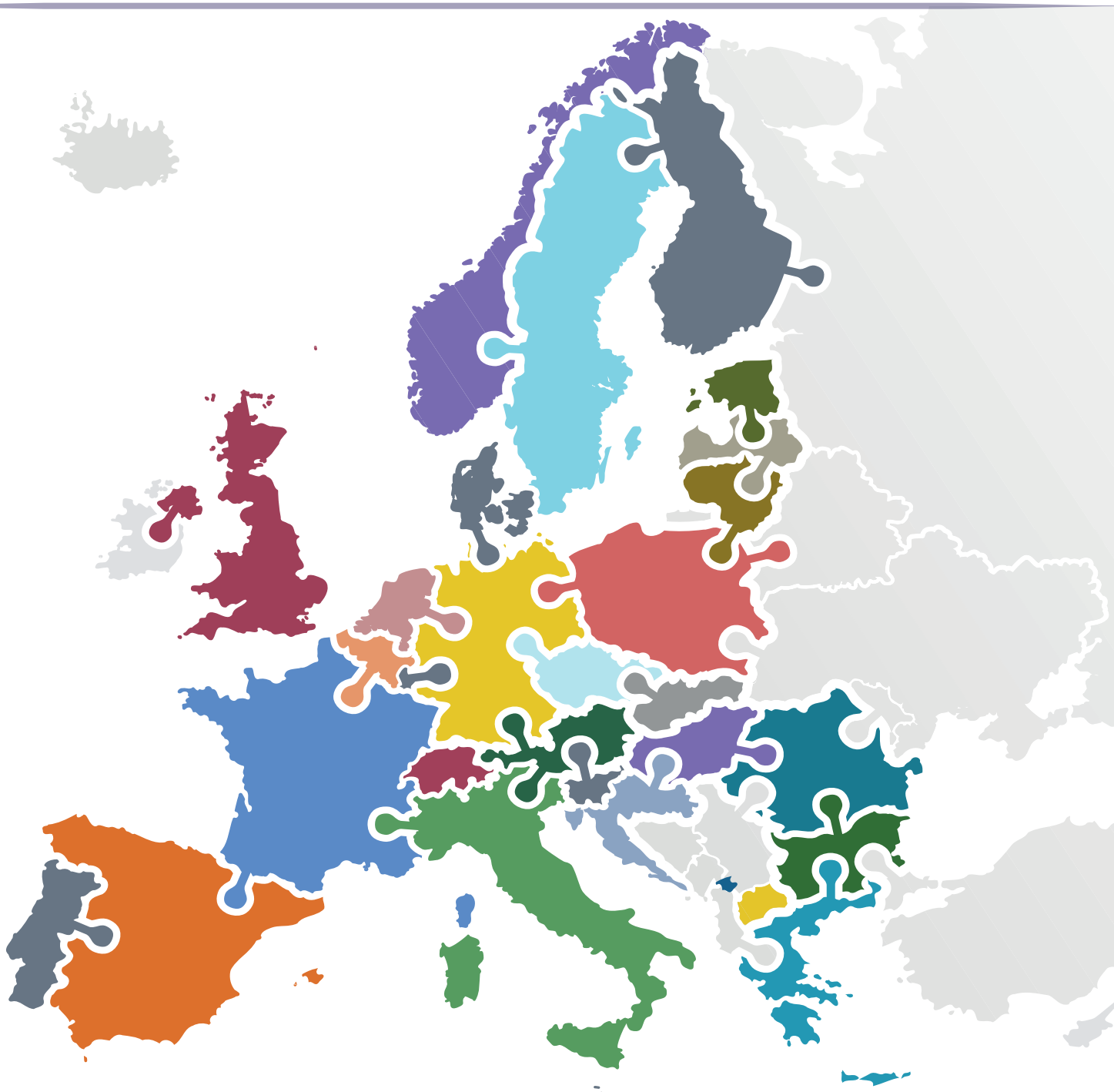
IRG-rail

Independent Regulators'Group - Rail

Seventh Annual Market Monitoring Report

April 2019



01

Introduction

Participating countries

AT - Austria
BE - Belgium
BG - Bulgaria
HR - Croatia
CZ - Czech Republic
DK - Denmark
EE - Estonia
FI - Finland
FR - France
DE - Germany
GR - Greece
HU - Hungary
IT - Italy
KS - Kosovo

LV - Latvia
LT - Lithuania
LU - Luxembourg
MK - Republic of North Macedonia
NL - Netherlands
NO - Norway
PL - Poland
PT - Portugal
RO - Romania
SK - Slovakia
SI - Slovenia
ES - Spain
SE - Sweden
CH - Switzerland
UK - United Kingdom

KEY FIGURES 2017

29 countries

5 years of data

CONTENT OF THE REPORT

Main Focus 2017

Focus in previous reports

2012	2013	2014	2015	2016
Service facilities	Charges	Trends analysis	Degree of market opening	Quality of rail passenger services

IRG-Rail – A network of cooperation

The Independent Regulators Group-Rail (IRG-Rail) was established by 15 European rail regulatory bodies in June 2011. From the beginning, the objective of the group has been to establish a network of cooperation between member regulatory organizations, in the railway sector. The group has expanded over the years and currently has members from 31 countries.

IRG-Rail members aim at consistently dealing with regulatory challenges and rail developments across Europe. IRG-Rail acts as a platform for cooperation, sharing of best practice and promotion of a consistent application of the European regulatory framework. The overall aim of IRG-Rail is to facilitate the creation of a single, competitive, efficient and sustainable internal railway market in Europe.

What we do

Article 56 (paragraph 2) of Directive 2012/34/EU states that regulatory bodies have a formal duty to monitor the situation in the rail market. Market monitoring is therefore an essential task for the national regulatory bodies. It is also a vital instrument for enhancing market transparency, setting directions for the activities of regulatory bodies and encouraging market participants to improve their activities.

General aim of IRG-Rail Market Monitoring Working Group

The IRG-Rail Market Monitoring Working group was set up as a platform for cooperation and exchange of best practice for the collection and analysis of data. Hence, the group has agreed on a set of guidelines[1] for the gathering of railway related data. Based on the results of a yearly data collection, an annual Market Monitoring report is issued by the Working Group.

This is IRG-Rail's Seventh Market Monitoring report. It refers to calendar year 2017, unless otherwise stated.

Content of the reports

The Market Monitoring report provides an annual overview of market developments and economic conditions in the railway sector. The report also enables comparisons between years regarding the development and competitiveness of the railway market.

The report consists of two parts: This document is the main report, which presents results at the overall European level. This is supplemented with a working document which includes country specific data and more detailed observations about the monitored countries.[2] In addition, data from the graphics is available on the IRG-Rail website.[3]

Furthermore, each Market Monitoring report covers a particular subject. The 2017 report focuses on two topics:

- competition for the market with an analysis on the outcome of awarding procedures for public service contracts and
- the incumbents' strategies to access rail passenger markets abroad.

Methodology

It is the responsibility of each regulatory body to gather, quality assure and submit data according to the guidelines agreed upon by the Working Group. The Working Group has developed a common template in order to ease the effort for the regulatory bodies and to ensure the comparability of the data. Data can originate from market surveys carried out by the regulatory bodies, national statistics and other trustworthy sources.

With the participation of Czech Republic for the first time, 29 countries contributed to this Seventh Market Monitoring Report.[4] However, most countries were not able to provide a full set of data. In order to ensure reliable and consistent information, this report only presents indicators for which enough data was provided. Consequently, some analyses are performed using data from a selection of the participating countries. In each section of the report, the key figures and analyses presented use a consistent sample of countries.[5] Therefore, some sections may not cover all 29 countries. However, detailed information and specific data per country are provided in the working document.

[1]The guidelines can be found on IRG-Rail website.
[2]The working document can be found on IRG-Rail website.
[3]The data can be found on IRG-Rail website.
[4]The historical data in this report may differ from the data presented in previous reports since historical data for Czech Republic has been added where available.
[5]For the countries considered each figure is specified. Without specification, the full sample of 29 countries is considered.

02

Network characteristics of the railway market

IN 2017

Network length

230 551 km
total route length

4.87 km
of lines per 100 km² country area

4.42 km
of lines per 10,000 inhabitants

Network usage intensity

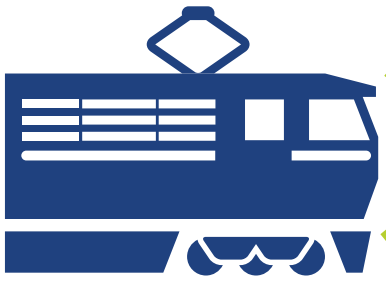
54
trains per day per route km

81%
for passenger services

19%
for freight services

93% share of main infrastructure manager

3% share of high-speed route length

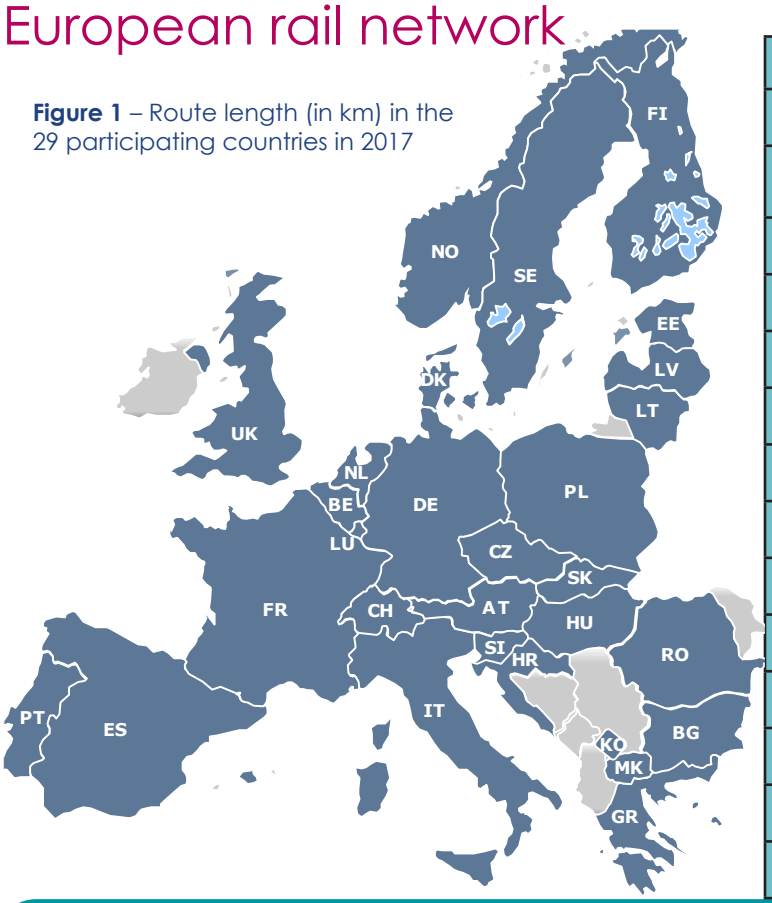


55% share of electrified route

The sample used to calculate these figures is specified in the following pages.

European rail network

Figure 1 – Route length (in km) in the 29 participating countries in 2017



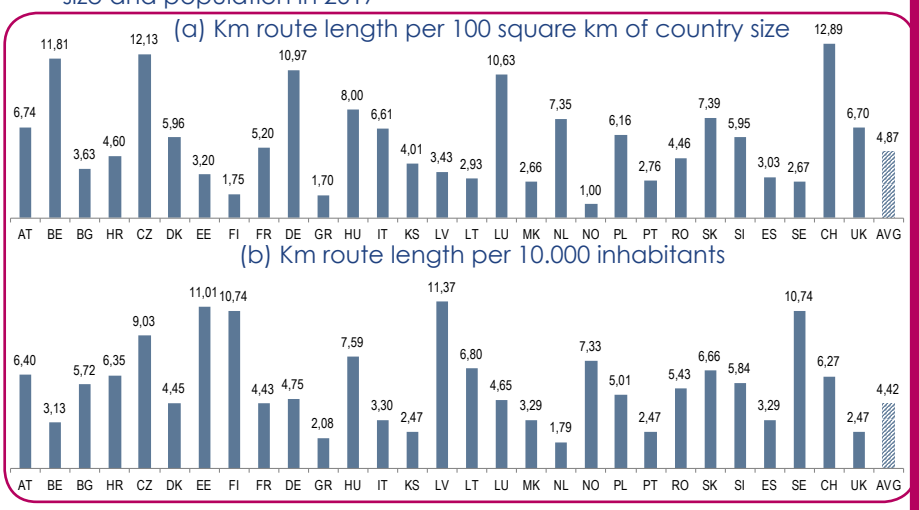
AT	Austria	5.648	LT	Lithuania	1.911
BE	Belgium	3.605	LU	Luxembourg	275
BG	Bulgaria	4.030	MK	Republic of North Macedonia	683
HR	Croatia	2.605	NL	Netherlands	3.055
CZ	Czech Republic	9.567	NO	Norway	3.856
DK	Denmark	2.560	PL	Poland	19.251
EE	Estonia	1.453	PT	Portugal	2.546
FI	Finland	5.926	RO	Romania	10.628
FR	France	28.710	SK	Slovakia	3.626
DE	Germany	39.219	SI	Slovenia	1.207
GR	Greece	2.240	ES	Spain	15.356
HU	Hungary	7.441	SE	Sweden	10.874
IT	Italy	19.982	CH	Switzerland	5.323
KO	Kosovo	437	UK	United Kingdom	16.320
LV	Latvia	2.217			

Following the introduction of data from the Czech Republic in this report for the first time, the route length for IRG-Rail monitored countries totals over 230,000 kilometres in 2017. The European rail network has been quite stable over the last five years, decreasing in length by only 0.3% between 2013 and 2017. Between 2016 and 2017, a slight increase (+0.1%) has been observed. This increase is explained further in the country-specific commentary in the working document. Almost 50% of the total route length is from the countries with the four longest rail networks: Germany, France, Italy and Poland. Luxembourg, with a route length of 275 kilometres, represents the shortest network of the participating countries.

High-speed lines account for 7,972 km of route, 3% of the total European network. The length of high-speed route has increased by 7.8% since 2016. The main infrastructure managers control 93% of the total route length in Europe.

Network density

Figure 2 – Network density with regard to country size and population in 2017



The network density (expressed in terms of km of route per 100 square km) is an indicator of the development and coverage of the rail network in each country. Switzerland has the highest network density, followed by the Czech Republic (with 12.89 km and 12.13 km of route per 100 square km, respectively). Both countries have rail networks with a high level of coverage across the country's geography. Norway has the lowest network density relative to country size, with 1.0 route km per 100 square km. This is due to the rail network only covering some parts of the country, mainly in the South around Oslo and Bergen - meaning that large parts of the country, especially the North, are not covered by the rail network.

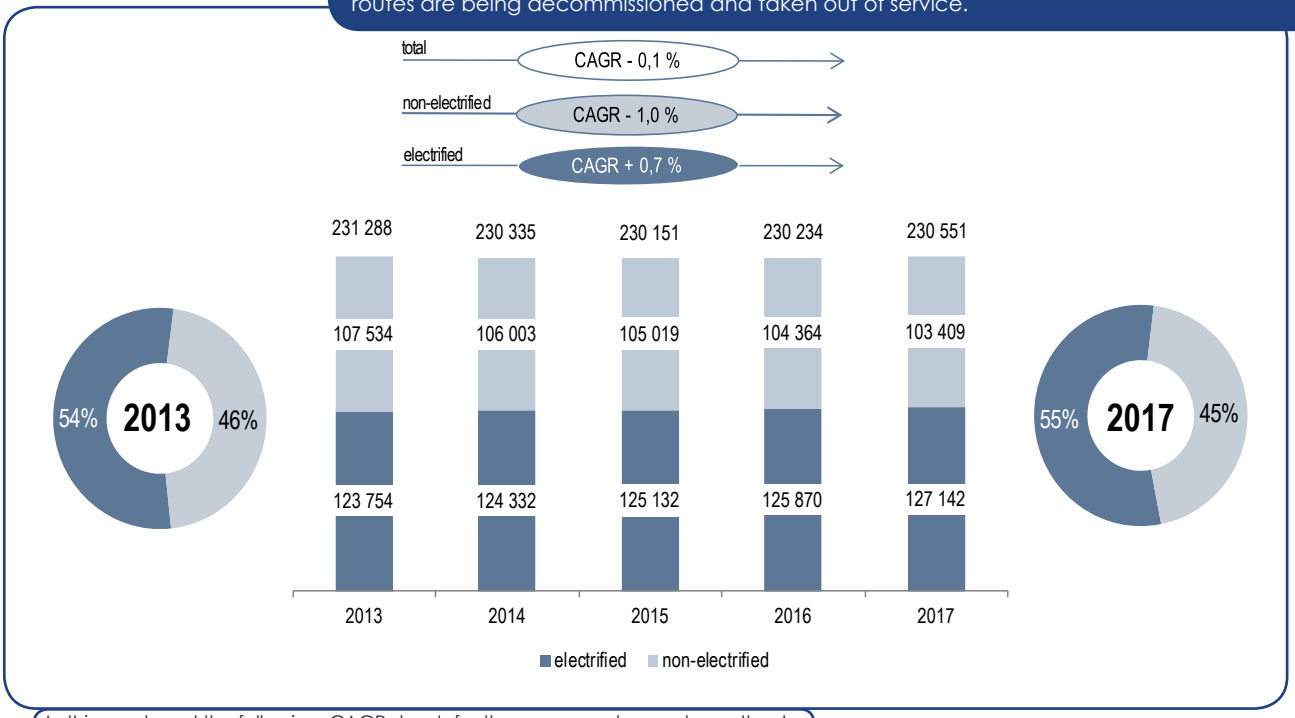
In terms of network density relative to population (km of route per 10,000 inhabitants), Latvia, Estonia, Finland and Sweden show the highest network values, all with greater than 10 km route per 10,000 inhabitants. This is usually indicative of a relatively low population density and/or a signal that there are large areas of a country not served by the rail network.

Electrification of the railway

Across the 29 participating countries, 55% of the total route length is electrified. Since 2013, the length of electrified route across the participating countries has been slowly increasing (with a compound average growth rate of 0.7% per year). Conversely, the length of non-electrified route has been declining since 2013, at a compoud average rate of 1.0% per year.

The overall route length has slightly decreased by 737 km (-0.3%) since 2013, which is a result of a 3,388 km increase in electrified route and a 4,125 km decrease in non-electrified route. This suggests that while some existing non-electrified tracks may be upgraded with electrification capability (in addition to the construction of entirely new electrified routes), more non-electrified routes are being decommissioned and taken out of service.

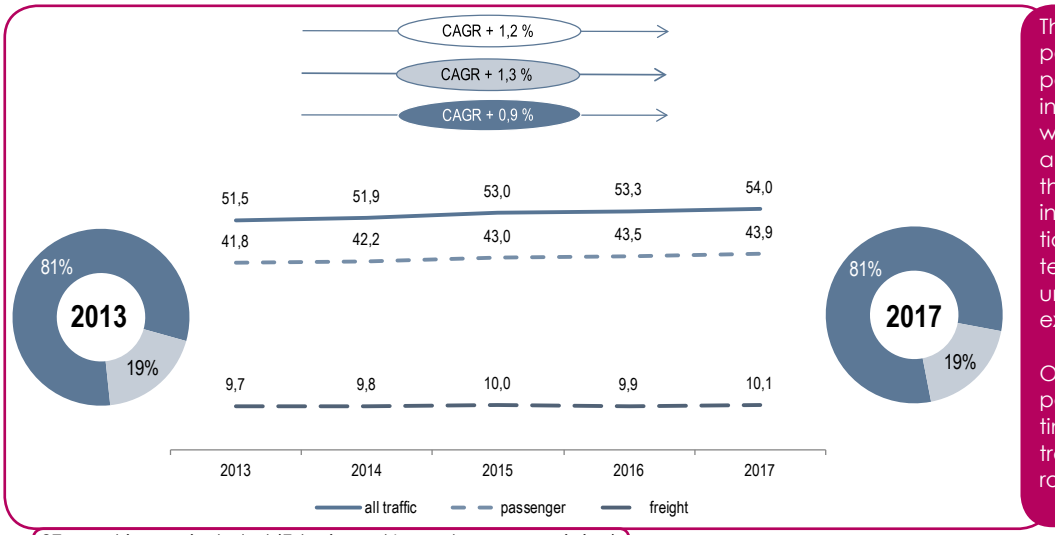
Figure 3 – Total route length (in kilometers) and electrified share from 2013 to 2017



In this graph and the following, CAGR stands for the compound annual growth rate.

Network usage

Figure 4 – Overall network usage intensity (train-km per route km per day) from 2013 to 2017



The network usage (train-km per route km per day) across participating countries has increased by 4.9% since 2013, with passenger services seeing a slightly higher growth (5.1%) than freight (3.8%). These increases may be a reflection of increasing demand or technological improvements unlocking extra capacity on existing railway networks.

Overall, the network usage for passenger trains is almost four times higher than for freight trains (44 and 10 train-km per route km per day respectively).

27 countries are included (Estonia and Luxembourg are missing).

03

Track access charges paid by railway undertakings for the minimum access package

IN 2017

€17.4 bn
total TAC

€4.10
average TAC per train.km

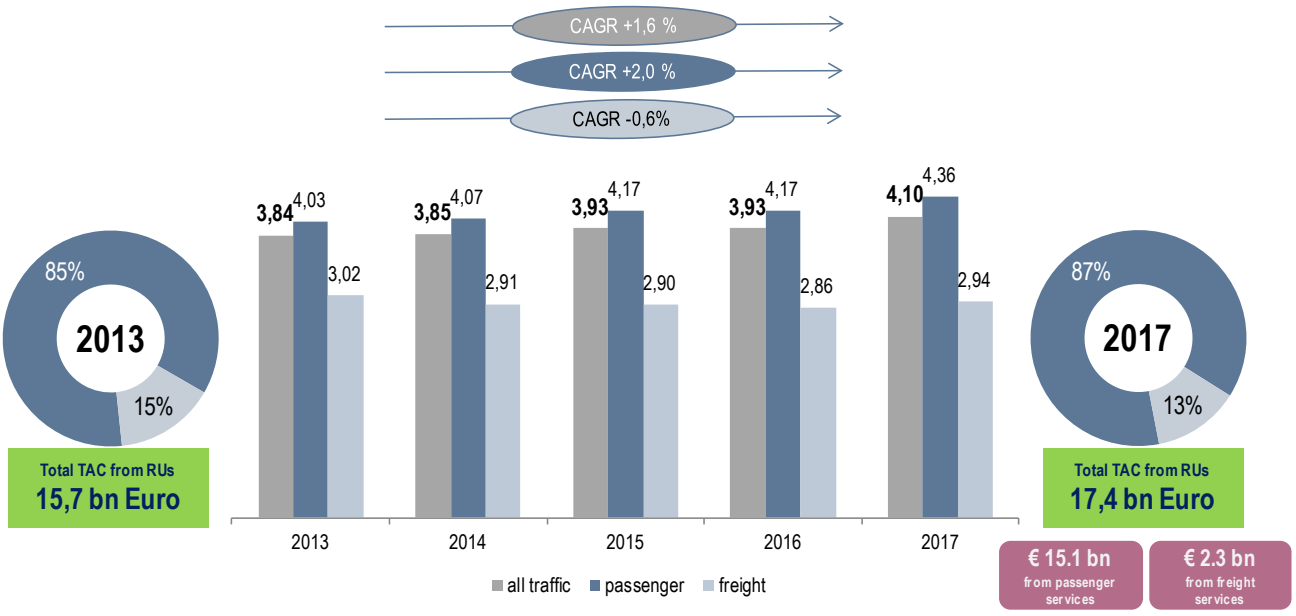
87%
share of TAC from passenger market

The sample used to calculate these figures is specified in the following pages.

Evolution of track access charges (TAC)

Figure 5 – Infrastructure managers revenues (in Euro per train-km) from track access charges paid by railway undertakings for the minimum access package from 2013 to 2017

In 2017 87% of the TAC were paid by passenger operators for the minimum access package, a similar share compared to 2016. Between 2013 and 2017, the share of TAC paid by passenger operators has increased from 85% to 87%.



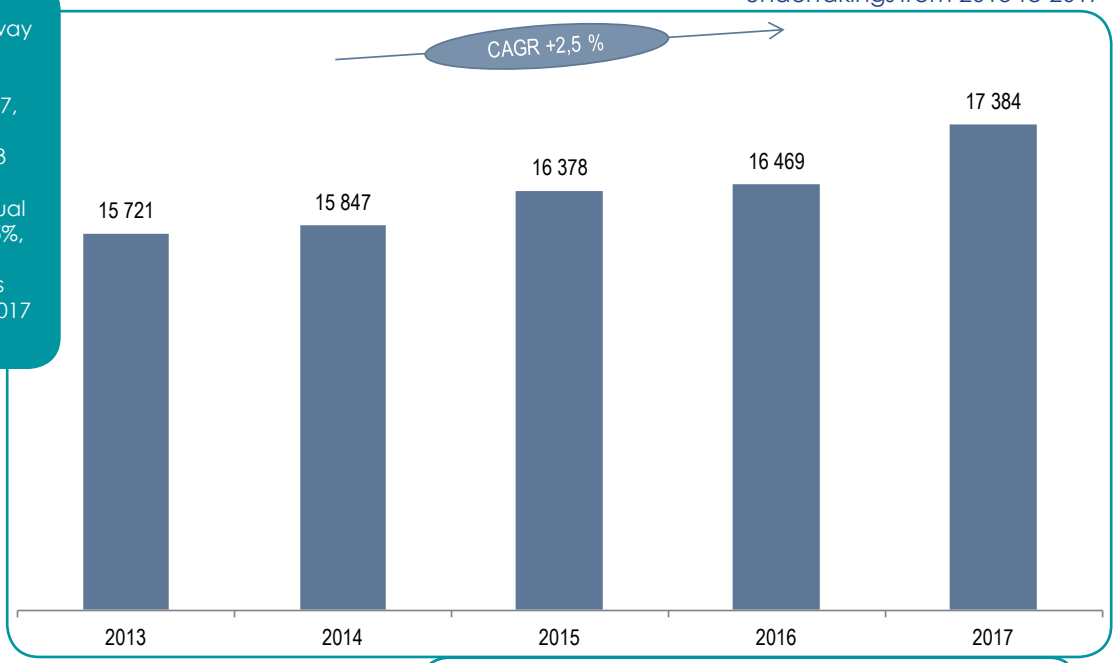
Track access charges per train-km have increased at an annual rate of 1.6% over the last five years. This is mainly driven by the passenger market (an annual growth rate of 2.0%) rather than the freight market (-0.6% compound annual growth rate). This represents an increase of 0.26 Euro per train-km between 2013 and 2017 (from 3.84 Euro per train-km in 2013 to 4.10 in 2017).

23 countries are included (Estonia, Hungary, Kosovo, Luxembourg, Republic of North Macedonia and Sweden are missing).

Total TAC from railway undertakings

Figure 6 – Total track access charges (in million Euro) from railway undertakings from 2013 to 2017

The track access charges paid by railway undertakings in 23 countries amounted to 17.4 bn Euro in 2017, increasing by 5.5% in a year. Between 2013 and 2016, the compound average annual increase was only 1.5%, therefore the rise in track access charges between 2016 and 2017 was relatively high.

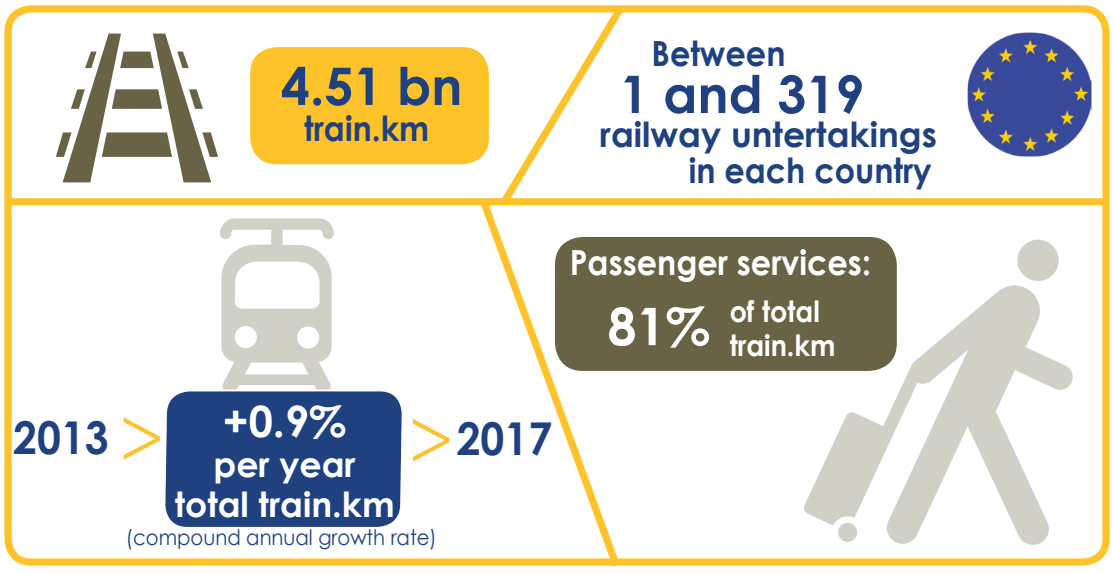


23 countries are included (Estonia, Hungary, Kosovo, Luxembourg, Republic of North Macedonia and Sweden are missing).

04

Market players and global rail traffic

IN 2017



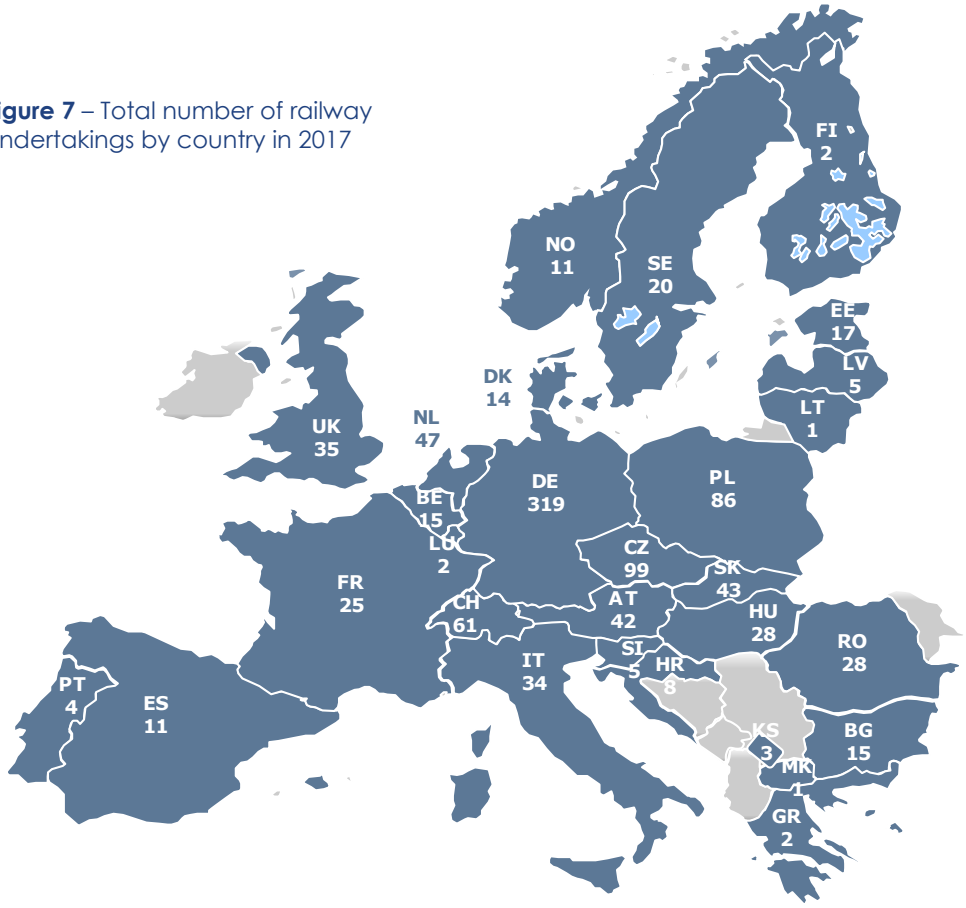
The sample used to calculate these figures is specified in the following pages.

Market players

In comparison to 2016, 13 countries experienced an increase of total number of active railway undertakings, while in 12 the number remained stable. Only four of the 29 monitored countries saw a decline in the number of active railway undertakings. Across the IRG-Rail member countries the number of active railway undertakings varies substantially, ranging from one (Lithuania and the Republic of North Macedonia) to 319 (Germany).[6] Passenger services are offered by 36% of the total number of railway undertakings, while freight services are offered by 74%.

In the passenger sector, 62% of all active undertakings provide services under public service contracts (PSC) and 49% offer non-PSO services.[7] All countries have at least one railway undertaking offering PSO services; in two countries (the Republic of North Macedonia and Romania) all passenger services are run under PSO. Belgium, Czech Republic and France are the only countries where railway undertakings offering PSO services make up less than 50% of the total.

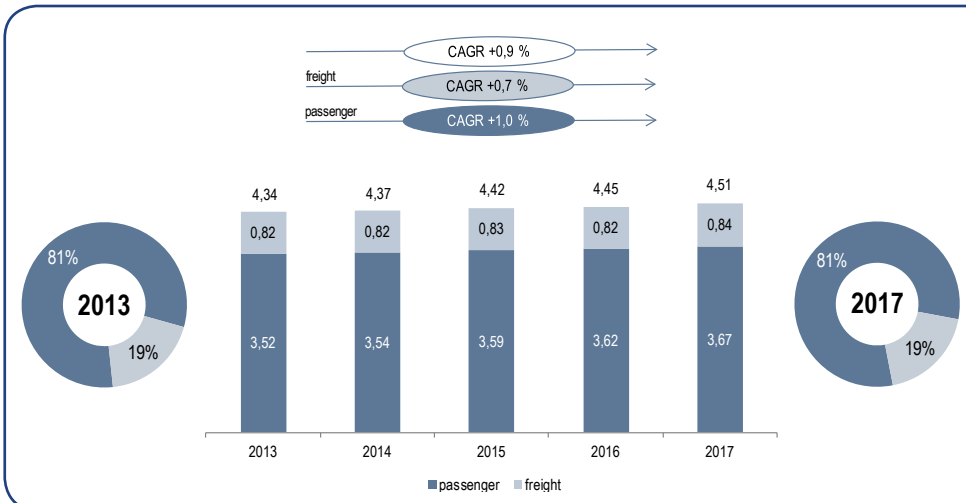
Figure 7 – Total number of railway undertakings by country in 2017



In the majority of member countries (20), the number of railway undertakings offering freight services exceeds that of railway undertakings providing passenger services. The number of freight operators has seen higher annual increases than the number of passenger operators.

Total rail traffic

Figure 8 – Passenger and freight traffic (in billion train-km) from 2013 to 2017



27 countries are included (Estonia and Luxembourg are missing).

For 2017 a total of 4.51 billion train-km was reported across 27 countries; passenger services accounted for 81% of this total. This share of passenger and freight services within the total traffic has remained constant over the past five years. A comparably low number of railway undertakings in passenger services is responsible for the vast majority of total rail traffic. This is consistent with the the network density findings that there are approximately four times as many passenger trains operating on the railway network of participating countries than freight trains. The growth rate for traffic volume has been slow but steady: with a compound annual growth rate from 2013 to 2017 of 0.9% for total traffic volume, 0.7% for freight traffic and 1% for passenger traffic.

[6]Details by country and by type of service can be found in the Part 4.1 of the working document.
[7]The total of percentage of RUs that provides PSO and non-PSO services exceeds 100% since one RU may offer both. The same applies to freight and passenger services.

05

The rail freight market

IN 2017

840 m
freight train.km

448 bn
freight net tonne.km

51% national
49% international

Freight load factor: **533 net tonne.km**
per freight train.km

41%
total market share of new entrants in the freight market

€21.7
operators' revenue per freight train.km

€cts3.88
operators' revenue per net tonne.km

The sample used to calculate these figures is specified in the following pages.

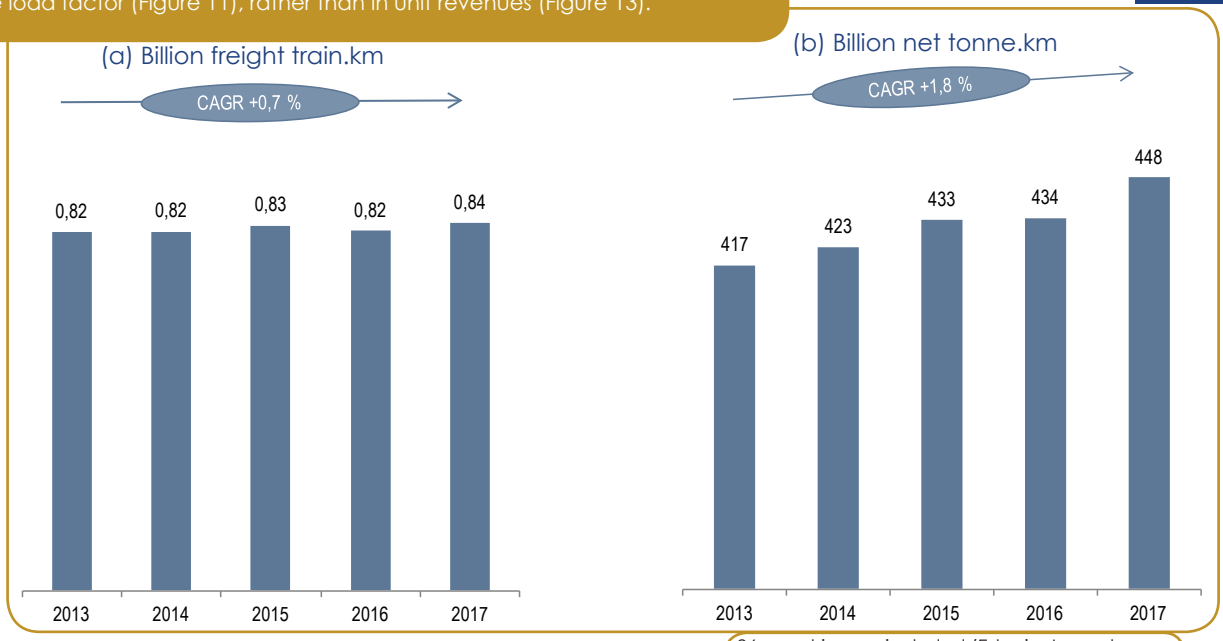
The rail freight market size

17,4%

Modal share for rail in the EU (tonne-km) for inland transport in 2016 according to Eurostat data.[8]

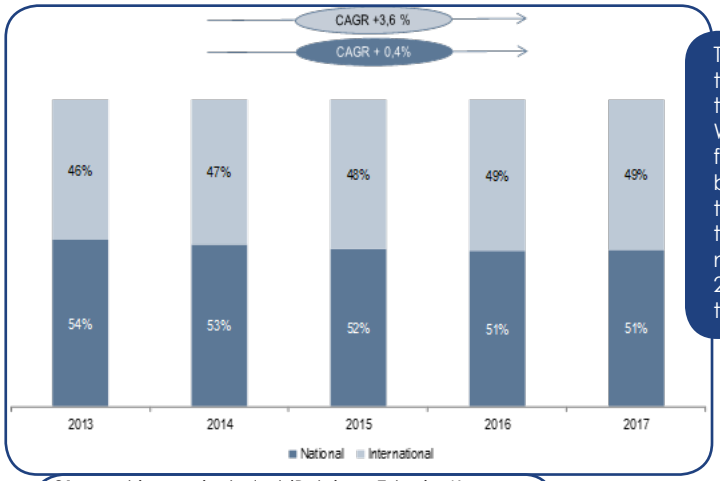
The freight supply side accounted for 0.84 billion train-km in 2017, a total which has been relatively constant since 2013, with an annual growth rate of just 0.7% over the last five years. The freight demand, in tonne-km, has seen higher growth, with average increase of 1.8% per year between 2013 and 2017, reaching 448 billion net tonne-km in 2017. This results in an increase in the load factor (Figure 11), rather than in unit revenues (Figure 13).

Figure 9 – Total freight traffic (billion train-km and billion net tonne-km) from 2013 to 2017



26 countries are included (Estonia, Luxembourg and Republic of North Macedonia are missing).

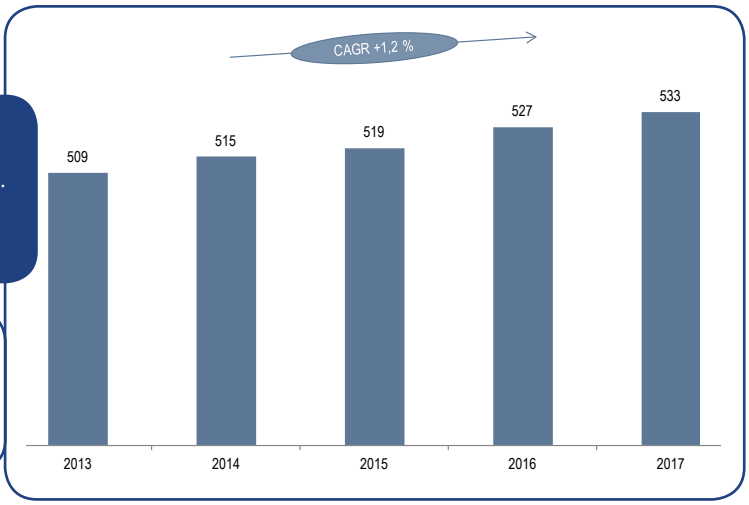
Figure 10 – National and international freight traffic (in billion net tonne-km) from 2013 to 2017



21 countries are included (Belgium, Estonia, Kosovo, Luxembourg, Republic of North Macedonia, Norway, Slovakia and Switzerland are missing).

The split between international and national rail freight traffic (in net tonne-km) remains unchanged compared to 2016, with the share of national freight traffic being 51%. With an annual average increase of 3.6%, the demand for international rail freight services has been growing between 2013 and 2017, with a total of 202 billion international tonne-km performed across 21 countries in 2017. After a four-year decreasing trend, the demand for national net tonne-km increased between 2013 and 2017, reaching 213 billion tonne-km in 2017 (which was higher than the total in 2013).

Figure 11 – Freight load factor (net tonne-km per freight train-km) from 2013 to 2017



The freight load factor is the ratio of net tonne-km and freight train-km. This factor has increased by 4.7% since 2013. This is consistent with the increased demand for rail freight services (Figure 11).

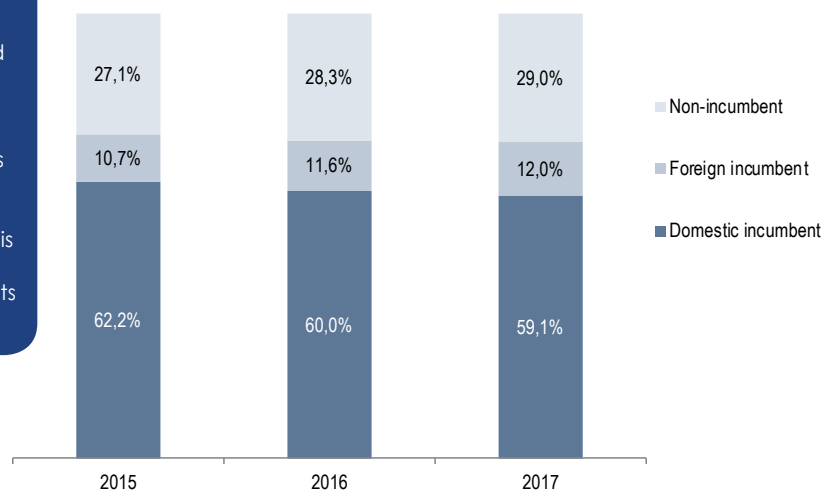
26 countries are included (Estonia, Luxembourg and Republic of North Macedonia are missing).

[8]Data on modal split of freight transport in European Union can be found on Eurostat website.

Market shares of freight railway undertakings

Figure 12 – Market shares of freight railway undertakings (based on net tonne-km) from 2015 to 2017

The share of domestic incumbents, based on net tonne-km, has continued to decrease compared to 2015 but remains predominant. Both foreign incumbents and non-incumbents have experienced a slight increase in market share over this time period; 1.9 and 1.3 percentage points respectively.

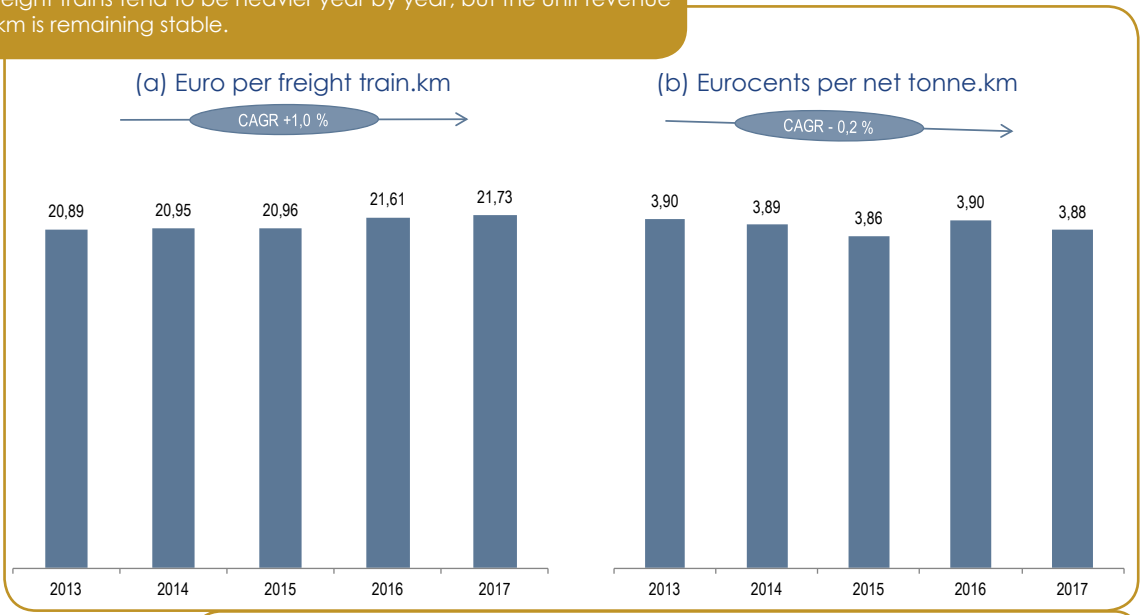


20 countries are included (Estonia, France, Italy, Kosovo, Republic of North Macedonia, Netherlands, Romania, Slovakia and Sweden are missing).

Economic performance indicator of freight railway undertakings

Economic performance indicators have been calculated by dividing total revenues by train-km or by net tonne-km. In the period from 2013 to 2017, the unit revenue per tonne-km increased by 4%, whereas the unit revenue per tonne-km remained relatively stable. The trends observed show that, on average, freight trains tend to be heavier year by year, but the unit revenue per tonne-km is remaining stable.

Figure 13 – Freight operators' revenues in Euro per train-km and Eurocent per net tonne-km from 2013 to 2017



17 countries are included (Belgium, Czech Republic, Denmark, Estonia, France, Italy, Luxembourg, Republic of North Macedonia, Netherlands, Norway, Slovakia, Slovenia and Switzerland are missing).

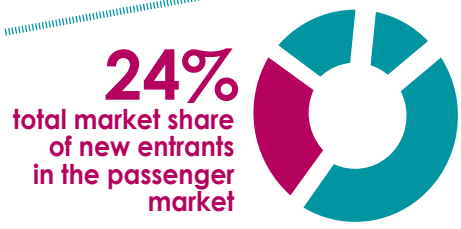
06

The rail passenger market

IN 2017

3.6 bn
passenger train.km

474 bn
passenger.km



24%
total market share of new entrants in the passenger market

€17.0
operators' revenue per passenger train.km

€cts 14.0
operators' revenue per passenger.km

The sample used to calculate these figures is specified in the following pages.

The rail passenger market size

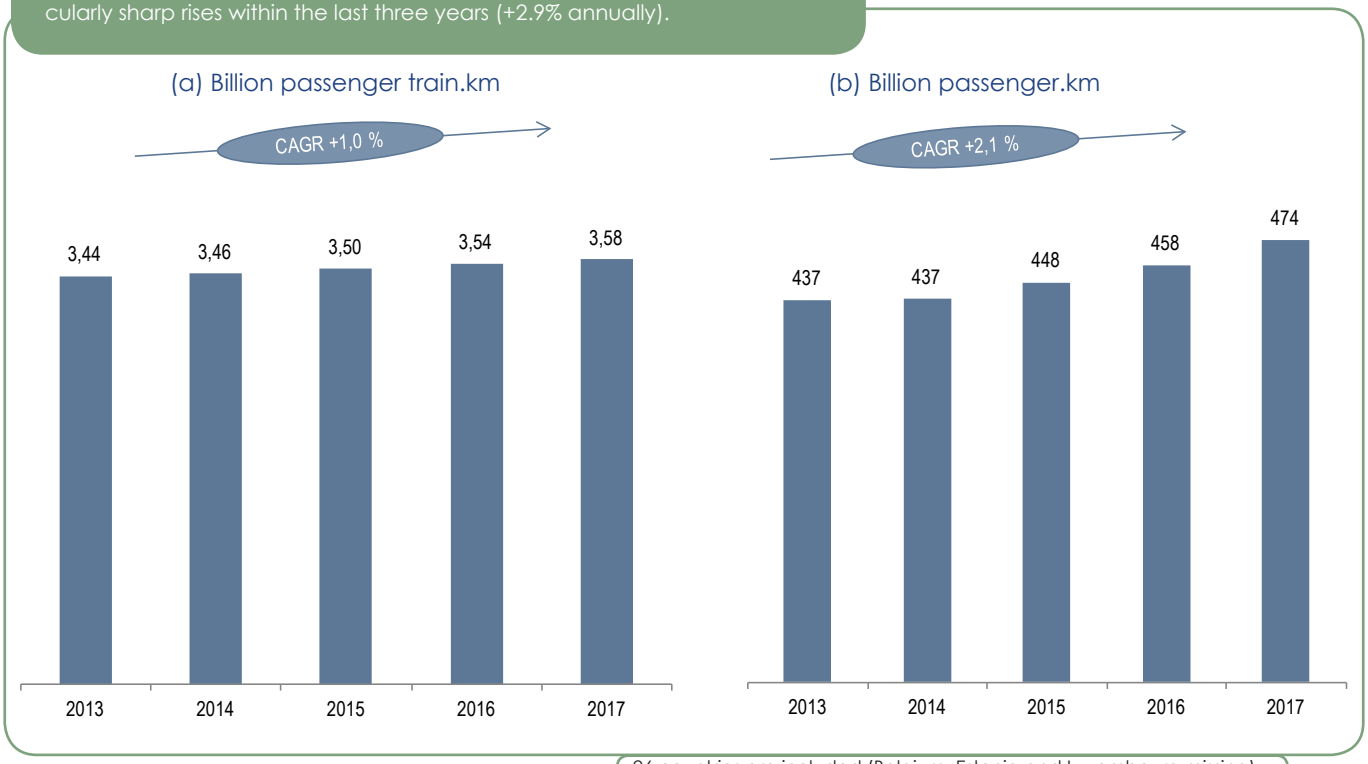
7,7%

Modal share for rail in the EU (passenger-km) for inland transport in 2016 according to Eurostat data.[9]

In 2017, the total traffic of passenger railway undertakings among 26 monitored countries came to 3.6 billion train-km (the supply side) and 474 billion passenger-km (the demand side).

The data for the most recent five years shows a moderate growing trend of offered train-km and a stronger increase in passenger kilometres. From 2013 to 2017, the number of train-km has remained relatively constant (with a compound average annual increase of 1%). Meanwhile, traffic in passenger-km is increasing, with an annual growth rate of 2.1%, and showing particularly sharp rises within the last three years (+2.9% annually).

Figure 14 – Total passenger traffic (in billion train-km and billion passenger-km) from 2013 to 2017



26 countries are included (Belgium, Estonia and Luxembourg missing).

Figure 15 – European share of national and international passenger traffic (based on passenger-km) in 2017

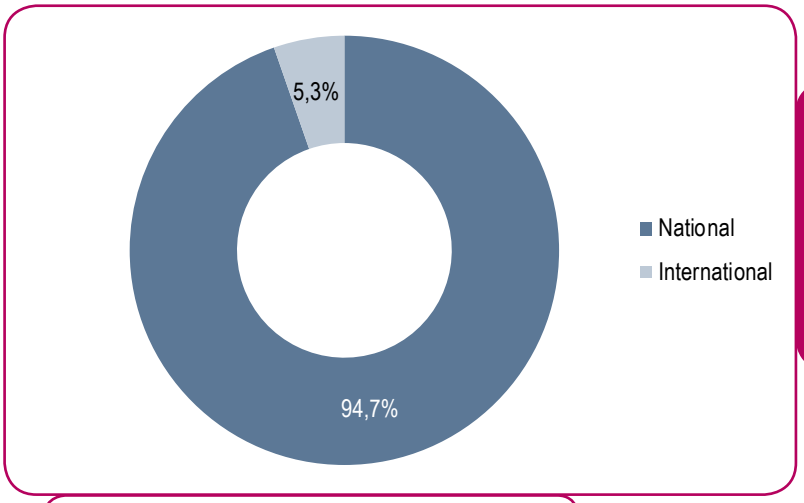
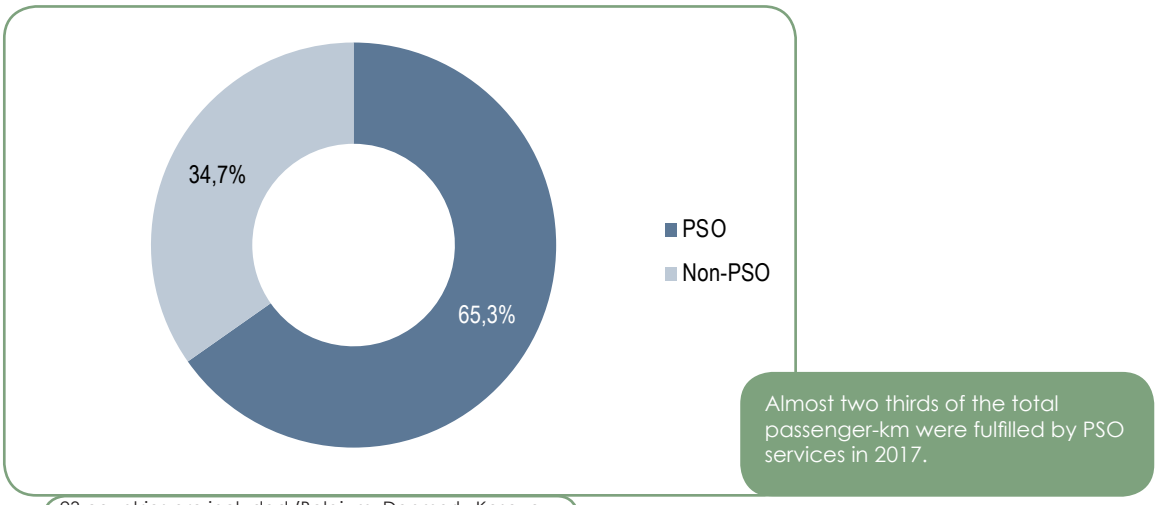


Figure 15 shows the small proportion of international rail passenger service in terms of passenger-km (around 5%). The rail passenger market is dominated by national traffic, which was almost 95% of the total in 2017.

25 countries are included (Belgium, Republic of North Macedonia, Slovakia and Switzerland and missing).

[9]Data on modal split of passenger transport in European Union can be found on Eurostat website.

Figure 16 – European share of PSO and non-PSO passenger traffic (based on passenger-km) in 2017

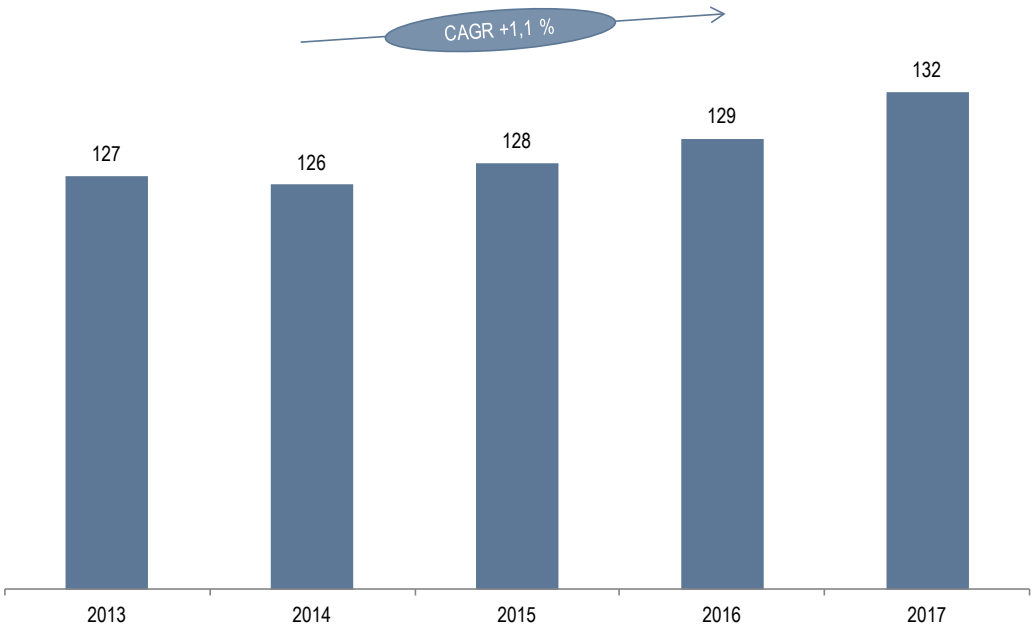


Almost two thirds of the total passenger-km were fulfilled by PSO services in 2017.

23 countries are included (Belgium, Denmark, Kosovo, Norway, Slovakia and Switzerland are missing).

Figure 17 – Number of passenger-km per passenger train-km from 2013 to 2017

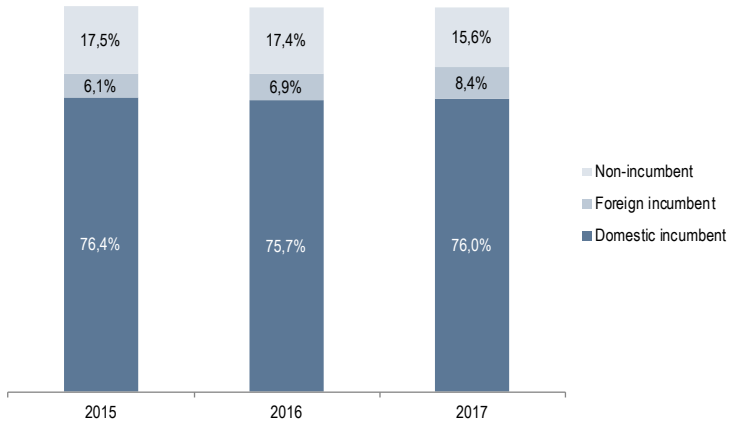
In 2017, there were on average 132 passengers per train. This indicator, which is obtained by dividing passenger-km by train-km, has been growing over the past three years. This could be explained by several reasons such as a higher capacity per train or higher occupation rates.



26 countries are included (Belgium, Estonia and Luxembourg are missing).

Market shares of passenger railway undertakings

Figure 18 – Market shares of passenger railway undertakings (based on passenger-km) from 2015 to 2017



22 countries are included (Belgium, Estonia, Luxembourg, Italy, Netherlands, Romania and Sweden are missing).

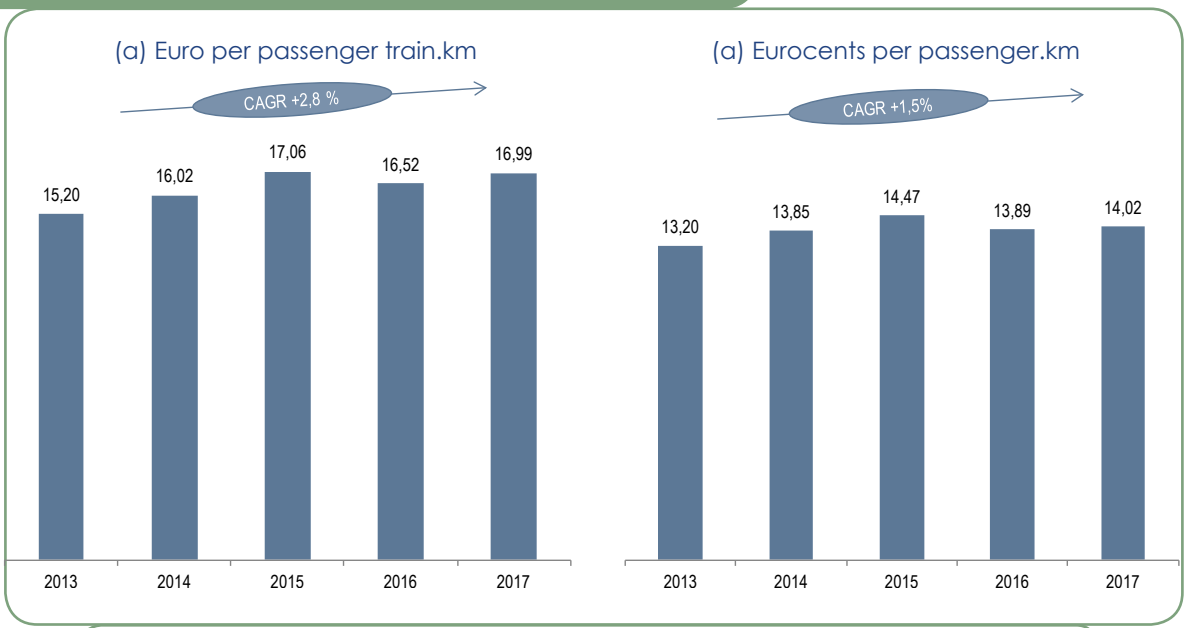
Domestic incumbents are still the biggest market players in passenger rail services. Their market share, based on passenger-km, has remained almost at a constant level in the past three years. It is interesting that the market share of foreign incumbents has grown slightly, while non-incumbents have seen a slight decrease in their market shares in the same period.

In 2017, domestic incumbents' market share was much higher on the passenger market (76%) than on the freight market (59%).

Economic performance indicator of passenger railway undertakings

The average revenue of passenger railway undertakings peaked in 2015. After a slight fall in 2016 the average revenue has risen to 16.99 Euro per train-km in 2017. Average revenues per passenger-km show a similar trend, rising in 2017 following a decrease in 2016.

Figure 19 – Passenger operators' revenue per train-km and per passenger-km from 2013 to 2017



15 countries are included (Belgium, Czech Republic, Denmark, Estonia, France, Italy, Luxembourg, Republic of North Macedonia, Netherlands, Norway, Romania, Slovakia, Slovenia and Switzerland are missing).

07

Competition for the passenger market with focus on the procedures for award of public service contracts

Introduction

The Fifth Annual Market Monitoring Report[10] outlined the situation in each market in 2015 both in terms of competition in[11] and for[12] the market. This review allowed to observe whether there are legal barriers to the market entry of railway undertakings which are not related to the domestic incumbent.

This report analyses the degree of participation of incumbent operators[13] in public tenders and/or direct awards of Public Service Contracts (PSC)[14] for rail services, trying to understand the level of supremacy of incumbent operators. The aim of this focus is to deepen the analysis from the Fifth Annual Market Monitoring Report and to gather data about the positioning and success rate of incumbents and other railway undertakings in winning public service contracts, either through competitive tenders or direct award.

Public Service Obligations (PSO) are determined by the competent authorities to ensure public passenger transport, social mobility and cohesion. These PSO are defined in a PSC and receive financial support from public authorities.

[10]The fifth report was published in March 2017, it can be found on the IRG-Rail website.
[11]Open access policy, that is to say, an opening of the market to allow several operators to run trains on the same line.
[12]When only one operator is selected to access to a railway infrastructure, where competitive pressure occurs ex ante, i.e., each time the auction process is renewed.
[13]Incumbent companies are railway undertakings that were part of a state-controlled railway monopoly (or still are), including all related companies with a current ownership relation to the incumbent railway undertaking (as stated in IRG-Rail Guidelines on Market Monitoring, June 2016).
[14]PSC is a contract with public service requirements and subsidies paid to the operators to offset relevant operation deficit. The contract can be awarded directly by negotiation or following an open call for tenders.

Regulation (EC) 1370/2007[15] (also known as PSO-Regulation relies on the principle of competition for the market, as opposed to competition in the market. The Regulation also sets out that where an authority decides to grant an operator exclusive rights and/or compensation in return for the discharge of PSO, it has to do so within the framework of a public service contract. As a general rule, a PSC is to be awarded after a competitive tender procedure. However, the PSO-Regulation provides for derogations and allows direct awards of PSCs under certain conditions.

The adoption in 2016 of the Fourth Railway Package, amending the PSO-Regulation, enshrines open access on all routes and the opening of domestic passenger markets with mandatory competitive tendering for PSO contracts.

Thus, in light of the lack of competition when awarding public service contracts for rail services, the Fourth Railway Package has modified the PSO-Regulation provisions, allowing direct award until 24th December 2023, and introducing mandatory[16] competitive tendering for PSC award after this deadline. Technically, there will be a ten-year transition period after the entry into force of the new rules on PSO contracts since those that are directly awarded before December 2023 may continue until 2034. Open-access operators will be permitted to run services in competition with the incumbent operator on domestic routes from December 2020, subject to analysis of the economic impact on PSO services.

Competitive tendering of public service may bring a certain number of benefits to every stakeholder. For passengers, greater choice and better quality of services are often cited. Regarding the Public transport authorities, the process can help reduce functioning costs related to these rail services. It may also favour higher level of responsibility and stronger commitment of these public entities when awarding public service contracts. With reference to the whole sector, this is the higher competitiveness induced by the presence of new players that would allow railway undertakings to regain multimodal market shares.

The rail sector is characterized by the historically dominant position of incumbent companies. In 2017, national incumbents still hold very high market shares (76% of passenger-km as shown in Figure 18). However, with the market opening, the European railway sector has been gradually moving from a monopoly position towards a competitive environment, with new entrants active in the market.

A significant part of domestic passenger rail services across the European Union are either provided under PSCs directly awarded or are operated under exclusive rights following a competitive tender (65% of passenger-km in 2017 as shown in Figure 16). This represents competition for the market. The rest is managed through competition in the market, with several operators having the possibility of providing services on a commercial basis on the same route.

Evidence shows that there is a clear presence in almost every markets of a state-owned incumbent railway operator, particularly where passenger demand and passenger services dominate the national rail network. Even in countries where market opening has been extended to all train services, the state continues to be a major stakeholder.

Methodology

Data collection has been the main challenge for preparing this focus, since some Regulatory Bodies have not been able to have provide all the information required to allow an in-depth analysis of each country, such as the number and type of bidders or the scope of contracts.

Data was collected via a questionnaire which included two tables – one for the regional and the other for long-distance services.

It is worth noting that eight countries do not have segmentation between regional and long-distance services (namely Croatia, Greece, Hungary, Lithuania, Luxembourg, Romania, Slovenia and the Republic of North Macedonia). For those countries, detailled information are provided in the regional services part.

Each type of services was analysed at two levels:

– first for directly awarded contracts covering rail passenger services active in 2017;
– second for contracts awarded through competitive tenders, with services commenced between 2013 and 2017.

The survey allowed a systematic and objective evaluation of evidence, helped understanding the popularity of competitive tenders versus direct awarding and clarifying the market position of the incumbents and other railway undertakings.

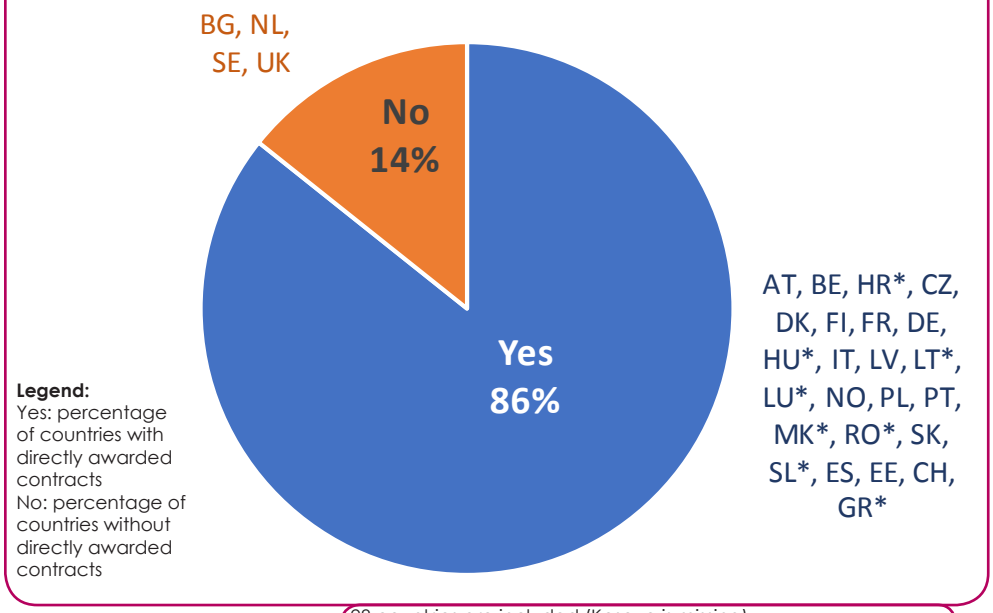
[15]Regulation (EC) 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road and repealing Council Regulations, article 5 (6).
[16]Some exemption cases are defined to allow direct award after 25th december 2023 (see Article 5 of Regulation (EC) No 1370/2007 modified by Regulation (EU) No 2016/2338.

Regional services

Regional railway services are mainly governed by PSO contracts concluded between the "competent authority" and the railway undertaking. Direct awards appear to be the preferred process.

Almost all countries award contracts directly to railway undertakings in 2017 (86%), while 32% of the countries used tender awarding procedures for services commence between 2013 and 2017. It is worth noting that five countries (Czech Republic, Germany, Macedonia, Poland and Portugal) apply both procedures.

Figure 20 – Countries that awarded contracts directly to railway undertakings, with active services in 2017, for regional services



As shown in Figure 21, competitive tendering has been used in nine countries with an aim to create competition for the market and hence to exploit the benefits that competition can bring in terms of lower costs, higher efficiency, greater quality and innovation. When properly designed and managed, competition between bidders can significantly reduce the amount of financial public support needed. It is worth noting that the majority of the contracts awarded by tendering procedure were attributed to a non-incumbent RU (56% over the 140 contracts, see Table 2).

Figure 21 – Countries with contracts awarded via competitive tenders to railway undertakings, for services commenced between 2013-2017, for regional services

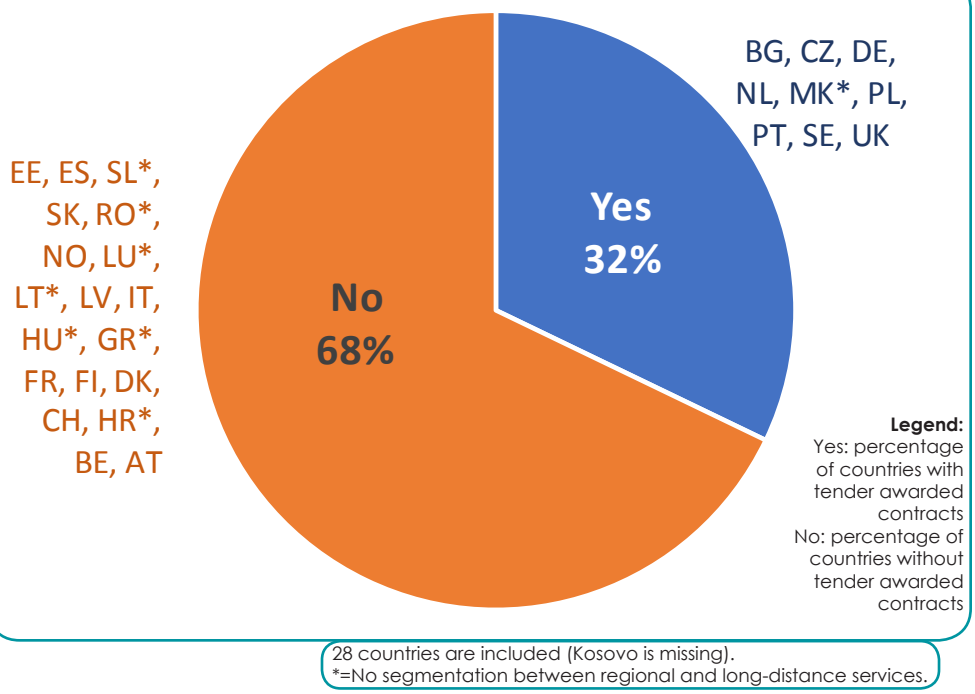
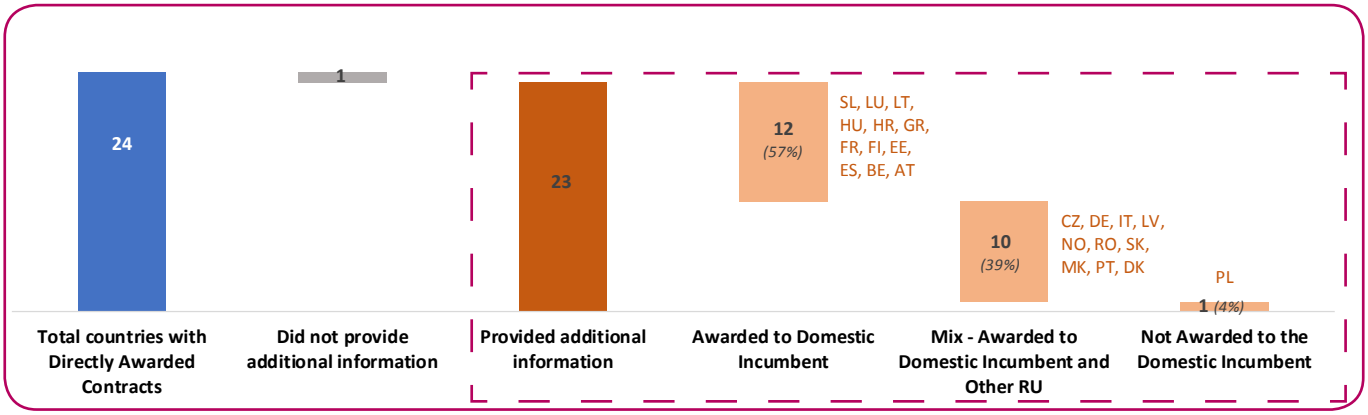


Figure 22 – Details regarding the countries that stated having directly awarding contracts in regional services



Regarding the countries that directly awarded contracts to domestic incumbents and other railway undertakings:

- **In two countries (Czech Republic and Romania) the award to domestic incumbent is less than 25% of the total contracts awarded;**
- **In two countries (Germany and Italy), the contract for public services was awarded to the domestic incumbent in more than half of the cases;**
- **In the six other countries (Denmark, Latvia, Norway, Portugal, the Republic of North Macedonia and Slovakia), 50% of the contracts have been awarded to the incumbent and 50% to other railway undertakings.**

Usually the competent authority awarding public service contracts is a state authority. However, there are some cases where the regional authority is responsible for such awards.

The average duration of the contracts is around seven years.[17] This is in line with the 2007 PSO-Regulation that sets a maximum duration of ten years for contracts that are directly awarded. PSCs have to last long enough to allow amortisation of set-up costs and investments.

[17]There are some cases of renewals, and these are contracts with shorter durations.

Table 1 – Summary of directly awarded contracts, active in 2017, for regional services

Country	Average Duration of Contract (years)	Contracting Authority	Directly Awarded Contracts	
			Domestic Incumbent	Other RU
Austria	10	State Authority	1	-
Belgium	4[1]	n.a.	1	-
Croatia[2]	n.a.	Ministry of the Sea, Transport and Infrastructure	1	-
Czech Republic	10-15	Regional Authorities	1	3
Denmark	8-10	Danish State	1	1
Estonia	5	Ministry	1	-
Finland	5	Ministry of Transport and Communi-cations/Helsinki Regional Trans-port Authority	2	-
France	8	Regional Authorities	18	-
Germany	4	Regional Authorities	33	15
Greece[2]	5	State Authority	1	-
Hungary[2]	10	Ministry for Innovation and Technology	2	-
Italy	6	Regional Authorities	24	10
Latvia	1-15[6]	Council of Public Transport	1	1
Lithuania[2]	1	Ministry of Transport and Communications	1	-
Luxemburg[2]	14	Ministry for Mo-bility and Public Works	1	-
Norway	6-15	Ministry of Transport and Communications	1	1
Poland	1-4	Regional Authorities	-	13[7]
Portugal	n.a.[3]	Secretary of State for Infrastructure and Planning	1	-
Republic of North Macedonia[2]	3	Ministry of Transport and Communications	1	1
Romania[2]	4	Railway Reform Authority	1	6
Slovakia	10	Ministry of Transport and Construction	1	1
Slovenia[2]	14	Ministry of Infrastructure	1	-
Spain	10[4]	Ministry of Transport and Regional Authorities	1	-
Switzerland[5]	2	Federation and Cantons	n.a	n.a
Total			**96** *(65 %)*	**52** *(35 %)*
			148	

[1]Extension of previous contract; [2]No segmentation between Regional and Long-distance services; [3]In 2017 there was an exclusive right granted by law without a contract; [4]This duration refers to the contract between the incumbent and the Ministry of Transport; [5]Multiple contracts were directly awarded, however the Regulatory Body does not have the exact number; [6]In Latvia there are two seperate types of contracts: i) for the Domestic incumbent (Pasazieru vilciens JSC), duration of 15 years, and ii) for regional narrow-gage operator (Gulbenes-Aluksnes banitis Ltd.), duration of 1 year (annually renegotiated); [7]These 13 other RUs in Poland are not competitors, but they are publicly-owned regional RUs.
n.a. - information not available.

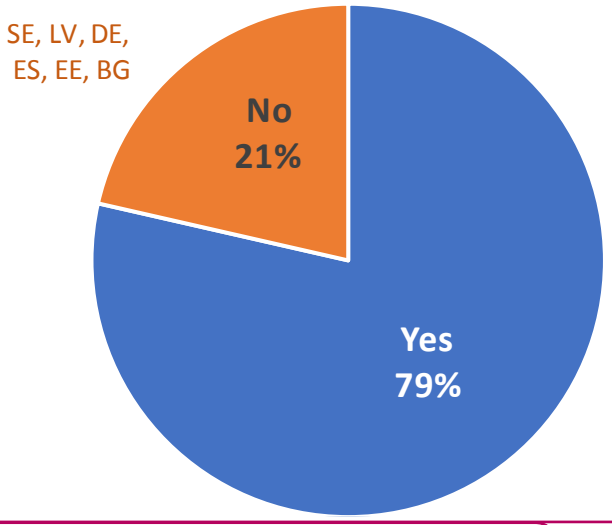
Table 2 – Summary of the tenders awarded, between 2013-2017, for regional services

Country	Average Duration of Contract (years)	Contracting Authority	Tender Awarded	
			Domestic Incumbent[1]	Other RU
Bulgaria	n.a.	Ministry of Trans-port	1	-
Czech Republic	15	Regional Autorities	1	-
Germany	9	Regional Authorities	54	48
Netherlands	10-15	Local Authorities	1	11
Poland	n.a.	Regional Authorities	-	1
Portugal[3]	6	Secretary of State for Infrastructure and Planning	-	1
Republic of North Macedonia[2]	4	Ministry of trans-port and Communications	1	-
Sweden	8	Regional Authorities	4	7
United Kingdom	9	Department for Transport	-	10
Total			**62** *(44 %)*	**78** *(56 %)*
			140	

[1]Domestic Incumbent won; [2]No segmentation between Regional and Long-distance services; [3]Although there was no tenders awarded in the period of analysis, the contract was renegotiated several times being consi-dered in this analysis.
n.a. - information not available

Long-distance services

Figure 23 – Countries that directly awarded contracts to railway undertakings, with active services in 2017, for long-distance services

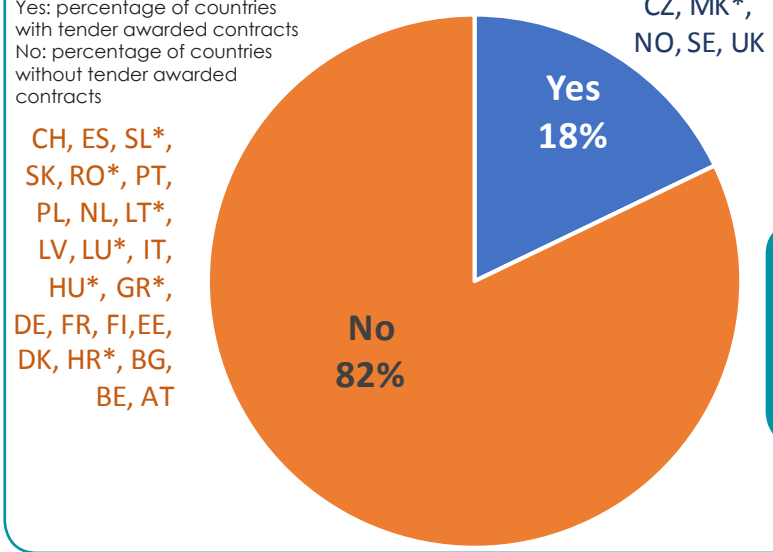


Legend:
Yes: percentage of countries with directly awarded contracts
No: percentage of countries without directly awarded contracts

The long-distance passenger rail market in most countries is still dominated by the state-owned incumbent. The UK is an exception with several train operating companies (TOCs) active on long-distance routes (Figure 25 and Table 4). Indeed, 22 countries granted directly contracts for long distance service in 2017 (Figure 23).

28 countries are included (Kosovo is missing).
*=No segmentation between regional and long-distance services.

Figure 24 – Countries with tender awarded contracts to railway undertakings, for services commenced between 2013-2017, for long-distance services

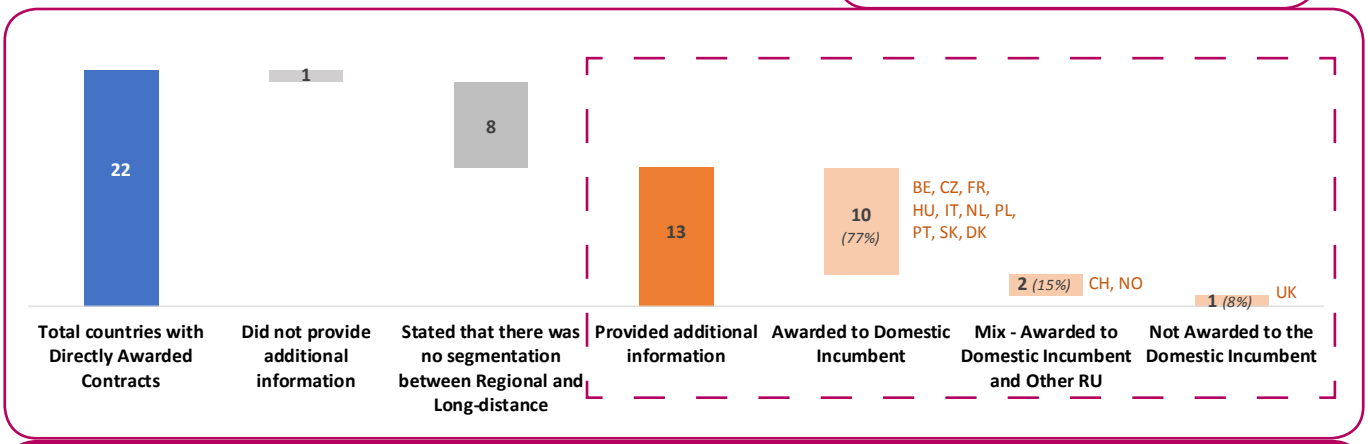


Considering only those Regulatory Bodies that stated having directly awarded contracts (a total number of twenty two countries), thirteen gave some additional information allowing to confirm for all of them but the UK the involvement of the incumbent operator in these directly awarded contracts.

28 countries are included (Kosovo is missing).
*=No segmentation between regional and long-distance services.

Figure 25 – Details regarding the countries that stated having directly awarding contracts in long-distance services[18]

The information for those countries that do not have segmentation between regional and long-distance services is included in figure 22.



The contracting authority responsible for awarding long-distance public service contracts is always a state authority. The average duration of the contracts is around nine years.

[18]The information for countries that do not have segmentation between regional and long-distance services (Croatia, Greece, Hungary, Latvia, Luxembourg, Republic of North Macedonia, Romania and Slovenia) is included in Figure 22.

Table 3 – Summary of directly awarded contracts,active in 2017, for long-distance services[19]

Country	Average Duration of Contract (years)	Contracting Authority	Directly Awarded Contracts	
			Domestic Incumbent	Other RU
Belgium	4	n.a.	1	-
Czech Republic	10	Ministry of Transport	1	-
Denmark	10	Danish State	1	-
Finland	10	Ministry of Transport and Communication	2	-
France	5	State Authority	1	-
Italy	10	Ministry of Transport and Infrastructure/Ministry of Economy	1	-
Netherlands	10	Ministry of Transport	1	-
Norway	6	Ministry of Transport and Communication	1	1
Poland	1	State Authority	2	-
Portugal	n.a.(1)	Secretary of State for Infrastructure and Planning	1	-
Slovakia	10	State Authority	1	-
Switzerland	10	Federal Office for Transport	1	-
United Kingdom	28	Department for Transport	-	2
Total			**14** *(82 %)*	**3** *(18 %)*
			17	

(1)In 2017 there were an exclusive right granted by law without a contract.
n.a. - information not available.

Table 4 – Summary of the tenders awarded, between 2013-2017, for long-distance services[20]

Country	Average Duration of Contract (years)	Contracting Authority	Tender Awarded	
			Domestic Incumbent(1)	Other RU
Czech Republic	10	Ministry of Transport	1	-
Norway	6	Ministry of Transport and Communication	-	1
Sweden	5	Swedish Transport Administration	1	-
United Kingdom	12	Department for Transport	-	2
Total			**2** *(40 %)*	**3** *(60 %)*
			5	

(1)Domestic Incumbent won

Final remarks

The European railway passenger market is largely dominated by state-owned companies. The dominance of the incumbent operators is visible in most of the countries analysed regardless the market (regional and long-distance markets) or the type of contracts awarding procedure (directly or tendering procedure). The Fourth Railway Package which introduces the liberalisation of domestic rail passenger services plays an important role in allowing the market to change. So as to enhance the competitiveness of the European railway sector, it is important to wipe out all the barriers to the market entrance to allow the appearance of new railway undertakings on these markets.

Effective competition in the passenger market is still very limited. Only a small number of countries had opened their domestic passenger market before the adoption of the Fourth Railway Package. Even where public tenders have been held, direct awards have often been necessary due to a lack of participation by non-incumbent operators; the latter being discouraged by de-facto barriers to entry, such as the low level of compensation for the delivery of public service obligations, or the absence of measures facilitating access to rolling stock.[21]

After analysing the information collected from the different countries, we observe that:

- Durations of PSCs differ. Contract duration varies considerably and ranges between one and 15 years, with an average of nine years. Some PSCs are quite short even in the case where they are capital intensive (due to large investments in rolling stock that are usually amortised in about 20 to 30 years). Short durations do not allow for any return on investment nor for any long-term planning of private operators. Conversely, long PSC durations usually represent high risk to authorities awarding the contracts, so a balance should be achieved, in order to maximize return for both parties.
- Competitive tenders attract between one and seven bids per tender.

To conclude, although progress has been made in opening up the passenger market, it remains patchy across Europe. State supported incumbent operators remain dominant in most countries and the rail market share in passenger traffic remains disappointingly low despite some growth in traffic.

With the Fourth Railway Package entry into force, direct awards will still be allowed under certain circumstances, albeit subject to strict contractual requirements for service quality, frequency, and capacity. Competitive tendering will become more frequent, with the sector having to adjust to new dynamics. The big challenge for the railway sector is therefore to adapt to the new legislative environment and to embrace the above mentioned reforms in order to increase its market share.

[19]Information for the countries that do not have segmentation between regional and long-distance services (Croatia, Greece, Hungary, Lithuania, Luxembourg, Republic of North Macedonia, Romania and Slovenia) is already mentioned in table 1 and therefore information for these countries are not repeated in this table. Regardin Austria, althought this country had directly awarded contracts, given the lack of information, it was not included in the table.
[20]The information for Republic of North Macedonia, is mentioned in table 2, since this country does not have segmentation between regional and long-distance services.
[21]These topics are not explored in this report.

08

Incumbent's strategies to access rail passenger markets abroad

Introduction

This chapter aims to present the incumbents' strategies to access rail passenger markets abroad. The subject is approached from two different angles. The first analysis, based on the list of the railway undertakings operating in each country, seeks to identify the market players in the rail passenger market. In the second part, by listing all the subsidiaries of each country's incumbent, we attempt to specify the incumbents' types of participation in other railway undertakings abroad. This analysis allows us to focus on the railway undertakings in which the incumbents have shares and to what extent their activities relate to the transport sector. We are interested in whether these operators provide PSO or non PSO services, regional, long-distance or international services, whether they are involved in other type of passenger transport services such as urban transport, coach, carpooling or air services, and whether they offer other key services abroad like ticketing or rail station management.

Those two analyses will give a better understanding of the relationship between incumbents and alternative railway undertakings at the European level and help us to draw a map of these relations in Europe. Indeed, the collected data presents all countries in Europe where subsidiaries of an incumbent have their headquarters and/or operate rail services.

It is worth noting that the list and the counting of the railway undertakings mentioned in this focus may differ from the ones used in other chapters of the report and those presented in the Fifth Annual Market Monitoring report[22] which focused on the market players. In this chapter, all the railway undertakings that entered a country, even when they are under the safety certificate of the domestic incumbent, are considered. This gives an exhaustive overview of the partnerships that exist in Europe between railway undertakings and more specifically between incumbents. Furthermore, cross-border activities – defined here as activities made by a railway undertaking to connect its network coverage to the nearest foreign station – are also taken into account. Such specific activities are not only related to operational issues but also reflect agreements between companies; their consideration is thus necessary.

Besides, by presenting railway undertakings in all countries, a company is listed in each of the different countries where it operates. For instance, a railway undertaking transporting passengers in both Italy and Austria is counted once in Italy and once in Austria when the railway undertakings are counted at country level. At the European level, we counted the total number of distinct railway undertakings.

Only 27 countries are included in this focus (all countries except the Czech Republic and Republic of North Macedonia).

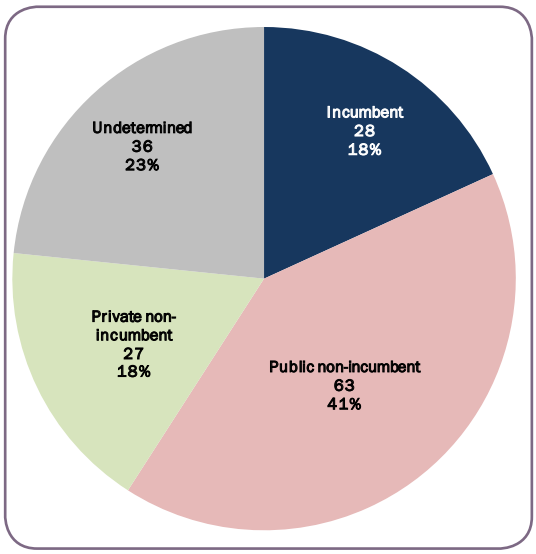
[22]The Fifth Annual Market Monitoring report can be found on IRG-Rail website.

Total passenger rail traffic and market structure

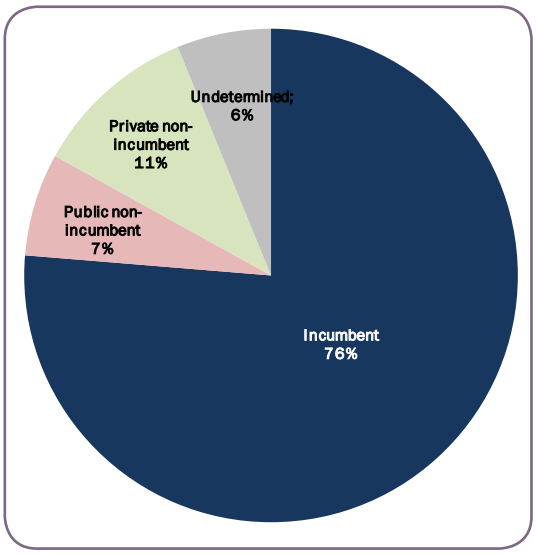
As of 31 December 2017, 278 railway undertakings[23] offer passenger services in Europe, organized in 154 ownership groups.[24] In 2017, they realized more than 3.5 million of train.km. We also consider in this section ownership groups. An ownership group assembles all the railway undertakings that belong to the same mother company, in which the latter has majority shareholding.[25] Groups can be held by historical incumbents, private or public non-incumbents.[26] Figure 26 shows the breakdown of the European passenger rail market by type of RUs and Figure 27 by ownership group.[27]

Figure 26 – Breakdown of the European passenger rail market in 2017 by type of railway undertakings

(a) according to the number of ownership groups



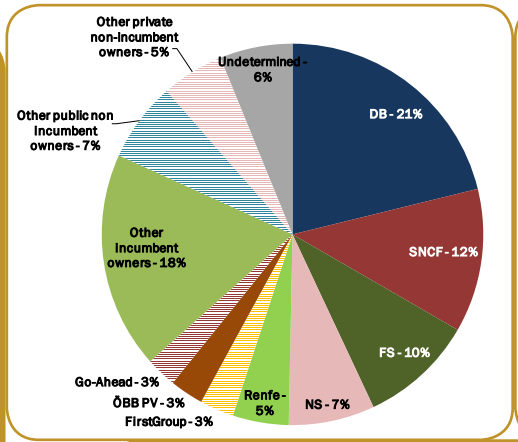
(b) according to the volume of train-km



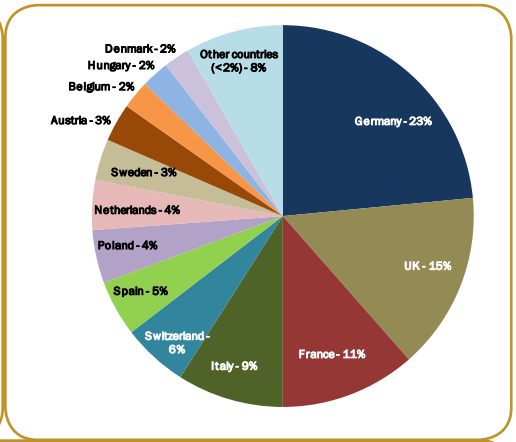
The European passenger rail market is clearly dominated by incumbents. Overall, 28 incumbent groups[28] (18% of the total number of railway undertakings) are transporting passengers in Europe but make up to 76% of the market volume, equivalent to more than 2.7 billion train-km.

Figure 27 – Breakdown of the European passenger rail market in train-km in 2017[29]

(a) By ownership groups



(b) By countries



Measured in train-km, the five biggest railway undertaking groups are found in this category: DB (German incumbent), SNCF (French), FS (Italian), NS (Dutch) and Renfe (Spanish). Together, they account for more than 50% of the traffic realized (Figure 27 (a)).

Non-incumbent railway undertakings groups share around 18% of the total passenger traffic, represented by the striped parts of the graph. Among them, one can find public-owned non-incumbents (60 groups, 7% of market shares) as well as private-owned non-incumbents (30 groups, 11%).

It is worth noting that the UK is the second biggest country in terms of train-km. However, most of the traffic in this country is operated by foreign incumbent or non-incumbent railway undertakings. With regards to the Dutch market, while the historical operator NS appears to be the fourth incumbent on the European market (Figure 27 (a)) by concentrating 7% of the train-km, the Netherlands ranks eighth in terms of traffic volume (4% of the European total train-km – Figure 27 (b)).

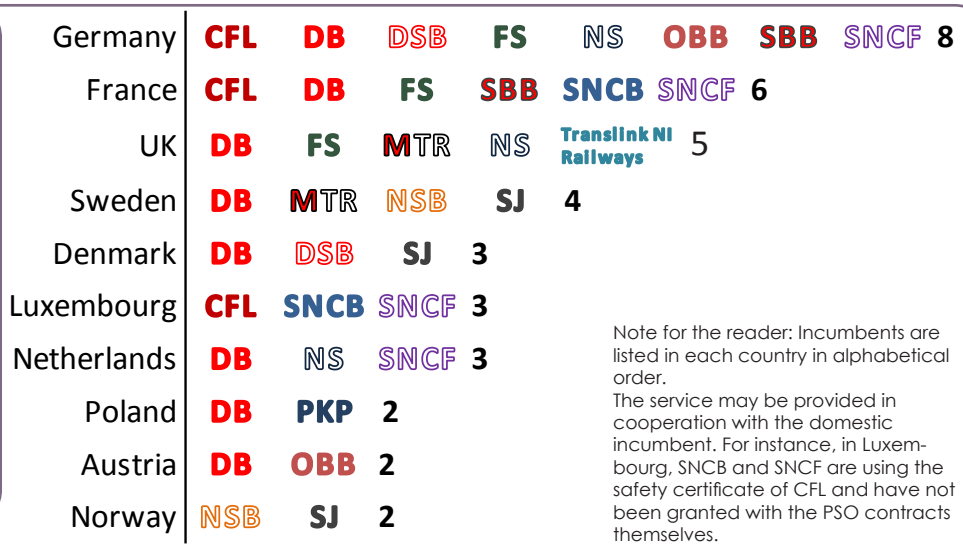
[23]Total number of distinct railway undertakings in 2017, i.e. no double-counting of RUs operating in multiple countries. However, duplicates may still exist since partial information from Switzerland do not allow us to identify any RUs active in this country.
[24]Due to incomplete information from Switzerland, the number of ownership groups may be improperly counted. It is then supposed that there are as many RUs as groups in Switzerland.
[25]Ownership of 50% or more of stakes.
[26]A complete list of RUs and their type can be found in the Annex.
[27]The undetermined class is due to missing information from Switzerland.
[28]There is one incumbent per IRG-Rail country studied in this chapter (i.e. 27 incumbents) and one non-member incumbent (Hong-Kong) which provides services in the countries studied (Sweden and UK).
[29]Note that around 6% of the total train-km cannot be attributed to any groups since Swiss data are not disclosed.

Incumbents' spread in Europe

In this part, the focus is only on countries where there are at least two incumbents operating. Therefore, countries where there is no foreign incumbent offering services besides the domestic incumbent are excluded. Note that all countries have at least their historical incumbent active in their market.[30] PSO and non-PSO services are analyzed separately.

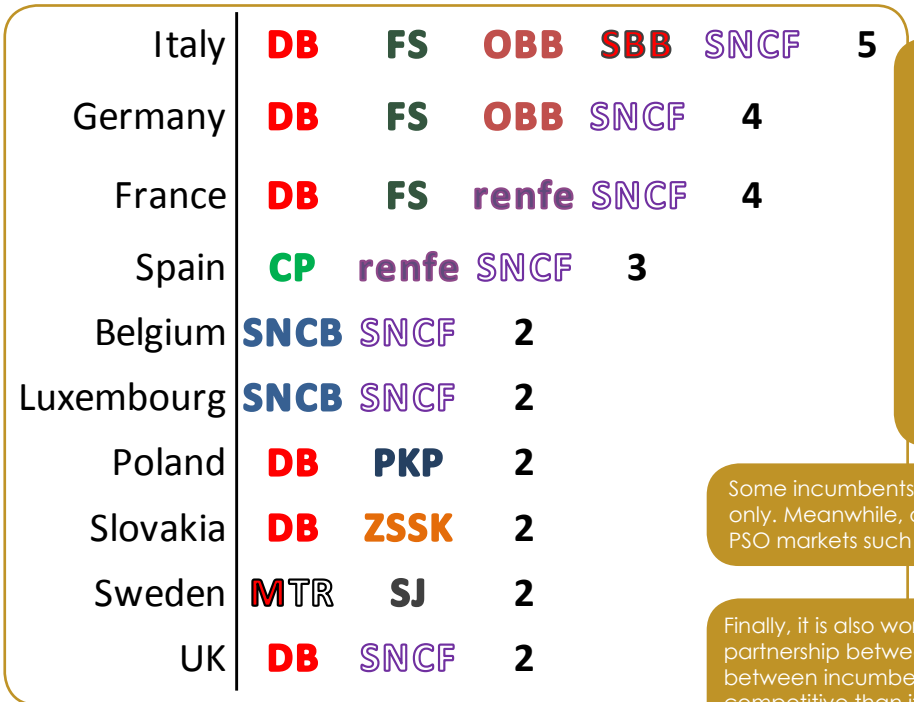
Figure 28 – Number of incumbent groups realizing PSO services by country

Concerning PSO services, Germany, with its liberalized market, attracts the most incumbents. There are seven foreign incumbents beside DB that perform PSO services on the German railway (Figure 28). France ranks second by having 6 incumbents serving the market. At the same time, DB is the most active incumbent, realizing PSO activities in eight countries outside its domestic market. The French SNCF occupies the second position by operating in four countries, followed closely by the Italian FS with three countries entered.



Note for the reader: Incumbents are listed in each country in alphabetical order.
The service may be provided in cooperation with the domestic incumbent. For instance, in Luxembourg, SNCB and SNCF are using the safety certificate of CFL and have not been granted with the PSO contracts themselves.

Figure 29 – Number of incumbent groups realizing non-PSO services by country



Note for the reader: Incumbents are listed in each country in alphabetical order.

On the non-PSO service side, just like the PSO market, Germany and France also lead the ranking of countries having the most incumbents (Figure 29), both with four incumbents. The French incumbent, SNCF, is quite involved in non-PSO activities abroad. Beside France, it operates in six other European countries. DB stands just behind with the total number of foreign markets entered equaling four.

Some incumbents like the Dutch NS provide PSO services only. Meanwhile, other incumbents are only active in non-PSO markets such as the Spanish.

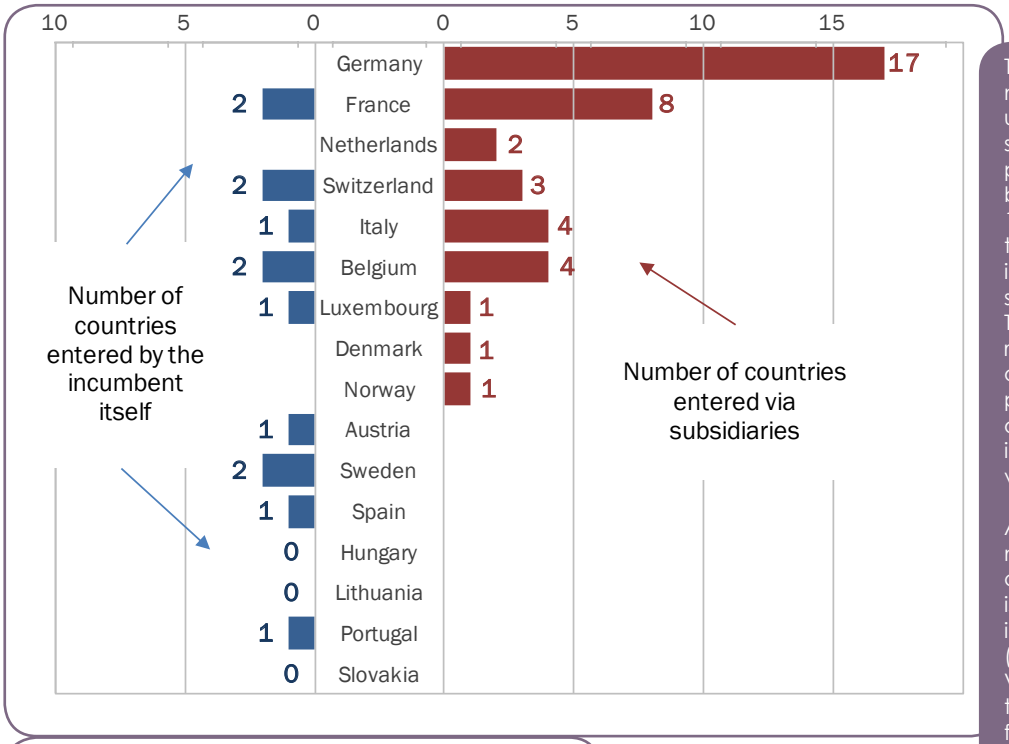
Finally, it is also worth noting that the existence of partnership between railway undertakings, especially between incumbents, makes the rail passenger market less competitive than it seems. Indeed, it is not rare that a foreign incumbent cooperates with the domestic incumbent to perform cross-border activities or realize a common service between related countries. In France for instance, CFL (Luxembourg) operates cross-border PSO services in partnership with SNCF – the domestic incumbent. This latter, meanwhile, cooperates with Renfe (Spanish) on an international line between the France and Spain.

[30]Including UK, where Translink NI Railways (the North Ireland incumbent) operates.

Strategies of historical incumbents when operating abroad

This part and the next cover the activities of historical incumbents when operating abroad exclusively via their subsidiaries, i.e. companies in which the incumbents have shares. All scales of shareholding are acknowledged[31] provided that the subsidiaries offer at least passenger rail services in 2017. Nonetheless, an incumbent present in foreign markets through a partnership with a domestic operator is not considered in this part of the focus.[32] Furthermore, only active transport companies are taken into account, i.e. those which effectively realized passenger traffic in 2017. As a result, all subsidiaries created but not active in that period are excluded.[33]

Figure 30 – Number of countries entered abroad by incument itself (left-hand side) and via subsidiaries (right-hand side)



The analysis of historical incumbents' participation in railway undertakings operating abroad shows a mixed picture of their presence beyond the domestic border. On the one hand, in 18 out of 27 reporting countries, the domestic historical incumbent does not have any subsidiary abroad (Figure 30). These incumbents do not operate in foreign markets[34] or just offer an international service in partnership with the domestic operators.[35] As a results, nine incumbents operate abroad via subsidiaries.[36]

Among them, some incumbents are only present abroad via its subsidiaries. This is the case of DB (German incumbent), NS (Dutch), DSB (Danish) and NSB (Norwegian). Via its ten subsidiaries, DB is transporting passengers in 17 foreign countries, which is also the highest number of markets entered by subsidiaries.

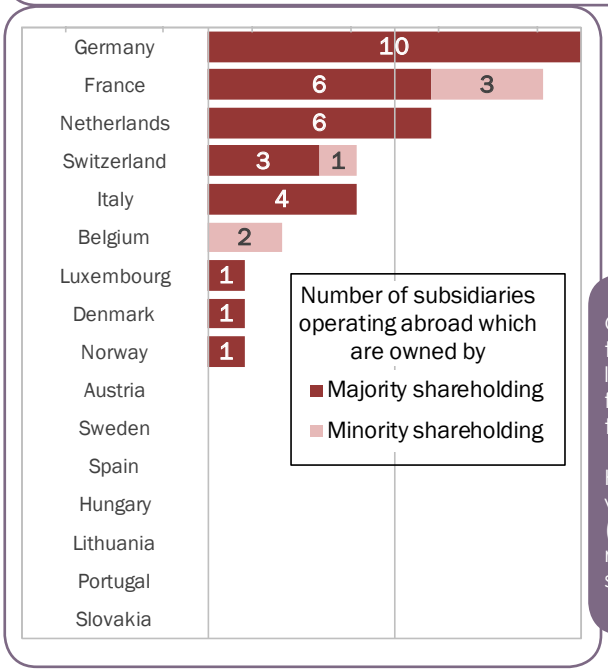


Figure 31 – Number of subsidiaries operating abroad by incument

Other incumbents are active abroad both on their own and via their subsidiaries. One can find in this group the French, Swiss, Italian, Belgian and Luxembourg incumbents. FS (Italian incumbent), for instance, is present in one country by itself and four countries through its subsidiaries, which all are held by a majority stake.

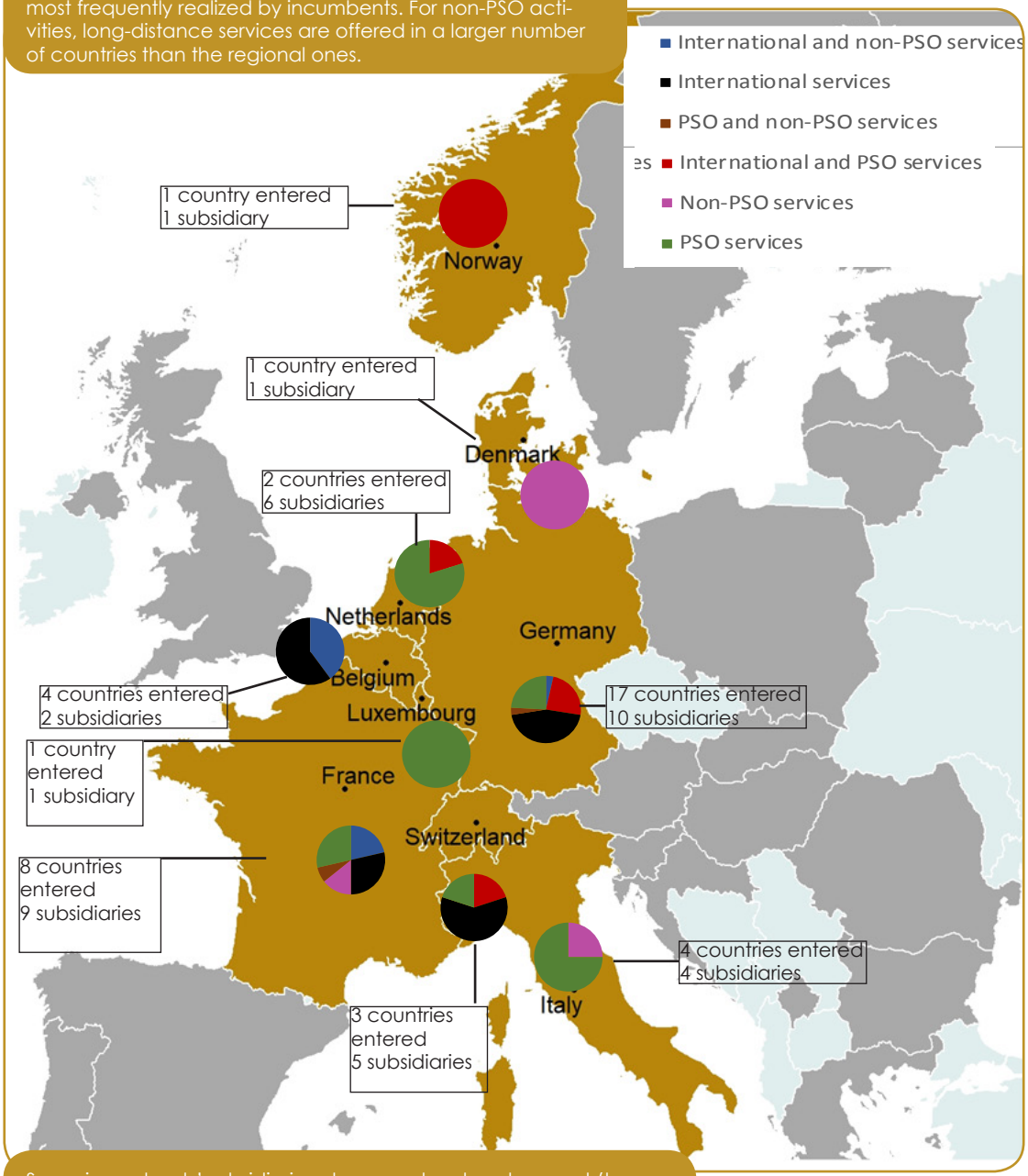
Historical incumbents seem to favour this type of participation when operating in foreign markets except three incumbents: SNCF (French), SNCB (Belgian) and SBB (Swiss). SNCB, the Belgian incumbent, is the only one which has minority shareholding in all of its subsidiaries (Figure 30).

[31]This is particulary different from the first part of the focus where companies held in majority (50%-100%) by an incumbent are counted as related to the incumbent and those which are not (minority shareholdings by incumbents) are listed as non-incumbents.
[32]Renfe, the Spanish incumbent for instance, operates in France not via its subsidary but only in partnership with the SNCF. Renfe and the Portugal's CP also have a similar partnership. It is thus not concerned in our analysis.
[33]For example, the two subsidaries abroad of the Swedish incumbent, SJ AB, are not active yet, so not counted in our analysis.
[34]Like the incumbents of Bulgaria, Croatia, Estonia, Finland, Greece, Kosovo, Latvia and UK.
[35]Such as that of Austria, Sweden, Spain, Hungary, Lithuania, Portugal, Romania, Slovakia and Slovenia.
[36]Namely Germany, France, Netherlands, Switzerland, Italy, Belgium, Luxembourg, Denmark and Norway.

Services offered by historical incumbents when operating abroad

Incumbents - when operating abroad via their subsidiaries - provide a large range of services, from domestic to international traffic, or from PSO to non-PSO activities (Figure 32). It is worth noting that an incumbent may operate in several countries with a subsidiary (such as DB with its subsidiary Arriva) or in a country with distinct subsidiaries (SNCF that operates in Belgium via Thalys and Eurostar). Among domestic services, regional or suburban PSO activities are most frequently realized by incumbents. For non-PSO activities, long-distance services are offered in a larger number of countries than the regional ones.

Figure 32 – Geographical presentation of number of countries entered abroad via subsidiaries and services offered abroad by incumbents' subsidaries[37]



Some incumbents' subsidiaries also operate urban transport (tram, bus, etc.) and coach services, while non incumbents, contrarily, provide carpooling and air services. Besides, other types of complementary services such as ticketing or station management can be cited for instance. Additional information per country can be found on part 8.3 of the working document.

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[37] Detailed flows by country are available in the part 8.2 of the working document.