road vehicles and animals or fixed obstacles and with one road vehicle alone; collisions between road and rail vehicles. Multi-vehicle collisions are counted as only one accident provided that any successive collisions happen within a very short time period. Injury accidents exclude accidents incurring only material damage.

An injured person is any person who, as result of an injury accident, was not killed immediately and did not die within 30 days, but sustained an injury, normally needing medical treatment, excluding attempted suicides. Persons with lesser wounds, such as minor cuts and bruises are not normally recorded as injured.

Persons killed in accidents include any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides. The number includes drivers and passengers, in motorised vehicles and on bicycles, as well as pedestrians involved in road accidents. For countries that do not apply the threshold of 30 days, conversion coefficients are estimated so that comparisons on the basis of the 30 day-definition can be made.

Air

An airport is a defined area of land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Rail

A railway is a line of communication between two or more geographic locations consisting, usually, of one or more railway lines constructed from two parallel steel rails that is for the exclusive use of railway vehicles. Railway lines are one or more adjacent running tracks forming a route between two points. Where a section of network comprises two or more lines running alongside one another, there are as many lines as routes to which tracks are allotted exclusively. A running track is a track providing end-to-end line continuity designed for trains between stations or places indicated in tariffs as independent points of departure or arrival for the conveyance of passengers or goods. A distinction is often made between electrified and non-electrified railway lines and for high-speed railway lines.

Inland waterways

Inland waterways are rivers, canals, lakes or other stretches of water that are not part of the sea, which through natural or man-made features are suitable for navigation. This term includes both navigable rivers and lakes and navigable canals. A waterway forming a common frontier between two countries is reported by both states. Waterways also include river estuaries, the boundary with the sea being that point nearest the sea where the width of the river is both less than three kilometres at low water and less than five kilometres at high water. A navigable inland waterway is a waterway on which vessels with a carrying capacity of not less than 50 tonnes can navigate when normally loaded. The length of rivers and canals is measured in mid-channel. The length of lakes and lagoons is measured along the shortest navigable route between the two most distant points that perform transport operations.