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## Passenger transport statistics

Data extracted in June 2019.  
Planned article update: June 2020.

### Highlights

**More than 9.6 billion passengers travelled on national railway networks in the EU.**

**Air passengers transport surpassed 1 billion passengers for the first time in 2017 at EU level.**

*Seaborne passengers embarked and disembarked in all ports, EU-28, 2002-2017*

2002200320042005200620072008200920102011201220132014201520162017(million)390395400405  
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This article provides details on the current situation and recent developments for passenger transport statistics within the [European Union \(EU\)](#), based on the most recent data available. It presents information on passenger transport by a range of [transport modes](#), such as road, [rail](#), air and maritime transport. Among these, the principal mode of passenger transport is the [passenger car](#), fuelled by a desire for greater mobility and flexibility. However, the high reliance on the passenger car as a means of transport across the EU has contributed to increased congestion and pollution in many urban areas and on many major transport arteries.

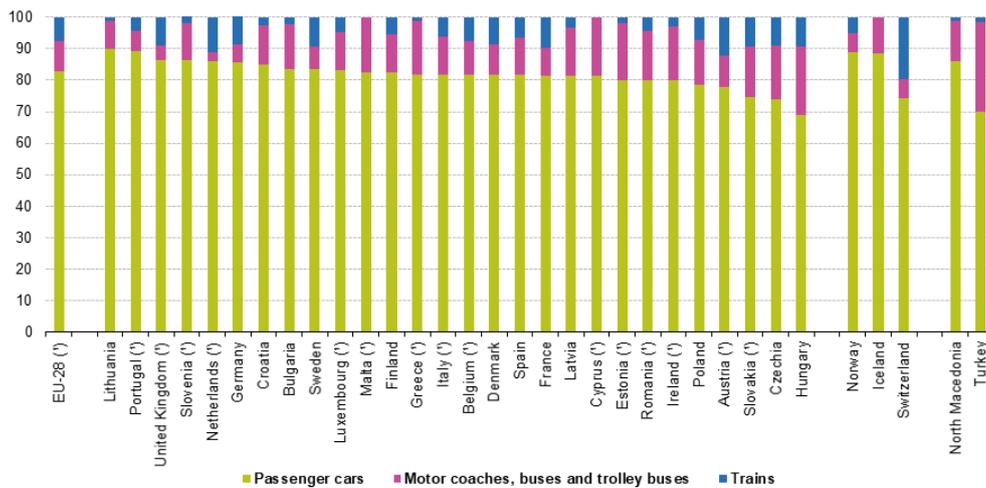
### Full article

Modal split of inland passengers

## Modal split of inland passengers

Figure 1 shows that passenger cars accounted for 82.9 % of inland passenger transport in the EU in 2016, with motor coaches, buses and trolley buses (9.4 %) and passenger trains (7.7 %) both accounting for less than a tenth of all traffic (measured by the number of inland [passenger-kilometres \(pkm\)](#) travelled by each mode).

**Modal split of inland passenger transport, 2016**  
(% share in passenger-kilometres)



Note: excluding powered two-wheelers. Cyprus, Malta and Iceland: railways not applicable.  
(\*) Includes estimates or provisional data.  
Source: Eurostat (online data code: tran\_hv\_psmod)



Figure 1: Modal split of inland passenger transport, 2016

(% share in passenger-kilometres)

Source: Eurostat ([tran\\_hv\\_psmod](#))

The passenger car was by far the most important mode for passenger transport in all EU Member States. In Lithuania and Portugal passenger cars accounted for close to 90 % of all passenger transport in 2016. Slovakia, Czechia and Hungary were the only EU Member States where the shares of passenger cars were below three quarters. For Hungary, this was reflected in the highest share of motor coaches and buses (21.7 %) among the EU Member States. An even higher share was reported for the candidate country Turkey (28.5 %). The lowest share for motor coaches, buses and trolley buses was in the Netherlands (3.0 %).

The EU Member States with the highest share of passenger transport by train were Austria (12.1 %) and the Netherlands (11.0 %). However, this was well below the EFTA country Switzerland, where trains carried out 19.8 % of all passenger transport in 2016. At the same time, their share was 2.0 % in Estonia and Slovenia and less in Greece and Lithuania, as well as in North Macedonia and Turkey.

## Rail passengers

Concerning rail transport, more than 9.6 billion passengers travelled on national railway networks in the EU, in 2017 (Table 1). It has to be noted that international transport represented less than 8 % of the total transport for all countries except Luxembourg where it represented 28 %. All in all, sixteen of the EU Member states reported increases in the total number of passenger transported between 2016 and 2017. The largest increases were recorded in Romania (+14.4 %), Slovakia (+8.3 %) and Estonia (+7.3 %). In contrast, the transport of passengers decreased by 4.7 % in Slovenia. Outside the EU, Montenegro and North Macedonia registered a large drop in rail passenger transport (-27.9 % and -24.5 %).

**Rail passenger transport by type of transport, 2016-2017**  
(thousand passengers)

	National			International			Total		
	2016	2017	Change 2017/2016 (%)	2016	2017	Change 2017/2016 (%)	2016	2017	Change 2017/2016 (%)
<b>EU-28</b>	9 490 149	9 634 875	1.5	:	:	:	:	:	:
Belgium	:c	:c	:c	:c	:c	:c	:c	:c	:c
Bulgaria	20 911	20 411	-2.4	515	784	52.3	21 425	21 195	-1.1
Czechia	173 701	176 932	1.9	5 066	5 791	14.3	178 766	182 724	2.2
Denmark	198 682	193 928	-2.4	12 717	12 638	-0.6	211 399	206 566	-2.3
Germany	2 799 851	2 815 592	0.6	13 931	15 851	13.8	2 813 782	2 831 443	0.6
Estonia	6 823	7 326	7.4	103	107	4.4	6 926	7 433	7.3
Ireland	42 478	45 130	6.2	342	375	9.5	42 820	45 505	6.3
Greece	15 561	15 337	-1.4	21	22	4.4	15 582	15 359	-1.4
Spain	568 756	592 284	4.1	1 065	1 321	24.0	569 822	593 605	4.2
France	1 197 557	1 237 353	3.3	38 966	40 126	3.0	1 236 523	1 277 479	3.3
Croatia	20 412	19 513	-4.4	298	290	-2.5	20 709	19 803	-4.4
Italy	849 248	846 081	-0.4	2 972	2 676	-10.0	852 220	848 757	-0.4
Cyprus	-	-	-	-	-	-	-	-	-
Latvia	17 071	17 327	1.5	157	167	6.5	17 228	17 494	1.5
Lithuania	3 580	3 855	7.7	336	322	-4.2	3 916	4 176	6.7
Luxembourg	16 081	16 523	2.8	6 378	6 407	0.5	22 459	22 930	2.1
Hungary	:c	:c	:c	:c	:c	:c	:c	:c	:c
Malta	-	-	-	-	-	-	-	-	-
Netherlands	:c	:c	:c	:c	:c	:c	:c	:c	:c
Austria	243 898	245 224	0.5	9 298	9 269	-0.3	253 196	254 493	0.5
Poland	274 302	291 500	6.3	1 143	1 548	35.5	275 445	293 048	6.4
Portugal	133 238	141 876	6.5	234	251	7.4	133 472	142 127	6.5
Romania	58 656	67 142	14.5	203	188	-7.6	58 859	67 330	14.4
Slovenia	13 231	12 592	-4.8	419	410	-1.9	13 650	13 002	-4.7
Slovakia	65 807	71 474	8.6	3 343	3 442	3.0	69 150	74 916	8.3
Finland	81 662	85 155	4.3	452	548	21.0	82 114	85 703	4.4
Sweden	208 944	216 800	3.8	12 001	12 100	0.8	220 945	228 900	3.6
United Kingdom	1 753 135	1 737 710	-0.9	19 428	19 649	1.1	1 772 563	1 757 359	-0.9
Norway	73 756	72 968	-1.1	537	593	10.4	74 293	73 561	-1.0
Switzerland	483 705	485 694	0.4	13 584	14 427	6.2	497 289	500 121	0.6
Montenegro (*)	:	:	:	:	:	:	1 285	927	-27.9
North Macedonia	660	495	-24.9	3	5	64.8	663	500	-24.5
Turkey	88 870	85 206	-4.1	168	132	-21.5	89 038	85 338	-4.2

Note: Cyprus and Malta have no railways. (:) not available. (c) confidential data. (-) not applicable.

(\*) Totals are the sum of quarterly data.

Source: Eurostat (online data codes: rail\_pa\_typepas and rail\_pa\_quartal)



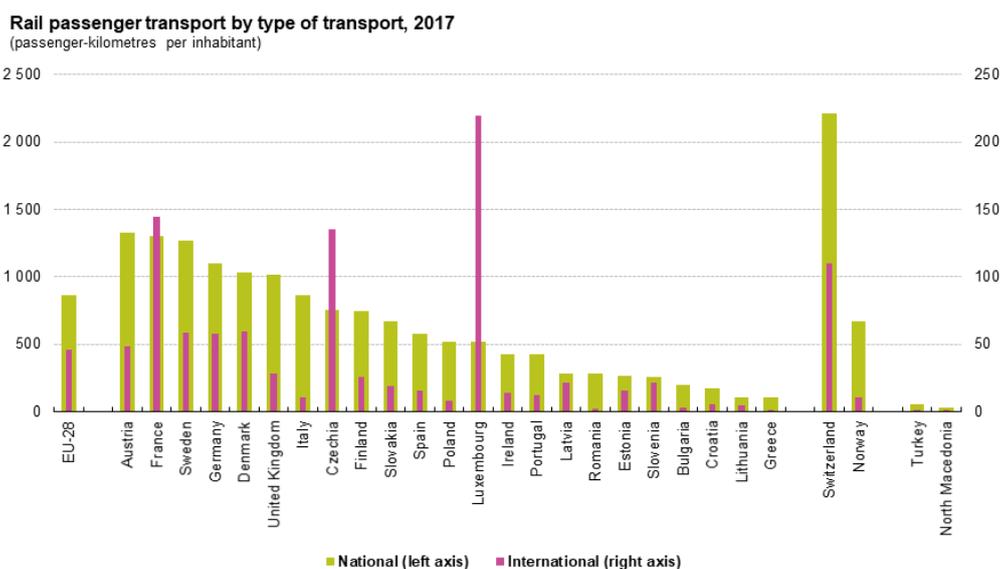
Table 1: Rail passenger transport by type of transport, 2016-2017

(thousand passengers)

Source: Eurostat ([rail\\_pa\\_typepas](#))

When looking at the evolution of international transport between 2016 and 2017, the largest increases were reported by Bulgaria (+52.3 %), Poland (+35.5 %), Spain (+24.0 %) and Finland (+21.0 %). In contrast, the largest decreases were reported by Italy (-10.0 %) followed by Romania (-7.6 %). Finally, concerning the evolution of national transport, Romania registered the largest increase with +14.5 %, followed by Lithuania (+7.7 %) while Slovenia reported the largest decrease with -4.8 %.

In order to compare between countries the relative importance of rail transport, the data can be normalised by expressing passenger traffic in relation to population (Figure 2). Travel on the national rail network in Austria, France, Sweden, Germany, Denmark and the United Kingdom averaged more than 1 000 passenger-kilometres per inhabitant in 2017; this was well below the level recorded in Switzerland (2 211 passenger-kilometres per inhabitant). By contrast, among the EU Member States the lowest average distances travelled on national railway networks in 2017 were recorded in Greece (103 passenger-kilometres per inhabitant) and Lithuania (107 passenger-kilometres per inhabitant), while the levels in the candidate countries Turkey (56 passenger-kilometres per inhabitant) and in North Macedonia (28 passenger-kilometres per inhabitant) were even lower.



Note: Cyprus and Malta have no railways. Data are not available for Belgium, Hungary and the Netherlands.  
Source: Eurostat (online data codes: rail\_pa\_typepas and demo\_gind)



Figure 2: Rail passenger transport by type of transport, 2017

(passenger-kilometres per inhabitant)

Source: Eurostat ([rail\\_pa\\_typepas](#)) and ([demo\\_gind](#))

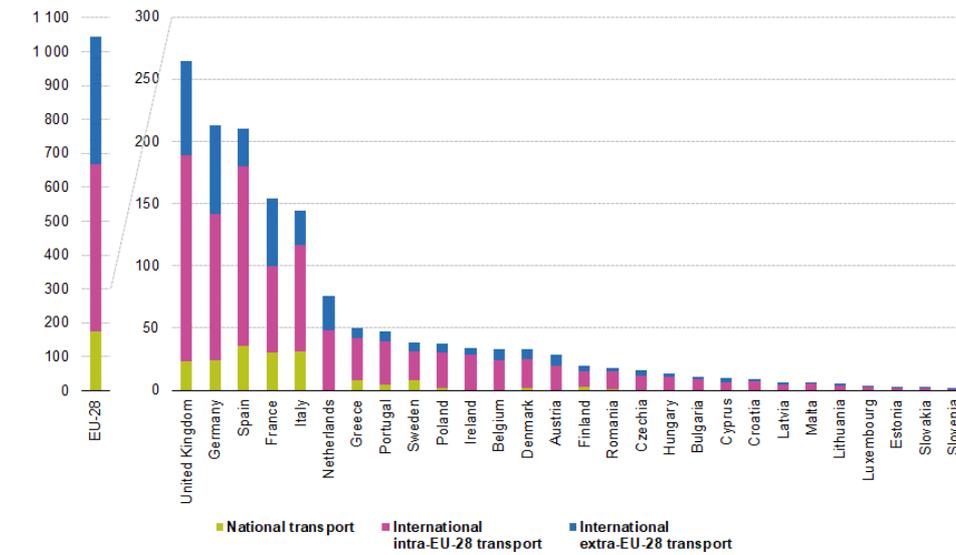
In terms of international rail travel, the only EU Member States to report levels of more than 100 passenger-kilometres per inhabitant in 2017 were Luxembourg (219 passenger-kilometres per inhabitant), France (145 passenger-kilometres per inhabitant) and Czechia (136 passenger-kilometres per inhabitant); this level was also surpassed in the EFTA country Switzerland (110 passenger-kilometres per inhabitant). These figures may reflect, among others, the proximity of international borders, the importance of cross-border commuters within the workforce, access to [high-speed rail links](#), and whether or not international transport corridors run through a particular country.

## Air passengers

The total number of air passengers transported surpassed 1 billion for the first time in 2017, at EU level (Figure 3). The United Kingdom was the EU Member State carrying the highest number of passengers in 2017 (265 million passengers), followed by Germany (212 million passengers) and Spain (210 million passengers). The first five countries represented two thirds of the total EU air transport. On the other side, Slovenia recorded 1.7 million passengers.

Almost half of the air passenger transport concerned intra-EU flights (47 %) while national transport and extra-EU transport accounted for 17 % and 36 % of air passenger transport, respectively. For all countries intra-EU transport is dominant, with shares between 45 % for France and 92 % for Malta. When looking at extra-EU transport, the highest share was registered by Slovenia (40 %) while the lowest by Malta (8%). The share of national transport was higher than the share of extra-EU transport only for Italy (22 %), Sweden (20 %) and Spain (17 %).

**Air passenger transport by type of transport, 2017**  
(million passengers carried)



Source: Eurostat (online data code: avia\_paoc)



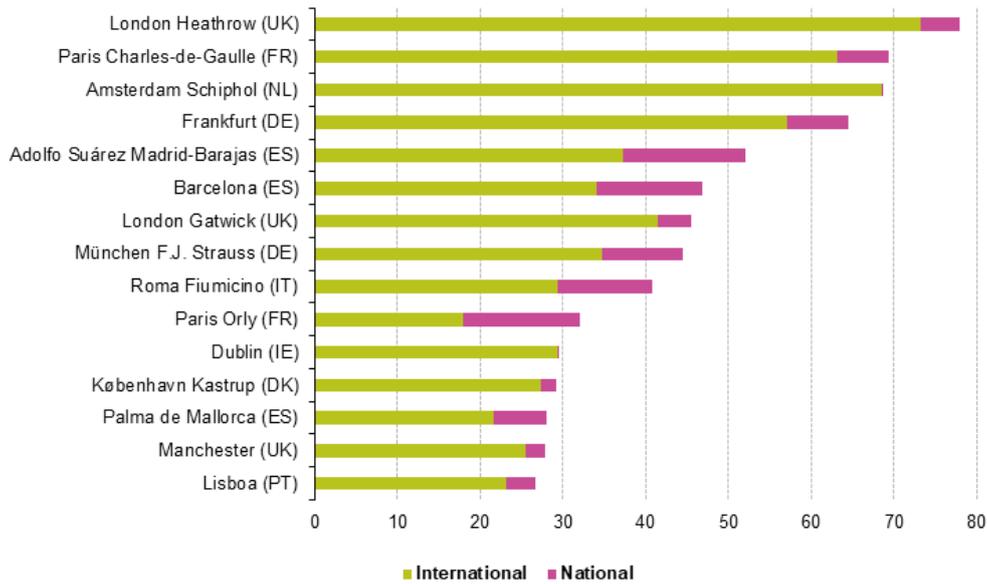
Figure 3: Air passenger transport by type of transport, 2017  
(million passengers carried)

Source: Eurostat ([avia\\_paoc](#))

London Heathrow was the busiest airport in the EU in terms of passenger carried in 2017, with 78 million passengers arriving or departing (Figure 4). Heathrow has constantly remained the busiest airport in the EU since the beginning of the time series in 1993. It was followed — at some distance — by Paris' Charles de Gaulle airport (69 million), Amsterdam's Schiphol airport (68 million) and Frankfurt airport (64 million). The same airports have been the largest four in the EU since 2011, when Amsterdam Schiphol moved from fifth into fourth place.

The overwhelming majority of passengers travelling through these four busiest airports were travelling on international flights; the lowest share among them was recorded for Frankfurt airport (88.7 %), rising to 100.0 % for Amsterdam Schiphol. In contrast, national flights accounted for 28.3 % of the 52 million passengers carried through the EU's fifth busiest passenger airport in 2017, Adolfo Suárez Madrid-Barajas. There were also relatively high proportions of passengers on national flights to and from Paris Orly (44.3 %), Roma Fiumicino (28.1 %) and Barcelona airport (27.1 %).

**Top 15 airports in the EU-28, 2017**  
(million passengers carried)



Source: Eurostat (online data code: avia\_paoa)

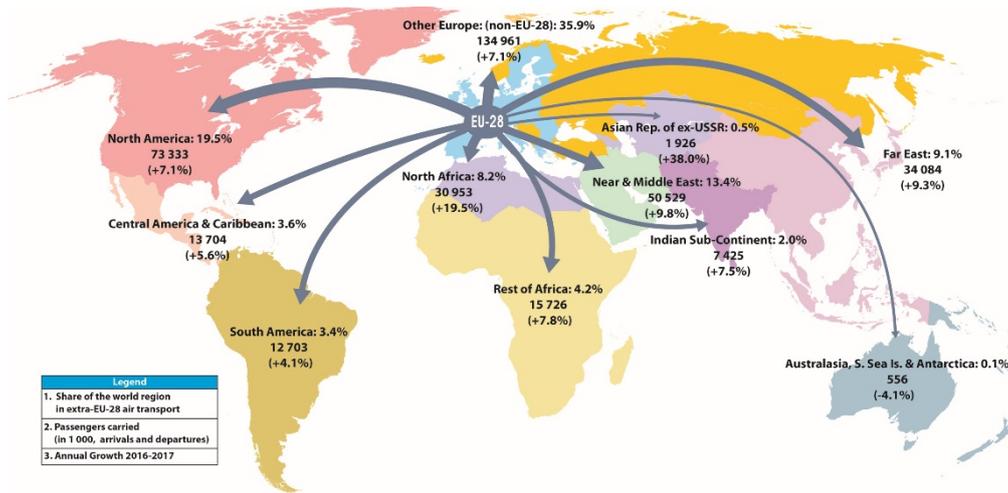


Figure 4: Top 15 airports in the EU-28, 2017

(million passengers carried)

Source: Eurostat ([avia\\_paoa](#))

Map 1 presents some elements of the extra-EU air transport of passengers. With a 38 % increase between 2016 and 2017, 'Asian Republics of the Ex-USSR' is the partner world region with the highest increase for EU passenger transport. The highest and continued decrease of Australia – 4.1 % could be partially linked to the increase in Near and Middle East (+9.8 %) – more passengers taking indirect flight to Australia changing in Near and Middle East airports. North Africa also recorded an important increase after several years of decrease +19.5 %.



Map 1: Extra-EU-28 air transport of passengers, EU-28, 2017

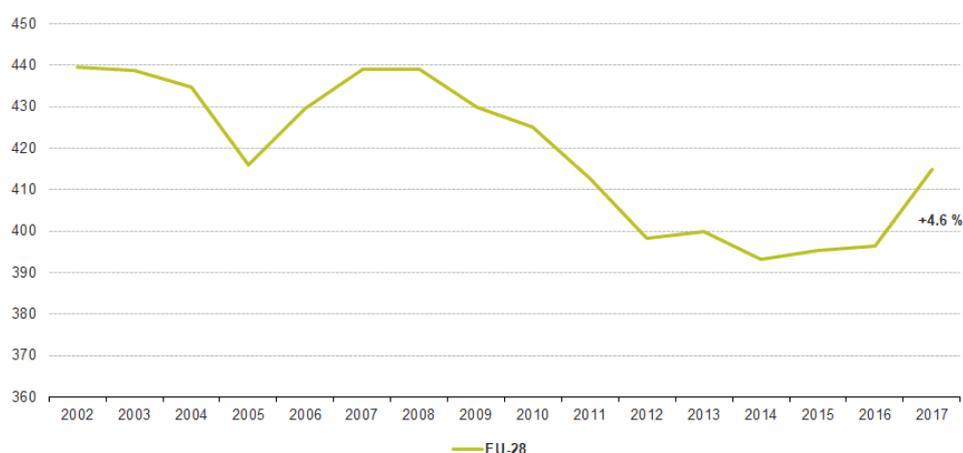
Source: Eurostat ([avia\\_paexcc](http://avia.paexcc))

## Maritime passengers

When it comes to maritime transport, the total number of passengers embarking and disembarking in EU ports is estimated at almost 415 million in 2017, a rise of 4.6 % from the previous year (Figure 5). Unlike goods movements, where broadly 60 % of goods are unloaded and 40 % loaded in the EU ports, the difference between the number of passengers disembarking ("inwards") and embarking ("outwards") in EU ports is generally small. This reflects the fact that seaborne passenger transport in Europe is mainly carried by national or intra-EU ferry services, with the same passengers being counted twice in the port throughput statistics (once when they embark the ferry in one EU port and once when they disembark the same ferry in another EU port).

**Seaborne passengers embarked and disembarked in all ports, EU-28, 2002-2017**

(million passengers)



Note: the y-axis is cut.

Source: Eurostat (online data code: mar\_mp\_aa\_cph)

eurostat 



Figure 5: Seaborne passengers embarked and disembarked in all ports, EU-28, 2002-2017

(million)

Source: Eurostat ([mar mp aa cph](#))

At close to 74 million and 70 million seaborne passengers, respectively, Italian and Greek ports handled a combined share of 35 % of the total number of passengers embarking and disembarking in EU ports in 2017. As a consequence, Italy and Greece remained the main countries in terms of EU seaborne passenger transport. Both countries recording substantial increases in passengers embarking and disembarking compared with 2016 (+9.8 % and +7.3 %, respectively). The two leading countries were followed by Denmark with close to 43 million passengers embarking and disembarking in 2017, an increase by 3.1 % from 2016.

Compared with the previous year, the largest relative increases in seaborne passengers transport were recorded by Latvia (+37.5 %), Slovenia (+33.0 %), Romania (+25.0 % from a low base), Cyprus (+22.8 %) and Belgium (+13.7 %) as well as Iceland (+68.4 %), in 2017. In contrast, only five countries reported a fall in 2017 compared with the previous year. The largest relative decreases were recorded in Bulgaria (-28.0 %, from a low base).

**Seaborne passengers embarked and disembarked in all ports, 2014-2017**  
(thousand passengers)

	2014	2015	2016	2017					Change 2017/2016 (%)
	Total	Total	Total	Inwards	Outwards	Cruise	Non cruise	Total	
<b>EU-28</b>	393 127	395 432	396 523	207 978	206 829	14 020	400 788	414 808	4.6
Belgium	821	844	1 118	634	636	950	321	1 270	13.7
Bulgaria	1	2	3	0	2	0	2	2	-28.0
Denmark	41 353	41 647	41 583	21 507	21 379	425	42 461	42 886	3.1
Germany	30 780	30 087	30 849	15 321	15 453	2 248	28 527	30 774	-0.2
Estonia	13 654	14 164	14 333	7 402	7 449	14	14 836	14 850	3.6
Ireland	2 755	2 751	2 717	1 394	1 380	5	2 769	2 774	2.1
Greece	66 533	65 680	65 248	35 021	35 002	439	69 584	70 023	7.3
Spain	23 486	24 522	26 323	13 976	13 923	3 004	24 896	27 899	6.0
France	26 638	26 133	24 514	12 641	12 453	717	24 377	25 093	2.4
Croatia	23 523	27 271	29 661	15 976	15 351	76	31 251	31 327	5.6
Italy	72 225	70 268	67 273	36 935	36 941	3 747	70 129	73 876	9.8
Cyprus	76	68	59	46	26	21	51	72	22.8
Latvia	862	661	723	487	507	0	994	994	37.5
Lithuania	280	286	303	141	156	0	297	297	-1.8
Malta	9 669	9 910	10 690	5 643	5 642	211	11 075	11 286	5.6
Netherlands (*)	1 819	1 910	1 906	963	965	0	1 928	1 928	1.2
Poland	2 224	2 421	2 602	1 292	1 293	0	2 585	2 585	-0.7
Portugal	551	583	679	369	371	63	677	740	9.0
Romania	1	1	0	0	0	0	0	0	25.0
Slovenia	27	34	28	19	19	0	38	38	33.0
Finland	18 471	18 884	19 222	9 800	9 689	7	19 481	19 489	1.4
Sweden	29 244	29 500	29 800	15 384	14 881	175	30 091	30 265	1.6
United Kingdom	28 135	27 805	26 887	13 027	13 311	1 919	24 419	26 338	-2.0
Iceland	723	737	544	459	458	0	917	917	68.4
Norway (†)	6 103	6 714	6 266	3 079	3 273	109	6 243	6 352	1.4
Montenegro	108	99	110	62	57	0	119	119	7.6
Turkey	2 150	2 233	1 250	683	694	118	1 259	1 377	10.2

(\*) Data exclude cruise passengers.

(†) Data on international maritime passenger transport only.

Source: Eurostat (online data codes: mar\_mp\_aa and mar\_mp\_aa\_cphd)

eurostat 



Table 2: Seaborne passengers embarked and disembarked in all ports, 2014-2017

(thousand)

Source: Eurostat ([mar\\_mp\\_aa](#)) and ([mar\\_mp\\_aa\\_cphd](#))

Although cruise passengers made up only 3.4 % of the total number of passengers embarking and disembarking in EU ports in 2017, these passengers play an important role in the ports and countries where the cruise traffic is concentrated. Close to 80 % of the total number of cruise passengers embarking and disembarking in European ports in 2017 did so in the ports of one of the four countries Italy, Spain, Germany and the United Kingdom. Cruise passengers on day excursions in EU ports are not included in these figures.

## Source data for tables and graphs

-  [Passenger transport statistics: tables and figures](#)

### Data sources

The majority of inland passenger transport statistics are based on vehicle movements in each of the reporting countries, regardless of the nationality of the vehicle or vessel involved (the 'territoriality principle'). For this reason, the measure of passenger-kilometres (pkm, which represents one passenger travelling a distance of one kilometre) is generally considered as a more reliable measure, as a count of passengers entails a higher risk of double-counting, particularly for international transport. The methodology used across the EU Member States is not harmonised for road passenger transport.

The [modal split](#) of inland passenger transport identifies transport by passenger car, by motor coach, bus and trolley bus, and by train; it generally concerns movements on the national territory, regardless of the nationality of the vehicle. The modal split of passenger transport is defined as the share of each mode (in percentage) and is based on data expressed in passenger-kilometres. For the purpose of this article, the aggregate for inland passenger transport excludes domestic air and water transport services (inland aviation and maritime transport).

The level of inland passenger transport (in passenger-kilometres) may also be expressed in relation to GDP; within this article, the indicator is presented based on GDP in constant prices for the reference year 2005. This indicator provides information on the relationship between passenger demand and the size of the economy and allows monitoring of the development of passenger transport demand relative to economic growth.

### Rail passengers

A rail passenger is any person, excluding members of the train crew, who makes a journey by train.

Rail passenger data are not relevant for Malta and Cyprus (or Iceland) as these countries have no railways. Annual passenger statistics for national and international rail transport generally cover only larger rail transport enterprises, although some countries use detailed reporting for all railway operators.

### Air passengers

Air transport statistics concern national and international transport, as measured by the number of passengers carried; information is collected for arrivals and departures. Air passengers carried relate to all passengers on a particular flight, counted once only and not repeatedly on each individual stage of that flight. Air passengers include all revenue and non-revenue passengers whose journeys begin or terminate at the reporting airport, as well as transfer passengers joining or leaving a flight at the reporting airport; excluded are direct transit passengers. Air transport statistics are collected monthly, quarterly and annually, although only the latter are presented in this article. Air transport passenger statistics also include the number of commercial passenger flights, as well as information relating to individual routes and the number of seats available. Annual data are available for most of the EU Member States from 2003 onwards.

## Maritime passengers

Maritime transport data are generally available from 2001 onwards, although some EU Member States have provided data since 1997. Maritime transport statistics are not transmitted by the Czechia, Luxembourg, Hungary, Austria or Slovakia, as these are landlocked countries with no maritime traffic; the same applies to Liechtenstein and Switzerland.

A sea passenger is defined as any person that makes a sea journey on a merchant ship; service staff are not regarded as passengers, neither are non-fare paying crew members travelling but not assigned. Infants in arms are also excluded. Double-counting may arise when both the embarking port and the disembarking port report data; this is quite common for maritime transport of passengers, which is generally a relatively short distance activity.

## Context

EU transport policy seeks to ensure that passengers benefit from the same basic standards of treatment wherever they travel within the EU. Passengers already have a range of rights covering areas as diverse as: information about their journey; reservations and ticket prices; damages to their baggage; delays and cancellations; or difficulties encountered with package holidays. With this in mind the EU legislates to protect passenger rights across the different modes of transport:

- [Regulation 261/2004](#) establishing ‘common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delays of flights’; in March 2013

the [European Commission](#) proposed a [revision](#) of this Regulation (COM(2013) 130 final) aiming to clarify grey areas, introduce new rights (for example concerning rescheduling), strengthen oversight of air carriers, and balance financial burdens;

- [Regulation 1371/2007](#) on 'rail passengers' rights and obligations';
- [Regulation 181/2011](#) establishing 'the rights of passengers in bus and coach transport';
- [Regulation 1177/2010](#) establishing 'the rights of passengers when travelling by sea and inland waterway'.

Specific provisions have also been developed in order to ensure that [passengers with reduced mobility](#) are provided with necessary facilities and not refused carriage unfairly.

In December 2011, the European Commission adopted '[A European vision for passengers: communication on passenger rights in all transport modes](#)' (COM(2011) 898 final). This acknowledged the work undertaken to introduce passenger protection measures to all modes of transport but notes that a full set of rights is not completely implemented. The Communication aims to consolidate the existing work, and move towards a more coherent, effective and harmonised application of rights alongside better understanding among passengers.

In March 2011, the European Commission adopted a White paper, the '[Roadmap to a single European transport area — towards a competitive and resource efficient transport system](#)' (COM(2011) 144 final).

This comprehensive strategy contains a roadmap of 40 specific initiatives to build a competitive transport system over a 10-year period that aims to increase mobility, remove major barriers in key areas and fuel growth and employment.

More details concerning the European Commission's proposals for transport policy initiatives are provided in an [introductory article on transport in the EU](#).