Railway passenger transport statistics - quarterly and annual data

Statistics Explained

This article takes a look at recent annual and quarterly statistics on rail passenger transport in the European Union (EU) . The article is based on data collected on the basis of Regulation (EU) No 2018/643 recast of Regulation (EU) No 2016/2032 .

Rail passenger transport performance continued to increase in 2019

Estimated at 416 billion passenger-kilometres in 2019, rail passenger transport performance at EU level continued its increase by 3.4 % compared with 2018 (see Figure 1). A steady growth was observed between 2013 and 2019, with a growth in each quarter of the six years compared with the same quarter of the previous year, except in the second quarter of 2018 (-2.2 %) and the fourth quarter of 2019 (-0.1 %).
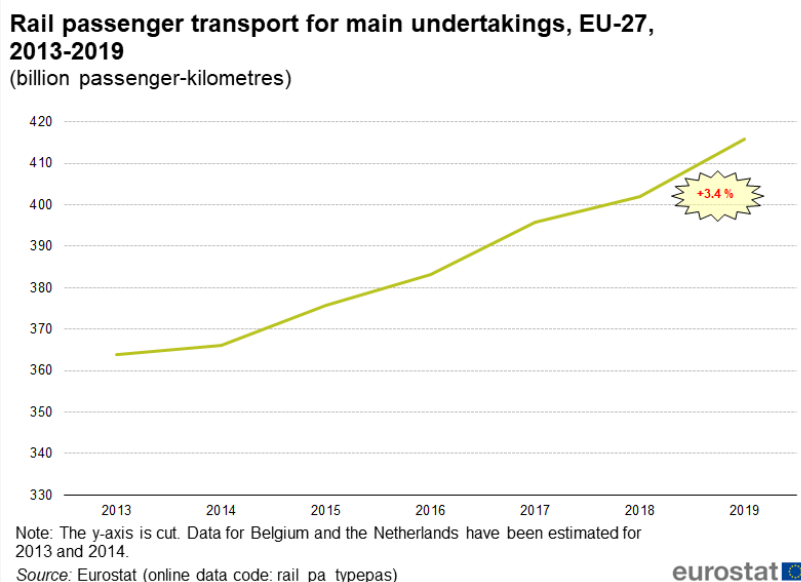

Rail passenger transport for main undertakings, EU-27, 2013-2019
(billion passenger-kilometres)

Note: The y-axis is cut. Data for Belgium and the Netherlands have been estimated for 2013 and 2014.
Source: Eurostat (online data code: rail_pa_typepas)

Figure 1: Rail passenger transport for main undertakings, EU-27, 2013-2019 (billion passenger-kilometres) Source: Eurostat (rail_pa_typepas)

This increase was mainly influenced by the second quarter of 2019 (+8.7 % compared with the same quarter of 2018). The first and third quarters also showed a positive trend of 2.9 % and 4.1 %, respectively, while the fourth quarter slightly decreased by 0.1 %.

A seasonal pattern can be observed with drops in the first and fourth quarters and increases in the second and third quarters when comparing to the previous quarter. However, in 2016 and 2017, the fourth quarter showed slight increases of 0.2 % and 0.4 % respectively, compared to the previous quarter. In 2018 and 2019, the usual seasonal pattern is back (see Figure 2).

Quarterly rail passenger transport for main undertakings, EU-27, 2013-2019
(billion passenger-kilometres)

Note: The y-axis is cut. Data for Belgium and Austria have been estimated.
Source: Eurostat (online data code: rail_pa_quartal)
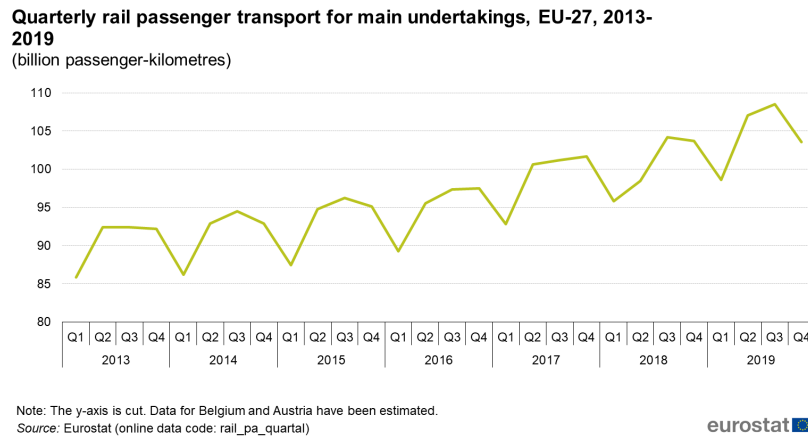
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Figure 2: Quarterly rail passenger transport for main undertakings, EU-27, 2013-2019 (billion passenger-kilometres) Source: Eurostat (rail_pa_quartal)

In 2019, national transport represented more than two thirds of the total transport in all countries

Focusing on the share between national and international transport, national transport is always predominant, representing more than 80 % of the total transport for all countries in 2019; the exception to this is Luxembourg, where national transport represented only 68 % of the total passenger transport by rail but international transport represented 32 % (see Figure 3).

Rail passenger transport by type of transport for main undertakings, 2019
(% share in passenger-kilometres)

National   International

Note: Countries are ranked based on the share of national transport. Cyprus and Malta have no railways.
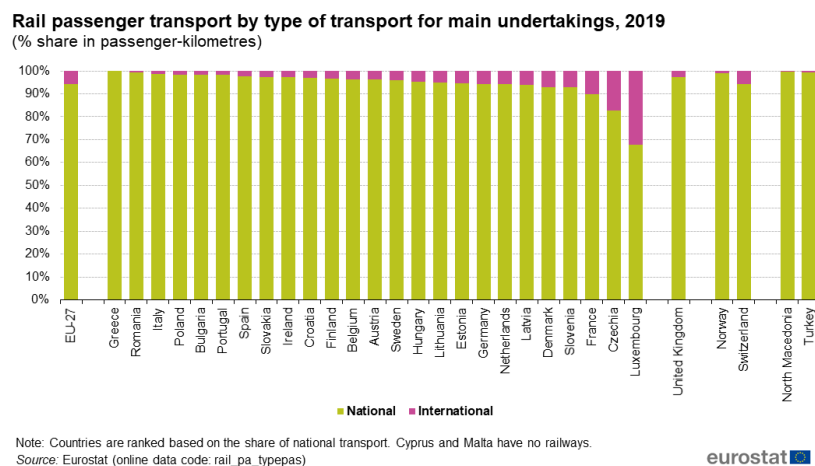*Source:* Eurostat (online data code: rail_pa_typepas)

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Figure 3: Rail passenger transport by type of transport for main undertakings, 2019 (% share in passenger-kilometres) Source: Eurostat (rail_pa_typepas)

Although rail passenger transport performance (in passenger-kilometres) at EU level recorded an increase in 2019 compared with 2018, three Member States showed a decrease over the same period. The highest decrease among the EU countries can be observed in Estonia (-6.0 %), followed by Croatia (-3.1 %). In contrast, rail passenger transport performance in Greece and Portugal increased substantially by 13.4 % and 10.6 % respectively. Outside the EU, the candidate country Turkey recorded a significant growth of 99.1 %.

Rail passenger transport by type of transport for main undertakings, 2018-2019
(million passenger-kilometres)

	National			International			Total		
	2018	2019	Change 2019/2018 (%)	2018	2019	Change 2019/2018 (%)	2018	2019	Change 2019/2018 (%)
EU-27	380 154	392 286	3.2	21 842	23 458	7.4	401 996	415 744	3.4
Belgium	:c	:c	:c	:c	:c	:c	:c	:c	:c
Bulgaria	1 457	1 495	2.6	18	24	32.3	1 476	1 520	3.0
Czechia	8 515	8 972	5.4	1 705	1 884	10.4	10 220	10 856	6.2
Denmark	5 764	5 741	-0.4	419	433	3.3	6 182	6 174	-0.1
Germany	93 112	94 550	1.5	5 049	5 702	12.9	98 161	100 252	2.1
Estonia	396	370	-6.6	20	21	5.2	417	392	-6.0
Ireland	2 210	2 330	5.4	71	68	-3.9	2 281	2 399	5.1
Greece	1 102	1 252	13.5	2	1	-49.0	1 104	1 252	13.4
Spain	27 660	28 043	1.4	657	661	0.5	28 317	28 703	1.4
France	83 840	88 379	5.4	9 547	9 981	4.5	93 387	98 360	5.3
Croatia	726	703	-3.2	21	21	2.1	747	724	-3.1
Italy	54 385	55 492	2.0	652	668	2.4	55 037	56 160	2.0
Cyprus	-	-	-	-	-	-	-	-	-
Latvia	584	604	3.5	40	39	-2.3	624	643	3.1
Lithuania	339	341	0.5	15	18	22.1	354	359	1.4
Luxembourg	313	314	0.3	129	149	15.0	443	463	4.6
Hungary	:c	:c	:c	:c	:c	:c	:c	:c	:c
Malta	-	-	-	-	-	-	-	-	-
Netherlands	:c	:c	:c	:c	:c	:c	:c	:c	:c
Austria	12 226	12 270	0.4	456	492	8.0	12 681	12 761	0.6
Poland	20 512	21 488	4.8	337	346	2.7	20 849	21 834	4.7
Portugal	4 487	4 964	10.6	84	91	8.8	4 570	5 055	10.6
Romania	5 392	5 695	5.6	34	40	16.6	5 426	5 735	5.7
Slovenia	524	531	1.4	45	41	-7.5	568	572	0.7
Slovakia	3 684	3 845	4.4	108	111	2.9	3 792	3 957	4.3
Finland	4 392	4 759	8.4	143	165	15.8	4 535	4 924	8.6
Sweden	13 058	13 998	7.2	489	619	26.6	13 547	14 617	7.9
United Kingdom	67 736	69 848	3.1	1 970	1 976	0.3	69 706	71 823	3.0
Norway	3 684	3 676	-0.2	38	39	1.1	3 722	3 715	-0.2
Switzerland	18 157	19 126	5.3	1 088	1 189	9.3	19 245	20 315	5.6
Montenegro (¹)	:	:	:	:	:	:	67	66	-0.4
North Macedonia	63	61	-2.3	0.5	0.3	-41.8	63	62	-2.6
Turkey	5 499	10 997	100.0	61	71	16.4	5 560	11 068	99.1

(:) not available.
(-) not applicable.
(c) confidential.
Note: Cyprus and Malta have no railways.
(¹) Quarterly data have been used for totals.
Source: Eurostat (online data codes: rail_pa_typepas and rail_pa_quartal)

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Table 1: Rail passenger transport by type of transport for main undertakings, 2018-2019 (million passenger-kilometres) Source: Eurostat (rail_pa_typepas) and (rail_pa_quartal)

Concerning the evolution of international transport performance between 2018 and 2019, the largest increases were reported by Bulgaria (+32.2 %), Sweden (+26.6 %), Lithuania (+22.1 %), Romania (+16.6 %), Finland (+15.8 %), Luxembourg (+15.0 %), Germany (+12.9 %) and Czechia (+10.4 %). The candidate country Turkey also registered a large increase of 16.4 %. In contrast, the largest decrease was reported by Greece (-49.0 %), followed by Slovenia (-7.5 %). Only four EU Member States reported a decrease. The candidate country North Macedonia also registered a large decrease of 41.8 %.

Regarding the evolution of national transport performance, only three countries registered a drop in 2019, the highest being for Estonia (-6.6 %). In contrast, Greece reported the largest increase at 13.5 %, followed by Portugal (+10.6 %).

Number of passengers transported by rail increased in 2019

All EU Member states reported increases in passenger transport (in number of passengers) between 2018 and 2019, with the exception of Croatia (-2.1 %). The largest increases were recorded in Portugal (+18.9 %) and Greece (+16.7 %). The candidate country Turkey recorded a significant growth of 63.8 %.

Rail passenger transport by type of transport for main undertakings, 2018-2019
(thousand passengers)

	National			International			Total		
	2018	2019	Change 2019/2018 (%)	2018	2019	Change 2019/2018 (%)	2018	2019	Change 2019/2018 (%)
EU-27	8 003 672	8 228 601	2.8	:	:	:	:	:	:
Belgium	:c	:c	:c	:c	:c	:c	:c	:c	:c
Bulgaria	20 534	20 285	-1.2	795	1 044	31.4	21 329	21 329	0.0
Czechia	182 513	186 150	2.0	6 775	7 419	9.5	189 288	193 569	2.3
Denmark	192 211	193 053	0.4	13 096	13 548	3.5	205 307	206 601	0.6
Germany	2 865 171	2 921 000	1.9	15 387	17 023	10.6	2 880 558	2 938 023	2.0
Estonia	7 652	8 261	8.0	107	112	4.6	7 759	8 373	7.9
Ireland	47 546	49 652	4.4	414	408	-1.5	47 960	50 060	4.4
Greece	16 778	19 590	16.8	17	8	-51.1	16 795	19 599	16.7
Spain	595 114	626 584	5.3	1 029	1 060	3.0	596 143	627 644	5.3
France	1 206 606	1 224 769	1.5	40 198	41 485	3.2	1 246 804	1 266 254	1.6
Croatia	19 942	19 525	-2.1	301	302	0.2	20 244	19 827	-2.1
Italy	863 992	880 437	1.9	2 596	2 863	10.3	866 588	883 300	1.9
Cyprus	-	-	-	-	-	-	-	-	-
Latvia	18 075	18 442	2.0	166	180	8.3	18 242	18 623	2.1
Lithuania	4 300	4 565	6.2	366	427	16.7	4 665	4 991	7.0
Luxembourg	17 155	17 812	3.8	6 176	7 204	16.6	23 331	25 016	7.2
Hungary	:c	:c	:c	:c	:c	:c	:c	:c	:c
Malta	-	-	-	-	-	-	-	-	-
Netherlands	:c	:c	:c	:c	:c	:c	:c	:c	:c
Austria	262 719	267 274	1.7	9 918	10 792	8.8	272 637	278 066	2.0
Poland	297 230	322 281	8.4	1 823	1 848	1.4	299 053	324 129	8.4
Portugal	147 408	175 333	18.9	173	178	3.1	147 581	175 511	18.9
Romania	64 539	67 707	4.9	176	204	16.0	64 715	67 911	4.9
Slovenia	12 677	12 837	1.3	428	423	-1.2	13 105	13 259	1.2
Slovakia	73 380	76 488	4.2	3 885	4 184	7.7	77 265	80 671	4.4
Finland	86 951	92 162	6.0	552	639	15.8	87 502	92 801	6.1
Sweden	235 330	252 131	7.1	11 160	12 472	11.8	246 490	264 603	7.3
United Kingdom	1 762 710	1 816 345	3.0	20 521	20 541	0.1	1 783 232	1 836 886	3.0
Norway	77 298	79 905	3.4	442	497	12.5	77 740	80 402	3.4
Switzerland	482 376	507 666	5.2	10 677	11 670	9.3	493 053	519 337	5.3
Montenegro (*)	:	:	:	:	:	:	992	985	-0.6
North Macedonia	534	546	2.3	6	3	-54.8	540	549	1.7
Turkey	100 368	164 483	63.9	200	229	14.5	100 568	164 712	63.8

(:) not available.
(-) not applicable.
(c) confidential.
Note: Cyprus and Malta have no railways.
(*) Quarterly data have been used for totals.
Source: Eurostat (online data codes: rail_pa_typepas and rail_pa_quartal)

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Table 2: Rail passenger transport by type of transport for main undertakings, 2018-2019 (thousand passengers) Source: Eurostat (rail_pa_typepas) and (rail_pa_quartal)

When looking at the evolution of international transport between 2018 and 2019, the largest increases were reported by Bulgaria (+31.4 %), Lithuania (+16.7 %), Luxembourg (+16.6 %), Romania (+16.0 %), Finland (+15.8 %) , Sweden (+11.8 %), Germany (+10.6 %) and Italy (+10.3 %). In contrast, only three EU Member States reported a decrease, the largest being reported by Greece (-51.1 %). Outside the EU, the candidate country North Macedonia registered a substantial drop of 54.8 %.

Finally, concerning the evolution of national transport, Portugal registered the largest increase at 18.9 %, followed by Greece (+16.8 %). The candidate country Turkey recorded a significant growth of 63.9 %. In contrast, only two EU Member States reported a drop, Croatia (-2.1 %) and Bulgaria (-1.2 %).

Source data for tables and graphs

- Rail passenger transport statistics: tables and figures

Data sources

The figures presented in this article have been extracted from the Eurostat rail transport database. They include data on national, international and transit transport of the Member States, EFTA and Candidate countries, collected according to the Regulation (EU) No 2018/643 recast of Regulation (EU) No 2016/2032 . The transport of passengers by metro, tram and/or light rail is excluded. The data presented are included in Eurostat's dissemination database (reference tables are provided under each table and graph). There is no railway in Cyprus and Malta. The various elements present data collected under the detailed reporting system, meaning that data include only main undertakings which are defined as follows:

- Until 2015: undertakings with a total transport performance greater than 500 million tonne-km or 200 million passenger-km.

- From 2016: undertakings with a total volume of goods transport of at least 200 million tonne-km or at least 500 000 tonnes or total volume of passengers transport of at least 100 million passenger-km.

Railway undertakings which are below the thresholds may be included for some countries. Basic results and derived indicators (such as growth rates and shares in % of total) in the tables are rounded. However, the figures are based on the non-rounded original data. As a result, the sum of shares in % of total, as shown in the tables, is not necessarily equal to 100 %. Explanatory notes for countries are available in the metadata on the Eurostat website **Symbols**

:	not available
-	not applicable
0	actual zero or very negligible transport
c	confidential data

Context

The content of this statistical article is based on data collected within the framework of Regulation (EU) No 2018/643 recast of Regulation (EU) No 2016/2032 .

Other articles

- Freight transport statistics - modal split
- Passenger transport statistics
- Railway freight transport statistics

Tables

- Transport , see:

Railway transport (t_rail)

    Rail transport of passengers (ttr00015)

Database

- Transport , see:

Railway transport (rail)

    Railway transport measurement - passengers (rail_pa)

Dedicated section

- Transport

Publications

- Energy, transport and environment statistics - 2020 edition

Methodology

- Railway transport measurement (ESMS metadata file — rail_pa_esms)

- Glossary for transport statistics - 5th edition - 2019

- Reference manual for rail transport statistics - version 10.3 (2019 edition)

Legislation

- Regulation (EU) No 2018/643 recast of Regulation (EU) No 2016/2032 .

- Summaries of EU legislation: EU rail transport statistics