IRG-rail
Independent Regulators'Group - Rail

Eighth Annual Market Monitoring Working Document

March 2020

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List of country abbreviations and regulatory bodies

Country	Country abbreviation	Participating regulatory bodies
Austria	AT	Schienen-Control GmbH
Belgium	BE	Regulatory Body for Railway Transport and for Brussels Airport Operations
Bulgaria	BG	Railway Administration Executive Agency
Czech Republic	CZ	Transport Infrastructure Access Authority
Croatia	HR	HAKOM
Denmark	DK	Jernbanenaevnet
Estonia	EE	Estonian Competition Authority
Finland	FI	Finnish Transport and Communications Agency (Traficom)
France	FR	Autorité de Régulation des Transports
Germany	DE	Bundesnetzagentur
Greece	GR	Regulatory Authority for Railways
Hungary	HU	Rail Regulatory Body
Italy	IT	Autorità di Regolazione dei Trasporti
Kosovo*	KS*	Railway Regulatory Authority
Latvia	LV	State Railway Administration
Lithuania	LT	Communications Regulatory Authority of the Republic of Lithuania
Luxembourg	LU	Institut Luxembourgeois de Régulation
Netherlands	NL	Autoriteit Consument & Markt
Norway	NO	Statens jernbanetilsyn
Poland	PL	Urząd Transportu Kolejowego
Portugal	PT	AMT - Autoridade da Mobilidade e dos Transportes
Republic of North Macedonia	MK	Macedonian Railway Regulatory Agency
Romania	RO	Consiliul Național de Supraveghere din Domeniul Feroviar
Slovakia	SK	Transport Authority
Slovenia	SI	AKOS
Spain	ES	Comisión Nacional de los Mercados y la Competencia
Sweden	SE	Transportstyrelsen
Switzerland	CH	Schiedskommission im Eisenbahnverkehr
United Kingdom	UK	Office of Rail and Road

Kosovo (KS)*: This designation is without prejudice to positions on status and is in line with UNSCR 1244 (1999) and the ICJ Opinion on the Kosovo declaration of independence.

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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
IE - Ireland
IT - Italy
KS - Kosovo*
LV - Latvia

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

KS - Kosovo*: This designation is without prejudice to positions on status and is in line with UNSCR 1244 (1999) and the ICJ Opinion on the Kosovo declaration of independence.

This Working Document complements the Eighth IRG-Rail Market Monitoring Report[1] by providing country specific data, mostly for 2018, and further context to results presented in the Main Report. The aim of this document is to provide a more detailed description and analysis of the developments in the monitored countries.

The content of the Working Document follows the structure set up in the Main Report, with chapters on the network characteristics of the railway market (Chapter 2), track access charges (Chapter 3), railway undertakings and global rail traffic (Chapter 4), before analysing the rail freight (Chapter 5) and passenger (Chapter 6) markets.

This year's report contains furthermore three focuses. First, the competitive situation in the rail passenger and freight markets is described in Chapter 7. Chapter 8 presents in more detail the barriers to entry in the rail passenger and freight markets. Finally, direct competition in the rail passenger market is analysed in Chapter 9.

Additionally, the Working Document also includes a summary of important regulatory decisions taken in 2018 (Chapter 10).

All data provided in tables and figures in this Working Document are available on the IRG-Rail website[2].

The Working Document can be read as a separate report or in parts for anyone interested in country specific or more detailed information than that provided in the Main Report.

[1] The Eighth IRG-Rail Market Monitoring Report can be found here.
[2] The data are available here.

02

Network characteristics of the railway market

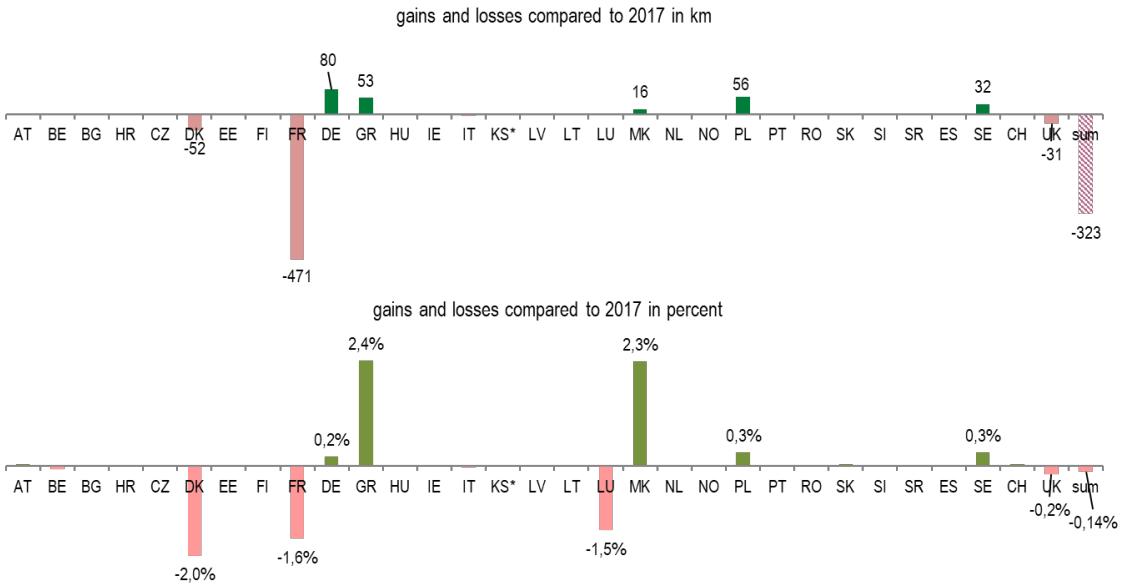
2.1. Total route length

Compared to 2017, only five countries have seen a change in total route length of more than 1%. For Greece, an increase of 53 km (2.4%) is the result of a new electrified high-speed route from Tithorea to Leianokladi. The total route length for Denmark decreased by 52 km (-2.0%) as a consequence of the reduction in route for small local railways.

The total route length in France decreased by 1.6% (471 km) mainly due to effective closures of routes where no passenger traffic had been recorded during the last few years (due to deterioration in infrastructure).

The combined route length across the participating countries decreased by 323 km compared to the previous year, less than 0.2% of the total.

Figure 1 – Evolution of total route length (in km and in %) between 2017 and 2018



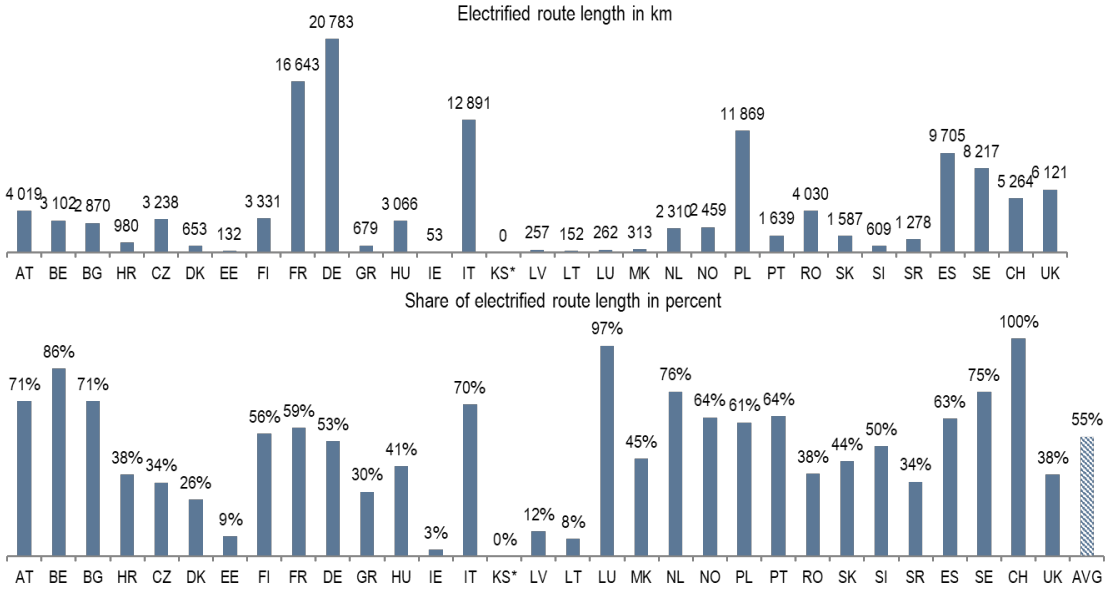
2.2. Electrified route length

The level of electrification of the railway network differs significantly between countries. Switzerland is the only participating country with a fully electrified network, while Kosovo has the only network where no lines are electrified. Overall, 55% of the total route for participating countries is electrified.

Many countries have had small increases in the length of electrified route since 2017, with the largest increases in the United Kingdom (UK), Greece and Poland. These changes are indicative of investment in the rail networks to electrify existing lines and the construction of new electrified routes. The use of electric powered trains is considered to be cleaner as well as more efficient than diesel powered equivalents and may help to increase capacity on existing networks.

Slovakia, Spain and Italy are the only countries in which the length of electrified route has fallen between 2017 and 2018.

Figure 2 – Electrified route length (in km and in % of the total route length) in 2018



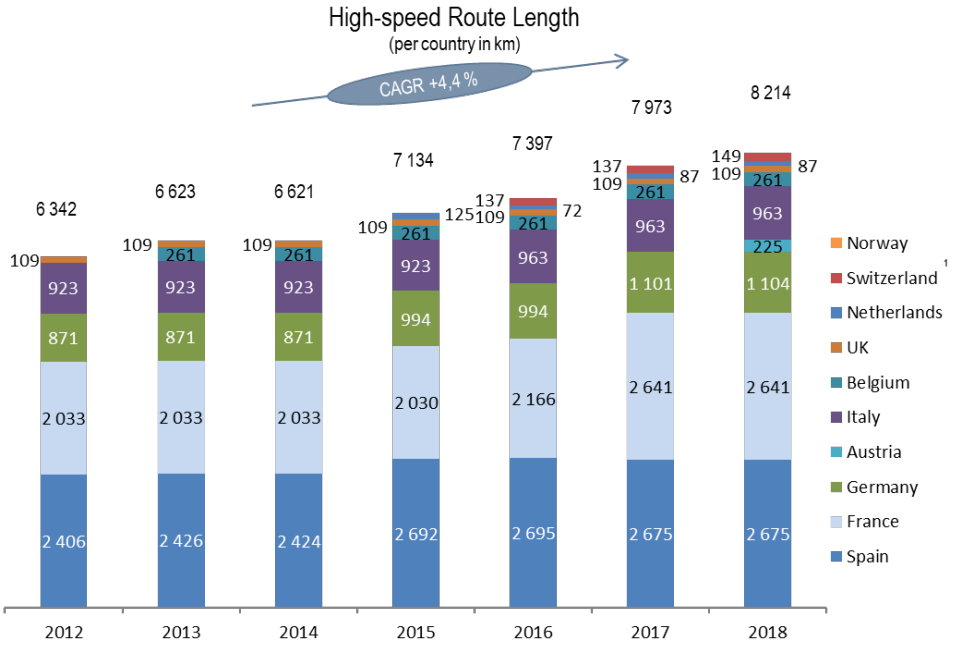
2.3. High-speed route length

Another indicator of the ongoing development of the European railway network is the expansion of high-speed lines. Nine countries now report having high-speed lines as defined in the European Commission Implementing Regulation 2015/1100[3].

The total length of high-speed routes in the participating countries in 2018 was 30% higher than in 2012. This change is primarily driven by the construction of new high-speed lines in France (between Tours and Bordeaux, Nîmes and Montpellier, as well as Le Mans and Rennes), in Germany (on the last part of the high-speed route between Berlin and Munich), and also in Spain.

[3] 'Dedicated high-speed line' means a line specially built to allow traffic to travel at speeds generally equal to or greater than 250 km/h on its main segments; it may include connecting segments where speeds are reduced to take account of local conditions;

Figure 3 – High-speed route length (in km) from 2012 to 2018

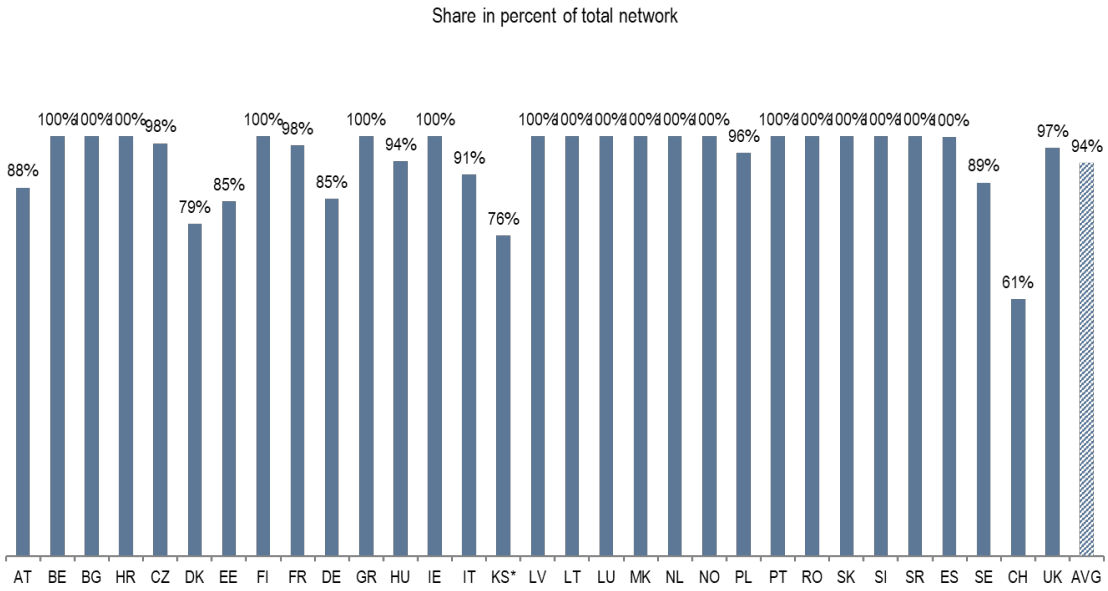


[1] On Swiss high-speed-tunnel-tracks, passenger trains usually run at 200 km/h due to capacity issues

2.4. Main infrastructure manager's share of route length

On average, the main infrastructure managers control 94% of the total route length across the participating countries. In 18 countries the main infrastructure manager controls 100% of the network. This is also the case for both Ireland and Serbia whose data have been included in the market monitoring report for the first time. There have been only marginal changes in the share of route length controlled by the main infrastructure manager since 2017.

Figure 4 – Main infrastructure manager's share of total route length in 2018

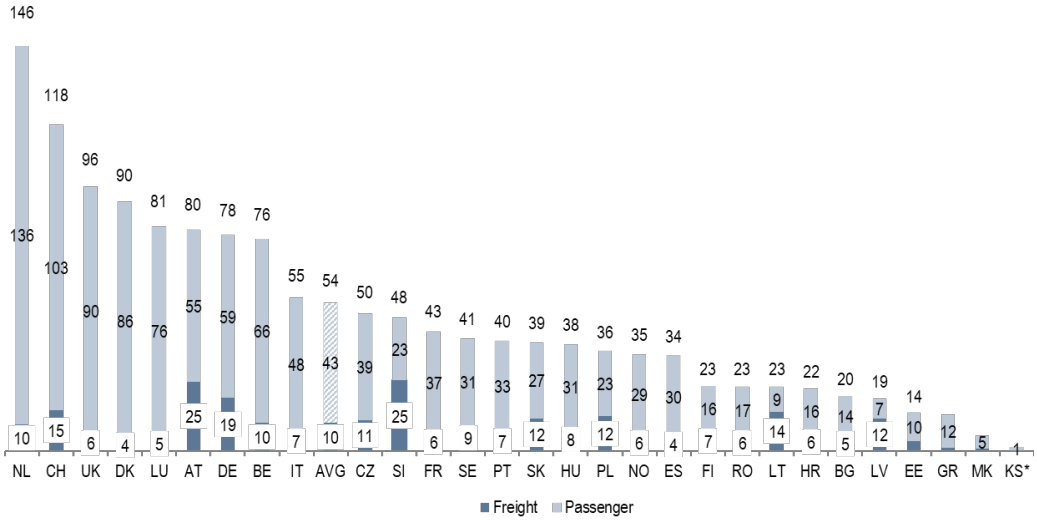


2.5. Network usage intensity

Network usage intensity measures the number of train-km per route km per day and is an indicator of the overall occupancy of the railway network. However, it cannot be considered as a measure for congestion since multi-track lines are not taken into account. This is a measure for the whole country, and it does not account for how usage can vary between different regions within a country.

For the majority of participating countries, the railway networks are much more used by passenger services than by freight services. Lithuania, Latvia and Slovenia are the only countries in which the railway network is utilised more intensively by freight services than by passenger services. The usage intensity for freight is highest in Slovenia, followed by Austria and Germany, which may be a reflection of the level of cross-border freight traffic in these countries. The Netherlands have the highest passenger train density.

Figure 5 – Network usage intensity (train-km per route km per day) in 2018

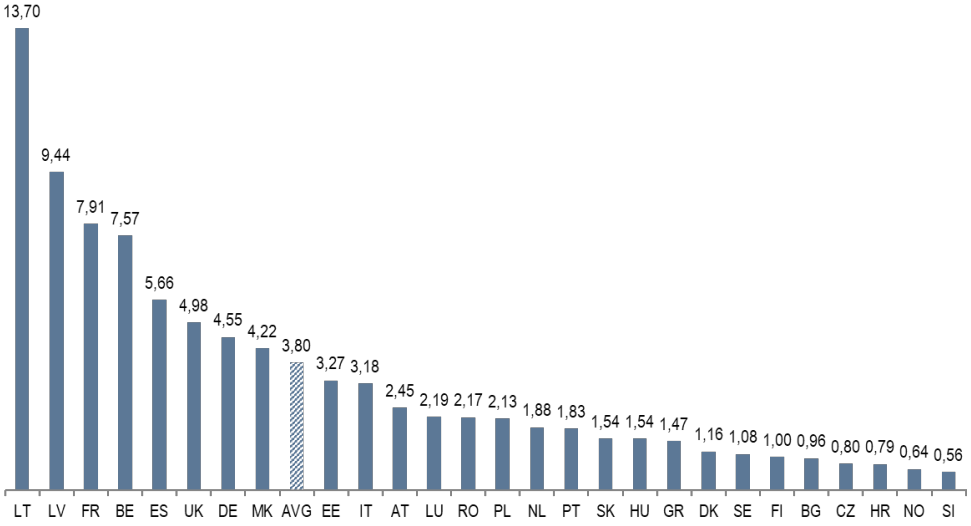


03

Track access charges (TAC) paid by railway undertakings for the Minimum Access Package

In 2015, the European Parliament and Council adopted Directive 2012/34/EU. This Directive requires Member States to harmonize their charging methods. The track access charges (TAC) must contain at least a charge for the Minimum Access Package (MAP), consisting of the direct costs per train-km. They may also include a mark-up, which the infrastructure manager can use to (partially) finance the indirect costs of train services. It is important to note that the figures displayed in this chapter are based on the national aggregate and the trend of the TAC might vary among sectors or regions within a country. Figure 6 shows that in spite of this harmonisation effort, the level of TAC per train-km widely varies among European countries. In Lithuania, railway undertakings (RUs) paid on average Euro 13.70 per train-km in 2018, while RUs in Slovenia paid only Euro 0.56.

Figure 6 – Total track access charges paid by railway undertakings for the Minimum Access Package (in euro per train-km) in 2018[4]



Differences between countries can be explained by many factors, such as the extent to which Directive 2012/34/EU has been implemented and the level of mark-ups. Moreover, there are differences between countries in the railway infrastructure items that are included in the MAP. For instance, at the time the European Court of Justice concluded that passenger platforms are part of the MAP,[5] it appeared that in some countries the costs of platforms were allocated to the passenger stations charge and thus not included in the TAC[6]. Therefore, Figure 6 does not allow for an accurate comparison to be made of track access charges between the monitored markets.

[4] The average value in this graph differs from the one in the Main Report since the samples are different: this one includes all available data for 2018 while the one in the Main Report includes only the countries which provide data for the 2014-2018 period.

[5] European Court of Justice, 10 July 2019, C−210/18, ECLI:EU:C:2019:586 (*WESTBahn Management GmbH v. ÖBB-Infrastruktur AG*).

[6] See the IRG-Rail paper "An overview of charges and charging principles for passenger stations" (2019).

Figure 7 shows that there are large differences across countries in the share of TAC paid for rail freight services and for passenger services. In Spain, 99% of the TAC is collected from passenger services, while in Slovenia and Estonia only 1% is collected from passenger services. In most countries, revenues in terms of TAC are mainly derived from passenger services – on average 88%. Differences in Figure 7 can partially be explained by differences in network usage, as there are more passenger services than freight services in most countries. There are also large differences between the TAC per train-km in monitored countries.

Figure 7 – Breakdown of the total track access charges paid by railway undertakings for the MAP (in euro per train-km) by passenger and freight services in 2018[7]

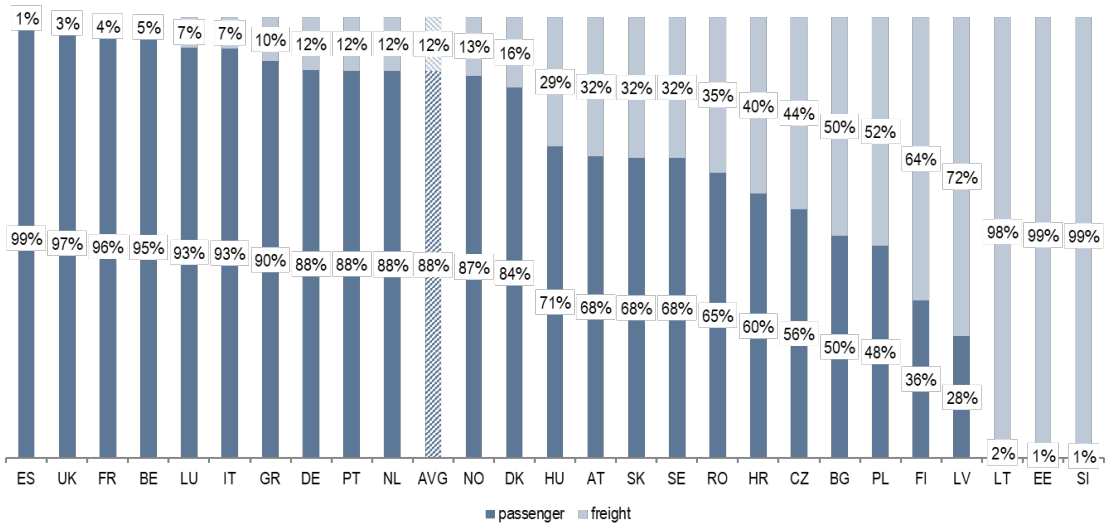
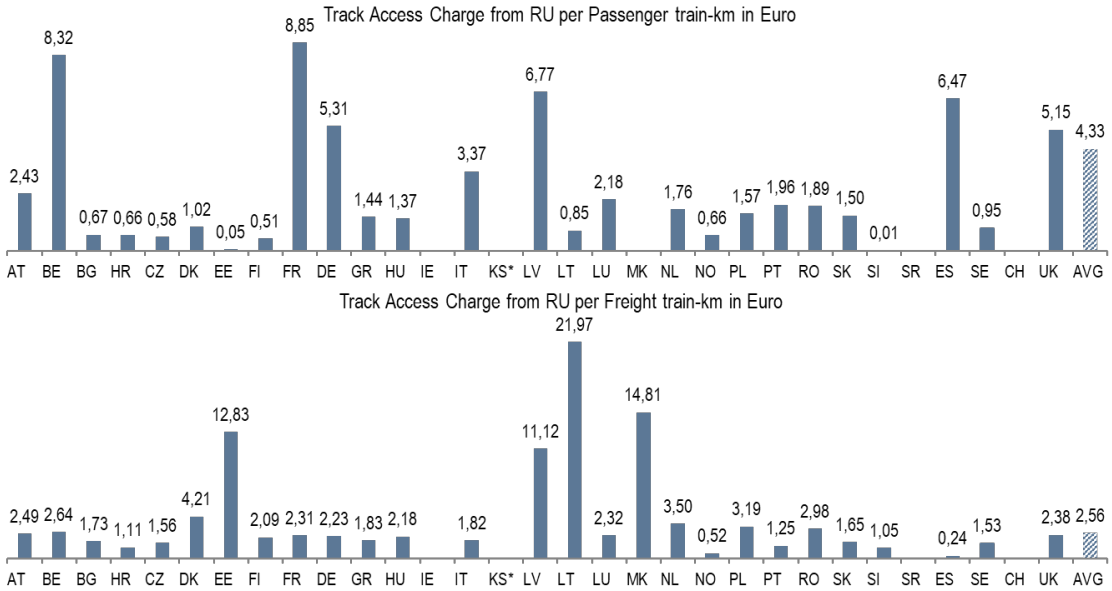


Figure 8 shows the track access charges per train-km per country for passenger and freight services. The figure shows large differences across countries, as well as differences between freight services and passenger services. On average, passenger services paid Euro 4.33 per train-km while freight services paid Euro 2.56. Freight services paid the highest fee in Lithuania, which was Euro 21.97 on average, while passenger services paid the highest fee in France (Euro 8.85 on average). Compared to 2017, the average TAC per train-km slightly increased for passenger services and slightly decreased for freight services.

[7] The average value in this graph differs from the one in the Main Report since the samples are different: this one includes all available data for 2018 while the one in the Main Report include only the countries which provided data for the 2014-2018 period.

Figure 8 – Total track access charges paid by railway undertakings for the MAP (in euro per train-km) for passenger and freight services in 2018[8]



In France there is a large gap between the average TAC per train-km for passenger services and for freight services. On average, freight services paid Euro 2.31 per train-km while passenger services paid about four times as much (Euro 8.85). This difference is the result of the application of relatively high mark-ups in France. Freight services only pay the direct costs of the use of the network, while passenger services also pay a mark-up to partially cover the indirect costs. This is also true for Belgium.

There are also differences compared to last year. In Germany, the TAC for freight services decreased significantly (-27%). Since 2018, rail freight companies have received financial support from the State. The most impactful measure has been the introduction of a “freight TAC funding”, worth Euro 350 million per year, in order to shift transport from road to rail. This measure has been approved by the EU. After coming into effect from the beginning of the second half of 2018, it has reduced TAC by an overall amount of Euro 175 million in 2018. This has led to a 27% drop in average freight TAC in Germany for 2018. It is expected that there will be a further drop in TAC for freight services in 2019 due to a full-year effect.

In Spain, the TAC for passenger services increased by 39%. Until the second half of 2017, the infrastructure manager (IM) was receiving an operational subsidy on urban, suburban and regional passenger services. Since then, the IM has decided to abandon the subsidy in favour of charging the total of the direct costs for those services.

[8] The average value in this graph differs from the one in the Main Report since the samples are different: this one includes all available data for 2018 while the one in the Main Report include only the countries which provided data for the 2014-2018 period.

In the United Kingdom, the income from TACs for passenger services increased by 31%. The main reason for this increase was a rise in revenues from fixed charges paid by passenger services. Fixed income from these services was higher than the amount included in the charging review determination this year as Network Rail earned additional income from the provision of additional services to operators, notably on the London North West route, along with income from services on the Crossrail line.

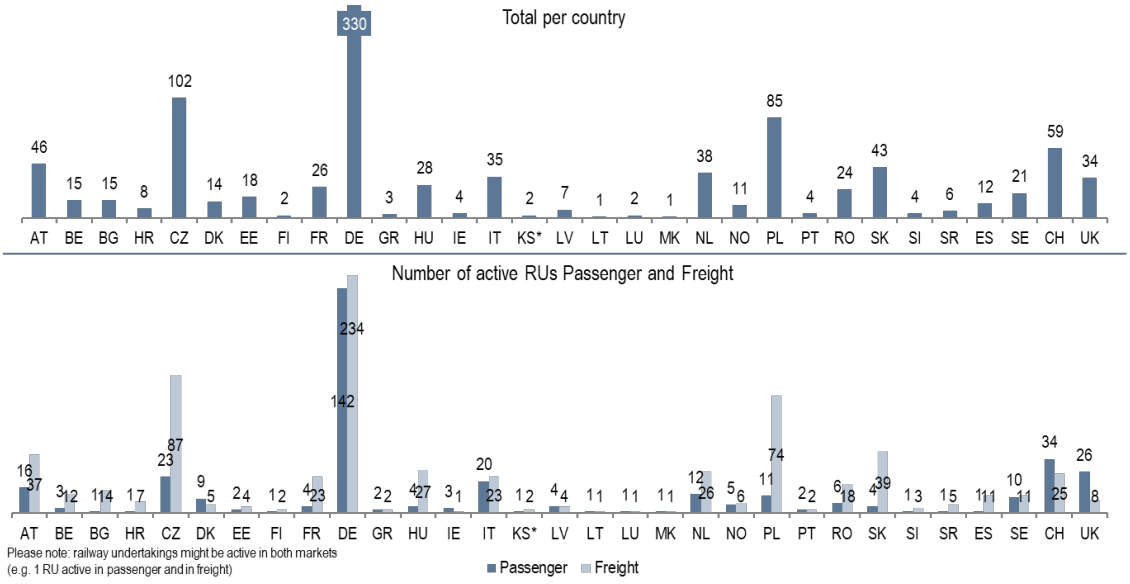
04

Railway undertakings and global rail traffic

4.1. Railway undertakings

The number of active railway undertakings varies substantially across IRG-Rail member countries, depending on several factors such as historical national developments, barriers to market entry and a number of mergers that took place within a country. In some countries like Lithuania and the Republic of North Macedonia, one single railway undertaking offered both passenger and freight services. On the other hand, Germany (330), Czech Republic (102) and Poland (85) reported the highest numbers of active railway undertakings in 2018, reflecting the high level of competition in these markets. Whilst many countries saw an increase or stable numbers in comparison to 2017[9], these numbers declined in seven out of 31 countries.

Figure 9 – Number of active railway undertakings (total and per service) in 2018



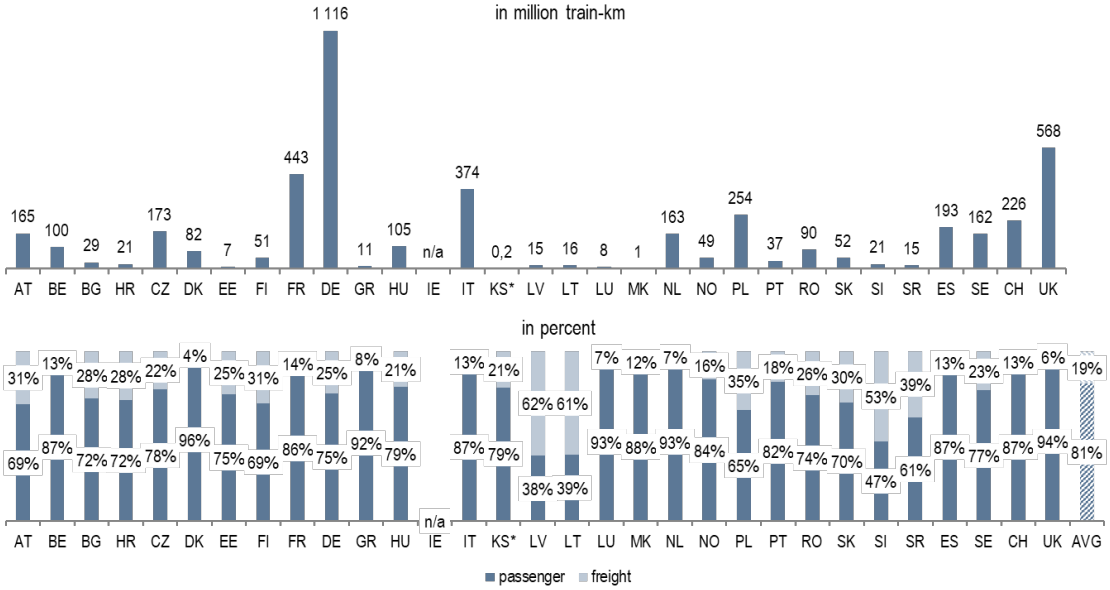
In the majority of countries, the number of active freight railway undertakings exceeds the number of passenger undertakings — regardless of whether the markets have a low or a high number of participants. This is likely to be a result of the process of liberalisation that started earlier in the freight market. However, when looking at the absolute numbers of freight and passenger railway undertakings, some undertakings might be listed twice for one country if they operate in both the freight and the passenger sector. Therefore, the sum of active freight and passenger railway undertakings (lower part of Figure 9) is not necessarily equal to the total number (upper part of Figure 9) of each country.

[9] Note that Ireland and Serbia (reporting four and six active railway undertakings, respectively) are new to this survey.

4.2. Total rail traffic

A total number of 4.5 billion train-km was reported in 2018. Breaking this down by country in Figure 10 reveals that railway undertakings operating in Germany accounted for almost one quarter of all train-km registered, followed by UK (12.5%) and France (9.7%). Together with Italy (8.2%), these countries contributed more than half of all train-km supplied in Europe.

Figure 10 – Rail traffic (in millions train-km) and breakdown between passenger and freight services (in %, based on train-km) in 2018



Passenger services accounted for 81% of the total amount of train-km on average. This distribution is typical for almost all countries, with a share of passenger-km ranging from 61% (Serbia) to 96% (Denmark). There are only three countries (Latvia, Lithuania and Slovenia) where the share of freight traffic exceeds that of passenger traffic. Although train-km have been constantly increasing since 2013, the distribution between freight and passenger traffic has not changed as both are increasing at the same rate.

05

The rail freight market

5.1. Rail freight market size

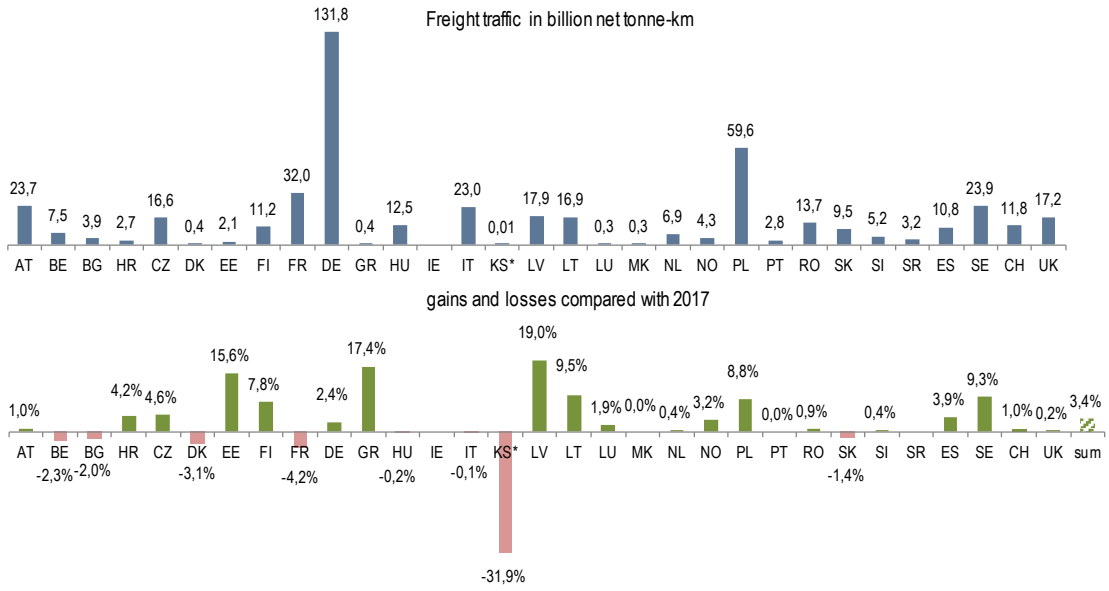
In 2018, the rail freight market accounted for approximately 470 billion of net tonne-km, including for the first time the numbers of Ireland and Serbia. The German rail freight market continues to be the largest with 131.8 billion tonne-km, followed by the Polish and French markets. In total, they represent nearly 50% of total demand (in tonne-km) in all the monitored countries.

On average, rail freight traffic experienced a 3.4% increase between 2017 and 2018 (Figure 11). The rate of change varies drastically across countries from a fall of more than 30% in Kosovo to an increase of 17.4% in Greece and 19.0% in Latvia. Overall, a decrease in net tonne-km compared to 2017 was noted in eight countries, while the demand for freight services increased in 19 countries and remained constant in one country. It is clear that the larger variations across the monitored countries are also related to the absolute values of traffic in tonne-km. A variation of a low initial value of traffic in absolute terms can show a large percentage change.

In Latvia, the increase of 19% was achieved by both international (+20%) as well as by domestic rail traffic (+17.4%). Import freight traffic accounted for the largest share of international traffic with Russian and Belarusian consignors being the main partners. Belarusian cargo volume also increased in recent years.

As in 2017 – when it recorded a 41% increase in rail freight traffic – Greece experienced growth in 2018 (17.4%), albeit starting from a very low nominal level. This is mainly due to the resolution of some problems encountered by Greece in previous years, such as the occupation of the railway line by refugees/immigrants. In addition, the economic situation has improved. This was shown by the market entry of a second railway undertaking transporting freight in September 2018.

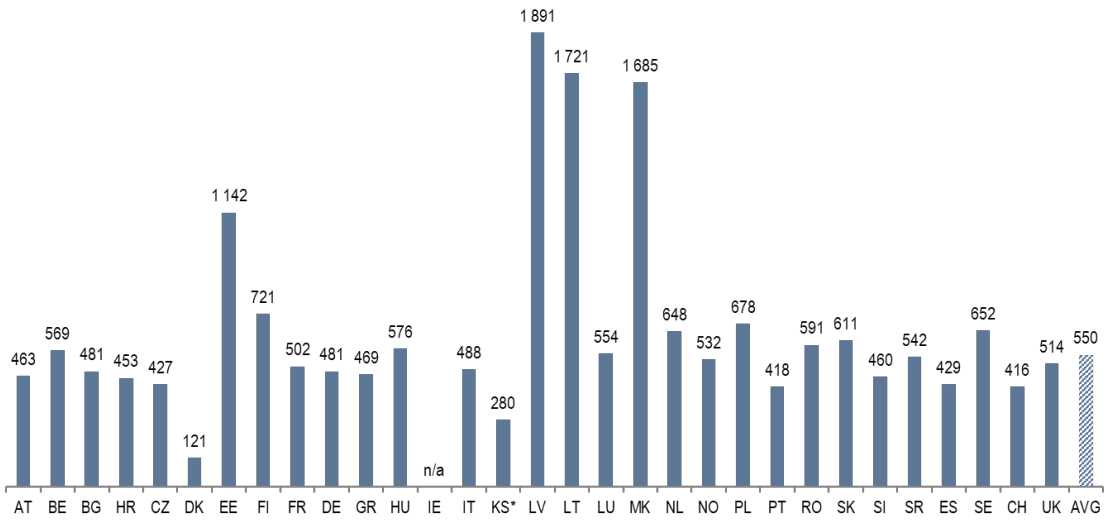
Figure 11 – Rail freight traffic (in billion net tonne-km) in 2018 and evolution between 2017 and 2018



As in previous years, the Baltic States – together with the Republic of North Macedonia – clearly showed the highest load factor in 2018 (see Figure 12). In Latvia, Lithuania and the Republic of North Macedonia, this was more than three times the average. This is likely due to their infrastructure which allows much heavier loaded and/or longer wagons than in the rest of Europe. The average load in 30 countries accounts for 550 tonnes per train.

Like in 2017, Finland showed the highest load factor after these countries (721 tonne-km per train-km), followed by Poland (678) and Sweden (652). The lowest value was recorded in Denmark with 121 tonne-km per train-km, followed by Kosovo (280). The remaining countries recorded a load factor close to the average.

Figure 12 – Freight traffic load (tonne-km per freight train-km) in 2018



5.2. Market shares of freight railway undertakings

The difference in market shares between incumbent and non-incumbent railway undertakings is an important indicator of the potential of the incumbent's competitive advantages and of possible barriers to new entrants. Figure 13 and Figure 14 represent the market shares of three types of undertakings (domestic incumbent, foreign incumbent and non-incumbent) measured in freight train-km and net tonne-km respectively.

Figure 13 – Market shares of freight railway undertakings (based on train-km) in 2018

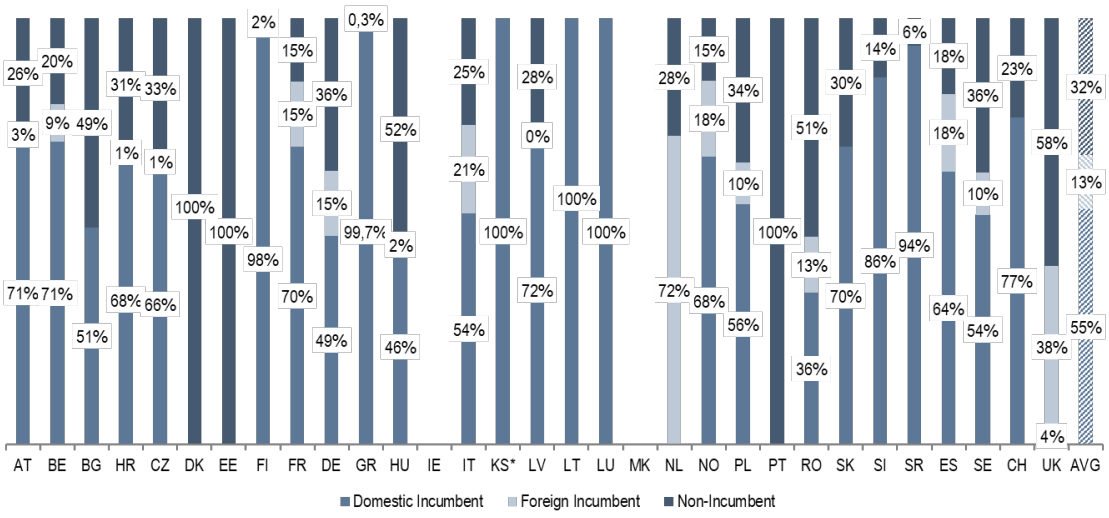
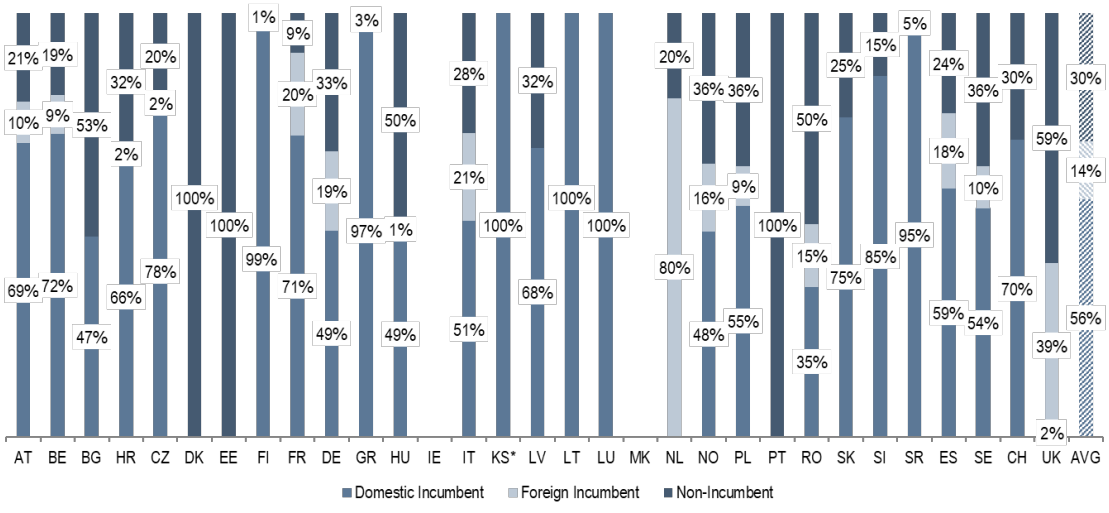


Figure 14 – Market shares of freight railway undertakings (based on net tonne-km) in 2018[10]



In some countries, the domestic incumbent is still the only freight operator, as is the case in Kosovo, Lithuania and Luxembourg. In Finland and Greece, the

[10] The average value in this graph differs from the one in the Main Report since the samples are different: this one includes all available data for 2018 while the one in the Main Report include only the countries which provided data for the 2014-2018 period.

incumbent continues to operate nearly 100% of the market. On the contrary, in countries like Estonia and Portugal, there was no incumbent (neither domestic nor foreign) active on the freight market in 2018.

In other countries, there is a mix of a domestic incumbent and competitors, which can be either foreign incumbents (from another country) or non-incumbents (national or foreign ones). The share of these new entrants is relatively high in some countries. In the Netherlands, 72% of the market is dominated by the foreign incumbent in train-km (80% in tonne-km), with the remaining market in the hands of non-incumbent undertakings. In the United Kingdom the opposite is true, with non-incumbents operating 58% of the market in train-km and 59% in tonne-km.

In Germany, Italy, Norway, Poland and Sweden, approximately half of the market is operated by the domestic incumbent. For most of the remaining countries, the domestic incumbent has a (much) higher share.

On average, in all the observed countries, 55% of the traffic in train-km is still being performed by the domestic incumbent (56% in net tonne-km). Foreign incumbents operate 13% of the market in train-km (14% in net tonne-km), while non-incumbents have an average share of 32% (30% in net tonne-km).

5.3. Economic performance of freight railway undertakings

In 2018, the revenue per train-km for freight operators was Euro 20.64 on average. In three countries (Luxembourg, Lithuania and Latvia), the revenue per train-km was higher than Euro 30, with Luxembourg reaching a very high level (Euro 52.78 per train-km). This is most likely due to the size of the country and not directly related to the size of the market/activities. Freight operators in Spain received the lowest revenue per train-km with Euro 11.76. This could be explained by the special mountainous geography of the country with steep slopes, making it difficult to transport large loads. As a result, trains in Spain are usually shorter and less heavy (mostly intermodal transport) than in the rest of Europe. In Bulgaria, Portugal, Kosovo and Greece, the freight RUs' average revenue is below Euro 15 per train-km[11].

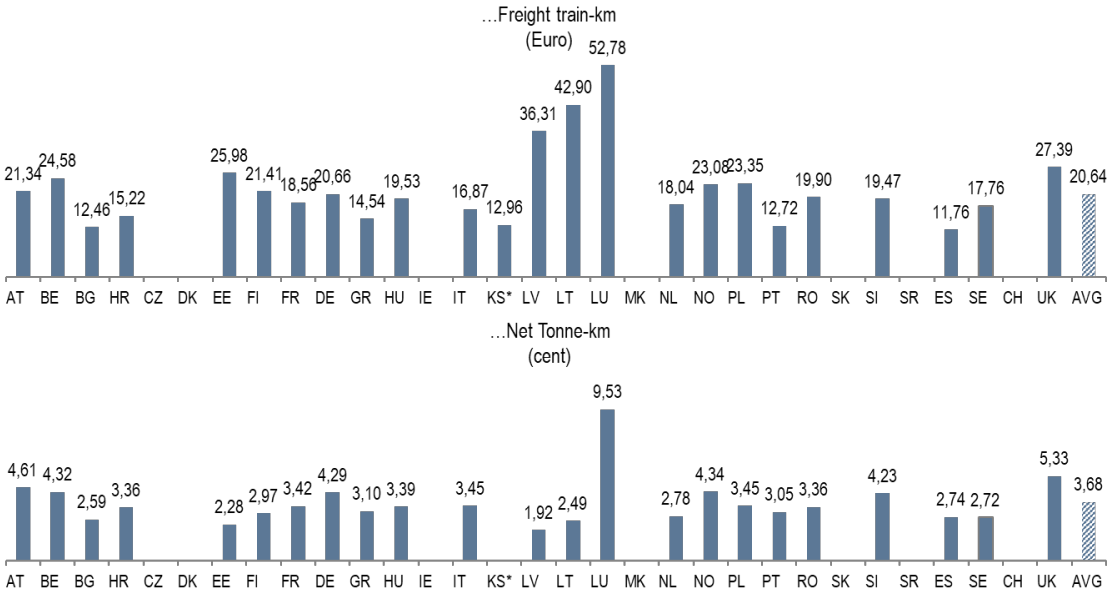
Per net tonne-km, the freight operators' revenue ranges from Eurocent 1.92 in Latvia to Eurocent 9.53 in Luxembourg. On average, based on data from 20 countries, the freight operators receive Eurocent 3.66 per net tonne-km.

Comparing the level of freight revenue per train-km with the revenues per net tonne-km highlights the stark differences across countries. The most likely explanation seems to be the use of longer and heavier trains in certain countries. As mentioned above, this can be seen in Spain, with a very low revenue per train-km and around average revenue per net tonne-km due to shorter and lighter trains. Another possible explanation could be that freight operators apply different

[11] 22 countries are included in the data.

methods to calculate the revenues that they charge their clients. For example, for some operators, the number of tonnes transported can be the most important factor while other operators put more emphasis on the distance covered. This is most likely dependent on the cost method used by the infrastructure managers.

Figure 15 – Freight operators' revenues per train-km and net tonne-km in 2018



06

The rail passenger market

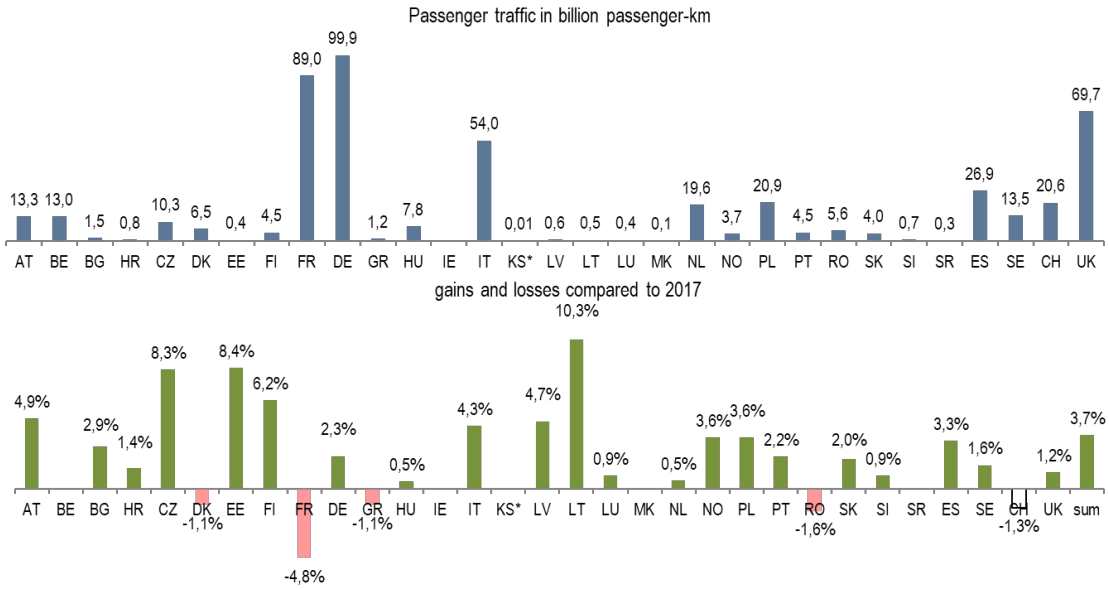
6.1. Rail passenger market size

In terms of passenger-km, Germany has the biggest rail passenger market, followed by France, UK and Italy. Together, they represent about two thirds of the market across all monitored countries.

In 2018, most countries showed a clear increase in passenger traffic compared with 2017 (Figure 16). Lithuania showed the largest growth (+10.3%) in terms of passenger-km mainly driven by an increase in e-commerce sales, improved train schedules (non-popular train routes were cancelled and more trains were added on other routes at peak times taking into account the needs of commuters) and the development of additional services for the business segment.

The Czech Republic and Estonia also showed a significant increase. In both countries the passenger markets expanded by more than 8% in terms of passenger-km. In the Czech Republic, passenger traffic continues to grow from year to year (by approximately 50% compared with 2010). Some of the reasons for this growth include the entry of private railway undertakings in the market, the integration of different modes of transport in regional and suburban transport (connecting timetables, common ticketing) and large discounts for elderly people and students. The increase in passenger traffic is also a result of the improvement of quality of services, a price reduction and a rising number of trains on main lines, all of which are a result of increased competition.

Figure 16 – Total passenger traffic (based on passenger-km) in 2018



Although between 2016 and 2017, there was a growth in rail passenger-km of 7% in France, the market has recorded a 4.8% decrease from 2017 to 2018. In 2018, a series of major industrial actions in passenger rail transport took place on 36 days between April 3rd and June 28th and strongly affected the traffic, which declined by 6.8% in train-km and 4.8% in passenger-km. Moreover, many train passengers switched to other means of transport during the strike, leading to a

surge in coach or carpooling traffic during the second quarter of 2018.

The numbers in Figure 17 show the average amount of rail travel (passenger-km) per inhabitant in the monitored countries in 2018. The distance travelled per inhabitant varies significantly across Europe. Switzerland, Austria and France are the countries with the highest amount of rail travel (in terms of passenger-km per inhabitant). In Switzerland an average citizen travelled 2,410 km by train, in Austria 1,502 km and in France 1,373 km. In 2018, Austria experienced a record number of passengers (about 310 million) and, at the same time, a growth in passenger traffic of 4.9% (in terms of passenger-km). This increase can primarily be explained by the expansion in the supply of regional services in several suburban areas.

Figure 17 – Passenger-km per inhabitant in 2018

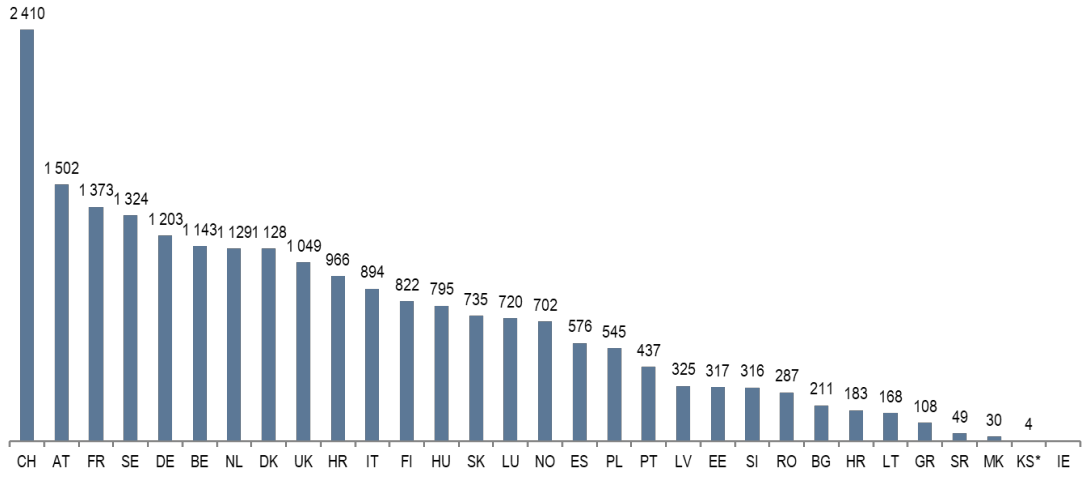
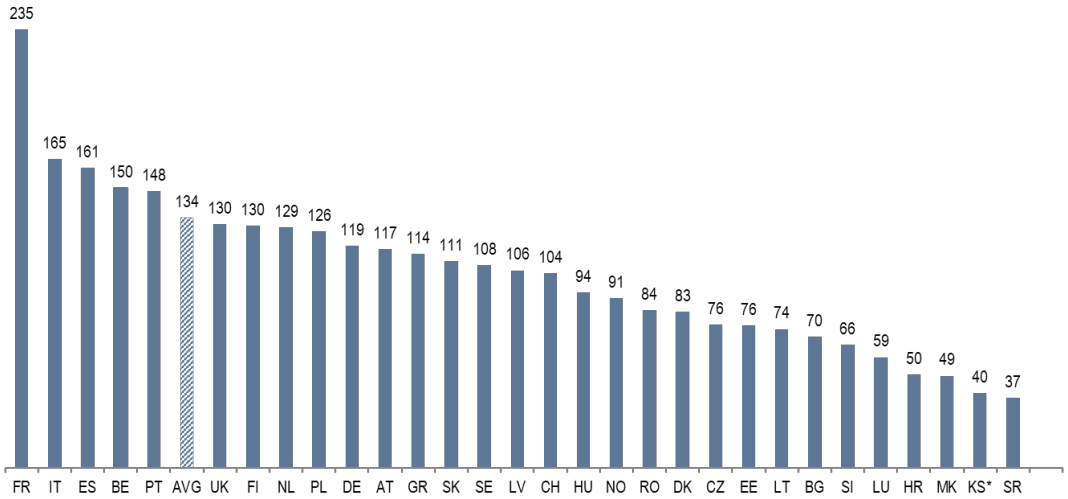


Figure 18 shows the load factor for each monitored country. The load factor indicator differs from the occupancy rate. The passenger load factor is calculated by dividing total passenger-km by total train-km and is therefore not only affected by the occupancy rate but also by the carrying capacities (number of seats per train). Across the monitored countries, the load factor was 134 passenger-km per train-km. The load factor was above average in France, Italy, Spain, Belgium and Portugal.

France shows the largest number in terms of passenger-km per train-km in 2018. During that year, traffic decreased more in train-km than in passenger-km, allowing the load factor to increase. This was due to the use of higher capacity rolling stock by the principal and incumbent railway undertaking SNCF for its low-cost high-speed service Ouigo as well as better occupancy rates for remaining services during the strike actions in the second quarter.

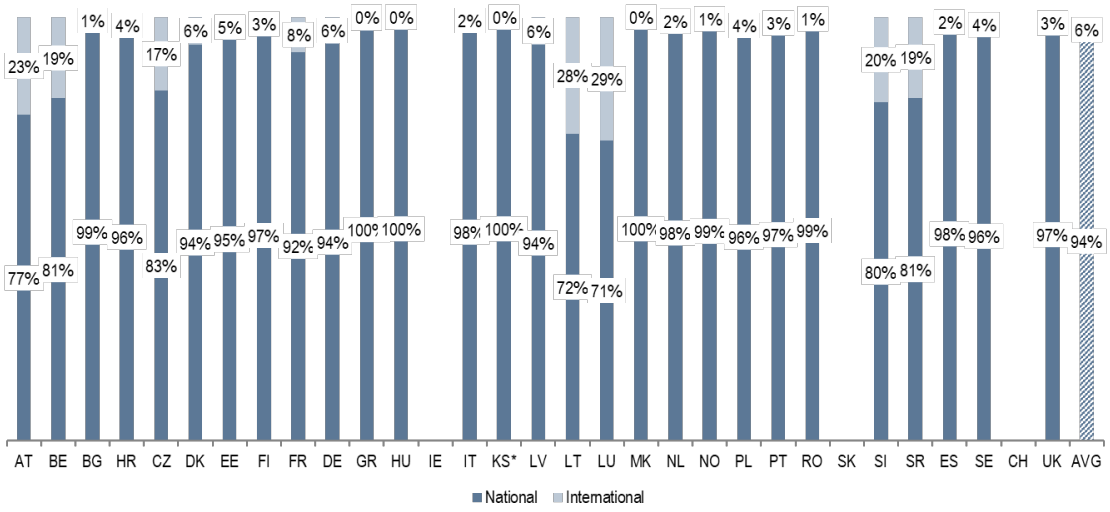
Figure 18 – Number of passenger-km per train-km in 2018



6.2. National and international passenger traffic

Across the monitored countries, the average share of international traffic was very low in 2018 (6%). In some countries, such as Spain, Greece and Norway, the share of international traffic was even less than 3% (Figure 23).

Figure 19 – National and international passenger traffic 2018, based on passenger-km



The share of international traffic was above average (i.e. 6%) in eight countries with Austria, Luxembourg and Lithuania recording the highest share. In Austria, the high proportion of international traffic (23%) is predominantly due to this country's geographical position and relatively small size. All long-distance trains crossing the country from east to west, and vice versa, have to go via Germany between Salzburg and Tyrol. Additionally, since many urban areas like Vienna, Salzburg and Innsbruck are located close to the border, Austria has many regional/suburban trains that go to/from a neighbouring country and thus are considered international. The same applies to Luxembourg, where international traffic reached 29% of passenger total traffic. Moreover, a large proportion of the

labour force commutes to Luxembourg from neighbouring countries (especially France) with many travelling by train.

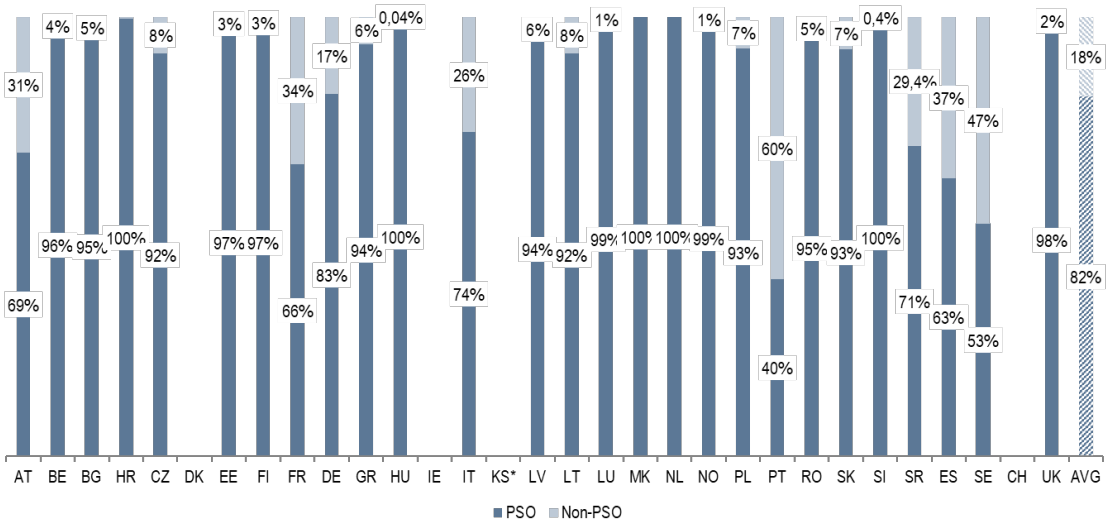
6.3. Share of PSO and Non-PSO

Figure 20 shows the proportion between PSO and non-PSO services on the supply-side (train-km). Across the monitored countries, PSO services accounted for 82% of the train-km offered on the passenger market.

There are eleven countries in which the share of PSO train-km is higher than 95% (Belgium, Croatia, Estonia, Finland, Hungary, Luxembourg, the Netherlands, Norway, Romania, Slovenia and the UK). In Belgium the share of PSO train-km is 96% since the entire domestic rail passenger service is organised under PSO contracts and the share of international train-km (non-PSO) is limited. In the UK, the share of PSO train-km amounts to 98%. Most passenger train operators have run under a franchise system (PSO) since privatisation in 1997. The other operators are non-franchised (open access), but they only make up a small part of the market.

In some countries, such as Spain, Sweden, Italy and Portugal, the share of non-PSO services (in terms of train-km) is above the average (18% of all train-km).

Figure 20 – Share of PSO and non-PSO services (based on train-km) in 2018

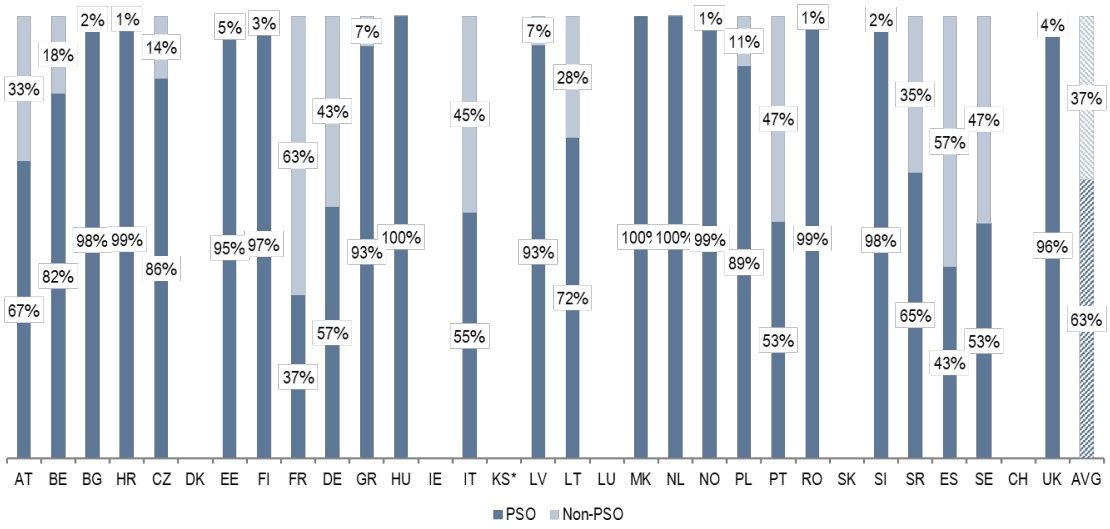


A similar situation can be found on the demand side (expressed in passenger-km). 63% of all passenger-km are operated under the framework of PSO contracts. In some countries such as Czech Republic, France, Germany, Italy, Poland and Spain, the share of PSO traffic on the supply side is larger than on the demand side.

In Germany, PSO traffic consistently has a high share in passenger train-km. While long-distance traffic, which is commercial traffic only, contributes around 145 million train-km in 2018 (approximately 17%), PSO regional and local traffic total around 700 million train-km in 2018 (around 83%). Looking at the PSO/Non-

PSO ratio in passenger-km, the share of PSO reaches only 57%, due to a lower passenger occupation per regional PSO train with around 82 passengers per train. Long-distance trains carry nearly 300 passengers per train which leads to a Non-PSO share in passenger-km of 43%.

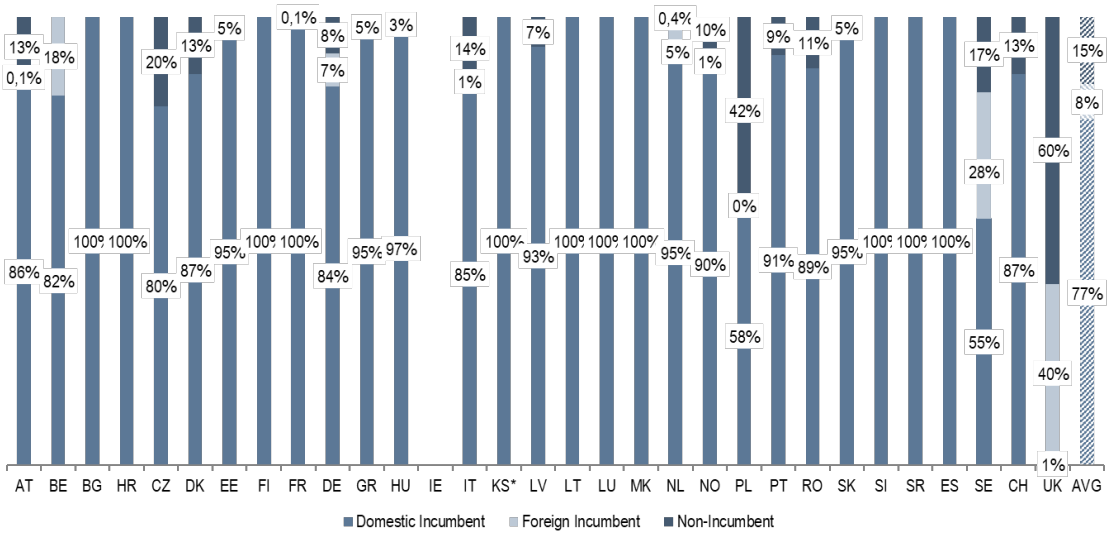
Figure 21 – Share of PSO and non-PSO services (based on passenger-km) in 2018



6.4. Market shares of passenger railway undertakings

Across the monitored countries, domestic incumbents have a market share of 77% in terms of passenger-km (Figure 22). The UK, Sweden and Poland are the only countries with a market share of domestic incumbents below the average.

Figure 22 – Market shares of passenger railway undertakings (based on passenger-km) in 2018



In the UK, the domestic incumbent accounts for only 1% of the market. This is explained by the fact that the operation of the railways was transferred from government control to private companies in 1997. The only domestic incumbent is Translink in Northern Ireland which makes up a very small proportion of total

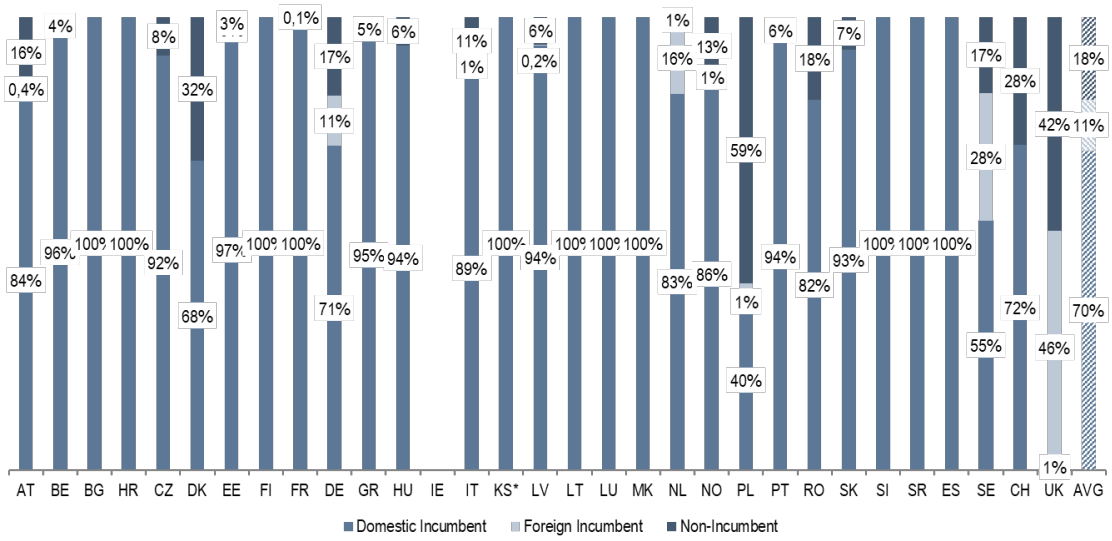
passenger km.

In Sweden the market share of the domestic incumbent has decreased (in terms of passenger-km) since the market opening. The main reason for the drop in the market share of the domestic incumbent is that other railway undertakings have won competitive tenders in regional PSO traffic. Thus, both non-incumbent railway undertakings and foreign incumbents have gained market shares. In 2018 the market share of domestic incumbent reached 55 % of the total passenger market.

In Poland, there are two railway undertakings acting as incumbents in the rail passenger market whose share totals 58% in terms of passenger-km. The largest railway undertaking that provides regional services in Poland called Przewozy Regionalne which used to be an incumbent (belonging to PKP) until 2008. Since then, all shares previously held by PKP S.A. were transferred to the State Treasury and by law, on the same day, to the 16 Polish regional authorities. In 2015, the State bought a majority share in Przewozy Regionalne, but the company does not have ownership relations with the incumbent.

The market shares of incumbent and non-incumbent railway undertakings are an important indicator of the potential for competitive advantages of incumbent operators and of the possible barriers to new entrants. In some countries the domestic incumbent is still the only passenger railway operator - there is no competition at all.

Figure 23 – Market shares of passenger railway undertakings (based on train-km) in 2018



Across the monitored countries, the market share of domestic incumbents is on average 70% in terms of train-km (Figure 23). Domestic incumbents still dominate most markets, except for a few countries, such as the UK, Poland, Denmark and

Sweden. In Germany, the market[12] share of domestic incumbents (in terms of train-km) has decreased to 71% since the market opening in 1994. Non-incumbent railway undertakings have gained market shares and reached 17% in 2018. The German market has also been attractive to foreign incumbents which progressively have tried to enter the market with their own subsidiaries. They successfully increased their market share to 11% in 2018. This development will continue, since a number of future PSO contracts have already been awarded to non- and foreign incumbent railway undertakings.

With 59%, Poland has the largest market share of non-incumbents while foreign incumbents account for the largest share in the Netherlands and Sweden. In the latter, three foreign incumbents offered passenger services in 2018, accounting for 28% of the rail passenger market.

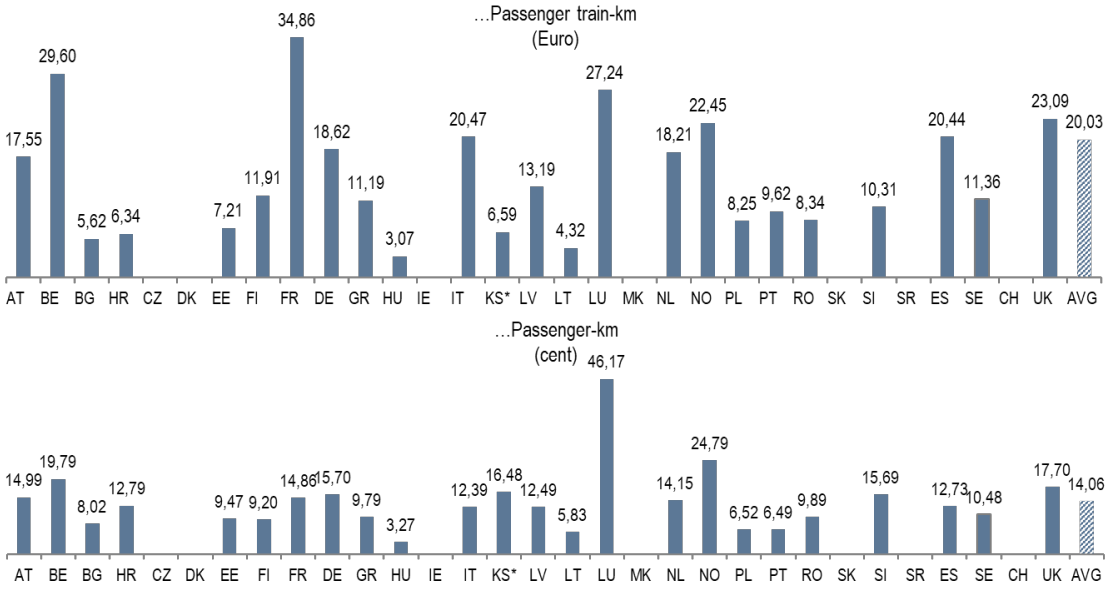
6.5. Economic performance indicators of passenger railway undertakings

The revenue of passenger railway undertakings across the monitored countries was Euro 20.03 per train-km and Eurocent 14.06 per passenger-km in 2018. The highest unit revenues on the supply side occurred in France (Euro 34.86 per train-km), Belgium (29.60) and Luxembourg (27.24). In Belgium, the high unit revenues on the supply side could possibly be explained by the fact that Belgium's incumbent receives a large part of its revenues from PSO-compensations. In comparison to the revenues from fares (which are received per passenger), the PSO-compensations are (for a major part) a fixed amount per train-km.

The highest unit revenues on the demand side are reported for Luxembourg (Eurocent 46.17 per passenger-km). Demand side unit revenues were also above the average in Belgium, Austria, France, Germany, Kosovo, the Netherlands, Norway, Slovenia and the UK.

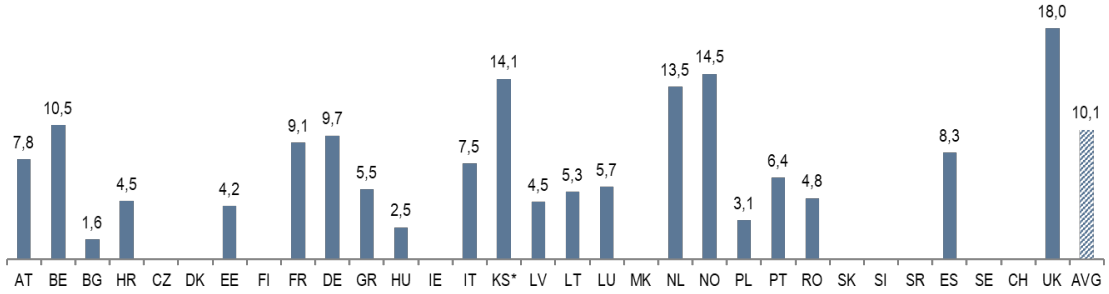
[12] The German passenger market was opened for competition as early as 1994 being one of the first open markets in Europe. Since this point in time, more and more contracts have been awarded through competitive tenders, giving new entrants a chance to enter the market. Today only in exceptional cases direct awarding is possible.

Figure 24 – Passenger operators' revenues per train-km and per passenger-km in 2018



Considering income from fares only (i.e. excluding compensations), the average revenue among the monitored countries totals Eurocent 10.1 per passenger-km. The highest unit revenues were in the UK. Unit revenues were also above the average in Norway, Kosovo, Belgium and the Netherlands.

Figure 25 – Passenger operators' revenues from fares (in Eurocent per passenger-km) in 2018



Across the monitored countries, on average 70% of all revenues for passenger services were collected from fares. Large differences in the distribution between revenues from fares and compensations can be seen across countries. In some countries, such as Luxembourg, Bulgaria and Croatia, passenger operators collect the majority of revenues from compensations. In Croatia, the revenues from ticket sales have constantly declined, and in order to maintain the business of the national carrier, the state intervenes by increasing its subsidies. This resulted in passenger operators collecting a high share of revenues from public compensations.

In other countries such as the Netherlands and Portugal, the passenger operators collect the majority of revenues from fares (95% and 99%, respectively). In the United Kingdom, the share of fares is 102% as the government received a net contribution from railway undertakings (i.e. PSO rail-operators paid more to the

government in premiums than they received from compensations). This gives the impression that in the United Kingdom fares make up a share greater than 100% of the total revenues.

Figure 26 – Breakdown of passenger operators' revenues between fares and compensations in 2018

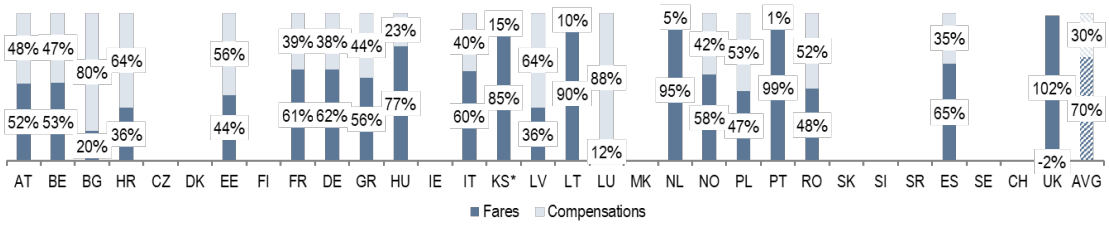
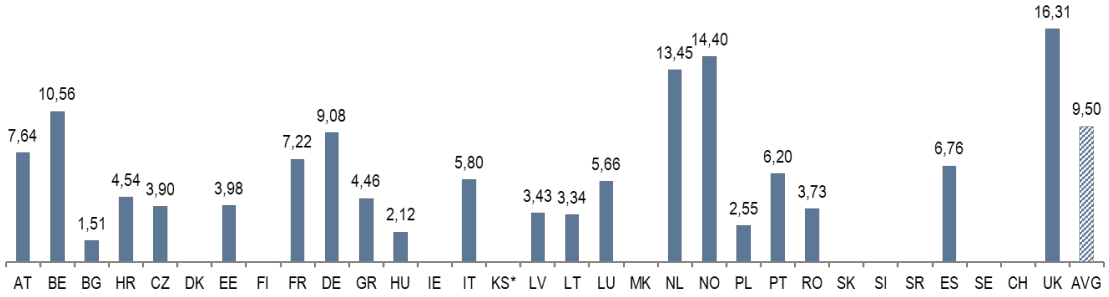


Figure 27 and Figure 28 repeat the analysis presented in Figure 25 and Figure 26 for PSO operators' revenue only.

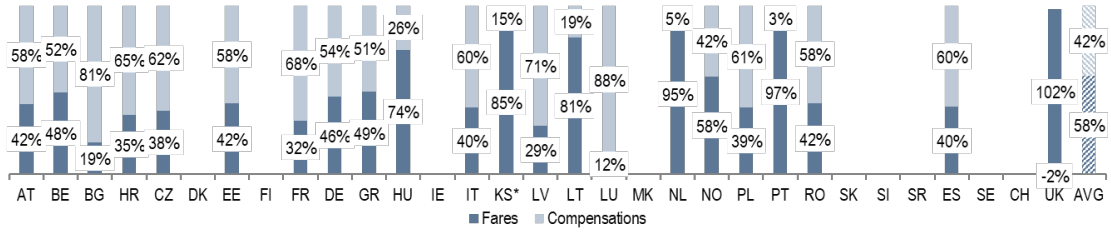
63% of all passenger-km are operated in the framework of PSO contracts. The average PSO revenues per passenger-km across monitored countries was Eurocent 9.50 per passenger-km. The highest PSO revenues per passenger-km is reported for the UK (Eurocent 16.31 per passenger-km) followed by Norway (14.40), the Netherlands (13.45) and Belgium (10.56). All the other countries were below the average. Bulgaria has the smallest figure (Eurocent 1.51 per passenger-km).

Figure 27 – Passenger PSO operators' revenues from fares (in Eurocent per passenger-km) in 2018



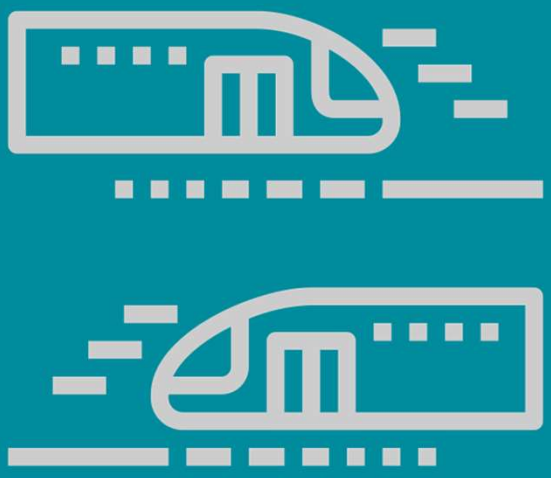
Across the monitored countries, 42% of PSO revenues come from compensations. This is, as expected, a higher share than in the overall passenger market where 29% were collected from compensations.

Figure 28 – Breakdown of passenger PSO operators' revenues between fares and compensations in 2018



07

Competitive situation in the rail passenger and freight markets



7.1. Introduction

In Article 56 (2) of directive 2012/34 EU, rail regulatory bodies have been tasked with the role of monitoring the competitive situation in the rail services markets. In line with regulatory bodies' task of monitoring the markets, IRG-Rail aims in this chapter to give a general overview, from the regulatory bodies' perspective, of the competitive situation in the three different national railway markets:

- PSO passenger railway market
- Non-PSO passenger railway market
- Freight railway market

The overview will be given on a national level for each IRG-Rail country participating in this part of the report, based on descriptions of the competitive situations that have been written by the different regulatory bodies themselves. The overview that was provided by the regulatory bodies was structured by IRG-Rail by asking each IRG-Rail member to write a short general description of the competitive situation, mentioning the main entry barriers in their respective market and providing a general non-binding assessment of the competition level based on indicators of concentration and entry barriers. All participating countries were therefore also asked to provide data for the calculation of Herfindahl-Hirschman indexes (HHIs) and to give an overview of the actual actors participating in each market (market players) and assigning them to a market share-interval. The HHIs for each of the countries can be found in the Main Report, while the market shares for the market players can be found in a fact sheet for each country in the Annex of this Working Document.

We have defined additional brackets to divide the countries into to ease the reading of the sub-chapters for the different markets. The brackets that we have used for this purpose are:

- HHI level below 2 500
- HHI level below 5 000
- HHI level below 7 500
- HHI level below 10 000
- *De facto* monopoly

For a country to be assigned into one of the brackets, only one of the two calculated HHIs for the given market is needed to be below the indicated level.

7.2. Description of the competitive situation in the PSO passenger railway markets

7.2.1. Description of the competitive situation in countries with HHI level below 2 500

Poland, Sweden and the UK had an HHI level below 2 500 in the PSO-passenger market in 2018. UK had an HHI level below 1 500, which might indicate that the British PSO passenger railway market is an unconcentrated and competitive market. Poland and Sweden both had an HHI level below 2 500, which might

indicate that the PSO passenger railway markets in those countries are moderately concentrated.

In the UK, there are 21 PSO-operators that run specific services within a specified area. The rail network is subdivided into three sectors for passenger journeys: London and South East, long-distance, and regional. Total passenger revenue reached £10.3 billion (Euro 13.7 billion) in the UK in 2018-19, with annual revenue growth at its highest (6.1%) since 2014-15. Even though the regulatory body in the UK, ORR, in general views the competitive situations in the market to be healthy, there are still some barriers to entry present. Two of those barriers are the access to leasing of rolling stock for franchised passenger services and the supply of automatic ticket gates (ATGs) and ticket vending machines.

In Sweden, regional public transport includes traffic within counties and cross-border traffic if it is intended primarily for everyday travellers. The traffic is almost exclusively publicly organised through regional public transport authorities, which are responsible for all public transport within their respective counties. In the Swedish PSO passenger railway market, there are five active RUs, of which the main market players are SJ, MTR and Arriva.

In Poland, Przewozy Regionalne Sp. z o.o has the largest share of the market (25 – 30%) in carried passengers. It is a company shared by regional authorities and provides regional services in the whole country (except of the Mazowieckie voivodship, where the RU Koleje Mazowieckie provides most of the regional services). In terms of transport performance (passenger-km) in PSO, PKP Intercity, a state-owned incumbent which provides long distance services in PSO and commercial services, has the largest share of the market (50 – 55 %). Direct competition occurs on several PSO routes in Poland, e.g. in Mazowieckie Voivodship, where city-owned RU SKM in Warsaw provides suburban and regional services which often overlap with the routes of Koleje Mazowieckie. This situation also happens between Koleje Mazowieckie, Łódzka Kolej Aglomeracyjna and Przewozy Regionalne on the route Warsaw – Lodz. Moreover, Przewozy Regionalne sometimes compete with regional RUs in particular regions, e.g. in Kujawsko-Pomorskie voivodship, where two RUs were chosen in a tender – private Arriva RP (subsidiary of DB) and Przewozy Regionalne.

7.2.2. Description of the competitive situation in countries with HHI level below 5 000

Germany is the only country that had an HHI level between 2 500 and 5 000 in the PSO passenger railway market in 2018. However, with a 3 000 to 3 500 HHI, the indicator points towards the German PSO passenger railway market still being in the category “a highly concentrated market”.

The main market player in the German market is the incumbent DB with its regional and local daughter companies. Other players are, for instance, Metronom Eisenbahngesellschaft,mbH, NordWestBahn,GmbH, Die Länderbahn GmbH DLB, Bayerische Oberlandbahn GmbH (BOB), but also daughters of

foreign incumbents like National Express Rail GmbH, Keolis Deutschland GmbH & Co. KG, Abellio Rail NRW GmbH or Transdev Mitteldeutschland GmbH. None of these has more than 3% market share on their own, but some foreign incumbents own more than one daughter company and gather 5% to 10% respectively if all subsidiaries are aggregated. International traffic is only of minor importance. The German PSO market is divided geographically and managed by 30 regional competent authorities with competition taking place in all of these regions. A growing market share of competitors is expected as a high number of competitive tenders will queue up in the next few years.

There are in general no market entry barriers which would hinder new entrants from entering the German PSO market. The framework of competitive tenders gives an equal chance to all participants. However, in some individual cases, political influence and biased tender conditions can be an issue. Also, access to and transition of service facilities (in cases of an operator change) can be problematic in isolated cases making it difficult for new entrants to hold up their offer and to provide seamless services. Additionally, the incumbent in some few cases makes use of any legal possibility to protect its market position, e.g. by setting different tariffs/tariff segments for competitors' and new entrants' rolling stock or by having longer processing times for services. Generally, tendered volume is limited due to partially congested infrastructure. Overall, there is a shortage of personnel as another general challenge for new entrants.

7.2.3. Description of the competitive situation in countries with HHI level below 7 500

Denmark, Italy, the Netherlands, Norway, Portugal, Romania and Switzerland had an HHI level below 7 500 in the PSO passenger market in 2018. Since all of these countries had an HHI level above 5000, their calculated HHIs point towards their markets being in the category "highly concentrated market".

In Italy, the PSO passenger railway market can be said to be the main passenger railway market due to its considerable size compared to the non-PSO passenger railway market. The main market player in the Italian market is Trenitalia, which holds about three quarters of the market. A total of 16 companies operate in the market even if they are not in direct competition. There is no presence of foreign incumbents in Italy and international traffic is negligible compared to domestic traffic.

There is limited competition in the PSO passenger market in the Netherlands. The long-distance services and a large part of the regional services are directly awarded to the Nederlandse Spoorwegen (NS) which accounts for approximately 85% of the train-km and 95% of the passenger-km. The remaining part that is competitively tendered is divided among Qbuzz (Trenitalia), Keolis (SNCF), Connexxion (Transdev), Abellio (also NS) and Arriva (DB). Only taking into account the concessions which are awarded by tendering, Arriva has a market share of over 80 %.

In Norway, the PSO passenger railway market was historically characterised by

directly awarding PSO-contracts to the incumbent, Vygruppen AS (previously called NSB AS). However, as a result of a railway reform that was introduced in 2015, competitive tendering of PSO-contracts has been introduced and a new national competent authority for PSO-contracts, the Railway Directorate, has been established. The Railway Directorate has since then decided to split the PSO-market in Norway into five PSO-contracts. The winners of the first two tenders, simply called tender “South” and “North”, were won respectively by the British company Go-Ahead in 2018 and the Swedish incumbent SJ AB in 2019. Go-Ahead will start their services by the end of 2019, while SJ AB will start theirs in 2020.

In Portugal, the market is fully liberalised and there are only two main operators, the incumbent and a private operator, CP and Fertagus – Travessia do Tejo, Transportes, S.A. (Fertagus), with approximately 85% and 15% of the market share, respectively. However, these operators do not compete directly as Fertagus exclusively operates commuter trains in a specific geographic area (Lisbon-Setúbal), complementary to CP, whose operations cover all Portuguese railway network.

In the Romanian PSO passenger railway market there are six companies: CFR Calatori, Regio Calatori, Transferoviar Calatori, Interregional Calatori, Softrans and Astra Trans Carpatic. Their activities cover the entire Romanian territory. The market is dominated by the state-owned company CFR Calatori, with a market share of approximately 80% in terms of train-km. According the Romanian legislation, all internal passenger railway transport is under PSO, so any new player is entitled to receive compensation after signing a PSO contract with Romanian Railway Reform Authority.

7.2.4. Description of the competitive situation in countries with HHI level below 10 000

Austria, Czech Republic, Hungary and Latvia had an HHI level below 10 000 in the PSO passenger market in 2018. Since all of these countries have an HHI level above 7 500, their calculated HHIs point towards their markets being in the category “highly concentrated market”.

In Austria, the whole regional passenger traffic is organised by PSO contracts. All of these contracts are directly awarded by the state authority (with expected changes from 2023 onwards) for a period of ten years - predominantly to the incumbent operator (ÖBB Personenverkehr), but also to regional railway undertakings (most of them being railway undertaking and infrastructure manager at the same time). Accordingly, the main customers are commuters in agglomeration areas. Until now, there have been no competitive tenders in Austria and hence there has been no (direct) competition for the market. Direct awarding is also used for the majority of long-distance services except for lines where there is open access competition.

In Czech Republic, PSO-contracts cover 92% of the passenger transport. The main RU is the incumbent Czech Railways, which operates 95-100% of train- km.

There were seven RUs, which operated in the PSO passenger railway market in 2018. In addition to Czech Railways, the second RU is GW Train Regio, which operates 0-5% of traffic. The national part of the Czech PSO passenger railway market has a share of 83%, while the international share is 17% (train-km).

In Hungary, there are two market players in the PSO passenger railway market, the MÁV-START Zrt. and the GYSEV Zrt. The market is geographically segmented, GYSEV operates in the northwestern part of the country. The PSO contracts are directly awarded, which makes it more difficult to enter the market. MÁV-START Zrt. and GYSEV Zrt. operate their international trains on the domestic section as a public service (international trains run on domestic train paths).

In Latvia, one PSO contract with the domestic passenger operator (JSC Pasazieru vilciens) has been concluded and is valid until 2029. This situation, however, does not apply to another, small regional narrow-gauge passenger operator (Gulbenes-Aluksnes banitis Ltd.), which also operates under a PSO agreement, which is reviewed and updated annually.

7.2.5. Description of the competitive situation in countries with de facto monopolies

Belgium, Croatia, Estonia, Finland, France, Greece, Lithuania, Luxembourg, Slovenia and Spain had a *de facto* monopoly (HHI = 10 000) in the PSO passenger railway market in 2018.

In Belgium, there is only one railway undertaking (SNCB) who provides PSO services. Therefore, there is currently no competition in the market. Everything is organised through a PSO-contract, concluded by the state. The situation is similar in Croatia, Estonia, Greece, Lithuania and Slovenia.

In Finland, all the domestic passenger traffic is based on directly awarded public service contracts and there is only one active railway undertaking (VR) in the PSO railway passenger market. There are two competent authorities in Finland for public railway passenger traffic. Helsinki Region Transport (HRT) arranges the commuter traffic in the Helsinki metropolitan area while the Ministry of Transport and Communication organizes regional and long-distance traffic of the rest of the country. HRT has started a tendering process with regard to commuter traffic in the Helsinki region. The plan is that an operator will be announced during spring 2020 and it will start its operation in June 2021.

In France, there is no competition in the PSO railway market and PSO-contracts are awarded directly to the incumbent SNCF Mobilités. However, the opening of the PSO market will start in 2021, signifying that the market opening would be effective in the following years. Indeed, in December 2019, two long-distance PSO lines (under the governmental management) were notified for tenders in order to start operating in 2022. Expression of interest has also been called for some regional PSO lines. The French regulatory body considers that the barriers to market entry are high in the PSO passenger market in France, due especially

to the asymmetry of knowledge of the PSO market between the incumbent and any potential entrant, which may lead to clear disadvantages in tendering procedures or even in services' operation (rolling stock data for instance).

In Spain, there is no competition yet in the PSO passenger railway market where only the incumbent operates. as a legal monopoly exists. The incumbent was directly awarded the PSO passenger services until 2027 and this situation could be extended for five more years. Notwithstanding, 3% of the current contract could be opened to public tendering in 2023.

7.3. Description the competitive situation in the non-PSO passenger railway markets

7.3.1. Description of the competitive situation in countries with HHI level below 2 500

The UK is the only country that had an HHI level below 2 500 in the non-PSO passenger railway market in 2018. The HHI for UK is however still above 1 500, which places the non-PSO passenger railway market in the category "a moderately concentrated market".

There are five non-PSO train operators in the UK, including Eurostar and Getlink which are international. Their geographical areas are set out in the table below. In April 2018, Eurostar introduced a new service from London to Amsterdam.

Operator (non-PSO)	Geographical area
Grand Central	London to Eastern England
Heathrow Express	London Paddington to Heathrow Airport
Hull Trains	Long distance services between London King's Cross and Hull
Eurostar	International high-speed service connecting London to France, The Netherlands, and Belgium
Getlink	Shuttle service between South East England and France (Calais) including passenger and freight vehicles

7.3.2. Description of the competitive situation in countries with HHI level below 5 000

Czech Republic is the only country that had an HHI level below 5 000 in the non-PSO passenger railway market in 2018. The HHI for Czech Republic is however still above 2 500, which places the Czech non-PSO passenger railway market in the category "a highly concentrated market".

In Czech Republic, the commercial passenger market covers 8.3% of the passenger transport. The main market players are the incumbent CD, RegioJet, Arriva and Leo Express, which all are considered to be in direct competition with each other. The commercial services are only operated on two main lines, where there is mixed operation of commercial and PSO services. The services are both

domestic and international. The private RUs started with domestic services. Now they operate mainly international services – from Czech Republic to Slovakia, Poland and Austria.

7.3.3. Description of the competitive situation in countries with HHI level below 7 500

Austria, Belgium, Greece, Italy and Norway had an HHI level below 7 500 in the non-PSO passenger market in 2018. Since all of these countries have an HHI level above 5000, their calculated HHIs point towards their markets being in the category “highly concentrated market”.

In Austria, there are no overshooting formal requirements for market entry in the non-PSO passenger railway market, but demand is somewhat saturated as the incumbent offers synchronised timetables through its PSO services which are comparatively tight. As PSOs are directly awarded, a new entry would require a market niche which would still be profitable in comparison with the incumbent’s economies of scale. In long-distance passenger traffic, some sections of the main infrastructure manager’s network are open access and hence non-PSO routes. Additionally, regional traffic on the route between Vienna Centre and Vienna Airport is operated by City Airport Train (CAT) which is in direct competition with ÖBB Personenverkehr. Customers of CAT are predominantly business people and travellers with a higher willingness to pay.

In Belgium, in addition to SNCB, which provides a very limited amount of commercial (national) passenger transport services, THI Factory (Thalys) and Eurostar are active on the commercial international passenger railway market. The latter two provide – for the time being – services on different lines and are therefore not in direct competition with each other. While Eurostar provides services to London, THI Factory has lines from/to Paris, the Netherlands and Germany.

In Italy, open access passenger traffic is a constantly growing market. The main company is Trenitalia which covers about three quarters of the traffic in train-km, followed by its main competitor Italo with about one quarter. The remaining three companies that operate in Italy are only active in international traffic and are attended by foreign incumbents. International traffic accounts for 2% of the total number of passengers.

In Norway, the market for national railway passenger traffic is not open for open access, and open access international passenger traffic has to pass the principal purpose- and economic equilibrium tests before being allowed to start operations. Due to these restrictions, the volume of non-PSO passenger traffic is low. The main market player in the international commercial passenger market is the Swedish incumbent SJ AB operating commercial trains between Oslo and Stockholm. In 2020, SJ AB plans to expand its operations with trains between Oslo and Gothenburg.

7.3.4. Description of the competitive situation in countries with HHI level below 10 000

France, Germany, Hungary, Latvia, Poland, Portugal and Sweden had an HHI level below 10 000 in the non-PSO passenger market in 2018. Since all of these countries have an HHI level above 7 500, their calculated HHIs point towards their markets being in the category “highly concentrated market”.

In France, open access non-PSO is only possible in the international passenger railway market. There were four active railway undertakings offering international services in 2018: SNCF-Mobilités (the incumbent), THI Factory/Thalys (a subsidiary of SNCF-Mobilités and SNCB – the Belgian incumbent), Eurostar (another majority held daughter company of SNCF-Mobilités) and Thello (a subsidiary of Trenitalia – the Italian incumbent). While Thalys and Eurostar have not proposed cabotage in France, Thello serves six French cities on their Marseille-Milan line and two cities on their Paris-Venice night line, thus in competition with SNCF-Mobilités (providing both PSO and non PSO services) on these routes. The national commercial traffic in France, however, has exclusively been covered by SNCF-Mobillités which operates high-speed lines in both standard (TGV InOui) and low-cost (Ouigo) offering. In 2019, several RUs (private operators or foreign incumbents) have expressed their intention to operate domestic commercial passenger traffic in France. Some of them have even submitted their line project to the regulatory body.

In Germany, the commercial non-PSO passenger railway market is the least developed segment regarding competition. About 99% of the market is occupied by the incumbent DB and its subsidiary DB Fernverkehr AG. New entrants, such as Flixtrain, have tried to enter the German non-PSO long-distance market by providing connections between Berlin, Stuttgart, Cologne and Hamburg with one or two daily journeys. Other smaller players, such as GVG typically operate just one route with some trains per week or seasonal traffic. At night, Austrian incumbent ÖBB provides a commercial night train network, which was taken over from DB. In addition, Thalys provides international traffic on routes to Brussels and Paris. Several RUs are also active in the German market with charter services, which in essence is an open-access sub-market. This sub-market is small in terms of market share and therefore does not significantly affect the whole commercial market.

In the Hungarian passenger railway market, there are currently two railway companies (MÁV Nosztalgia Kft. and Continental Railway Solution Kft.) alongside public service companies. Both operate heritage trains and organize excursions. They provide special services, so there is no real competition with public service companies.

In Latvia, international commercial non-PSO passenger services are offered on the lines to Moscow, Minsk, Sankt-Petersburg, Kiev and Valga (Estonia).

In Poland, the main market player is PKP Intercity and it holds 15-20% of carried passengers (50-55% in passenger-km). Other RUs active in the non-PSO passenger railway market in Poland are Koleje Mazowieckie (regional RU from Mazowieckie Voivodship), Arriva RP, Leo Express and Przewozy Regionalne.

In Portugal, the market is fully liberalised but there is only one operator, the incumbent CP which solely offers long-distance services ranging from the South to the North of Portugal. There are also a few seasonal commercial passenger operations mainly for touristic purposes, both in the Douro and Vouga lines.

In the Swedish commercial non-PSO passenger railway market, there were eight active RUs in 2018. The main market player is SJ (domestic incumbent), followed by MTR Express (foreign incumbent), Transdev (non-incumbent), TÅGAB (non-incumbent) and A-train (non-incumbent). When MTR entered the market in 2015, they started to offer high-speed transport services between Sweden's largest cities Stockholm and Gothenburg in direct competition with SJ.

7.3.5. Description of the competitive situation in countries with de facto monopolies

Croatia, Denmark, Estonia, Finland, Lithuania, Luxembourg, Romania, Slovenia and Spain had a *de facto* monopoly (HHI = 10 000) in the non-PSO passenger market in 2018.

In Estonia, Finland and Lithuania, there is only one railway undertaking (incumbent) active in the non-PSO passenger railway market, and in all three countries, only some international traffic is considered to be non-PSO.

In Luxembourg, given a very exhaustive and low-priced competitive PSO offer which, due to its geographical specificities, covers the entire territory, and low remaining capacity on the most attractive lines, it may not be attractive to provide domestic commercial passenger service. Therefore, no competition is observed in Luxembourg in this area, except for isolated international traffic (high-speed trains). The situation is similar in Romania and Slovenia.

In Spain, there still exists a legal monopoly for the non-PSO national commercial services segment of the passenger railway market. The historic incumbent also provides international services, liberalised since 2010. In a few cases, it works in cooperation with other RU with whom a partnership exists. Only 4% of the high-speed traffic (in terms of passengers) is international.

7.4. Description of the competitive situation in the freight railway markets

7.4.1. Description of the competitive situation in countries with HHI level below 2 500

Germany, Hungary and Romania had HHI levels below 2 500 in the freight railway market in 2018. Since all three countries have an HHI level in the interval between 1 500 and 2 500, their freight railway markets fall in the category “a moderately concentrated market”.

In Germany, there are around 200 competing railway undertakings (RUs) active in this market segment. The biggest player is the incumbent´s daughter DB Cargo with a market share (based on net tonne km) of about 50%, though with a decreasing tendency. Other major players are SBB Cargo Deutschland GmbH, TX Logistik AG, RheinCargo GmbH & Co. KG and some further competitors, each

of them having a market share of up to 5%. There are no general market entry barriers which would principally hinder new entrants from entering the German rail freight market. However, network effects and vertical integration of the incumbent make it hard for new entrants to compete on a broad and large-scale basis. Therefore, they concentrate on special customer groups. Furthermore, the limited number of viable and lucrative train paths reduces business opportunities for new entrants.

In Hungary, there are 27 active railway undertakings in the rail freight market, one of which can be considered as a domestic incumbent with a roughly 50% market share (tonne-km). In tonne-km, about 80% of the rail freight is international. The customers of railway companies are mainly industrial facilities, automotive suppliers, agricultural and energy companies.

In Romania, the market is dominated by two RUs, one is a domestic incumbent and the other one a local company. Together they have a market share of about 60%. In total, there are 18 active RUs on the local freight market. The international traffic (transit) accounts for about 3% of the total recorded TAC. The main barrier to entry in the Romanian market is the state of the infrastructure that leads to an average commercial speed of about 18 -24 km/h.

7.4.2. Description of the competitive situation in countries with HHI level below 5 000

Austria, Croatia, Czech Republic, France, Italy, the Netherlands, Norway, Poland, Spain, Sweden, Switzerland and the UK had an HHI level below 5 000 in the freight railway market in 2018. Since all of these countries have an HHI level above 2 500, their calculated HHIs point towards their markets being in the category “highly concentrated market”.

In Austria, the main market player in terms of net tonne km was Rail Cargo Austria (incumbent) with a market share of 65 – 70%. There were five additional undertakings holding market shares above three percent, Lokomotion, LTE, TX Logistik, WLC and CargoServ. All of them are in direct competition with each other, albeit competition primarily focuses on block trains. In fact, the incumbent is the only undertaking offering noteworthy wagonload freight. There is a variety of different customers in Austria, but the main customers are Voestalpine AG (mainly coal, ore and steel transport), OMV AG (mineral oil), Kaindl/Mondi (paper, wood) and the automotive sector (cars and their according components). Due to its geography, the emphasis of Austrian freight transport lies in transit. Hence, the main freight routes are Munich-Innsbruck-Verona, Vienna-Semmering-Graz-Trieste/Koper and Munich-Salzburg-Villach (all being North-South sections connecting Germany and Italy) as well as Vienna-Salzburg and Vienna-Linz-Passau (East-West, connecting Germany and Central Eastern Europe).

There are eight RUs operating in the Croatian freight railway market, with the main market player being incumbent HŽ Cargo Ltd. The latter mainly transports metal ores, coal, oil and petroleum products and agricultural products (cereals, oilseeds). Its most common customers are metallurgical industry, energy

energetics, oil industry, agriculture and food industry.

In Czech Republic, the main RU is the incumbent CD Cargo, which operates 60-65% of gross tonne-km. There are 79 RUs in total in Czech Republic, which operate in freight transport. In addition to CD Cargo, Advanced World Transport (5-10%) and METRANS Rail (5-10%) operate more than 5% of volume. The share of national freight transport is 43.5%, while international freight transport is 56.5%. Some RUs operating in Czech Republic are companies that transport their own goods, such as mining companies, steel producers and petrol companies.

There were 24 active railway undertakings in the French freight rail market in 2018. Among them, five RUs belong to SNCF group, the domestic incumbent, and three railway undertakings operate only in specific regional areas. The incumbent accounts for more than 50% of the total traffic in train-km while 15 RUs operate each less than 1% of the total train-km. The domestic market accounts for about 63% of the volume (in tonne-km) of freight rail transport in France, whereas transit transport represents about 10% and international transport 27% of the market in 2018. Intermodal freight represents 21% of the market.

In Italy, the main company is Mercitalia which holds about half of the market, where 20 companies in total operate. Of which, three RUs have market shares of around 5%. There are three foreign incumbents, who have consolidated their market presence in recent years. National traffic is slightly lower than international traffic.

There are approximately 10-15 players in the Dutch rail freight market. DB Cargo is market leader with a market share of 40-45%. The remaining traffic is divided among the other rail freight operators. The market share of DB is slowly decreasing. Captrain and RTB Cargo are the largest among the competitors with a market share of approximately 10%. Most of the traffic is destined for or goes through Germany. The transport is mostly commissioned by shippers, but part of the traffic is also commissioned by other parties, such as the petrochemical and coal industry.

There were in total six railway undertakings active in the market for rail freight transport in Norway in 2018. However, not all of these RUs compete directly and the incumbent, CargoNet AS, provides more than 50% of all freight train-km on the network. In most situations, the incumbent is only competing with one other railway undertaking on the same route. There are noticeable differences in the type of goods being transported by rail in Norway when looking at international and national traffic. International traffic is dominated by the transport of industrialised goods and raw materials, like iron ore and lumber, while national traffic is dominated by intermodal transport. In terms of national intermodal transport, there are only two railway undertakings active in this segment of the market; the incumbent, CargoNet AS, and the Swedish incumbent Green Cargo AB.

In Poland, there are 72 active RUs in the freight market. The main player is PKP Cargo, which holds 40-45% of the market. 20 other RUs hold market shares between 0.5% to 16-17%. The remaining RUs (approximately 50) hold each less than 0.5% of the market share. Apart from some exceptions, all market players are considered to be in competition with each other.

In Spain, nearly half of the total net tonne-km is associated with intermodal traffic. Of the remaining half, most of this traffic is generated by the steel industry (48.8%), bulk (14.8%), chemical (12.2%), automotive (vehicles represent 9.9% and its components amount to 1.5% of the total), multiproduct (5.5%) and paper goods (5.8%). In total, the Spanish freight railway market had eleven RUs in 2018, although only four of them had international traffic. The incumbent dominates the freight railway market with around 60% of the market share in terms of net tonne-km. New entrants have been increasing their market share except for 2017, where it fell slightly. There is a stark contrast in terms of activity between the incumbent and new entrants. The former combines both intermodal and non-intermodal traffic, while the latter specialise in intermodal transport (80% of their total activity, measured in net tonne-km).

There are eleven market players in the Swedish freight railway market: seven non-incumbents, one domestic incumbent and three foreign incumbents. Based on freight train-km, domestic incumbent Green Cargo AB has the largest market share (50-55%), followed by non-incumbent LKAB Malmtrafik (15-20%) and non-incumbent Hector Rail (10-15%). Analysing the market over time we can see that domestic incumbent Green Cargo's position on the market is not as strong as it used to be and more RUs are active, competing on the freight railway market. Based on tonne-km, 39% of the traffic was international and 61% was national. In Sweden, the market players on the freight railway market offer different kinds of transport services. For example, Hector Rail offers transport services (traction) between industries and rail terminals, CFL Cargo Sweden offers regional freight traffic and LKAB Malmtrafik transports iron ore in the north of Sweden. Green Cargo is the only RU which offers wagonload services. It is within procurement of business transport of goods and combined transport that a large part of the competition in the market occurs.

In the UK, there are four main freight operating companies: DB Cargo UK (largest), Freightliner, GB Railfreight and Direct Rail Services. There are also other smaller operators like Freightliner Heavy Haul, Colas Freight, Devon and Cornwall Railways and Rail Operations Group. DB Cargo UK covers the most freight train-km, followed by Freightliner and GB Rail Freight. These three companies accounted for over 85% of the total freight train-km ran in 2018. Of the seven major commodities that make up the rail freight moved in the industry, domestic intermodal had the largest share in 2018 (39%). The others are construction (26%), other (11%), metals (8%), coal (7%), oil & petroleum (6%) and international (3%).

7.4.3. Description of the competitive situation in countries with HHI level below 7 500

Belgium, Latvia and Slovenia had HHI levels below 7 500 in the freight railway market in 2018. Since all of these countries have an HHI level above 5000, their calculated HHIs point towards their markets being in the category “highly concentrated market”.

There are 12 railway undertakings active in the Belgian freight market. The domestic incumbent has a market share of 70-75% in tonne-km while the foreign incumbents have an important share (about 5-10%) and an additional 5-10% for non-incumbents. The most important traffic passes the Port of Antwerp to Montzen to be exported/imported abroad. Since Belgium is a relatively small country and traffic by rail is most profitable on longer distances, international traffic is an important part of the market (> 50%). Most freight RUs in Belgium are considered to be in direct competition with each other, although it can be seen that undertakings sometimes serve specific markets (for example, last miles are mostly done by the domestic incumbent). More than 30% of all traffic is intermodal transport (around the major ports), while other important segments are the metal and chemical industry, as well as bulk transport and cars (Port of Zeebrugge).

In Latvia, there are three railway undertakings operating in the freight transport market: one historical incumbent operator (LDz Cargo Ltd.) and two private operators (non-incumbents, JSC Baltijas Ekspresis and JSC Baltijas Tranzita Serviss). The market share for incumbent is 30-35% and non-incumbent companies is 65-70% (2018 data). There is one significant and principal barrier to entry for potential new railway undertakings into Latvia’s freight railway market. Roughly 95% of the freight railway market is filled by freight transport to/from third countries, mainly CIS countries, and these countries have recognised only one rail freight undertaking from each of the Baltic States, i.e. the historical incumbent. As a result, Latvian private rail freight undertakings cannot co-operate directly with cargo consignors and/or consignees in these third countries, and they must operate through the Latvian incumbent railway company in order to transport rail freight to/from these countries.

In Slovenia, freight transport services are provided by three RUs, the incumbent (SŽ-Freight transport) and two non-incumbents (Rail Cargo Carrier SI and Adria Transport). They compete mostly on the main railway line between Port of Koper and hinterland countries. The most important markets (i.e. customers) are companies from Austria, Hungary, Czech Republic, Slovakia and Southern Germany, such as timber industry, car factories, metal industry and companies that deal with intermodal units.

7.4.4. Description of the competitive situation in countries with HHI level below 10 000

Estonia, Finland, Greece and Portugal had an HHI level below 10 000 in the freight railway market in 2018. Since all of these countries have an HHI level above 7 500, their calculated HHIs point towards their markets being in the category “highly concentrated market”.

In Estonia, even though there are 16 freight RUs registered, only one company

has the majority of traffic volume. Other companies have relatively small and regional influence. AS Operail is the main company with 60% of its traffic is transit (the remainder is domestic).

In Finland, there are two railway undertakings that operate in the railway freight market, VR Group Ltd (the incumbent) and Fenniarail Ltd. Fenniarail started its operations at the end of year 2016, and the scale of its operations is still quite small compared to the incumbent. These two RU's compete in the same market. In 2018, Fenniarail expanded its operations to the international market when it started cross-border traffic transport between Finland and Russia. VR has operated between Finland and Russia for a long time (including passenger rail traffic). The main customers in the Finnish freight railway market come from woodworking, paper, mining and chemical industry.

There was only one RU for freight transport in Greece until October 2018, when a second railway undertaking entered the market.

The situation in Portugal is similar to the one in Finland and Greece with only two railway undertakings present in the freight railway market. These two RUs, Medway and Takargo, are both privately owned. Medway has a very strong presence in domestic transportation, representing 85-90% of its total activity. Takargo has a larger presence in international transport which represents about 80-85% of its activity. Freight forwarders, transportation and logistics companies and private clients are the main customers of the rail freight market in Portugal. Freight transportation occurs mostly to and from ports, logistics platforms and multimodal freight terminals.

7.4.5. Description of the competitive situation in countries with de facto monopolies

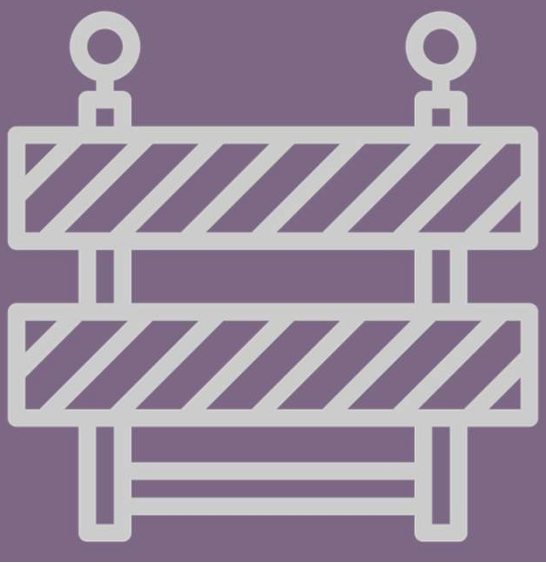
Lithuania and Luxembourg had a *de facto* monopoly (HHI = 10 000) in the freight railway market in 2018.

There are several explanations for the existence of only one RU in the freight railway market in Lithuania. Although the market is open to competition, market entry is restricted by national legislation that gives exclusive rights to provide transit services solely to RUs whose shares are directly or indirectly owned by the Lithuanian state, the strong market power of the Lithuanian incumbent (JSC Lietuvos geležinkeliai) and the limited capacity of the existing railway infrastructure.

In Luxembourg, the freight railway market is difficult to consider as an isolated national market due to its limited size. Except for a major multimodal terminal, with high volumes, the Luxembourgish market is a transit market with a large share of international traffic.

08

Barriers to entry in the railway markets



8.1. Introduction

As mentioned in chapter 7, low barriers to entry in a market can make the problems associated with high market concentration less problematic than they would otherwise be. The reason for this is that low barriers to market entry can indicate that there is a high potential for new entries in the market if the current incumbents decide to introduce prices that would result in higher than normal profits. On the other hand, high barriers to entry, in a market with high market concentration, can indicate that the current incumbents can take price decisions without fearing future competition from potential new entrants.

To complement the HHI levels presented in chapter 7 of the Main Report, IRG-Rail has in this year's report included an overview of the most commonly observed barriers to entry in the three different railway markets, as viewed by the IRG-Rail members. This has been done by using a questionnaire with pre-defined possible entry barriers. In the questionnaire, the IRG-Rail members were asked to answer if they consider the barriers indicated to be barriers to market entry that hinder potential new timely and sufficient market entries. The complete list of entry barriers identified is included in the final section of this chapter.

The definition of "barriers to market entry" and how this theoretical term is used in economics can be found in the Main Report.

8.2. About barriers to market entry in Commission guidelines

In its guidelines[13] on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, the EU Commission describes important considerations in paragraph 69 – 73 when examining whether entry in a market is likely or whether potential entry is likely to constrain the behaviour of incumbents. Paragraph 71 of the guidelines gives some specific examples of barriers to entry:

> *Barriers to entry can take various forms:*
>
> *(a) Legal advantages encompass situations where regulatory barriers limit the number of market participants by, for example, restricting the number of licences. They also cover tariff and non-tariff trade barriers.*
>
> *(b) The incumbents may also enjoy technical advantages, such as preferential access to essential facilities, natural resources, innovation and R&D, or intellectual property rights, which make it difficult for any firm to compete successfully. For instance, in certain industries, it might be difficult to obtain essential input materials, or patents might protect products or processes. Other factors such as economies of scale and scope, distribution and sales networks, access to important technologies,*

[13] (2004/C 31/03) - Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings

may also constitute barriers to entry.

(c) Furthermore, barriers to entry may also exist because of the established position of the incumbent firms on the market. In particular, it may be difficult to enter a particular industry because experience or reputation is necessary to compete effectively, both of which may be difficult to obtain as an entrant. Factors such as consumer loyalty to a particular brand, the closeness of relationships between suppliers and customers, the importance of promotion or advertising, or other advantages relating to reputation will be taken into account in this context. Barriers to entry also encompass situations where the incumbents have already committed to building large excess capacity, or where the costs faced by customers in switching to a new supplier may inhibit entry.

8.3. The concepts of timeliness and sufficiency

The concepts of "timeliness" and "sufficiency" are important to take into consideration when evaluating if a barrier to market entry hinders potential entries in a given market in a considerable way.

The Commission explains the concept of "timeliness" in paragraph 74 of the guidelines[14]:

> *The Commission examines whether entry would be sufficiently swift and sustained to deter or defeat the exercise of market power. What constitutes an appropriate time period depends on the characteristics and dynamics of the market, as well as on the specific capabilities of potential entrants. However, entry is normally only considered timely if it occurs within two years.*

The Commission explains the concept of "sufficiency" in paragraph 75 of the guidelines[15]:

> *Entry must be of sufficient scope and magnitude to deter or defeat the anti-competitive effects of the merger. Small-scale entry, for instance into some market 'niche', may not be considered sufficient.*

When taking into consideration these two concepts, an analysis of barriers to market entry should focus on those barriers that would hinder timely and sufficient potential entries in the market. This is not to say that there might not be other barriers in a market that influence how fast a potential new entrant can enter a market, or to say that low-scale entry is not beneficial. It is rather meant to highlight that it is important to consider what an appropriate time period is for new entry in a given market and to consider if the type of entry is likely to pose a threat

[14] (2004/C 31/03) - Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings

[15] (2004/C 31/03) - Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings

to incumbents.

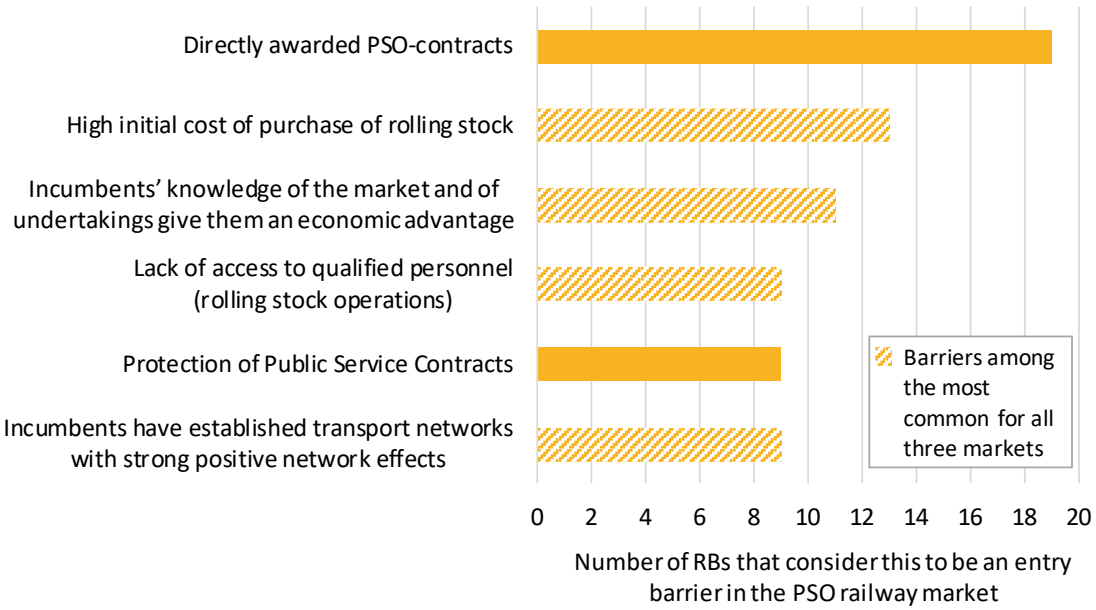
8.4. Additional barriers to market entry in the PSO passenger railway market

Figure 29 shows the barriers to market entry in the PSO passenger railway market that the IRG-Rail members viewed as the most commonly observed to hinder timely and sufficient potential new entries in the market. The following section includes some further examples of barriers to market entry in the PSO passenger railway market that were not mentioned in the section 8.6 of the Main Report, and that possibly are more specific to this market.

8.4.1. Directly awarded PSO-contracts and protection of PSO-contracts

Directly awarded PSO-contracts, and the protection of PSO-contracts, can be both a strategic and a structural barrier to market entry in the PSO passenger railway market, depending on the situation. In Austria for instance, the Austrian system of directly awarded PSO contracts with a regular duration of ten years are considered to be the highest barrier for new market entrants. The same length for PSO-contracts is also used in Croatia. In Latvia, the PSO's service provider is selected by direct award of the PSO contract, something that is considered a barrier for new railway undertakings to enter the passenger services market. In the Netherlands, the contract for passenger services on the core rail network has been awarded to NS (Dutch state-owned operator) until 2025 (these services cover 95% of all rail passenger-km in the Netherlands). In Spain, there still exists a legal monopoly in PSO services (directly awarded to the incumbent until 2027). In Italy, 18 regions out of 20 choose to directly award PSO-contracts.

Figure 29 – Most commonly observed barriers to market entry in the PSO passenger railway market, as viewed by the IRG-Rail members



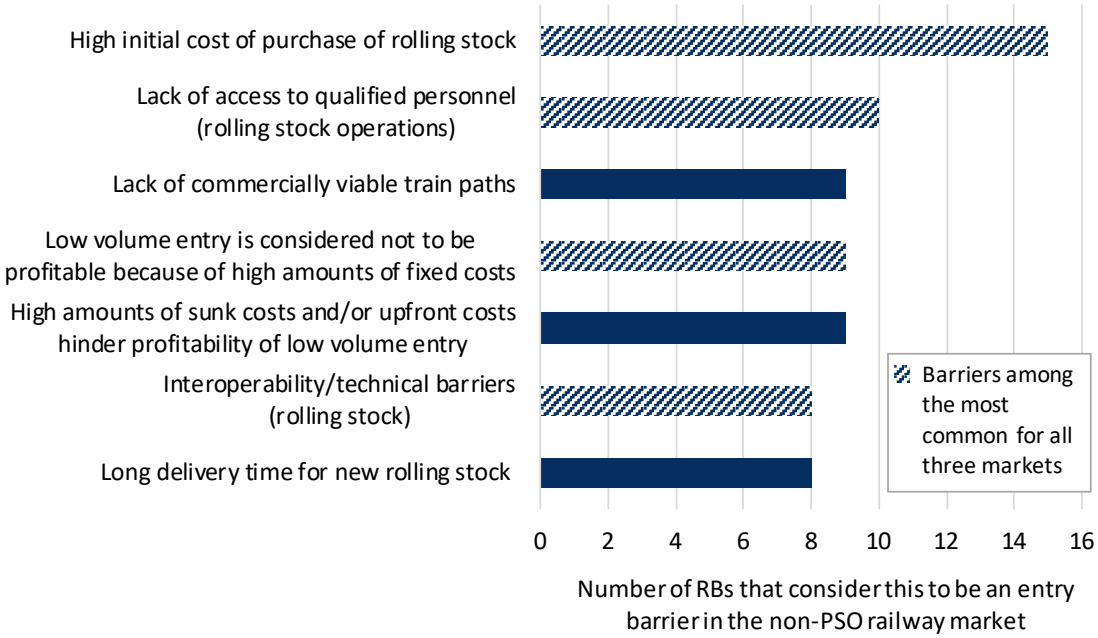
8.5. Additional barriers to market entry in the non-PSO passenger railway market

Figure 30 shows the barriers to market entry in the non-PSO passenger railway market that the IRG-Rail members viewed as the most commonly observed to hinder timely and sufficient potential new entries in the market. The following sections give some further examples of barriers to market entry in the non-PSO passenger railway market that were not mentioned in section 8.6 of the Main Report, and that possibly are more specific to this market.

8.5.1. Lack of commercially viable train paths

The lack of commercially viable train paths (infrastructure capacity) can be considered to be a structural barrier to market entry in the non-PSO passenger railway market. In Germany for instance, non-PSO new entrants barely have a chance to receive commercially viable train paths on highly frequented routes due to a general lack of train paths there. This situation is similar in Poland. In Romania, due to the competition from car transport, which reduces the number of rail passengers, and the pressure of increasing costs (wages, electricity), it is difficult to identify a train path to be operated on commercial principles. In Norway, commercially viable train paths for non-PSO passenger traffic are limited in number due to the prioritization of PSO-traffic (priority criteria), lack of alternative routes and a predominantly single-track network. An infrastructure dominated by single tracks, also leads to few commercially viable train paths in Latvia.

Figure 30 – Most commonly observed barriers to market entry in the non-PSO passenger railway market, as viewed by the IRG-Rail members



8.5.2. High amounts of sunk costs and/or upfront costs hinder profitability of low volume entry

The fact that some potential entrants do not consider low volume entry to be profitable because of the presence of high amounts of sunk costs and/or upfront costs, can be seen as a structural barrier to market entry in the non-PSO passenger railway market. In Poland, high amounts of sunk costs are seen as a characteristic of the non-PSO passenger railway market. In Finland, due to the different track gauge, acquiring new rolling stock poses a risk to new entrants, as they may struggle to sell the stock in the future. In Lithuania, because of the small size of the railway passenger services market, large upfront investment into rolling stock is considered to be a sunk cost.

8.5.3. Long delivery time for new rolling stock

Lengthy delivery time for new rolling stock can be seen as a structural barrier to entry in the non-PSO passenger railway market. In Austria for instance, there is long delivery time related to the purchase of rolling stock for passenger traffic. In contrast, there is a wide variety of suppliers and thus more competition in the Austrian freight railway market. In Finland, potential new entrants in the non-PSO passenger and other railway markets have to likely undergo one of two possible comprehensive processes to acquire suitable rolling stock; an entrant has to order new “tailor-made” rolling stock, or they have to ensure alteration work for existing rolling stock, which may lengthen the delivery time. In France, it is estimated that it takes four to five years to order, build and obtain the approval for new rolling stock. In Italy, the long delivery of rolling stock can make it difficult for an entrant in the non-PSO passenger railway market to expand its initially configured offering/capacity quickly and thus improve scale efficiency.

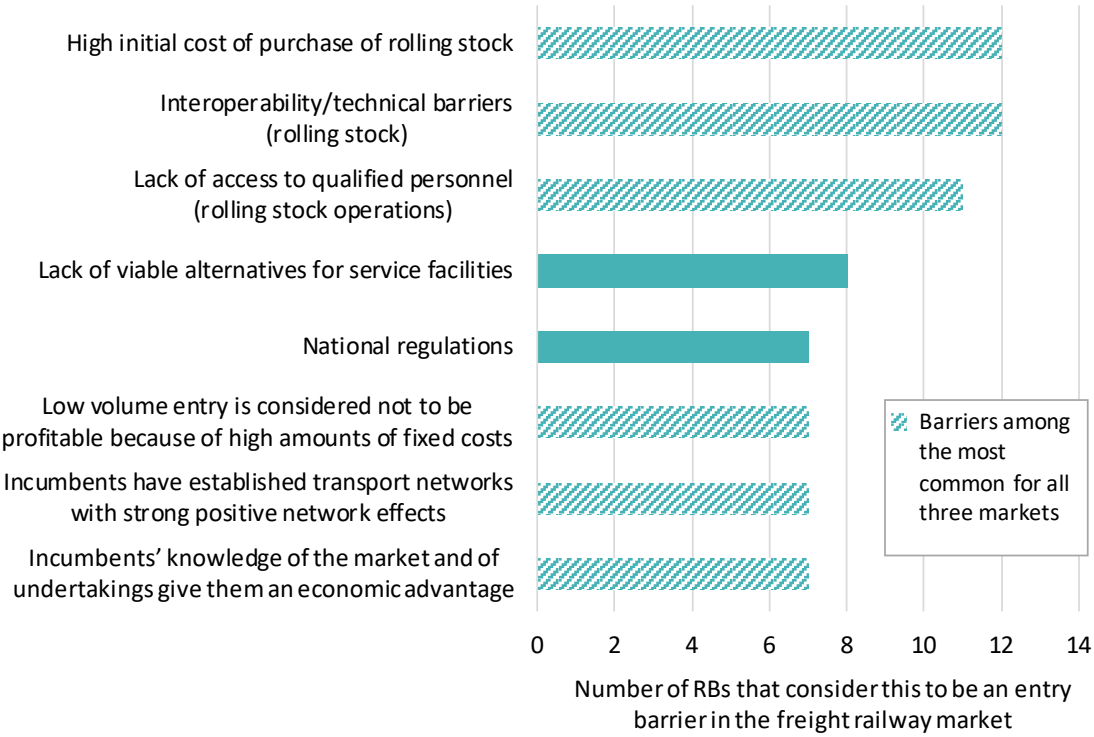
8.6. Additional barriers to market entry in the freight railway market

Figure 31 shows the barriers to market entry in the freight railway market that the IRG-Rail members viewed as the most commonly observed to hinder timely and sufficient potential new entries in the market. The following sections present some further examples of barriers to market entry in the freight railway market that were not mentioned in section 8.6 of the Main Report, and that possibly are more specific to this market.

8.6.1. Lack of viable alternatives for service facilities

A lack of viable alternatives for the use of service facilities can be seen as a structural barrier to market entry in the freight railway market. In several IRG-Rail countries, there is a lack of service facilities that new entrants in the freight railway market can use, and there are few viable alternatives for those that exist. This occurs for instance in Belgium, Croatia, Latvia, Norway and Spain. In Poland, there generally are no problems with availability of service facilities, but there are issues with their distribution on the network which is unsatisfactory.

Figure 31 – Most commonly observed barriers to market entry in the freight railway market, as viewed by the IRG-Rail members



8.6.2. National regulations

National regulations, such as language requirements for train drivers (including derogation procedures at cross-borders), minimum number of staff on-board in trains, requirements for rolling stock etc., can be considered a structural barrier to market entry in the freight railway market. In Norway for instance, the regulatory body considers that the strict language requirement for staff in the railway market creates a barrier to entry in the non-PSO passenger railway market. The Norwegian regulatory body does however acknowledge that this barrier is a result of policy decisions that are deemed necessary because of safety regulations. In France, the regulatory body has some concerns regarding driver hard training, technical requirements on rolling stock (mostly on signalling) and language requirements for open access passenger trains. In Poland, language requirements are also seen as a barrier to market entry in the non-PSO passenger railway market.

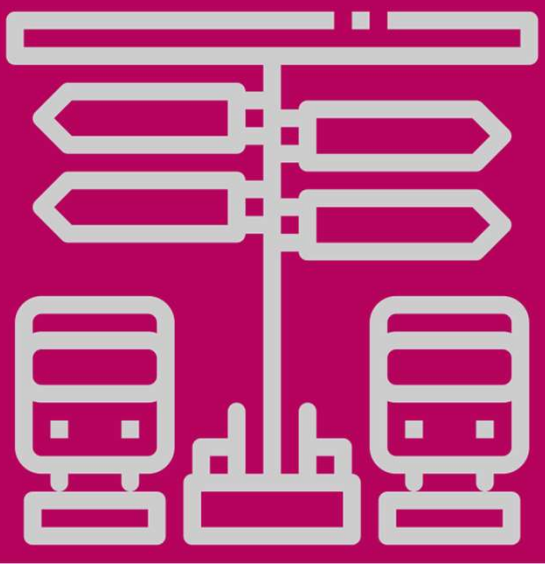
8.7. List of identified barriers to entry in the railway markets

Barriers to market entry	Structural / Strategic barrier
Access to infrastructure capacity	
Congested infrastructure	Structural
Lack of commercially viable train paths	Structural
Framework agreements	Can be both
Priority criteria	Can be both
Vertical integration	Strategic
Vertical integration	Structural
Complexity of the capacity reservation process	Structural
No information on residual capacity	Structural
Quality of information on residual capacity	Can be both
Incomplete international coordination	Structural
Lack of flexibility on the capacity allocation (rigid cancel capacity reservation policy)	Structural
Anticompetitive behaviour consisting in requesting all available capacity	Strategic
Service facilities	
Vertical integration	Strategic
Vertical integration	Structural
Access not given	Strategic
Discriminatory access conditions in practice	Strategic
Lack of information and transparency (real time information on the availability of the service facilities and services provided on these facilities)	Strategic
Lack of capacity	Structural
Lack of viable alternatives	Structural
Margin squeeze or other problems related to charges	Strategic
Investment in rolling stock / Rolling stock	
High initial cost of purchase	Structural
Long delivery time for new rolling stock	Structural
Problems related to leasing market	Can be both
Interoperability/tech-nical barriers	Structural
Licencing, authorization, registration, etc.	Structural
Lack of access to qualified personnel	Can be both
No second-hand market	Can be both
Interoperability/technical barriers (e.g. infrastructure compliance with STI)	Structural
Problems related to compatibility checks (regarding completeness of the RINF or technical complexity)	Structural
No routes map for multimodal transport	Structural
Strict and/or costly regulations	
Fulfilment of safety regulations/ Strict safety regulations	Structural
Fulfilment of too costly regulations (safety, data collection…)	Structural
Protection of Public Service Contracts	Structural
National regulations, i.e. language requirements for train drivers (including derogation procedures at cross-borders), minimum number of staff on-board in trains, requirements for rolling stock etc.	Structural
General understanding of regulations and the process for new entrants (tariff, access, etc…)	Structural
Lack of long-term visibility on regulations (change of tariff design, rule for access)	Structural
Economies of scales	
Low volume entry is considered not to be profitable because of high amounts of fixed costs	Structural
Low volume entry is considered not to be profitable because of high amounts of sunk costs and/or upfront costs	Structural
Low volume entry is considered not to be profitable because of high amounts of exit costs	Structural
Network effects (commercial, industrial, etc.)	
Railway undertakings already in the market have established transport networks with strong positive network effects	Structural

Barriers to market entry	Structural / Strategic barrier
Railway undertakings already in the market have established ticketing systems that provide positive network effects.	Structural
Customer switching cost (freedom to switch operator)	Strategic
Pricing	
Artificially low prices in the market can also apply to tendering) / Predatory pricing	Strategic
Railway undertakings already in the market have set low prices, and a high output, so that entrants cannot make a profit at that price (limit pricing)	Can be both
Margin squeeze	Strategic
Cross subsidization, for example between infrastructure and transport services, passenger and freight transport services or between PSO passenger services and commercial services.	Strategic
Strict price regulation (price cap policy)	Structural
Contracts	
Exclusive contracts	Strategic
Directly awarded PSO-contracts	Can be both
Problems related to tendering procedures	Can be both
Operations	
Access to operational documentation	Structural
Lack of railway experts (NoBo/DeBo…) in each technical field	Structural
Unfair or unclear traffic management rules	Structural
Natural incumbents' economic advantages	
Brand loyalty (Incumbents' brand image gives them an economic advantage)	Strategic
Knowledge of the market (Incumbents' knowledge of the market and of undertakers give them an economic advantage)	Strategic
Information barriers and/or information asymmetry	
Limited availability of data (entry decision cannot be made due to lack of available information)	Can be both
Information asymmetry (incumbents have more reliable data than potential entrants)	Can be both
Accessibility to information for obtaining administrative qualifications (for instance necessary for obtaining of licenses and security certificates)	Can be both
Requirements for access to information (for instance specific requirements that the participants must possess in order to access the data room)	Can be both
Confidentiality clauses (contained in the Service Contract or in primary sources)	Can be both

09

Direct competition in the rail passenger market



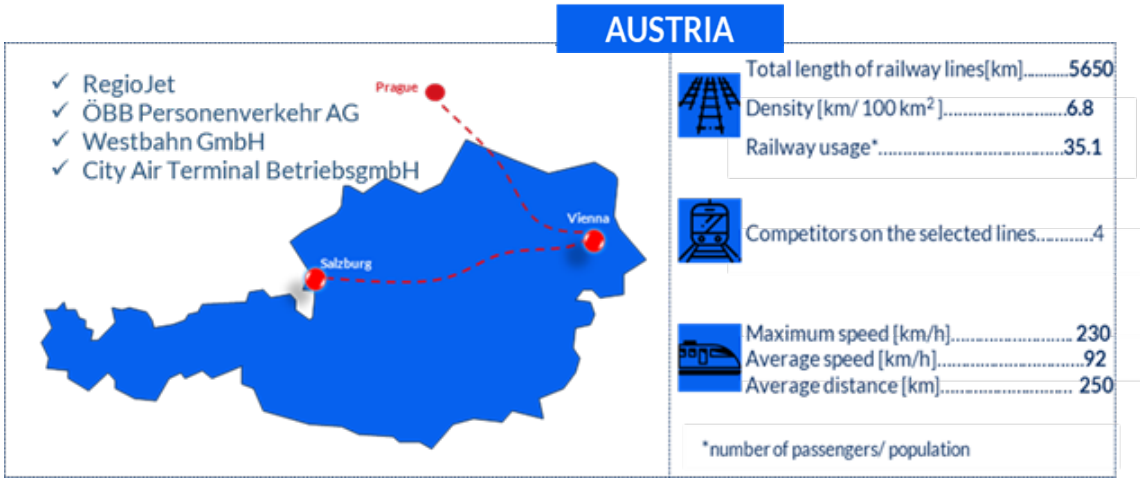
9.1. Aim and methodology

The aim of analysing the competition on selected major lines in European passenger rail market is to compare the offers available for passengers in particular countries. The analysis is based on a survey sent to 29 regulatory bodies. The survey contained questions about competition occurring on major railway lines defined as main railway lines comprising high-speed railway lines and important major conventional railway lines as defined by national or international authorities[16]. The survey asked for the following information:

- Name of the railway undertaking,
- Ownership of the RU (public or private),
- Routes on which the competition occurs,
- Type of service (PSO or non PSO),
- Type of rail connection (international, national interregional or regional)
- Division on high speed and conventional,
- Type of rolling stock servicing the connection (electric multiple units or locomotive with wagons),
- Maximum speed on the line,
- Distance and average time of the journey,
- Information on intermodal competition (air and road transport).

9.2. Detail by country

9.2.1. Austria



There are 5,650 km of railway lines in Austria. Its railway network is characterised by a density of approximately 7 km of route length per 100 km² of area and the TEN-T network covers 1,201 km. The main railway lines are in rail freight corridors RFC 5 and RFC 9. Competition in passenger transport occurs on three routes:

[16] Within the European Community guidelines define a specific main rail-network within the trans-european transport network (TEN-T), which is considered to be important at the community level.

- On the 380 km international long-distance route between Vienna and Prague (Czech Republic) where there is a choice between the incumbent operator ÖBB Personenverkehr AG and the private railway undertaking RegioJet.
- On the domestic long-distance route from Vienna to Salzburg where ÖBB Personenverkehr AG competes with the private operator Westbahn GmbH.
- On the suburban/regional route linking Vienna city and Vienna international airport (Wien Mitte - Wien Flughafen).

More than a half of traffic in train-km on these three routes is performed by the incumbent and publicly owned RU (54%) while the remaining 46% is operated by three private RUs. They are: Westbahn GmbH providing transport from Vienna to Salzburg, RegioJet offering international transport from Vienna to Prague and City Air Terminal Betriebs GmbH (CAT) connecting Vienna's centre with its airport. On regional and domestic routes, railway undertakings use electric multiple units (EMU) and international routes are served by wagon trains. The maximum speed on the Vienna - Salzburg route is 230 km/h. The other routes are operated at a maximum speed of 200 km/h.

The airport connection from Wien Mitte station in the centre of Vienna to Wien Flughafen is offered by two carriers: ÖBB Personenverkehr AG (ÖBB) and City Air Terminal Betriebs GmbH (CAT) which is partly owned by the Vienna International Airport. ÖBB provides PSO services, while the services of the second operator are commercial. The route covers a distance of 19 km and the journey takes 17 to 23 minutes with a maximum speed of 120 km/h. The total number of all trains running weekly is 1,358.

A large majority of total traffic on the competing routes considered in this study (95%) are operated without the support of public funds (non-PSO services). A bus connection, as an alternative means of transport, is present on all described routes. Prague and Salzburg can also be reached by airplane from Vienna (and vice versa).

Figure 32 – Number of trains running per week in Austria on the selected competitive routes

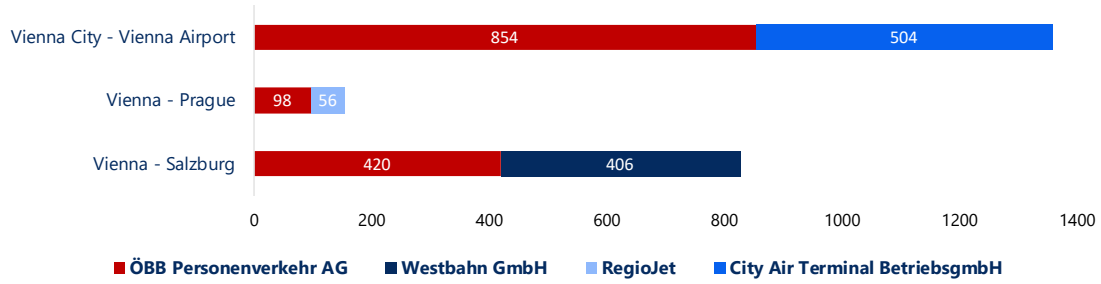
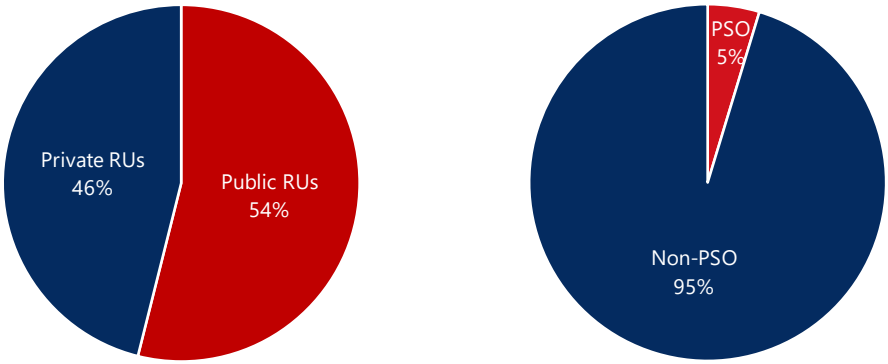
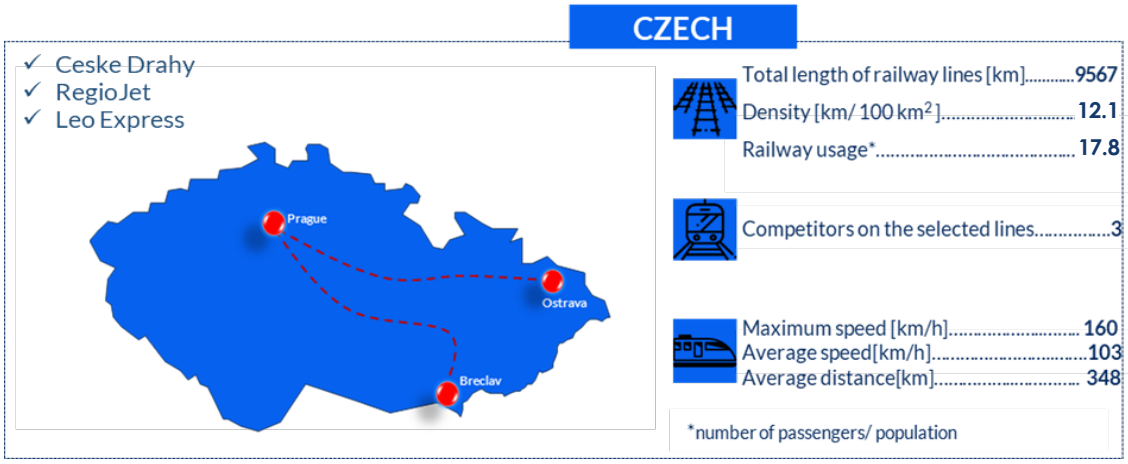


Figure 33 – Breakdown of traffic operated on the selected competitive routes by type of RU ownership and type of service



9.2.2. Czech Republic



There are over 9,560 km of railway lines in the Czech Republic. Approximately 7% of these are lines covered by the TEN-T network. The density of the network in the Czech Republic is 12.1 km/100 km², placing the country in the second place among IRG-Rail members. In the rail passenger sector, there are three railway undertakings competing on the main lines, where the state-owned company, Ceske Drahy is the dominant operator. The other two are private operators: RegioJet and Leo Express. Competition exists in domestic long distance and international rail transport. The support of public funds under the PSO is utilised only by the state-owned carrier (98 and 224 PSO trains per week on the Prague–Ostrava and Prague–Breclav routes respectively), which amounts to 32% of traffic in train-km.

Besides the dominant operator Ceske Drahy, between Prague-Ostrava competing services are offered by both by RegioJet (152 trains running weekly) and Leo Express (112 trains). With regards to the Prague–Breclav route, passengers have a competitive offering of RegioJet, running 112 trains a week, as well as the service of Ceske Drahy. The maximum speed on both routes is 160 km/h. Travel time between Prague and Ostrava depends on the timetable for each railway undertaking. Journey times range from 3 hours 15 minutes to 3

hours 45 minutes. Railway undertakings use EMU and wagon trains. Between Prague and Ostrava, passengers can take advantage of the alternative air connection, while between Prague and Breclav there are alternative bus connections. In the Czech Republic over 61% of train-km on the described lines are operated by the publicly owned company Ceske Drahy, 39% of traffic remains in the hands of private railway undertakings: Leo Express and RegioJet.

Figure 34 – Number of trains running per week in Czech Republic on the selected competitive routes

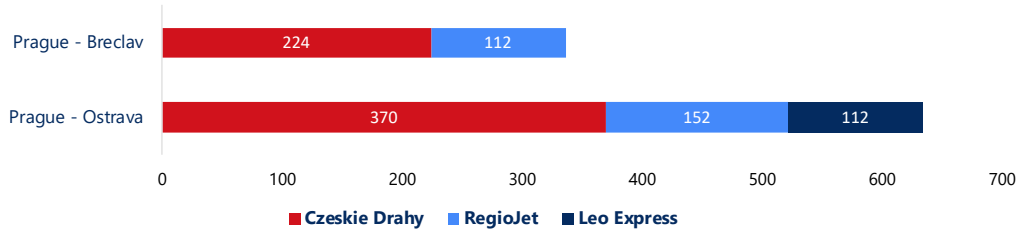
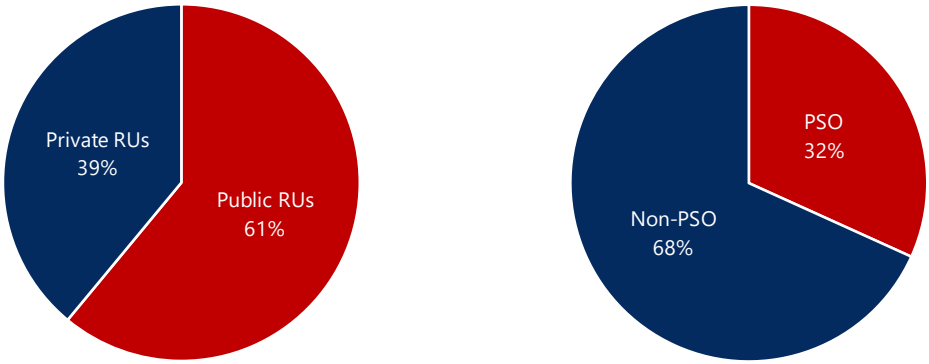
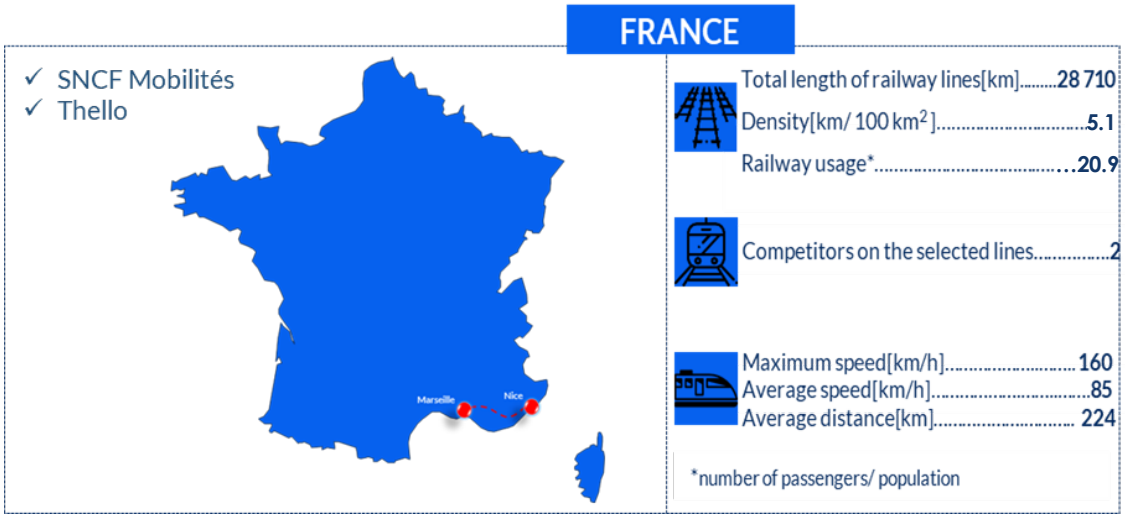


Figure 35 – Breakdown of traffic operated on the selected competitive routes by types of RU ownership and types of service



9.2.3. France



France with over 28,700 km of railway lines ranks second among IRG-Rail countries in terms of the length of the lines. Only the international passenger

transport market has been opened for competition, on which four railway undertakings operate in 2018. While Thalys and Eurostar (both are majority owned subsidiaries of the domestic incumbent) do not propose cabotage, Thello is serving six French cities between Marseille and Nice on their Marseille-Milan line and two other cities on their Paris-Venice night line, thus in competition with SNCF-Mobilités on these routes. Both SNCF Mobilités (the domestic incumbent) and Thello (a subsidiary of the Italian incumbent Trenitalia) are publicly owned companies. It is worth mentioning that Thello is an operator dedicated to handling international rail connections between France and Italy.

On the Marseille–Nice route for example, rail services are proposed under both PSO and non-PSO offering. This route is served by SNCF Mobilités as part of regional PSO services as well as domestic long-distance services and by Thello as international transport. While the number of trains differs from one service to another, their other characteristics (e.g. train speed, journey duration and prices) are quite similar. The maximum speed on this route is 160 km/h, served by both EMU and wagon sets. The time of the journey for this 224 km route is about 2.5 hours. However, the number of regional trains are mostly 50% higher than that of long-distance services and 10 times greater than Thello's.[17]

In terms of train-km, 56% of traffic on this route is PSO services, while 44% is non-PSO. Customers also have the alternative option to travel between Marseille and Nice by coach with a comparable journey time.

Figure 36 – Number of trains running per week in France within the selected competitive routes

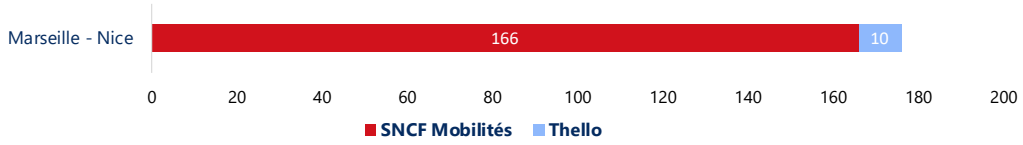
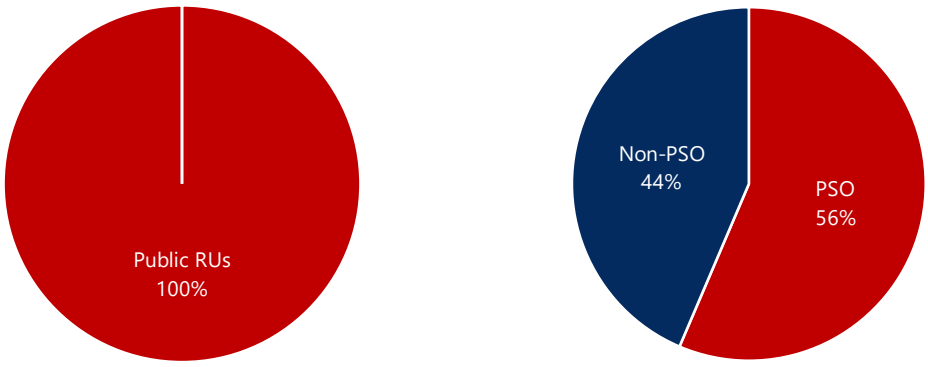
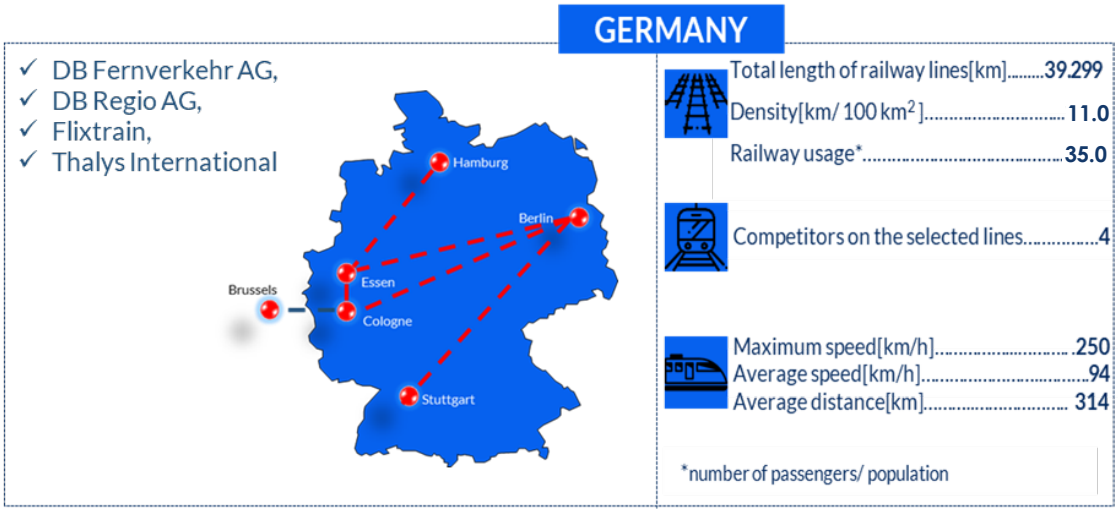


Figure 37 – Breakdown of traffic operated on the selected competitive routes by types of RU ownership and types of service



[17] Il can also be noted that since 2018, three short cross-border routes operated by both Thello and PSO services of SNCF Mobilités benefit from an agreement between the two undertakings. This agreement allows customers to subscribe to a unique monthly/annual pass that can be used on both Thello and SNCF Mobilités services between the three cities of Nice, Monaco and Vintimile (see here).

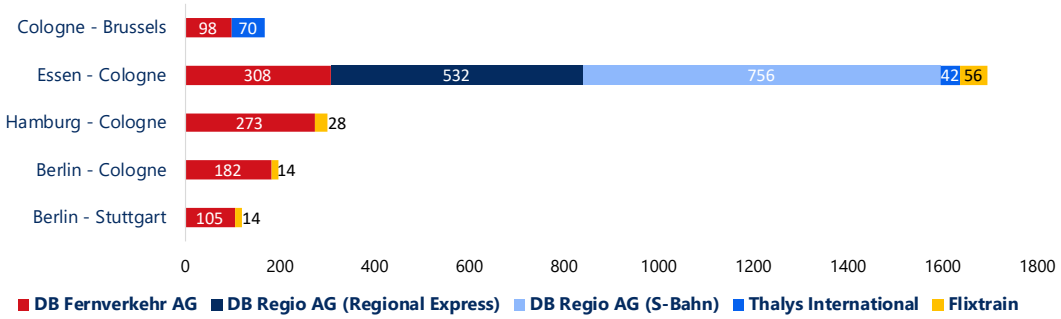
9.2.4. Germany



The German rail network is the longest in Europe. Direct competition was analysed on five main lines (which are only examples) where passenger services are provided by four railway undertakings, three of which are state-owned or related to state-owned enterprises. As part of public services, DB Regio AG provides two services (Regional Express and S-Bahn) between Essen and Cologne with a total of 1,288 trains a week. Competitive connections on this line are implemented, without public support, by Thalys, Flixtrain and DB Fernverkehr AG, totalising 79% of traffic.

The strongest competition takes place on the route between Essen and Cologne. It is served by all abovementioned four carriers. Depending on the entity, the route is served as part of regional, national and international transport. In total, 1,694 trains run weekly between these two cities. Travelling a distance of about 80 km takes approximately an hour with an EMU or a wagon train.

Figure 38 – Number of trains running per week in Germany on selected competitive routes



Competition in domestic long-distance transport takes place, for instance, between Berlin and Stuttgart, Berlin and Cologne and Hamburg and Cologne. Passengers can choose between two railway undertakings: state-owned DB Fernverkehr AG and private Flixtrain.

On the Berlin–Stuttgart route, a passenger may choose DB Fernverkehr AG train

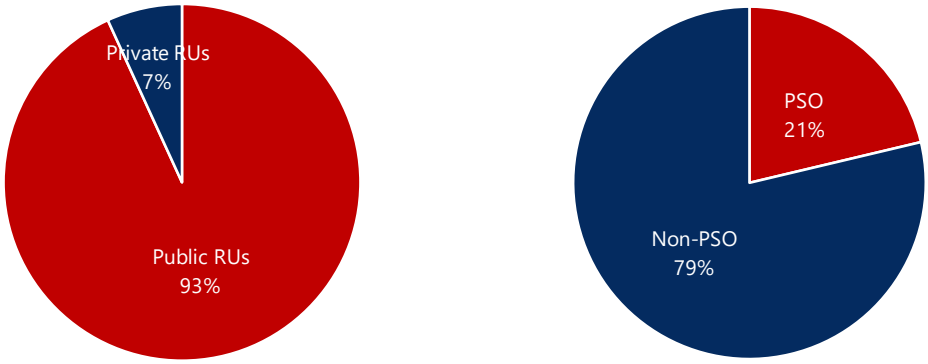
and take advantage of a trip in an EMU with a maximum speed of 250 km/h in about 5.5 hours, while, for price-sensitive customers, using the Flixtrain services for the same journey in a wagon train with a maximum speed of 160 km/h will take about 7 hours. The distance between cities is 650 km, and a total of 119 trains operate weekly.

The distance between Berlin and Cologne is 550 km. Passengers of DB travel in an EMU at a maximum speed of 250 km/h in about 4.5 hours, while in the Flixtrain wagon train takes about 6 hours at a maximum speed of 160 km/h.

On the Hamburg–Cologne route, both the journey with Flixtrain and DB Fernverkehr AG will take about 4 hours.

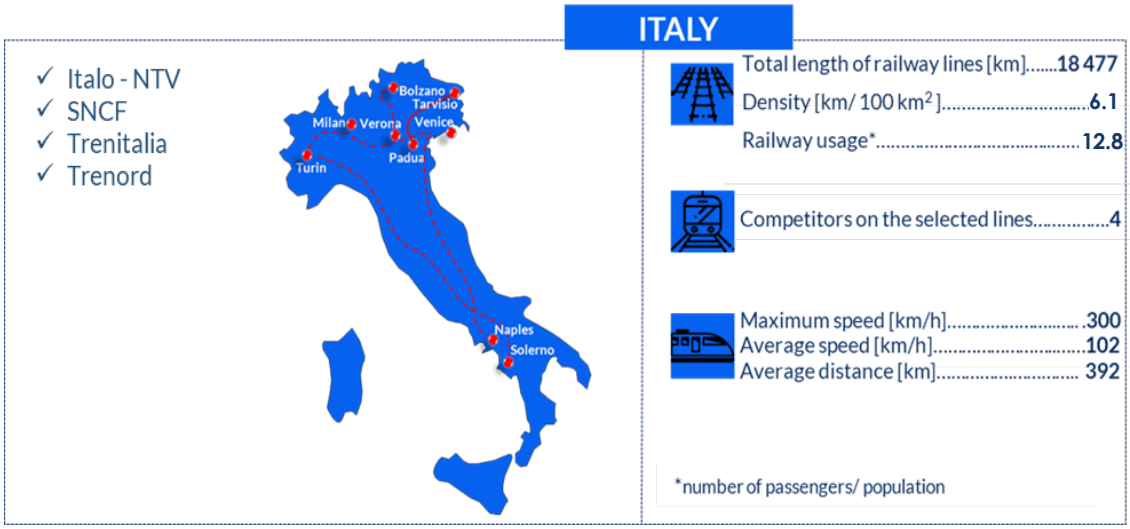
In Germany, there is also competition on international routes, for example between Cologne and Brussels. Passenger who want to travel from Cologne to the capital of Belgium can choose between an offer of Thalys International and DB Fernverkehr AG. In both cases, the distance of 220 km is covered in approximately 2 hours at a maximum speed of 250 km/h. Both carriers run 168 trains per week (high-speed EMU).

Figure 39 – Breakdown of traffic operated on the selected competitive routes by types of RU ownership and types of service



On these railway lines presented as examples to analyse the direct competition, 93% of traffic is operated by publicly owned companies, the remaining 7% are run by a private RU. On all indicated routes, passengers have the option to use a bus alternative. It should be mentioned, that there is also an alternative air connection between Cologne and Hamburg, Berlin and Cologne as well as between Stuttgart and Berlin.

9.2.5. Italy

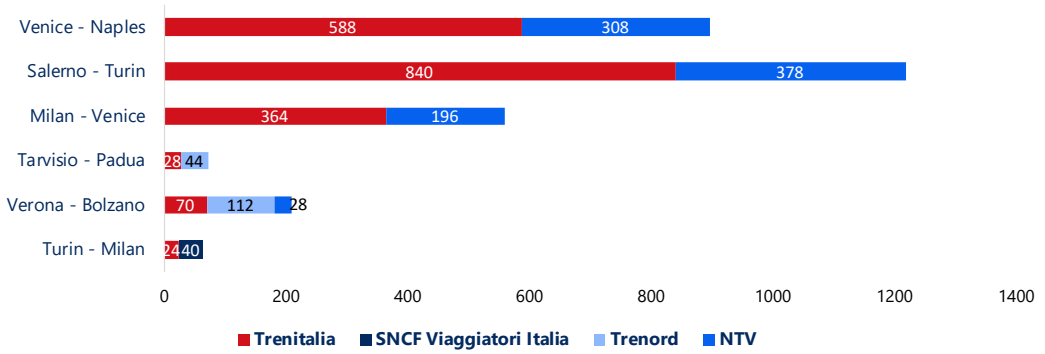


Italy is ranked fourth among IRG-Rail members in terms of the length of railway lines, while the density of railways places it in 12th position. In Italy, four railway undertakings compete on six routes as shown in Figure 40. Three companies are public (Trenitalia, SNCF Viaggiatori Italia - SVI, Trenord) and one private (Italo-NTV). Trenord is the railway company that has an agreement with DB-ÖBB for the traction and accompaniment of trains in Italy.

On the route between Turin and Milan, passengers can choose between the wagon trains of Trenitalia (domestic long-distance PSO services) or high-speed trains of SNCF Viaggiatori Italia (as part of an international line). There are 64 trains in both directions run weekly in about 1 hour choosing high-speed services and in 2 hours in PSO.

On Verona to Bolzano route, passengers can take advantage of the offer of three carriers (Trenitalia, Trenord (DB-OBB) and Italo-NTV) operating with EMU or wagon trains on a distance of over 155 km in 1.5 to 2.5 hours.

Figure 40 – Number of trains running per week in Italy on the selected competitive routes



The connection from Tarvisio to Padua is operated by two RUs: Trenord (DB-OBB) and Trenitalia with a total of 70 trains a week. The distance of 220 km can be covered in 2 hours 45 minutes to 3 hours 45 minutes. Transport in both cases

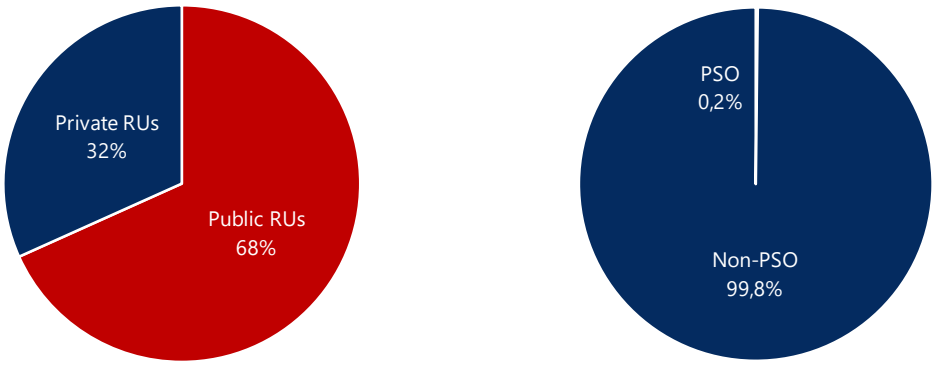
is carried out by wagon trains.

The service between Milan and Venice is operated by the state-owned Trenitalia and private Italo-NTV. The journey in EMU over a distance of 267 km takes between 2 hours 15 minutes and 3 hours 15 minutes. In total, railway undertakings operate 560 trains a week.

Trenitalia and Italo-NTV also offer long-distance connections. Passengers can travel on a distance over 900 km between Turin and Salerno – both railway undertakings offer the possibility of covering this distance by high speed trains between 6.5 and 7.5 hours.

The second route in terms of length connects Naples and Venice. Trenitalia and Italo-NTV offer a journey with a maximum speed of 300 km/h which covers a distance of 725 km in 5 to 6 hours.

Figure 41 – Breakdown of traffic operated on the selected competitive routes by types of RU ownership and types of service



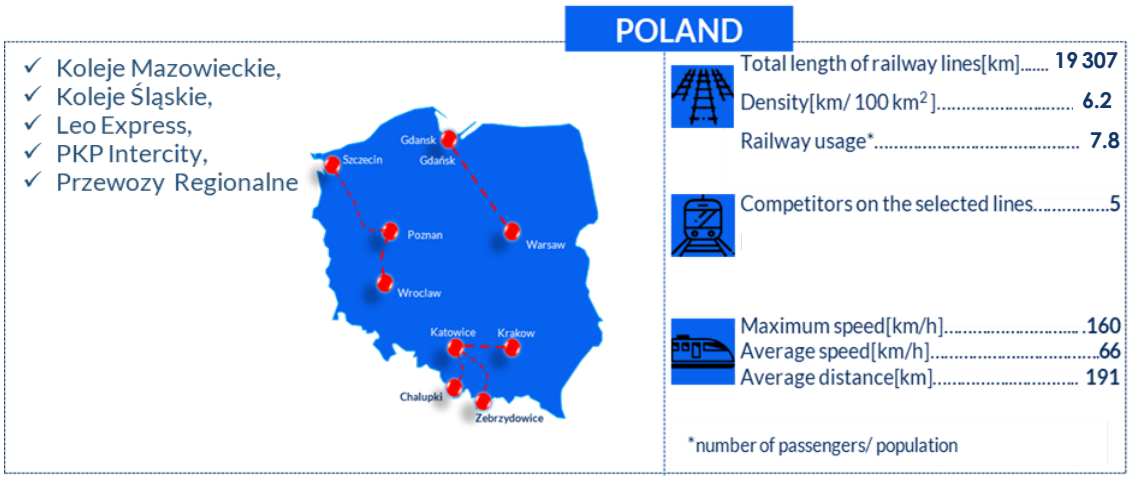
In Italy, nearly 70% of traffic is carried out by publicly owned companies and more than 30% by private operators. However, almost all carriers provide non PSO services. In all cases analysed for this chapter, passengers have the option of using bus transport. There is also an alternative of flights between Venice and Naples as well as from Salerno to Turin.

9.2.6. Poland

The Polish railway network with a length of over 19,300 km and a density of 6.2 km/100 km^2 places the country in third position in terms of length of the national rail networks and 11th in terms of the density among IRG-Rail countries.

Competition exists on six routes served by five railway undertakings.

On the domestic long-distance Warsaw–Gdynia route, there is competition between the incumbent operator PKP Intercity and the Mazovian Railways (Koleje Mazowieckie), which runs seasonal services between June and August. The total number of PKP Intercity trains is 264 per week. Koleje Mazowieckie operates 8 trains per week. The distance of 351 km takes between 3.5 to 5 hours.



Another case, where a passenger can take advantage of more than one offer is on the lines between Wrocław and Poznań and between Poznań and Szczecin. Competitive connections are offered by PKP Intercity and Regional railway undertakings. Almost all of them are provided under PSO contracts. The journey from Poznań to Wrocław takes about 3 hours, and the total number of weekly trains is 247. The journey between Poznań and Szczecin lasts from 3 to 3.5 hours, and the total number of trains is 191.

Another route where passengers can benefit from competitive offers is the connection between upper Silesia and the Czech border (through two border crossing stations at Zebrzydowice and Chałupki). Services from Katowice to Zebrzydowice are provided by three RUs: PKP Intercity, Koleje Śląskie and Leo Express. The journey takes approximately one hour for a distance of 71 km using in each case an EMU. Railway undertakings offer a total of 87 connections per week. From Katowice to Chałupki there are three competitive offers from the same RUs operating 153 connections per week. A distance of about 75 km is covered in about an hour and a half.

Direct competition also occurs on the railway line between Kraków and Katowice (76 km). Three railway undertakings operate on this route: PKP Intercity, PolRegio, Leo Express.

Figure 42 – Number of trains running per week in Poland on the selected competitive routes

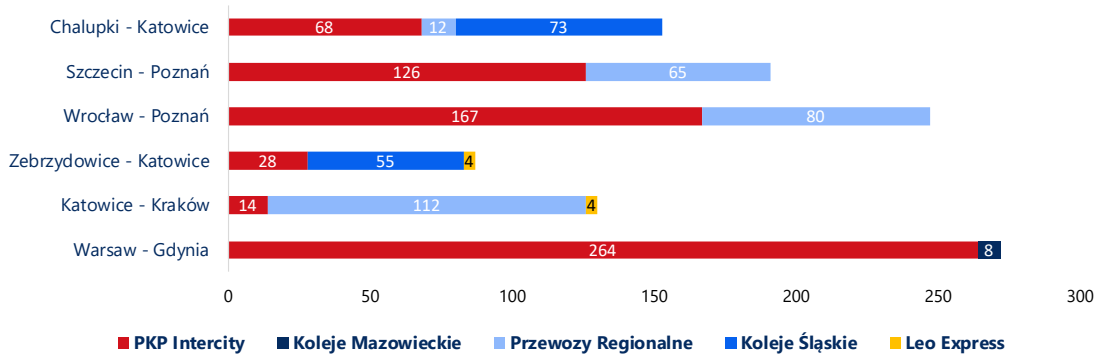
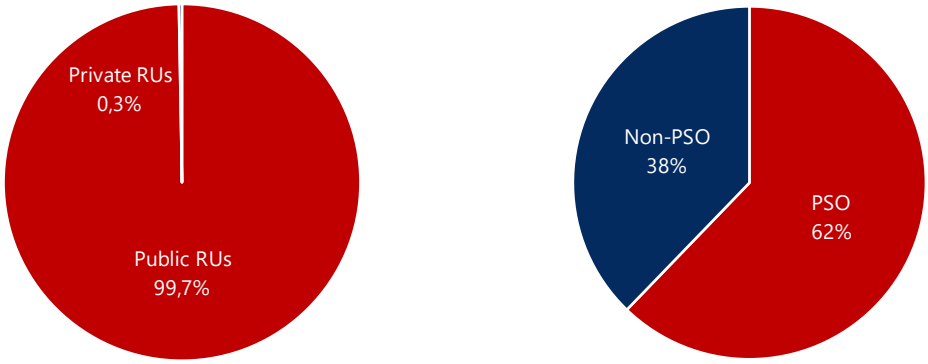
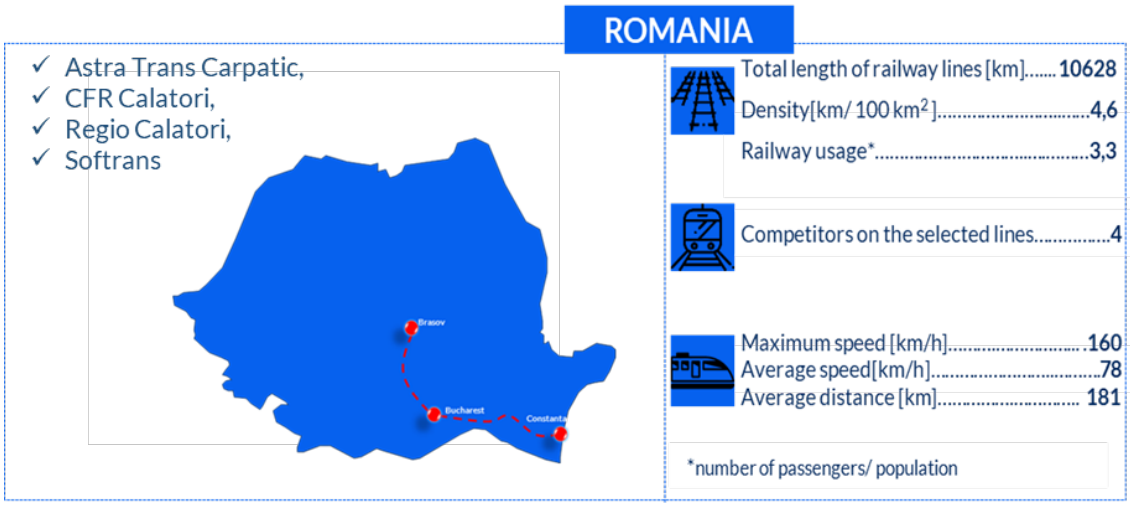


Figure 43 – Breakdown of traffic operated on the selected competitive routes by types of RU ownership and types of service



In Poland, 62% of traffic on the described routes are operated as PSO services and 38% is non-PSO. Almost all (99,7%) traffic in train-km is provided by publicly owned RUs. Only 0.3% is carried out by Leo Express, a private rail operator from the Czech Republic.

9.2.7. Romania



There are five private RUs on the Romanian rail market: Regio Calatori, Astra Trans Carpatic, Softrans, Transferoviar Calatori, Interregional Calatoriand (the first three propose services on competitive major lines presented in this study) and one publicly owned RU: CFR Calatori.

From Bucharest to Brasov, passengers can choose between four carriers. In each case the distance of 160 km is covered in about 2 hours (using EMU or wagon trains) with a maximum speed of 160 km/h.

For passengers travelling from Bucharest, the capital of Romania, to the port city of Constanta located on the Black Sea shore, the state-owned CFR Calatori offers 84 trains weekly. The distance of 225 km is covered in about 3 hours. The other RU on this route offering seasonal trains from June to September are Astra

Trans Carpatic and Softrans, both with one pair of services per day from Monday to Friday.

In Romania, two-thirds of traffic on the selected main competitive lines is operated by publicly owned RUs and one-third by private operators. Romania is the only country studied in which all traffic in train-km on main lines is carried out as PSO. On the indicated lines, the passenger may choose an alternative bus connection.

Figure 44 – Number of trains running per week in Romania on the selected competitive routes

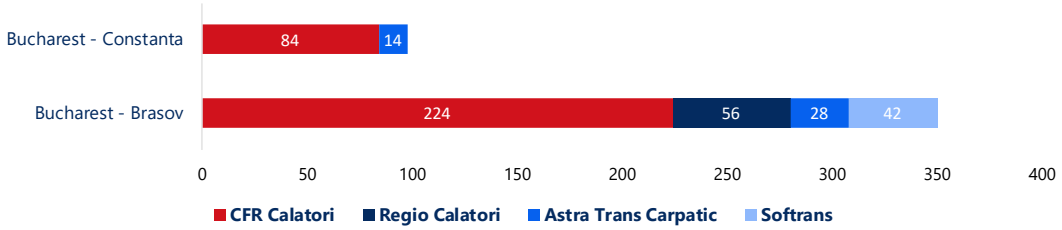
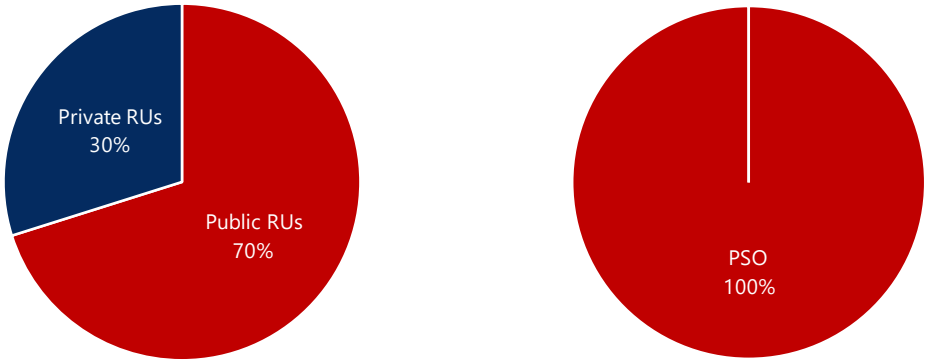
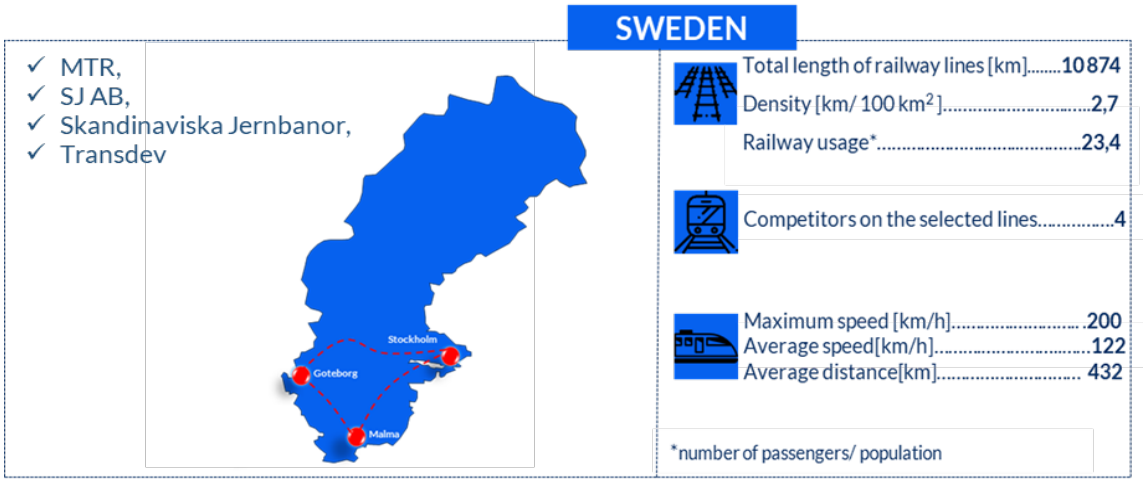


Figure 45 – Breakdown of traffic operated on the selected competitive routes by types of RU ownership and types of service



9.2.8. Sweden

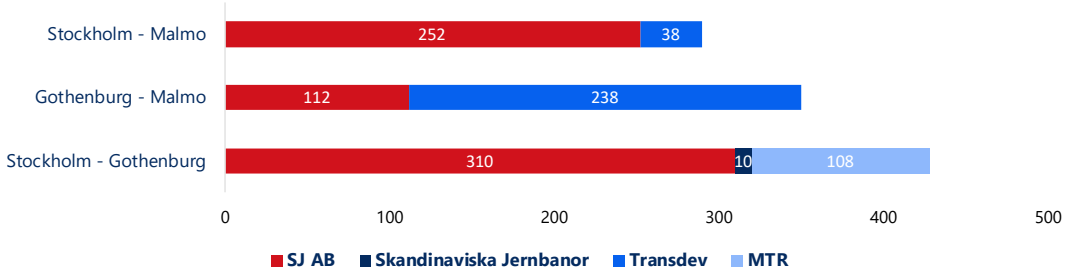


In Sweden the total number of competitive trains operating on the main lines is 1,068. There are four passenger RUs providing services on the selected routes,

two of which are private: Skandinaviska Jernbanor and Transdev, and two are state-owned: SJ AB (domestic incumbent) and MTR (foreign incumbent).

MTR, SJ AB and Skandinaviska Jernbanor operate on the Stockholm–Gothenburg route. Depending on the offer selected, the journey lasts from 3 to 5 hours. Trains operated by the state-owned SJ AB and MTR are carrying passengers within high-speed EMU in about 3 hours. The other option is a five-hour journey offered by conventional trains operated by Skandinaviska Jernbanor or SJ AB. Weekly, 344 high-speed trains and 84 conventional trains operate with a maximum speed of 160 km/h.

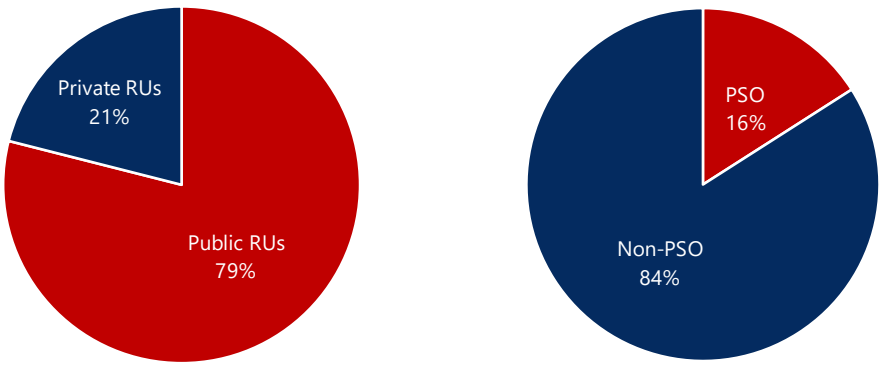
Figure 46 – Number of trains running per week in Sweden on the selected competitive routes



The journey between Gothenburg and Malmo takes 2.5 to 3 hours. The route covering a distance of 300 km is serviced by two RUs, Transdev (PSO) and SJ AB (non-PSO), operating EMU. In total, both carriers operate 350 trains a week.

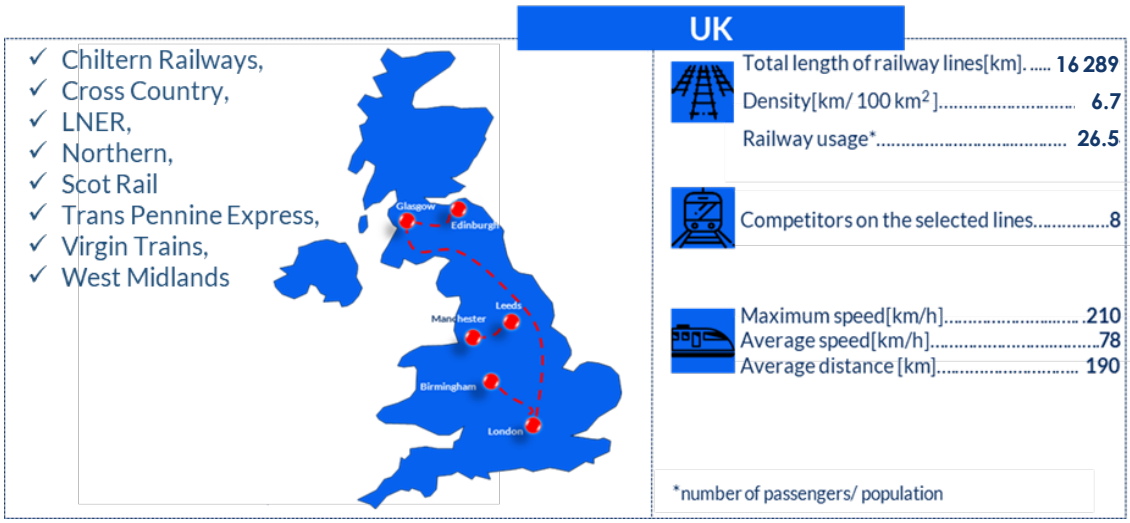
The distance of 480 km between Stockholm and Malmo is covered in 4.5 to 5 hours. Two operators are competing on this route: private Transdev, with wagon trains running with a maximum speed of 160 km/h and state-owned SJ AB, with EMU operating with a maximum speed of 200 km/h. In total 290 trains run in both directions per week.

Figure 47 – Breakdown of traffic operated on the selected competitive routes by types of RU ownership and types of service



In Sweden 79% of traffic in train-km on the described competing routes is operated by publicly owned RUs and 21% by private operators. 16% of traffic is PSO, while 84% is non-PSO. On all routes, customer may also opt to use bus and air connections, except for Malmo-Gothenburg where no air alternative is available.

9.2.9. United Kingdom

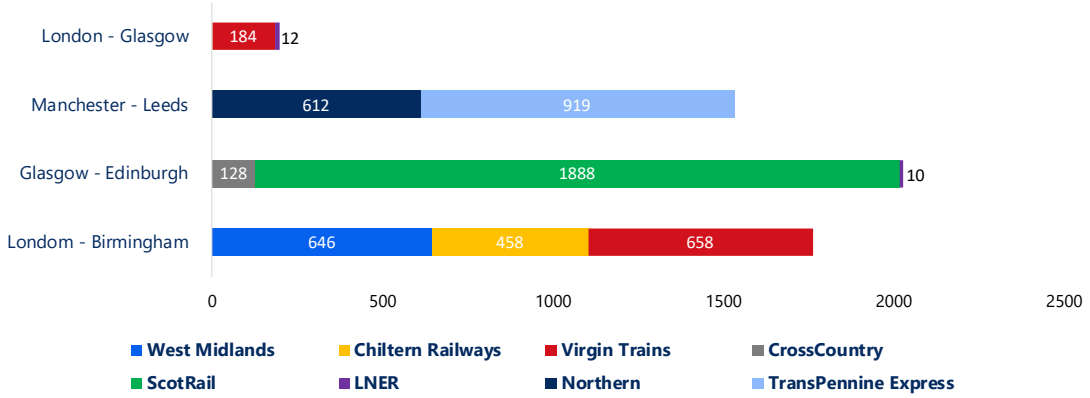


United Kingdom is in fifth place in terms of the length of railway lines and 10th place in terms of network density among IRG-Rail countries. For this study, direct competition is reported on four major lines served by a total of eight RUs. Due to a large liberalised network, information about direct competition was not provided for all routes.

The largest competition in terms of the number of trains operating is on the Glasgow - Edinburgh route, where three carriers operate a total of 2,026 trains in both directions per week. Passengers can choose from the offers of: Cross Country (128 trains), ScotRail (1,888 trains) and LNER (10 trains). The journey covering a distance of 67 km takes about an hour. The route is operated with EMU.

The second largest route in terms of the number of trains operating weekly is London–Birmingham. The route is served by three railway undertakings: West Midlands, Chiltern Railways and Virgin Trains. This is a distance of 160 km and journeys take between 1.5 to 2 hours.

Figure 48 – Number of trains launched per week in the United Kingdom on the selected competitive routes



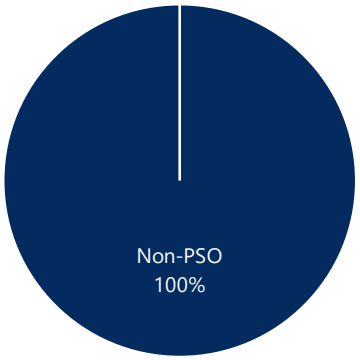
The third route where the competition occurs is Manchester–Leeds. There are

two carriers: Northern and TransPennine run 1,531 trains in both directions. The distance of 57 km is covered in 1 to 1.5 hours.

On the London–Glasgow route 196 trains are operating weekly. Two carriers offer connections covering 555 km with EMU in 4.5 to 6 hours.

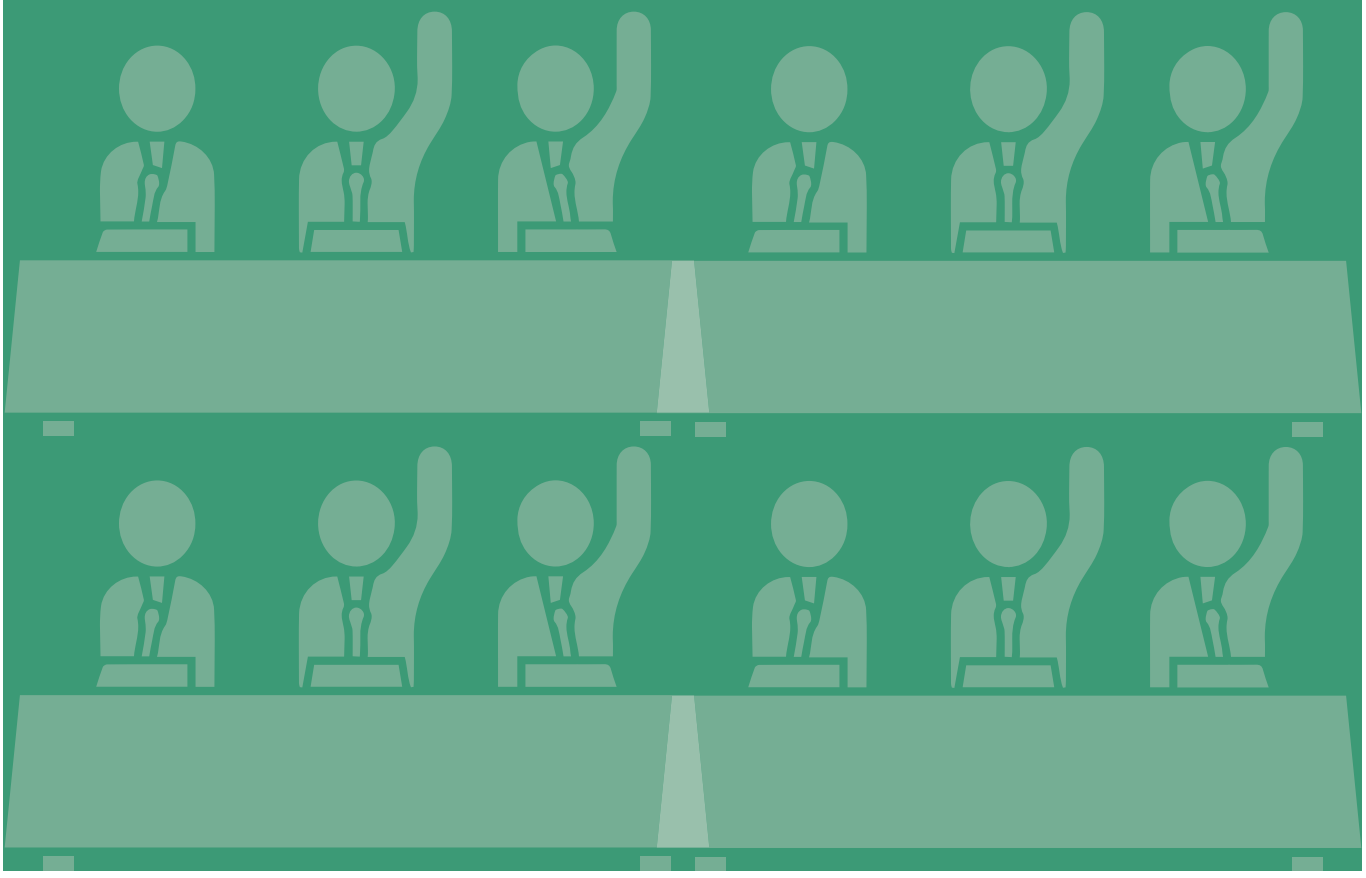
In the UK, all indicated RUs providing services on selected major lines are franchised and they serve non-PSO services. On most routes, passengers have the alternative of coaches and airplanes.

Figure 49 – Share of PSO and non-PSO services in total traffic operated on the selected competitive routes



10

Abstract of regulatory decisions in 2018



Austria

- Decision regarding the 2019 timetable

Two railway undertakings (the incumbent and a competitor) had a conflict due to the awarding of train paths in long-distance traffic. Since the infrastructure manager could not solve this problem, one railway undertaking appealed to Schienen-Control Commission in order to solve the conflict. Schienen-Control Commission rejected the complaint after it applied the rules of priorisation which were in force back then.

- Decision on the traction current network usage model of 2017 and 2018

Since 2016, several railway undertakings have been exercising their right to select their own energy supplier. ÖBB-Infrastruktur continues to provide the network for the transmission of electricity and ensures that the feed-in power from third-party energy suppliers is converted from 50 hertz to 16.7 hertz and transmitted via the traction current network to the traction vehicle. To ensure fair competition in this sector, Schienen-Control Commission examined the conditions for transmitting, converting and distributing the electricity as well as related costs standards for 2017 and 2018. Some of the cost positions were declared excessive and/or invalid and hence a tariff reduction was imposed on the network manager for both years.

Belgium

- Decision regarding the cost model (November 2018)

Due to legislative developments, the charging model for direct costs of Infrabel had to be adjusted so that the tariffs could be determined in accordance with the regulations. The submitted cost method was in line with both European and Belgian regulations and was therefore approved.

- Decision related to certain charges levied by SNCB to Railway undertakings for access to railway stations or services provided in the railway stations (August 2018)

SNCB may not apply the fees for the mobile equipment in its current form (not compatible with Belgian legislation).

- Decision to terminate the audit assignment regarding the performance scheme (July 2018)

Infrabel has withdrawn the performance scheme that contained discriminatory elements. In addition, Infrabel made the necessary commitments in search for

a new system on the one hand and a solution for the 2017 to 2019 timetable periods on the other hand.

- Decision regarding the conformity of Infrabel's contract for the reservation of capacities with the Railway code (May 2018)

Different articles have to be modified.

- Seven decisions regarding a dispute between the infrastructure manager and seven railway undertakings regarding the performance regime (April 2018)

The Regulatory body decided - based on discriminatory arguments brought up by some RU's which were already demonstrated by the regulatory body in a previous advice - that the performance regime needed to be adapted conform Belgian legislation to avoid any discrimination.

Bulgaria

- Decision to suspend the Order of the NRIC under which all wagon overload templates were declared invalid (December 2018)

The reviewed complaint was filed by the railway carrier DB Cargo Bulgaria ltd. against Order N° 662 from 30.03.2018 of the infrastructure manager – Director-General of the State-owned enterprise National Railway Infrastructure Company (NRIC), with which all wagon overload templates were declared invalid. The complainant claims that as the owner of 70 six-axle freight wagons of the Eaaos type, is deprived of the opportunity to operate the wagons according to the maximum load capacity.

As a result of the inspection, the Executive Director of RAEA issued decision N° 15-03-2 / 14.12.2018 to suspend the Order of the Director-General of NRIC until the following instructions were fulfilled:

- develop rules for issuing a permit for exceeding the gross axle load of a type of wagon, in accordance with the requirements of BDS EN 15528:2016. The rules shall specify the criteria for the decision whether to grant an authorization or refuse an authorization, and the conditions under which such authorization may be revoked;

- announce on its web site the procedure for issuing an authorization for exceeding the gross load on the axle of freight wagons.

- pending the approval of the SOE NRIC to exceed the gross axle load of freight wagons, the wagons should be operated in accordance with the basic table (ABC table) for the load in accordance with BDS EN 15528:2016.

- Decision on the deadline for the response of the operator of the service facility on requests for access and provision of services in service facilities (November 2018)

In fulfillment of the requirements of Art. 9 (1) of Commission Implementing Regulation (EU) 2017/2177 of 22 November 2017 on access to service facilities and rail-related services and Art. 17, para. 8 of Ordinance No. 41 on Access and Use of Railway Infrastructure, the Executive Director of RAEA issued a Decision N° 15-03-1 of 27.11.2018, which set out the deadline for the response of the operator of the service facility on requests for access and provision of services in service facilities.

Croatia

- Arrangements for access to infrastructure

Croatian regulatory body (RB) decided on a complaint submitted by the HŽ Putnički prijevoz LLC (HŽPP), Croatian passenger railway undertaking, against the infrastructure manager HŽ Infrastruktura LLC (HŽI), concerning Art. 11 Par. 1. TAC 2017/2018. HŽPP claimed that HŽI restricted its responsibility in case of stand or interruption of traffic, which is caused by HŽI´s fault. HŽPP claimed that it can't recover the whole damages and that HŽI misuses its monopoly position. RB rejected HŽPP`s complaint since the right to compensation can be accomplished in a civil litigation, without any limitation. HŽI can´t limit the right to compensate full damages.

- Access to service facilities and related services

Decision according to the Art. 13 Par. 4 of Directive 2012/34/EU regarding reasonable time limit for answering to requests for access and supply of services in service facilities. A single three-day time limit is set for all service facilities and all services.

Czech Republic

- RB reviewed the network statement with result that some decisions are against the law. (November 2018)
- RB reviewed infrastructure access charges with result that they are not justified by calculation. (July 2018)

Denmark

- Decision on the supervision of 2018 charges for intermodal terminals in Høje Taastrup and Taulov (JN36-00036, ongoing case).

According to the statutory order on intermodal terminals § 9(3) the operators must forward the terminals' general conditions of use to the Danish Rail

Regulatory Body (The Danish RB). The general conditions must contain a description of the conditions for access to the terminals along with the conditions for use of the terminal. Furthermore, the general conditions must contain information about what services that are provided and at what charge.

In accordance with the statutory order the Danish RB oversees whether the operator of a terminal complies with the regulations in the statutory order. As part of the Danish RB's supervision of the operator, the terminal is obliged to provide any/all requested information and documents.

The supervision of the two terminals as mentioned above began in 2017 and has required quite a lot of correspondence. Several times the Danish RB has been compelled to issue injunctions with notices of penalty payments in order to receive the necessary information.

The supervision of the general conditions of the two terminals was finalised in 2017.

Originally the supervision concerned the charges for 2017. The regulatory body decided then to change the focus of the supervision to the charges for 2019 to give DB Cargo improved conditions for fulfilling documentation requirements such as extending the deadline for which the requirements set by the Danish RB must be met.

Despite the extended deadline the Danish RB was compelled to issue several injunctions with notices of penalty payments with the sole purpose of having DB Cargo to fulfil the required documentation. After the first injunction relating to the charges for 2018 from 30th November 2017, similar rulings were decided on 28th September 17th October and the 28th of November.

DB Cargo has in connection with the Danish RB's administrative procedure repeatedly requested further extensions of deadline. DB Cargo had by the end of the year 2018 not yet completely fulfilled the document requirements. The Danish RB found it necessary to initiate supervision with DB Cargos' charges for 2019 according to the case JN36-00052.

DB Cargo filed a lawsuit against the Danish RB the 12th of October 2017, because DB Cargo found one of the Danish RB's injunctions about forwarding revised general conditions without legal basis. On the 10th of July 2018 the City Court's judgement acquitted the Danish RB. The 16th of July 2018 DB Cargo chose to appeal the case to the Danish High Court. The Danish High Court's decided on the 11th of July that the recast 2012/34/EU was not fully incorporated into national law. Because of this the Danish RB did not have the legal basis for its decision and the ruling was therefore in favor of the appellant/DB Cargo. The Danish High Court did find one of the appellant's claims was to be dismissed. The Danish RB has requested the Appeals

Permission Board to allow the case to be brought before the Supreme Court as the ruling has limited the Danish RB's ability to operate in correspondence with EU legislatives.

The 23rd of November 2018 DB Cargo filed another lawsuit against the Danish RB. DB Cargo disputes the validity of the Danish RB's rulings of the 28th of September 2018 and the 17th of October 2018.

The ruling of 28th of September 2018 relates to injunction and notice of administrative penalty payments due to lack of forwarding of documentation regarding the charges for 2019 for the intermodal terminals in Taulov and Høje Taastrup. The ruling of the 17th of October relates to the Danish RB's rejection of the resumption of the injunction ruling.

The case has been brought for the City Court and awaits a date for trial proceedings.

- Supervision of 2019 charges concerning the intermodal terminals in Hoeje Taastrup and Taulov (JN36-00052, ongoing)

At the end of 2018 it was still not possible for the Danish RB to finish the supervision of the charges for 2018 concerning the intermodal terminals in Hoeje Taastrup and Taulov because of the lack of the documentation

For this reason, the Danish RB found it necessary to supervise the charges for 2019 for the intermodal terminals in Høje Taastrup and Taulov. Including an intent to ensure the compliance with the regulations regarding charges in the statutory order of intermodal terminals.

The 28th of November 2018 Jernbanenævnet issued an injunction to the operator of the terminals about submitting full documentation for the charges of 2019.

At the end of 2018 DB Cargo had yet to fulfil their documentational requirements.

The 29th of March 2019 the Danish RB had finally received all the necessary documentation needed in order to conduct the supervision of the 2019 charges.

The supervision of DB Cargo's documents shows that some of the charges for 2019 are sat higher than the specified level according to the statutory order of intermodal terminals' § 7(1). The charges must only cover the allocated costs, with a for each service reasonable profit. Therefore, the Danish charges must be adjusted downwards.

The 18th of June 2019 the Danish RB decided to issue an injunction to adjustment of charges downwards along with a notice of administrative penalty payments if non-compliant.

- Supervision of charges for 2018 etc. concerning the intermodal terminal in Padborg (JN36-00037, Octobre 2018)

Concurrent with the supervision of DB Cargo, the Danish RB has completed an identical supervision with the charges and other general conditions for TX Logistik's intermodal terminal in Padborg.

In so far as the general conditions are concerned, TX Logistik had formerly forwarded the general conditions of the Nordic Association of Freight Forwarders, but there was no explicit mentioning of either TX Logistik nor the intermodal terminal in Padborg. Following the regulatory body's request and further instructions TX Logistik composed specific general conditions for the use of the intermodal terminal.

Following further instructions regarding the general conditions for the terminal, TX Logistic chose to abandon different conditions. Including conditions regarding collection of additional compensation and cancellation fees etc.

Subsequently certain conditions were added to the general conditions, including that users of the terminal have the right to self-supply within the terminal's area. It was specified that self-supply includes cleaning of trains, operation of coolant systems, parking and shunting of trains in periods where the operator of the terminal is absent and not able to offer this, i. e. outside the terminal's regular opening hours.

It was specified in the general conditions that the users are entitled to file a complaint to the Danish RB regarding rejection of requests for access to the terminal, use of services provided and the charges.

The Danish RB had nothing further to add to the case. The general conditions were published at the terminal operator's website and that part of the case was closed.

In relation to the charges, there was a prolonged process with guidance of TX Logistik about the design of the required documentation. Including the layout of internal account with auditor's statement, number of sold services pr. user, design of a cost allocation, model of reasonable profit, etc.

The final documentation for the supervision of the charges for 2018 was forwarded by TX Logistik the 15th of June 2018. The case was finalised by the Danish RB's indicative opinion on the 9th of October 2018. The regulatory body declared that certain charges for 2018 was set higher than prescribed according to the statutory order's § 7(1). Under these circumstances the board exceptionally refrained from mandating a downward adjustment of the charges for 2018. However, at the same time TX Logistik was informed that the board intended to take similar supervision regarding the operator's charges for 2019 and that TX Logistik must expect that the board will demand downward

adjustment of charges that must have been established higher than the costs with reasonable profit.

- Answer to questions regarding DSB's wheel profiling facility in Aarhus along with the tracks leading into the facility (JN36-00044, May 2018)

By a letter dated 13th September 2017 Arriva Tog A/S requested the Danish RB to answer questions regarding DSB's wheel profiling facility in Aarhus along with the tracks leading into the facility.

Initially the case was postponed due to clarification of the security authority's interpretation of the exemption regulation in the Railways Act § 2(6), collection of information from DSB and specification of Arriva's questions in the case.

On a conference call the 5th of February 2018, the questions were finally clarified, and the 27th of February 2018 DSB had forwarded all the necessary information needed for the Danish RB's handling of the case.

The case was hereafter finalised by the Danish RB issuing a statement 16th of May 2018.

The board stated that the tracks that connect the wheel profiling facility with Banedanmark's infrastructure was covered by the Railway Act's regulations regarding market entry. The board found it significant that the tracks were used by other railway undertakings than the owner and used for other purposes than solely freight transport. Furthermore, the board referred to directive 2012/34/EU about establishing a single European railway area, article 10 litra 1-2 and the directive's preamble no. 12, where the regulations about market entry should be applicant on infrastructure, that connects service facilities with the railway network, even if such an infrastructure consists of private tracks that are exempted from the directive's requirements for infrastructure managers.

Additionally, the board stated that the wheel profiling facility is a service facility according to the Railway Act. In that relation the board attached importance to the fact that the wheel profiling facility conveyor necessary and regular maintenance with the trains and is not custom made nor limited to maintenance of specific types of trains.

The board found that the railway undertakings have a right for access in a non-discriminatory manner to the tracks leading into the wheel profiling facility cf. Railway Act § 4(1) just as railway undertakings have a right to request operating capacity for the wheel profiling facility on a level playing field, cf. Railway Act § 5(3).

According to DSB all railway undertakings can make use of the wheel profiling facility, though it is a requirement for each railway undertaking that they in advance will sign a special access contract. The contract for access contained

(The contract's § 9) regulations that essentially changed the distribution of a potential liability for damages between the parties that otherwise applies according to the common principles about liability for damages within and without contract (among others a limitation of DSB's liability to DKK 1M each incident, exemption for compensation by indirect damages, operating loss, etc.). The board stated that these regulations could displace the distribution of a potential liability for damages in favor of DSB. Thereby leading to discrimination between DSB and other railway undertakings in violation of the Railway Act § 4(1). The board concluded that the regulations must be omitted from the access contracts.

Estonia

No final decisions taken in 2018 by the Regulatory body.

Finland

- Decision following a complaint concerning the pricing of provided services in freight market (September 2018)

A complaint filed by Fenniarail Ltd (an entrant on the rail freight market) that concerns pricing of the services provided for enabling Russian border crossing for the freight wagons and of related shunting service, both provided by VR Group Ltd (incumbent RU). In its decision Finnish RB obliged VR Group Ltd to make changes to its charging principles and cost accounting as well as to publish the prices.

- Disapproval of the investment charge proposal submitted by FTA (August 2018)

Finnish Transport Agency (FTA) submitted an application to the regulatory body for the acceptance of investment charge (based on 2012/34/EU article 32(3)) to be collect between 1.1.2019 - 31.8.2021. Finnish RB declined FTA's application. RB concluded that the charge as suggested by FTA did not fulfil the criteria set by Finnish railway law and directive 2012/34/EU article 32(3), accordingly.

- Requirement for immediate adjustments of the 2019 network statement (July 2018)

Finnish RB initiated an own-initiative investigation after the Finnish Transport Agency (main infrastructure manager) published an updated version of the network statement for the timetable period of 2019 on 13 June 2018 to supplement and remedy the information in the network statement. The Regulatory Body considered that the Transport Agency should make certain

adjustments to the network statement for the timetable period 2019 immediately.

France

- Publication of a four-volume booklet on railway market opening (March 2018)

Looking ahead to the upcoming opening of the passenger railway markets in France, the Regulatory Body aims to share its knowledge about railway markets with market players and public authorities through a four-volume booklet:

Volume 1 – European experience of railway market opening: This volume gives an overview of what happened in Europe after the opening of the rail market in terms of traffic, quality of service, prices and performance of the incumbent as well as new entrant operators.

Volume 2 – Lifting the obstacles to a successful market opening: The second volume sheds lights on technological, economic, regulatory and information barriers which might hinder effective competition. Some solutions to overcome these obstacles are then presented.

Volume 3 – Conditions for an efficient opening of the PSO railway market: Principal steps of the opening of the PSO market are detailed, accompanied by some recommendations so that the market liberalisation could be effective.

Volume 4 – Questions about the opening of the open-access railway market: The scope of the open-access market, the profitability of the service, the economic balance between PSO and non-PSO services, and the role of competent authorities are the points analysed in this volume.

- Opinion on a draft order of the “Law for a new railway pact” (November 2018)

In June 2018, the Law n° 2018-515 for a new railway pact was adopted in France. This law modifies the institutional as well as financial organization of the railway market and sets out the procedures for the opening of the domestic market following the Fourth railway package.

In November 2018, the Regulatory body (RB) was consulted on a draft order prepared in application of this law. The draft order contains provisions for the railway infrastructure management and domestic passenger market opening. The RB drew the attention of the government to the following four points:

- Independence of the infrastructure manager (IM): The RB recalled the need to guarantee the independence of the IM, especially within a vertically integrated group, in terms of (i) preventing potential influences of other entities on the IM’s decisions and (ii) impartiality of the members of the supervisory and

executive boards. While the first recommendation was adopted in the final order published in December 2018, the second was only partially taken into account. The order indeed provides that a code of conduct must be established by the IM itself, which is not prescriptive enough whereas the role entrusted to the RB in this area remains limited.

- Regulatory framework for service facilities: The RB deemed it essential to strengthen the regulatory framework for service facilities by (i) by allowing the RB to issue opinions on the rules applicable to service facilities and (ii) introducing the concept of “efficient operator” into national law. This recommendation was however not included in the published order.

- Transmission of information to the regional competent authorities: The RB recalled the need to ensure that all information, presently held by the incumbent, necessary to establish the transport plan and to operate PSO services is transmitted to the regional organizing authorities in proper conditions and free of charge.

- Risks of reconstituting a vertically integrated scheme: According to the Law, organizing authorities may entrust a railway undertaking holding a public service contract with the station services when the latter are mainly used by PSO services. However, the way this can be done is not clarified in the draft order. The RB then highlighted the inherent risks of reconstituting a vertically integrated scheme through this practice due to this lack of clarification.

- Decision on the establishment of an incentive system for a better usage of the network capacity (December 2018)

The RB adopted a decision to improve the reciprocal incentive scheme which will be applied to the 2020 duty roster and later. The new system aims to encourage applicants and the IM to make better use of the commercial and non-commercial capacities of the national rail network. There are two main advances compared to the previous device:

- Extension of the scope: The incentive scheme now extends to the entire national rail network, except for the section conceded to LISEA. In addition, the scheme now applies to the train path-days requested through last-minute enquiries of service, after a test period without travellers. The new system also provides for the penalization of all successive modifications of the timetable or the train path no matter which side – the applicants or the IM – originating the change (only the first action was previously penalised). Finally, the penalties are computed over the entire train path-day attributed, i.e. at all points (origin, intermediate and destination) of the train path-day and at the corresponding arrival/departure or passing time.

- Revision of sanctions: The new system defines a more progressive scale of sanctions so that each modification is more strongly penalised each day closer to the day of traffic.

Germany

- Ruling regarding the network statements of DB Netz AG (November 2018)

On 2 October 2018, DB Netz AG and DB RegioNetz Infrastruktur GmbH notified Bundesnetzagentur of changes they intended to make to their network statements. Bundesnetzagentur had six-week time to review the intended changes and made use of its right of refusal under section 73 (1) no. 4 of the Rail Regulation Act. It refused to approve, among other things, plans to freeze at the current level orders for regional passenger rail transport services on lines that have been designated as congested. Bundesnetzagentur also refused to approve a change which would extend the minimum stop and turnaround times that are to be taken into account in the timetable. Bundesnetzagentur also refused to approve an arrangement DB Netz AG wanted to use to shorten the coordination process in conflict situations. DB Netz AG wanted to set a low abstract maximum limit on the number of proposed solutions to be submitted. Bundesnetzagentur determined that with this arrangement DB Netz AG would not fulfil its obligation to coordinate train path requests. Due to Bundesnetzagentur's refusal to approve the request, the planned changes cannot go into effect. DB Netz AG has instituted legal proceedings with the Cologne Administrative Court against the ruling.

- Review of the Westbahn railway's access entitlement (September 2018)

The company Westbahn Management GmbH informed Bundesnetzagentur of its plans to offer cross-border train service between Vienna and Munich Central Station for the 2019 working timetable (starting December 2018). Westbahn does not have a registered office in Germany. Consequently, based on current law, in order to acquire access entitlement, it must notify the rail regulatory authorities in advance of its intention to offer cross-border passenger rail transport service. After these plans were announced by Bundesnetzagentur, "entitled parties" (railway undertakings that operate passenger services on at least one section of the planned train service) had the opportunity to request Bundesnetzagentur to review the crossing of the border to determine if it is the main purpose of the planned service. DB Regio AG and DB Regionetz Verkehrs GmbH made use of this opportunity. Bundesnetzagentur determined on 25 September 2018 that the main purpose of the train service being planned by Westbahn along the route Vienna – Munich for the 2019 working timetable is to transport passengers between railway stations in different EU Member States (Federal Republic of Germany and the Republic of Austria).

- Incentive system of DB Netz AG (August 2018)

Bundesnetzagentur refused to approve the arrangements DB Netz AG planned to put in place for an incentive system. An objection to DB Netz AG's incentive

system was raised in 2017. The company subsequently submitted a revised system in 2018. The revised incentive system was supposed to include higher contractual penalties and apply to DB Netz AG's entire network. In addition, contractual penalties for DB Netz AG were significantly higher for delays due to construction work than for delays with other causes. Bundesnetzagentur found that the system proposed by DB Netz AG was not compliant with the legal requirements for incentive systems. On the one hand, the basic parameters of the planned incentive system had not been sufficiently agreed on with the parties with access entitlements. There was no corresponding agreement with the rail freight transport undertakings. Further, the payment calculation did not take into account the average delay of the transport services. Other objections concerned unreasonably short deadlines for applying for corrections regarding the assignment of delay minutes, the lack of impartiality on the part of the designated dispute settlement body, and inappropriate provisions to reduce and preclude claims for damages.

- Approval of charges for passenger stations (July 2018)

Bundesnetzagentur approved DB Station&Service AG's charges for the use of its passenger stations for the year 2019. DB Station&Service AG operates approximately 5,400 stations in Germany, making it the largest operator of passenger stations in the country. Prices for the year 2019 increased an average of 1.11%. This was a moderate increase compared to the previous year (2.96%). In the course of the approval procedure, various cost estimates were not accepted in the originally submitted amounts. This led to a lowering of the relevant upper limit on charges.

- Access to railway system hubs (January 2018)

As part of its activities to regulate access to service facilities and services, Bundesnetzagentur monitors access to important hubs in the railway system such as marshalling yards, interfaces with other modes of transport such as (container) terminals or passenger stations or railway workshops and other services pertaining to railway transport. Considerably more than 100 investigations and proceedings relating to this issue were conducted in 2018. Proceedings regarding freight terminals Access to service facilities must be provided on reasonable, non-discriminatory and transparent terms. In January 2018, the Federal Administrative Court confirmed (6 B 21.17 of 15 January 2018) that operators of trimodal freight terminals are subject to rail regulation and are required to grant access on said terms. In the case of a facility that is operated for the trimodal transshipment of containers, the court ruled that the facility, irrespective of the share represented by rail transport, is a freight terminal in terms of rail regulation. From a functional standpoint, the purpose and typical operational processes in such a facility are decisive factors for its

classification, the court said. The Federal Administrative Court thus adheres to a broad understanding of the term “service facilities” under the Rail Regulation Act as well. Following the Federal Administrative Court’s ruling, 14 suspended investigations of terminal operators in the Duisburg/Upper Rhine area were resumed. In the meantime, the operators of the container terminals have acknowledged that they are subject to regulation.

- Approval of track access charges (January 2018)

Bundesnetzagentur approved DB Netz AG’s charges for the use of its train paths during the 2018/2019 working timetable period. The track access charges for regional passenger rail service were approved without any adjustments. The charges for regional passenger rail services were calculated on the basis of the average charges per Land (federal state) in 2017 and then increased in line with the funding provided for the development of regional public transportation. The track access charges DB Netz AG applied for in the “standard” market segment for rail freight transport were lowered by 5% because of the special intermodal competitive and margin pressure in rail freight transport. The Ruling Chamber reduced the track access charges proposed by DB Netz AG in its request by 16% in the segments Charter / Nostalgia (which are served primarily by competitor railways) and by 7% in the Point-to-Point segment. The determinations issued by the Ruling Chamber is applying since 9 December 2018.

- Proceedings to set an upper limit on total costs (August 2018)

Prior to the start of the first regulatory period, which runs from 2019 to 2023, the base level of total costs for each undertaking concerned was determined on a one-off basis in a ruling. Using this base level, an upper limit on the total costs was set for each undertaking concerned for the 2019/2020 working time-table period. The annual determination of the upper limit on total costs takes into account the general inflation rate on the one hand and the general productivity growth rate on the other. The productivity growth rate is based on time series published by the Federal Statistical Office or the German Council of Economic Experts. The upper limit on total costs restricts the charges to be requested and approved for the respective working timetable period in the first regulatory period. The determination of the 2020 upper limit on total costs for the 2019/2020 working timetable period is the second determination of an upper limit on total costs in the first regulatory period. DB Netz AG’s upper limit on total costs for 2020 is Euro 59 million (1.1%) less than the previous year’s determination for the 2019 upper limit on total costs (€5.3bn). The key dynamic behind the lowering of the upper limit on the total costs was the fact that during relevant period the inflation rate that fuels rising prices was lower than the productivity growth rate which acts to lower costs. The fact that the reduction

rate was not applied to DB Netz AG resources whose use DB Netz AG agreed to undertake in the Service Level and Funding Agreement II had the effect of slightly dampening the lowering of the upper limit on the total costs. DB Netz AG underwent a recognition procedure to determine whether Service Level and Funding Agreement II could be taken into account when calculating the upper limit on total costs. This procedure resulted in the recognition of this agreement as a qualified regulatory agreement.

Greece

No significant decisions taken in 2018 by the Regulatory body.

Hungary

- Setting time limits to answer requests related to service facilities

According to the Hungarian railway act requests by railway undertakings for access to and supply of services in the service facility referred to in point 2 of Annex II shall be answered within a time limit set by the regulatory body. The time limit cannot exceed 15 days. During the procedures we have investigated maintenance facilities. The facilities provide service regulated under Point 2. d) and 2. e) of Annex II of the 2012/34/EU Directive. Taking into account the relevant national legislation and the service facility statement published by the operators, we set the maximum time limits to be determined (15 days) for answering requests. While determining the time limit, we have taken into consideration that requests may only be refused if there are viable alternatives allowing railway undertakings to operate the freight or passenger service concerned on the same or alternative routes under economically acceptable conditions. Considering the fact that in case of lack of capacity in the service facility the procedure for determining whether a viable alternative is available is part of the capacity allocation process, which in the regulatory body's opinion requires a significant amount of time, we considered that setting the maximum time limits for answering requests was justified.

- Reporting obligations of BOBO Co.

We have been investigating a potential service facility operated by BOBO Co. As an outcome of the procedure we set out in decision No. PIUF/5058-3/2018-NFM that the facility provides service regulated under ANNEX II point 2/e of the 2012/34/EU Directive. Based on the above, we have obliged BOBO Co. to fulfil its reporting obligations within 30 days after receiving the decision towards VPE (independent capacity allocation body responsible for the compilation of the Network Statement) concerning information on conditions for access and towards the regulatory body concerning its registration as an operator of a service facility.

- Warning to the capacity allocation body

In an ex-officio procedure we found that the capacity allocation body violated the provisions of the national legislation on the declaration of congested infrastructure in the Network Statement and the principle of transparency in the allocation procedure. We issued an official warning to the capacity allocation body to prevent future breach of law.

- Warning to the IM

In an ex-officio investigation concerning the elaboration and content of a capacity enhancement plan we found that the IM did not fulfil all requirements concerning the obligatory content of the capacity enhancement plan and it did not carry out a preliminary consultation with the applicants. We issued an official warning to the IM to prevent future breach of law.

Italy

- Procedure concerning access to the service facilities (October 2018, closed in 2019)

Procedure concerning access to the service facilities and to the services provided by such plants are supplied, started with ART Resolution N° 98/2018, approved on 11 October 2018, ended with ART Resolution N° 130/2019.

As regards supervisory activities in the sector of access to railway infrastructures, during the course a series of sanctioning procedures started in the year 2018 were concluded in the reference period.

- Decision n. 16/2018 (February 2018): Minimum quality conditions of local and national rail passenger services subject to public service obligations.

Following an ad hoc consultation procedure, the Authority adopted a set of indicators and levels aimed at measuring the minimum quality conditions of services provided under public service obligations.

The measures, which apply to rail passenger transport services of local, regional and national interest, are to be adopted by awarding entities and railway undertakings operating either on a national or interconnected rail network, or (though with an ad hoc timetable) on isolated networks, that have concluded service agreements. These conditions are intended to be factored in the Charters of quality of rail passenger services as determined in the service agreement, as well as in the programming documents of transport services.

- Decision n. 120/2018 (December 2018): Conclusion of proceedings initiated by Decision No 69/2017. Adoption of regulatory measures on

"Methodologies and criteria to ensure the efficient management of regional rail transport services".

- Decision n. 106/2018. Conclusion of proceedings initiated by Decision n. 43/2018. Adoption of measures concerning the minimum rights that may be claimed from infrastructure managers and rail operators by users of rail transport services subject to public service obligations

Ireland

No decisions were taken during 2018 or decisions whose effects appeared in 2018.

Kosovo

- Preparation and transposition of the Regulation No. 01/2018 on the modality for cost calculation, that are caused directly as the result of the train operation.

Initiation and organizing the consultation process for the draft Network Statement 2019 and holding a public discussion with stakeholders.

There are prepared and sent to stakeholders for final comments on draft Network Statement 2019.

An agenda has been prepared and we have applied in TAIEX for organizing a workshop with the subject: Opening of the railway market, according to EU practices.

Latvia

- Four decisions on equal and non-discriminatory access to a private-use railway infrastructure (January 2018)

The applicants - an incumbent RU, informed RB that there is no access in the four different private-use railway infrastructure holds by a port-based freight terminal. RB investigated the cases, in order to clarify whether the infrastructure serves or could potentially serve for more than one end-user, the named freight terminals, and in 3 cases concluded there is more than one end-user of the private-use railway infrastructure for using they for rail freight operations, but in 1 case - that there is only one end-user. RB adopted 4 decisions: in 3 cases instructing private IM's to grant the access to RU, and in 1 case taking no actions. Decisions were taken on 24 January 2018. No appeal to court was submitted. In 3 cases the defendants - private IM had taken steps to comply with the decision.

- Decision on the infrastructure charges setting (January 2018)

The applicant - a RU, asked RB to investigate the newly adopted infrastructure charges, complaining that the new charges on average by 5% increasing for freight services, and asking to check whether the charges for 1track lines and 2track lines can be charged the same amount. RB requested the information from IM and investigating the newly charges. No infringements or grounds for discrimination was found in the investigation. RB adopted decision leaving the charges unchanged and finding RU's complaint as unfounded. Decision was taken on 25 January 2018. No appeal to court was submitted.

- Decision on RB's own initiative on IM charge collection scheme (February 2018)

RB supervising the charge collection scheme adopted by IM, investigated whether the charge collection scheme was in accordance with railway legislation, and found that named scheme did not foreseen that applicants could pay for infrastructure charges according to article 44(1) of Directive 2012/34. RB adopted a decision instructing IM to make the necessary amendments to charge collection scheme, so that also applicants can pay infrastructure charges. Decision was taken on 1 February 2018. IM appealed to court. No court decision adopted.

- Decision on RB's own initiative on IM charging scheme (June 2018)

RB supervising the charging scheme adopted by IM, investigated whether the charging scheme was in accordance with railway legislation, and found several infringements: IM had applied a full mark-up for PSO segment because state shall cover losses of passenger operator of the PSO contract; and a market can bear test had not been performed by IM; and as well the charging scheme did not contain criteria as to how to do a market can bear test. RB adopted a decision instructing IM to introduce criteria for measuring market can bear test in the application of mark-up. Decision was taken on 27 June 2018. IM appealed to court. No court decision adopted.

Lithuania

- Decision on the capacity allocation process

The RRT received a complaint from Gargždų geležinkelis Ltd (hereinafter – the GG) regarding the allocation of public railway infrastructure capacity for the validity period of the 2017-2018 working timetable for rail transport and related decisions on 6 November 2017. In that complaint, it was stated that the GG was not allocated the requested public railway infrastructure capacity and such exclusion was not justified. After analysing the full content of the complaint, the RRT found that the capacity allocation process was not carried out properly that the decision on the allocation of capacity was made on the basis of false data.

Against this background, the RRT decided (RRT 7 March 3 2018 order No. 1V-198) that the capacity allocation process should be re-launched and properly carried out by the capacity allocation institution (Lithuanian transport safety administration, LTSA), and, based on new findings, a new decision on the allocation of capacity to GG should be adopted.

The GG and LTSA appealed the RRT decision (RRT 7 March 2018 order No. 1V-198) to the Regional Administrative Court (hereinafter – the Court):

1) The Court examined the case on the GG's appeal and left the RRT decision unchanged. The Court decided that the capacity allocation process for the 2017-2018 working timetable was carried out by entitled institutions. The GG disagreed with this decision and appealed against it to the Supreme Administrative Court. The case is still pending.

2) The Court stopped examination of the case on the LTSA's appeal because this case was related to the GG appellation to the Supreme Administrative Court. The Court is waiting for the decision of the Supreme Administrative Court judgment, which was mentioned in paragraph 1.

Luxembourg

No significant decisions taken in 2018 by the Regulatory body.

Republic of North Macedonia

No significant decisions taken in 2018 by the Regulatory body.

The Netherlands

- Response to a complaint concerning the network statement (November 2019)

DB Cargo filed a complained concerning the network statement of ProRail. DB Cargo argued that the description of the service sidings was incorrect. Contrary to previous years, ProRail charged this service from the first minute. The ACM ruled that the rates were not in conflict with Dutch law, although the definition of the service sidings was not consistent throughout the network statement.

- Response to a complaint concerning the division of capacity on marshalling yard Kijfhoek (February 2019)

DB Cargo also filed a complained concerning the division of capacity on marshalling yard Kijfhoek. The ACM ruled that ProRail did not follow the correct procedure, although it led to the right result.

Norway

No final decisions were taken by the Norwegian regulatory body in 2018.

Poland

- Decision on introduction of changes to the Passenger Stations Statement (October 2018)

In December 2017, the President of the UTK opened ex-officio administrative proceeding to verify if Passenger Stations Statement issued by PKP S.A., hereinafter called the “Statement”, complies with the Railway Transport Act.

In October 2018, President of UTK issued a decision in which he ordered PKP S.A. to introduce changes to the Passenger Stations Statement. In the opinion of the President of UTK, the internal regulations of the manager need to be improved.

This includes: (i) the price list, which included also the area not used to check-in passengers, or (ii) differentiated fees for access to stations of the same category depending on the province. (iii) PKP included in the access charge the costs related to stations which are no longer managed by them and stations located along the lines covered by the total traffic interruption. (iv) Statement do not contain full information on passenger stations managed by PKP (no information on services, no information on the technical conditions of access to the station), i.e. passengers with disabilities or reduced mobility.

PKP submitted the appeal for reconsideration of this case.

- Approval of the access charges for the 2018/2019 timetable (August 2018)

In August, President of UTK issued a decision approving the access charges for the 2018/2019 timetable. For the first time, the charges fulfil the 2015/909 regulation regarding calculation of the direct costs, and the IM applied mark-up in its access charges. Mark-up allows to cash-back a part of the total costs. It is 1,20 PLN/train-km and concerns freight trains not lower that 660 tons, excluding intermodal trains.

Prior to approving of the access charges, the President of UTK started a public consultation with the market – market entities could present their opinion on the new charges. Prior to approving the access charges, the President obliged IM to clearly define the rules of calculating and settlement of the mark-up in the network statement. If the IM achieves the revenues on the higher level that foreseen in the multiannual program it would stop to impose mark-ups or even return it to the RU.

Portugal

No new decisions were taken in 2018.

Romania

- Decision on the charging system revision (June 2018)

The Romanian Regulatory Body (CNSDF) received a complaint from the private freight railway undertaking GFR SA against CFR SA (IM) regarding the charging system applied by the IM within six contracts concluded between CFR SA and GFR SA. The Regulatory Body adopted the Decision No.1/28.06.2018 and issued measures for the IM in order to revise the charges and methodologies which include in their calculation the wage components that reflect the effective activity performed by the personnel of the IM.

- Obligations to the IM to apply the structure and methodology of the new tariffs in a transparent and non-discriminatory manner (August 2018)

Romanian Regulatory Body (CNSDF) decided on a complaint submitted by the Association of Private Operators against the infrastructure manager (CFR SA) concerning art. 56 par.2. of the national Law 202/2016. The Association of Private Operators complained about some charges (level and description) for additional services within service facilities imposed by the infrastructure manager. After reviewing these tariffs, CNSDF issued the Decision No.2/30.08.2018 and CFR was obliged to respect and to apply the structure and methodology of the new tariffs in a transparent, non-discriminatory manner, in accordance with the Law 202/2016.

- Obligations to the IM to make certain adjustments to the 2019 network statement (August 2018)

Following an own-initiative assessment procedure, the Romanian Regulatory Body (CNSDF) adopted a decision to complete and adjust the information provided by CFR SA, the infrastructure manager, in the Network Statement for the year 2019. The Decision No.3/30.08.2018 considers that CFR SA should make certain adjustments to the network statement for the timetable period 2019 immediately. The adjustments referred to the publication in a transparent manner of the charges and the methodologies used.

Serbia

The proceedings were suspended due to the withdrawal of the appeal. The appeal was withdrawn due to agreement between IM and RU. (31. October 2018)

Slovakia

Three decisions in the field of possible impact of new international passenger railway services on existing services operated under public service contract

Slovenia

No significant decisions taken in 2018 by the Regulatory body.

Spain

- Report on the network statement (January 2018)

The CNMC publishes a report on the network statement of the Spanish IM before its publication in order to encourage the IM to implement some improvements in the network statement (STP/DTSP/057/17).

- Setting conditions to be met by Renfe Alquiler to rent locomotives to its competitors (May 2018)

The Spanish Regulatory Body establishes the conditions to be met by Renfe Alquiler to rent locomotives to its competitors in freight traffic to reduce the entry barrier to the railway freight transport market. (STP/DTSP/055/17)

- Opinion on the new draft legislation provided by the Transports Ministry (July 2018)

The CNMC has approved the report on the Preliminary Draft Law amending Law 38/2015 of 29 September on the railway sector, which incorporates Directive 2016/2370 into the Spanish legal framework. (IPN/CNMC/014/18:)

- Reports on the market for the transport of passengers by rail (September and December 2018)

The CNMC has published its monitoring reports on the market for the transport of passengers by rail (both PSO and non-PSO) to have a better knowledge of the market before the liberalisation (INF/DTSP/117/18 and INF/DTSP/173/18)

- Approval of new service (September 2018)

The CNMC has approved a Resolution in which it considers that the main purpose of the new international passenger transport service by train communicated by Intermodalidad del Levante, S.A. (ILSA) between Madrid and Montpellier is international passenger traffic (STP/DTSP/052/17)

- Approve the IM's charging scheme for 2019 (September 2018)

Decision about the ADIF charging scheme for 2019. (STP/DTSP/069/18)

- Principles and methodological criteria related to the economic equilibrium test (October 2018)

The text approves the principles and methodological criteria to be applied in relation to the economic equilibrium test of a new international passenger transport service. (STP/DTSP/077/18)

- Approval of the public consultation (October 2018)

The CNMC has approved the public consultation document on the principles and criteria for the application of Commission Implementing Regulation (EU) 2017/2177 of 22 November 2017, which concerns access to service facilities and related rail services. (STP/DTSP/118/18)

- Report on the 2019 network statement (November 2018)

The CNMC publishes a report on the network statement of the Spanish IM before its publication in order to encourage the IM to implement some improvements in the network statement (STP/DTSP/119/18).

- Report on rail freight market (December 2018)

This report is carried out in the exercise of the function of supervision and control of the proper functioning of the railway sector attributed by law to the regulatory body and is aimed at rail freight services. The present document, in addition to presenting the situation of rail freight transport in 2017, incorporates a study analysing the costs of this service, with the aim of highlighting the main factors that determine its competitiveness with respect to road freight transport (INF/DTSP/041/18).

Sweden

- Decision on the modulation of the average direct unit cost (January 2018)

The main Swedish IM, the Swedish Transport Administration (Trafikverket), modulated the average direct unit cost by basing the modulation on the vehicle with the highest axle weight load in the train. The RU claimed that the modulation was not in line with Regulation 2015/909 since it does not reflect the actual wear and tear caused to the infrastructure and that it was discriminatory for RUs with wagon load traffic. The RU also claimed that the method of modulation in Network statements 2017 and 2018 should be based on an average of the axle weight in the train. The Swedish Transport Agency (RB) found that the IM couldn´t prove that the modulation did reflect the cost directly incurred by the train service operation and it was therefore not in line with the Regulation and not in line with the Swedish Railway Act. The RB decided that Trafikverket shall ensure that, if a modulation of TAC is based on axel weight, they must determine method and rules for a modulation in line with the regulation at the latest in the Network Statement 2020. The RB dismissed the claim that the modulation should be based on the average of the axle weight for NS 2017 and 2018. It is possible that this method is in line with the legislation but there was not enough information to change this retroactively since this would affect other RUs.

- Settlement of dispute about the performance scheme and delay classes used (July 2018)

Due to a planned construction work, the main IM Trafikverket (the Swedish Transport Administration) lowered the maximum speed for a distance of 3 km with an estimated delay of 10 minutes. The route was not equipped with ATC. The delay was referred to delay class Planned construction work, i.e. a penalty was to be paid by the IM to the RUs. Several RUs did not respect the speed limit. Trafikverket therefore had a dialogue with the RUs, but RUs continued to exceed the speed limit. Trafikverket then decided to lower the maximum speed for a longer distance (60 km) to be able to control the speed with ATC. The estimated delay was prolonged to about 50 minutes. Trafikverket also changed the delay class to accident/ incident for the rest of the construction work period and no penalty was paid neither from IM to RU, nor from RU to IM.

The complaint: A RU complained to the RB Transportstyrelsen (the Swedish Transport Agency) and argued that the new delay class was not correct because the reason for delays in the future was not an accident or incident but the lowered speed by ATC. The RU also did find it inaccurate that the RUs should not to be paid for the delay. The RU did not request a new decision from the IM in the specific issue but a decision from the RB about the principle to use the delay class for accidents/hazards in similar situations. The RB decided that Trafikverket´s decisions to change the delay class planned construction work on the stretch and to apply the delay class accidents/hazards on the stretch were not in line with the Railway Act, nor with the NS for TT 2016 and 2017. The RB also decided that Trafikverket shall not use the delay class accidents/ hazards for TT 2018 or in the future, before such event has occurred since this does not comply with the Railway regulation. Trafikverket appealed but then withdrew its appeal. The Administrative Court wrote off the case (case id 3299-18). The case also did include issues concerning safety management system within the IM and the complainant RU. The RB therefore informed the functions within Transportstyrelsen responsible with safety issues. A supervision has been initiated in this respect, so far towards the IM.

Switzerland

In 2018 notifications and claims were submitted. The respective procedures were not yet concluded by the end of 2018.

United Kingdom

- Approval of the access request of Virgin Trains West Coast (January 2018)

Virgin Trains West Coast (VTWC) and Network Rail Infrastructure Limited: The dispute relates to the franchisee, VTWC’s, request for additional capacity on

the West Coast Main Line between London Euston and Blackpool from the May 2018 timetable change date. ORR approved firm and contingent access rights on 21 January. Services started in May 2018.

- Withdrawal of the dispute between First Transpennine Express Limited and Network Rail (May 2018)

First Transpennine Express Limited (FTPE) and Network Rail Infrastructure Limited: The dispute relates to FTPE's request to amend its track access contract to include an additional train slot between York and Newcastle on the north end of the East Coast Main Line, as well as capacity for additional services between Manchester Airport and Scotland and between Liverpool and Scotland, and on the north and south Transpennine routes from the December 2017 timetable change date. Dispute was withdrawn in May 2018 and superseded by updated applications.

- Approval of the access request of Great North Western Railway and the access contract (June 2018)

Great North Western Railway (GNWR) and Network Rail Infrastructure Limited: This dispute relates to a GNWR request for capacity for services between London Euston and Blackpool using the West Coast Main Line using older and potentially slower rolling stock than that foreseen in the original application for a framework agreement. ORR performed a new economic analysis, in particular whether they would generate enough new business to pass the NPA test and impacts on funders. A Decision letter published on 7 June 2018 confirming ORR approval of track access contract.

- Rejection of the access request of Grand Southern (August 2018)

Grand Southern (Alliance) and Network Rail Infrastructure Limited: The dispute relates to Grand Southern's request for a track access contract for new services between London Waterloo and Southampton from the December 2018 timetable change date. The Infrastructure Manager confirmed its position in January 2018. ORR considered the financial impacts the new services might have and concluded that they would not generate enough new business to pass the NPA test and impacts on funders. Decision letter was published on In August 2018 rejecting the request (failing NPA test) in the light that planned rolling stock to operate services is no longer available and no certainty how the new rolling stock being sought will impact on the NPA.

- Establishment of charging principles and approval of five-year expenditure of the IM (October 2018)

On 31 October 2018, ORR published its final determination giving the green light to Network Rail £35bn funding plans (£31bn in England and Wales and

£4bn in Scotland) for the five years from 1 April 2019. ORR approved £24.3bn to be spent in Great Britain on maintaining (£7.7bn) and renewing (£16.6bn) the existing railway, with renewal work seeing a 17% increase from the £14.2bn in CP5. The ORR's increase in the Performance Innovation Fund from £10m (in our draft determination) to £40m will support the testing and implementation of new ideas from across industry to improve punctuality. ORR confirmed Network Rail's plans for a significant funding and resource boost for its timetabling and planning functions, with the System Operator's forecast spend almost doubling from around £145m in CP5 to over £270m in CP6 enabling this part of Network Rail to employ around 100 new staff from the current total of around 700. The five-year plans will see Network Rail become much more locally focused, with each of its eight geographic routes having its own budget, delivery plans and scorecards. In addition, ORR has strengthened local routes' ability to buy goods and services they need locally rather than centrally, where it offers better value for money. This is an important part of giving more responsibility to Network Rail's routes, which are best placed to deliver for local passengers and freight users. https://orr.gov.uk/news-and-blogs/press-releases/2018/orr-approves-35bn-plans-to-boost-britains-railway-reliability-and-timetabling

- Formal provisional Order directing actions to be taken by IM to deliver improved performance (November 2018)

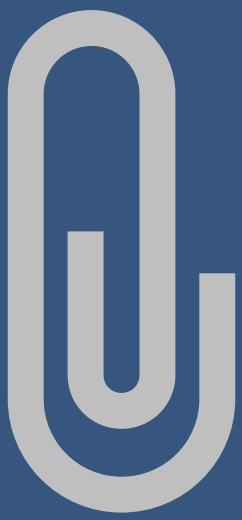
This Order requires Network Rail and its Route Managing Directors to take the following urgent action to address these failings:

- Step up engagement and work with train operators to review and develop actions to address the underlying causes that have led to the findings identified in the relevant reviews (referred to above);

- Deliver a report to ORR by 15 February 2019, detailing how it is identifying the common underlying issues relating to performance planning and its capability to recover service from incidents on its network. We also require the report to address how Network Rail is implementing the conclusions of its report;

- Provide ORR with subsequent and regular updates on progress in delivering its report. https://orr.gov.uk/news-and-blogs/press-releases/2018/orr-takes-formal-action-against-network-rail-to-deliver-improved-performance.

ANNEX



Annex 1 – PSO railway market fact sheet per country

Fact sheet for the PSO passenger railway market in Austria

market players and key figures

all data for 2018

number of IMs with passenger services	**11**
incumbent	1
non-incumbent	10
number of active passenger RUs	**16**
incumbent	2
non-incumbent	13
thereof PSO	4

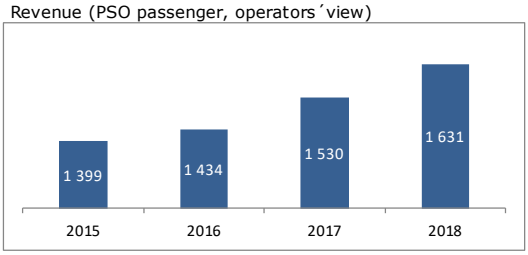
passenger train km	**113 341 621**	
thereof PSO	78 500 000	69 %

passenger km	**13 272 652 808**	
thereof PSO	8 903 037 808	67 %

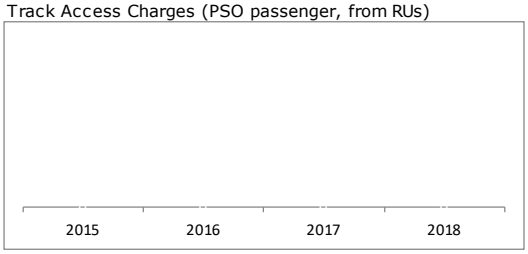
market volume

in million Euro

Revenue (PSO passenger, operators´view)

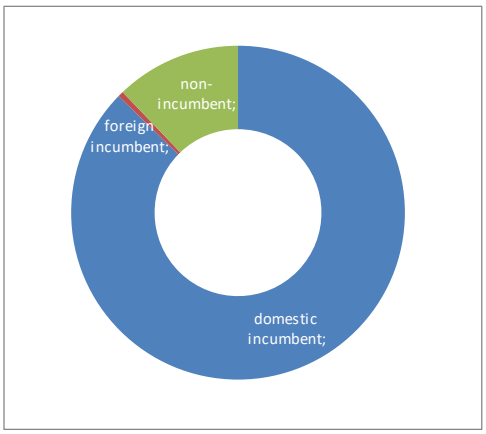


Track Access Charges (PSO passenger, from RUs)



market shares

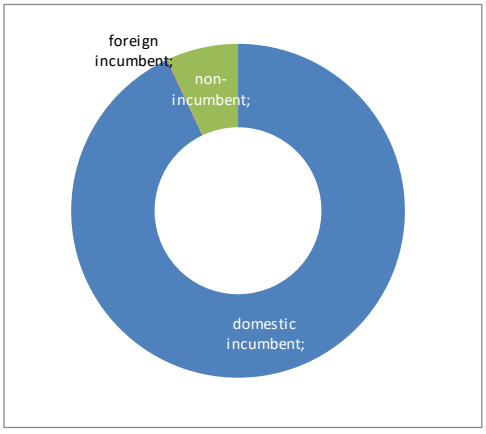
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	ÖBB Personenverkehr AG	**80%-90%**
2	Wiener Lokalbahnen GmbH	**0%-5%**
3	Stern & Hafferl Verkehrs GmbH	**0%-5%**
4	Salzburger Lokalbahn	**0%-5%**
5	Graz-Köflacher Bahn GmbH	**0%-5%**
6	Niederösterreichische Verkehrsorganis.	**0%-5%**
7	Zillertaler Verkehrsbetriebe AG	**0%-5%**
8	Steiermärkische Landesbahnen	**0%-5%**
9	DB Regio AG	**0%-5%**
10	Raab-Oedenburg-Ebenfurter Eisenbahn	**0%-5%**
11	Innsbrucker Verkehrsbetriebe GmbH	**0%-5%**
12	Neusiedlerseebahn GmbH	**0%-5%**
13	Montafonerbahn AG	**0%-5%**
14	Bayerische Oberlandbahn GmbH	**0%-5%**
15	Metrans Railprofi Austria	**0%-5%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	ÖBB Personenverkehr AG	**90%-100%**
2	Graz-Köflacher Bahn GmbH	**0%-5%**
3	Wiener Lokalbahnen GmbH	**0%-5%**
4	Salzburger Lokalbahn	**0%-5%**
5	Stern & Hafferl Verkehrs GmbH	**0%-5%**
6	Zillertaler Verkehrsbetriebe AG	**0%-5%**
7	Raab-Oedenburg-Ebenfurter Eisenbahn	**0%-5%**
8	Neusiedlerseebahn GmbH	**0%-5%**
9	Steiermärkische Landesbahnen	**0%-5%**
10	Niederösterreichische Verkehrsorganis.	**0%-5%**
11	Innsbrucker Verkehrsbetriebe GmbH	**0%-5%**
12	Bayerische Oberlandbahn GmbH	**0%-5%**
13	Montafonerbahn AG	**0%-5%**
14	DB Regio AG	**0%-5%**
15	Metrans Railprofi Austria	**0%-5%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Belgium

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	0
non-incumbent	1
number of active passenger RUs	3
incumbent	3
non-incumbent	0
thereof PSO	1

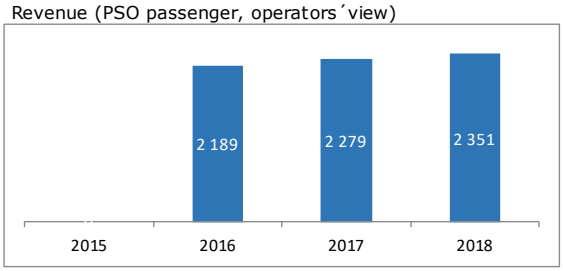
passenger train km	87 204 177	
thereof PSO	83 820 420	96 %

passenger km	13 043 110 200	
thereof PSO	10 743 110 200	82 %

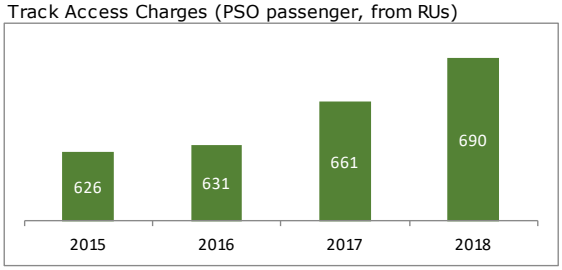
market volume

in million Euro

Revenue (PSO passenger, operators´view)

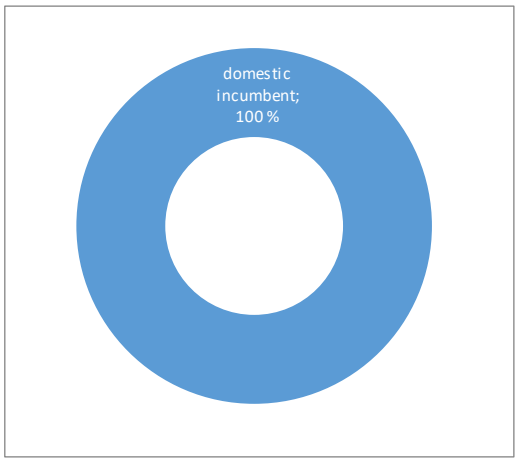


Track Access Charges (PSO passenger, from RUs)



market shares

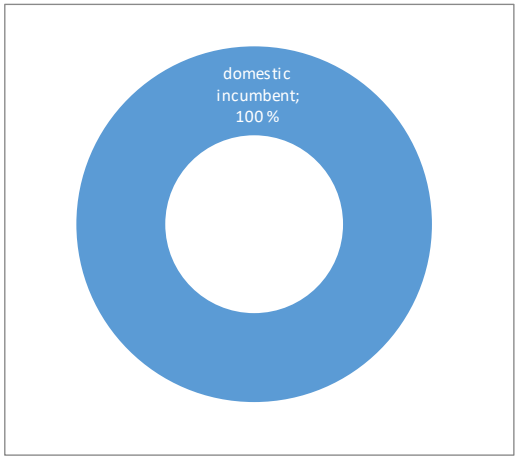
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	NMBS/SNCB	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	NMBS/SNCB	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

Fact sheet for the PSO passenger railway market in Croatia

market players and key figures

all data for 2018

number of IMs with passenger services	
incumbent	
non-incumbent	
number of active passenger RUs	**1**
incumbent	
non-incumbent	
thereof PSO	1

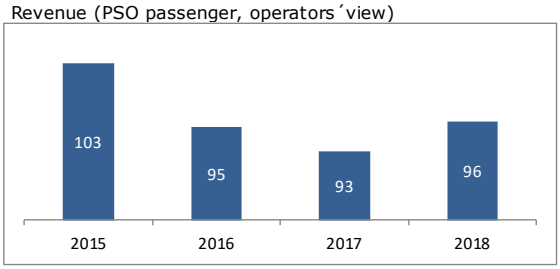
passenger train km	15 235 783	
thereof PSO	15 179 072	100 %

passenger km	755 882 773	
thereof PSO	746 929 620	99 %

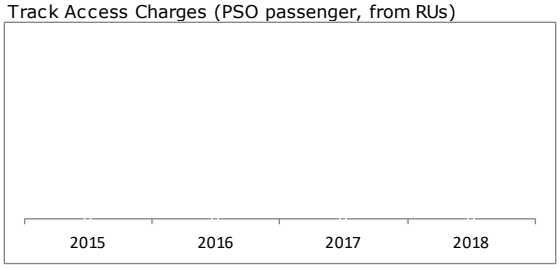
market volume

in million Euro

Revenue (PSO passenger, operators´view)

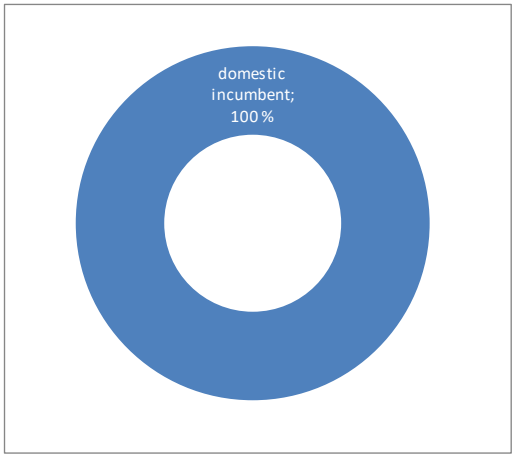


Track Access Charges (PSO passenger, from RUs)



market shares

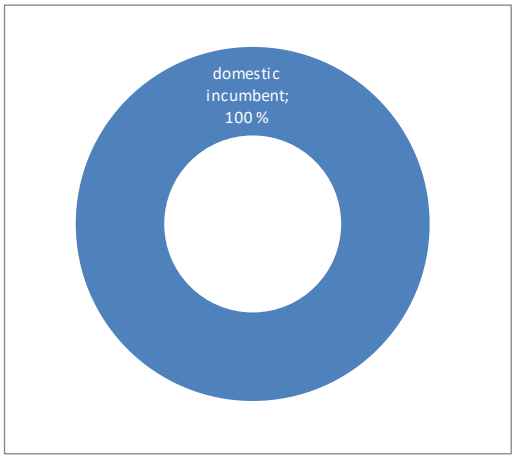
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	HŽ Putnički prijevoz d.o.o.	**90%-100%**
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	HŽ Putnički prijevoz d.o.o.	**90%-100%**
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Fact sheet for the PSO passenger railway market in Czech Republic

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	0
non-incumbent	1
number of active passenger RUs	**23**
incumbent	1
non-incumbent	22
thereof PSO	6

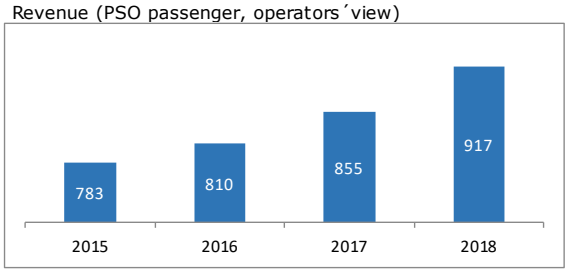
passenger train km	**134 526 211**	
thereof PSO	123 412 956	92 %

passenger km	**10 286 000 000**	
thereof PSO	8 828 203 000	86 %

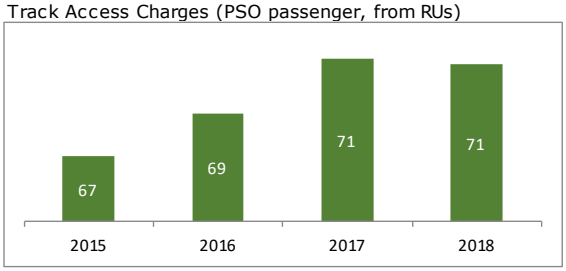
market volume

in million Euro

Revenue (PSO passenger, operators´view)

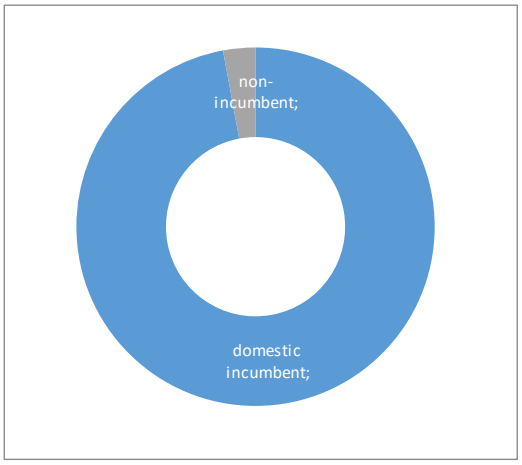


Track Access Charges (PSO passenger, from RUs)



market shares

based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	České dráhy, a.s.	**90%-100%**
2	GW Train Regio a.s.	**0%-5%**
3	Vogtlandbahn GmbH	**0%-5%**
4	JHMD	**0%-5%**
5	KŽC Doprava, s.r.o.	**0%-5%**
6	MBM, místní dráha MB - Mělník	**0%-5%**
7	ARRIVA vlaky s.r.o.	**0%-5%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**

Top 20 (based on **PSO passenger km**)

		market share range (%)
1	n/a	**0,0%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Estonia

market players and key figures

all data for 2018

number of IMs with passenger services	**0**
incumbent	0
non-incumbent	0
number of active passenger RUs	**2**
incumbent	1
non-incumbent	0
thereof PSO	1

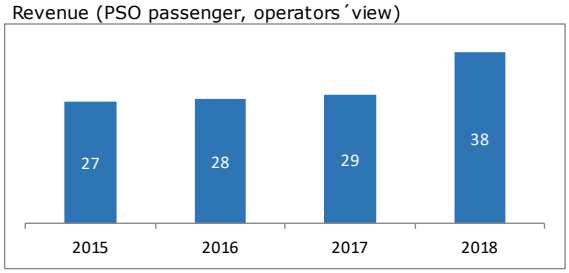
passenger train km	**5 509 875**	
thereof PSO	5 353 798	97 %

passenger km	**419 750 000**	
thereof PSO	399 400 000	95 %

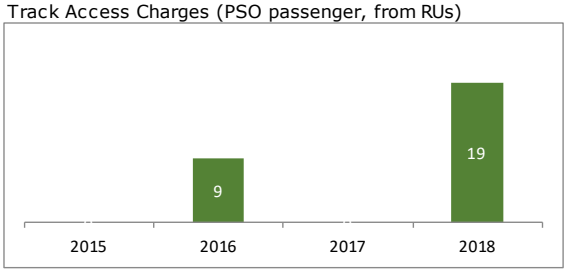
market volume

in million Euro

Revenue (PSO passenger, operators´view)

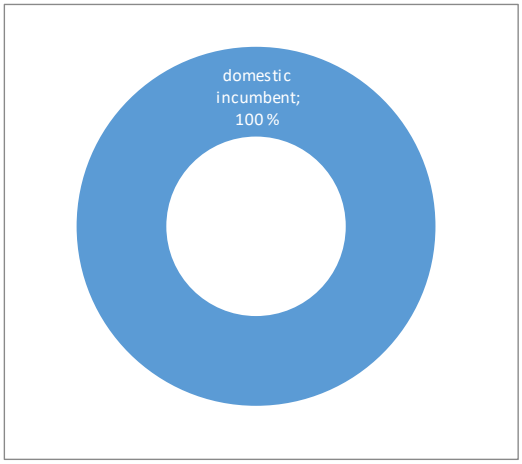


Track Access Charges (PSO passenger, from RUs)



market shares

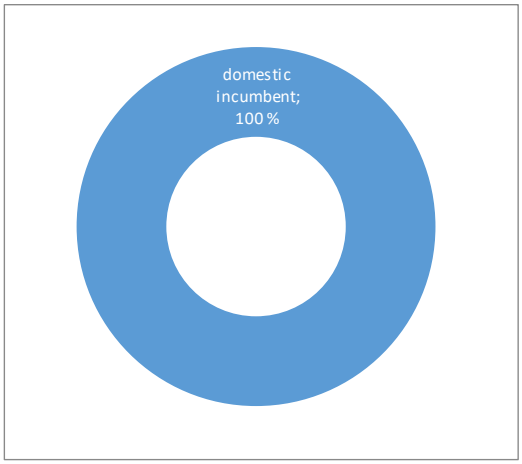
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	AS Eesti Liinirongid	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	AS Eesti Liinirongid	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Finland

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	0
number of active passenger RUs	1
incumbent	1
non-incumbent	0
thereof PSO	1

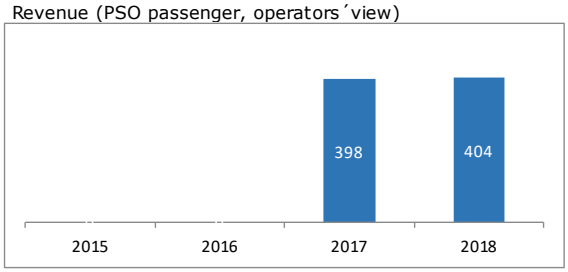
passenger train km	35 003 000	
thereof PSO	34 093 000	97 %

passenger km	4 534 000 000	
thereof PSO	4 391 000 000	97 %

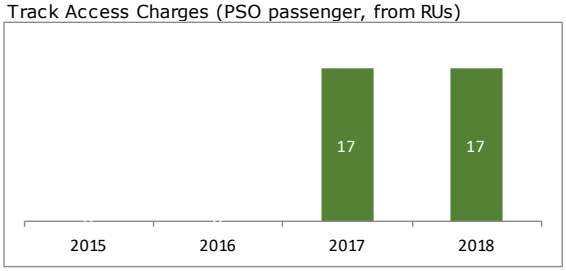
market volume

in million Euro

Revenue (PSO passenger, operators´view)

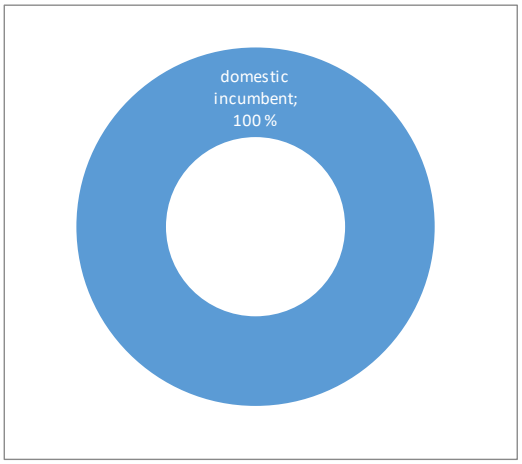


Track Access Charges (PSO passenger, from RUs)



market shares

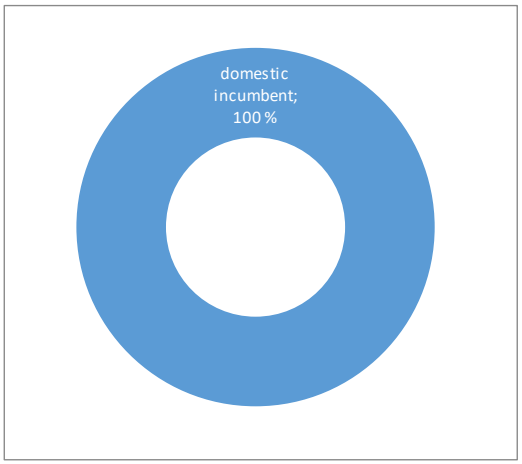
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	VR	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	VR	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

Fact sheet for the PSO passenger railway market in France

market players and key figures

all data for 2018

number of IMs with passenger services	**4**
incumbent	1
non-incumbent	3
number of active passenger RUs	**4**
incumbent	3
non-incumbent	1
thereof PSO	1

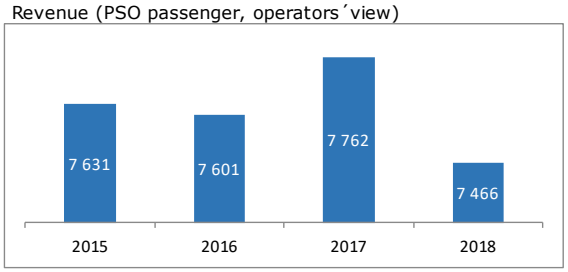
passenger train km	**379 358 109**	
thereof PSO	252 078 664	66 %

passenger km	**88 989 999 170**	
thereof PSO	32 719 960 794	37 %

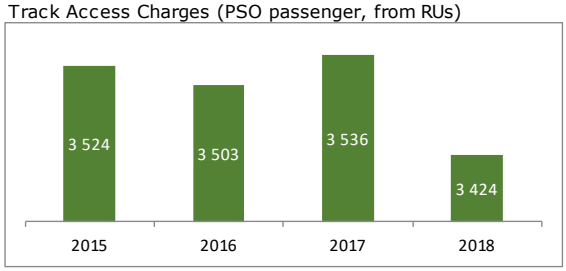
market volume

in million Euro

Revenue (PSO passenger, operators´view)

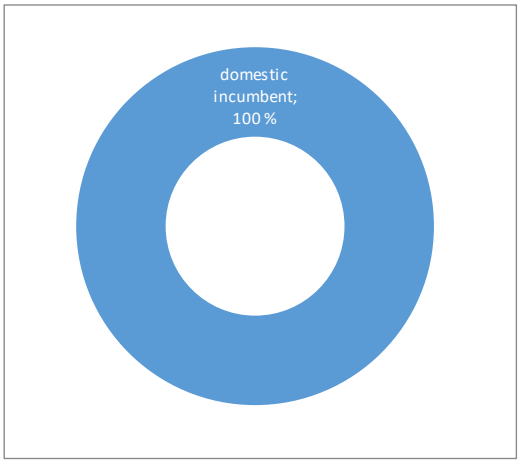


Track Access Charges (PSO passenger, from RUs)



market shares

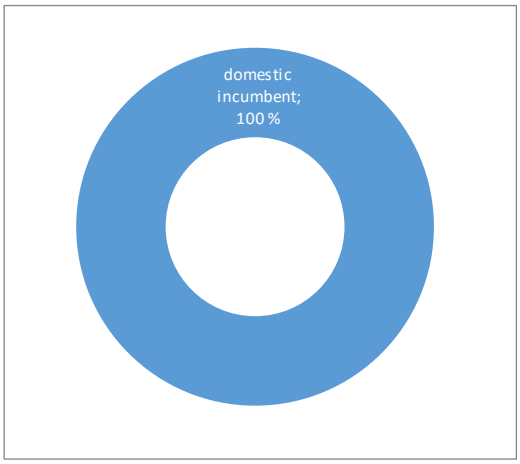
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	SNCF Mobilité	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	SNCF Mobilité	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Germany

market players and key figures

all data for 2018

number of IMs with passenger services	**110**
incumbent	3
non-incumbent	107
number of active passenger RUs	**142**
incumbent	7
non-incumbent	135
thereof PSO	71

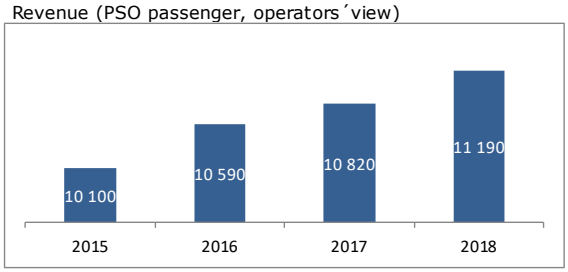
passenger train km	**842 000 000**	
thereof PSO	695 000 000	83 %

passenger km	**99 900 000 000**	
thereof PSO	56 800 000 000	57 %

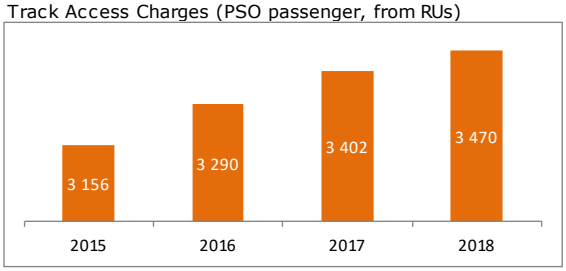
market volume

in million Euro

Revenue (PSO passenger, operators´view)

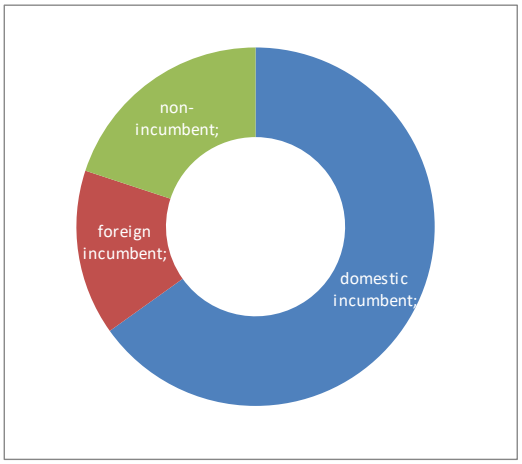


Track Access Charges (PSO passenger, from RUs)



market shares

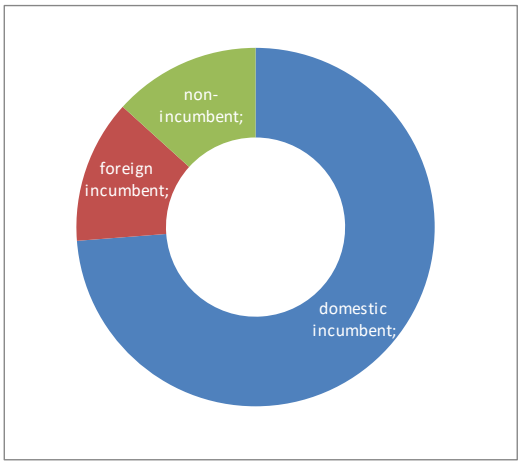
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	DB Regio AG	**50%-60%**
2	S-Bahn Berlin GmbH	**0%-5%**
3	NordWestBahn GmbH	**0%-5%**
4	DB ZugBus Regionalverkehr Alb-Boder	**0%-5%**
5	KEOLIS Deutschland GmbH & Co. KG	**0%-5%**
6	DB RegioNetz Verkehrs GmbH	**0%-5%**
7	Die Länderbahn GmbH DLB	**0%-5%**
8	Albtal-Verkehrs-Gesellschaft mbH (AVC	**0%-5%**
9	S-Bahn Hamburg GmbH	**0%-5%**
10	HLB Hessenbahn GmbH	**0%-5%**
11	metronom Eisenbahngesellschaft mbH	**0%-5%**
12	ODEG-Ostdeutsche Eisenbahn GmbH	**0%-5%**
13	agilis Verkehrsgesellschaft mbH & Co.	**0%-5%**
14	Abellio Rail Mitteldeutschland GmbH	**0%-5%**
15	Abellio Rail NRW GmbH	**0%-5%**
16	Bayerische Oberlandbahn GmbH (BOB`	**0%-5%**
17	Erfurter Bahn GmbH	**0%-5%**
18	vlexx GmbH	**0%-5%**
19	SWEG Südwestdeutsche Landesverkeh	**0%-5%**
20	NEB Betriebsgesellschaft mbH	**0%-5%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	DB Regio AG	**50%-60%**
2	S-Bahn Berlin GmbH	**5%-10%**
3	S-Bahn Hamburg GmbH	**0%-5%**
4	metronom Eisenbahngesellschaft mbH	**0%-5%**
5	DB ZugBus Regionalverkehr Alb-Boder	**0%-5%**
6	HLB Hessenbahn GmbH	**0%-5%**
7	NordWestBahn GmbH	**0%-5%**
8	Die Länderbahn GmbH DLB	**0%-5%**
9	KEOLIS Deutschland GmbH & Co. KG	**0%-5%**
10	Bayerische Oberlandbahn GmbH (BOB`	**0%-5%**
11	ODEG-Ostdeutsche Eisenbahn GmbH	**0%-5%**
12	National Express Rail GmbH	**0%-5%**
13	WestfalenBahn GmbH	**0%-5%**
14	DB RegioNetz Verkehrs GmbH	**0%-5%**
15	Abellio Rail NRW GmbH	**0%-5%**
16	Albtal-Verkehrs-Gesellschaft mbH (AVC	**0%-5%**
17	vlexx GmbH	**0%-5%**
18	Abellio Rail Mitteldeutschland GmbH	**0%-5%**
19	SWEG Südwestdeutsche Landesverkeh	**0%-5%**
20	Erixx GmbH	**0%-5%**

Fact sheet for the PSO passenger railway market in Greece

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	
number of active passenger RUs	**2**
incumbent	
non-incumbent	1
thereof PSO	1

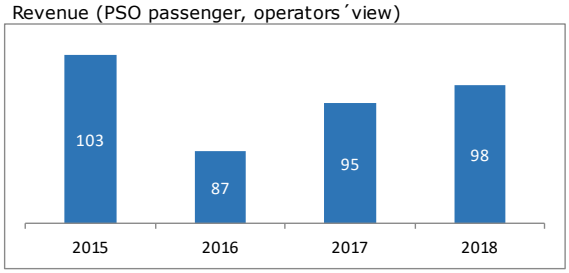
passenger train km	**10 123 442**	
thereof PSO	9 508 069	94 %

passenger km	**1 157 178 854**	
thereof PSO	1 077 567 654	93 %

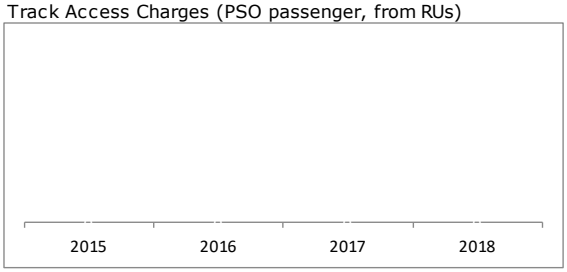
market volume

in million Euro

Revenue (PSO passenger, operators´view)

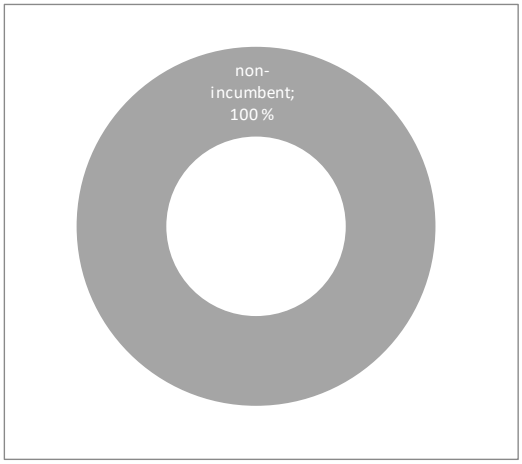


Track Access Charges (PSO passenger, from RUs)



market shares

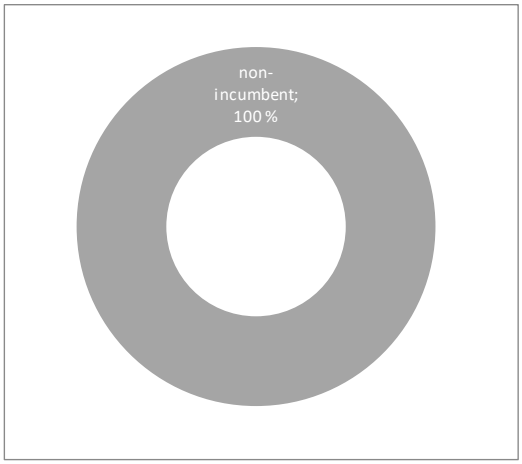
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	trainose	**90%-100%**
2	stasy	**0%-5%**
3	rail cargo	**0%-5%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	trainose	**90%-100%**
2	stasy	**0%-5%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Hungary

market players and key figures

all data for 2018

number of IMs with passenger services	2
incumbent	1
non-incumbent	1
number of active passenger RUs	4
incumbent	1
non-incumbent	3
thereof PSO	2

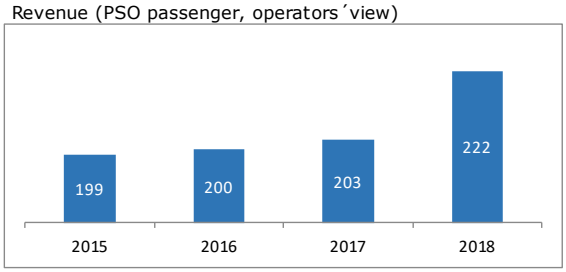
passenger train km	82 884 172	
thereof PSO	82 847 000	100 %

passenger km	7 769 079 000	
thereof PSO	7 760 500 000	100 %

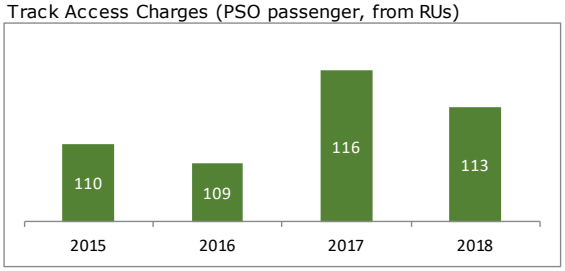
market volume

in million Euro

Revenue (PSO passenger, operators´view)

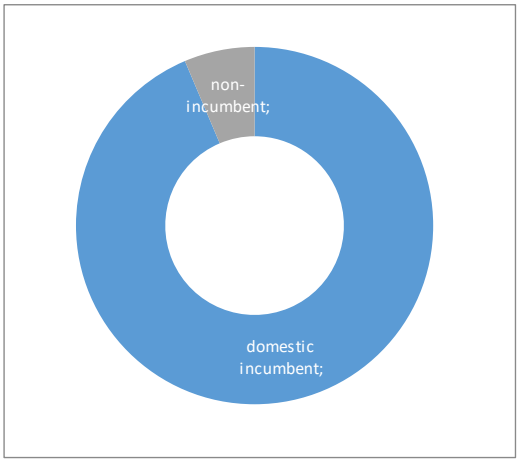


Track Access Charges (PSO passenger, from RUs)



market shares

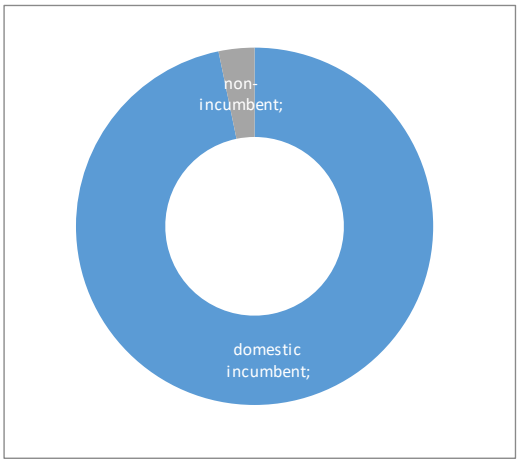
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	MÁV-START Zrt.	90%-100%
2	GYSEV Zrt.	5%-10%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	MÁV-START Zrt.	90%-100%
2	GYSEV Zrt.	0%-5%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

Fact sheet for the PSO passenger railway market in Italy

market players and key figures

all data for 2018

number of IMs with passenger services	13
incumbent	2
non-incumbent	11
number of active passenger RUs	**20**
incumbent	6
non-incumbent	14
thereof PSO	15

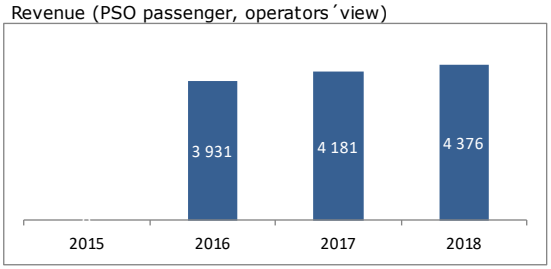
passenger train km	326 623 763	
thereof PSO	241 204 348	74 %

passenger km	53 957 404 968	
thereof PSO	29 887 415 707	55 %

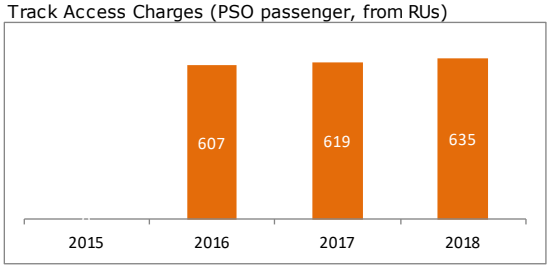
market volume

in million Euro

Revenue (PSO passenger, operators´view)

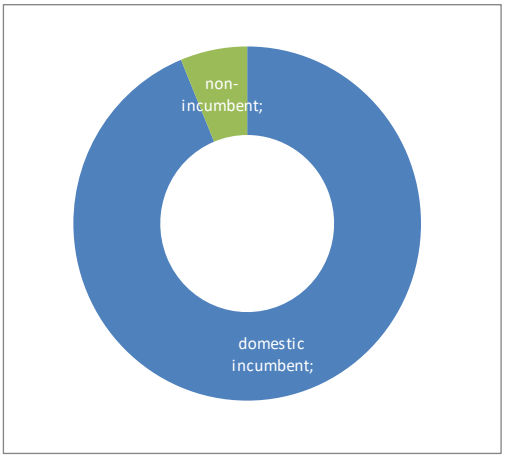


Track Access Charges (PSO passenger, from RUs)



market shares

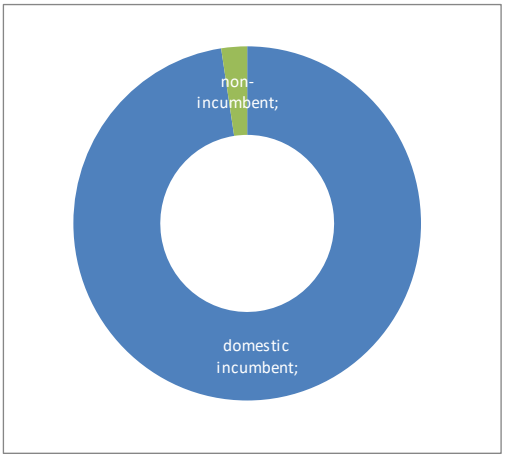
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	BUSITALIA SITA NORD SRL	0%-5%
2	ENTE AUTONOMO VOLTURNO SRL	0%-5%
3	FERROTRAMVIARIA SPA - DIVISIONE T	0%-5%
4	FERROVIE DEL GARGANO SRL	0%-5%
5	FERROVIE DEL SUD EST E SERVIZI AU	0%-5%
6	GRUPPO TORINESE TRASPORTI SPA	0%-5%
7	SAD - Trasporto Locale SpA	0%-5%
8	SISTEMI TERRITORIALI SPA	0%-5%
9	SOCIETA' FERROVIE UDINE CIVIDALE	0%-5%
10	TPER - TRASPORTO PASSEGGERI EMIL	0%-5%
11	Trasporto Ferroviario Toscano spa	0%-5%
12	Trenitalia SpA	70%-80%
13	TRENORD S.r.l.	10%-20%
14	TRENTINO TRASPORTI SPA	0%-5%
15	TUA	0%-5%
16	BLS AG	0%-5%
17		
18		
19		
20		

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	BUSITALIA SITA NORD SRL	0%-5%
2	ENTE AUTONOMO VOLTURNO SRL	0%-5%
3	FERROTRAMVIARIA SPA - DIVISIO	0%-5%
4	FERROVIE DEL GARGANO SRL	0%-5%
5	FERROVIE DEL SUD EST E SERVIZ	0%-5%
6	GRUPPO TORINESE TRASPORTI SF	0%-5%
7	SAD - Trasporto Locale SpA	0%-5%
8	SISTEMI TERRITORIALI SPA	0%-5%
9	SOCIETA' FERROVIE UDINE CIVIDA	0%-5%
10	TPER - TRASPORTO PASSEGGERI	0%-5%
11	Trasporto Ferroviario Toscano spa	0%-5%
12	Trenitalia SpA	70%-80%
13	TRENORD S.r.l.	20%-30%
14	TRENTINO TRASPORTI SPA	0%-5%
15	TUA	0%-5%
16	BLS AG	0%-5%
17		
18		
19		
20		

Fact sheet for the PSO passenger railway market in Latvia

market players and key figures

all data for 2018

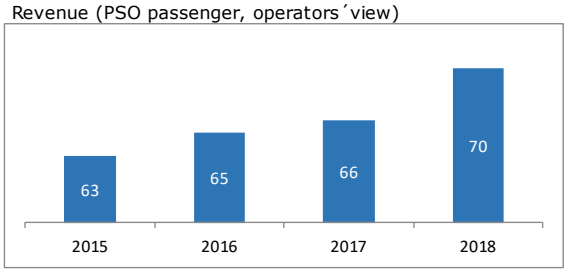
number of IMs with passenger services	**1**
incumbent	1
non-incumbent	
number of active passenger RUs	**4**
incumbent	1
non-incumbent	3
thereof PSO	2

passenger train km	**5 912 394**	
thereof PSO	5 582 603	94 %
passenger km	**624 313 962**	
thereof PSO	582 543 687	93 %

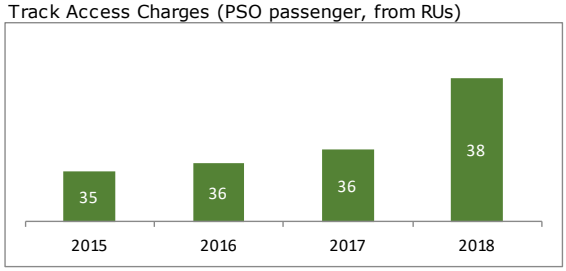
market volume

in million Euro

Revenue (PSO passenger, operators´view)

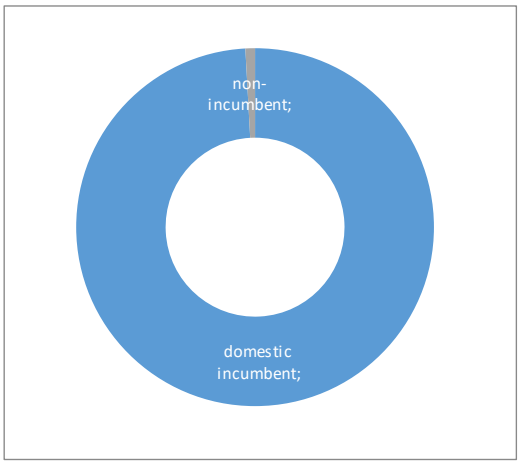


Track Access Charges (PSO passenger, from RUs)



market shares

based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	JSC Pasazieru vilciens	90%-100%
2	Ltd Gulbenes Aluksnes banitis	0%-5%
3		
4		
5		
6		
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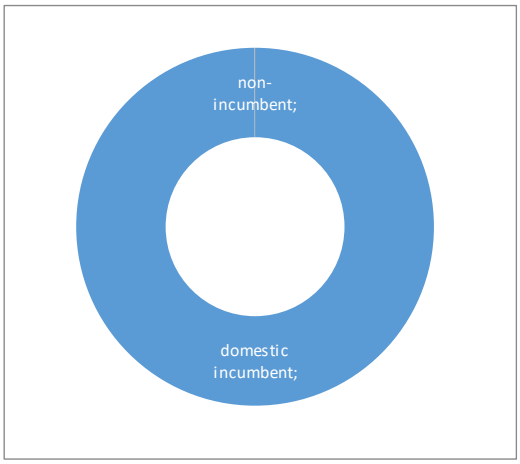
based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	JSC Pasazieru vilciens	90%-100%
2	Ltd Gulbenes Aluksnes banitis	0%-5%
3		
4		
5		
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19		
20		

Fact sheet for the PSO passenger railway market in Lithuania

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**1**
incumbent	1
non-incumbent	0
thereof PSO	1

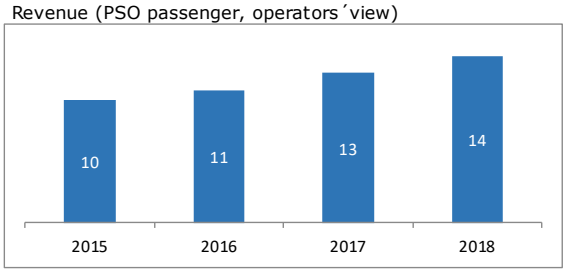
passenger train km	**6 317 081**	
thereof PSO	5 794 144	92 %

passenger km	**468 113 000**	
thereof PSO	339 097 000	72 %

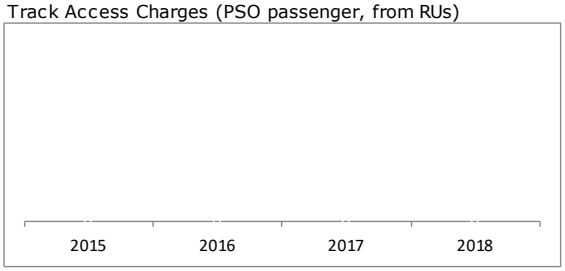
market volume

in million Euro

Revenue (PSO passenger, operators´view)

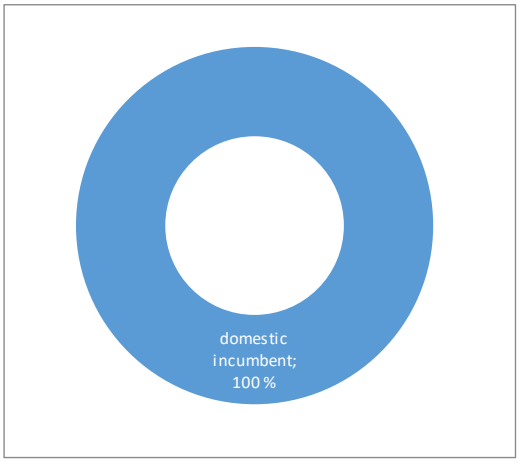


Track Access Charges (PSO passenger, from RUs)



market shares

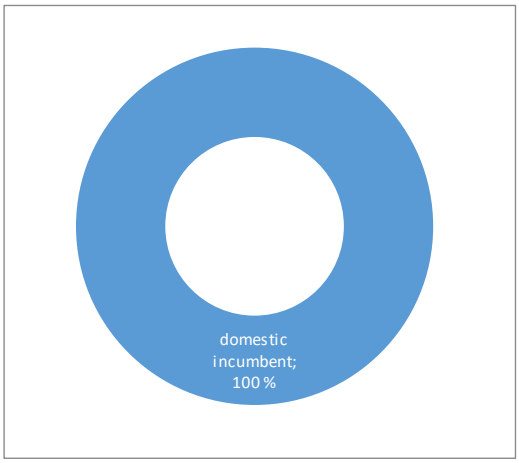
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	JSC "Lietuvos geležinkeliai"	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	JSC "Lietuvos geležinkeliai"	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Luxembourg

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	0
number of active passenger RUs	1
incumbent	1
non-incumbent	0
thereof PSO	1

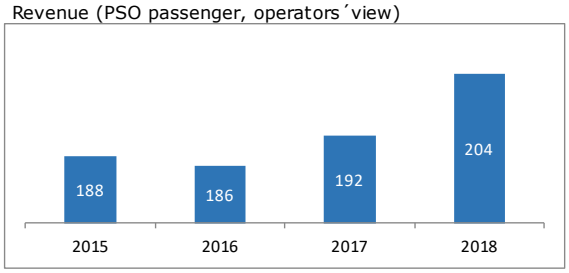
passenger train km	7 490 000	
thereof PSO	7 410 000	99 %

passenger km	442 000 000	
thereof PSO	442 000 000	100 %

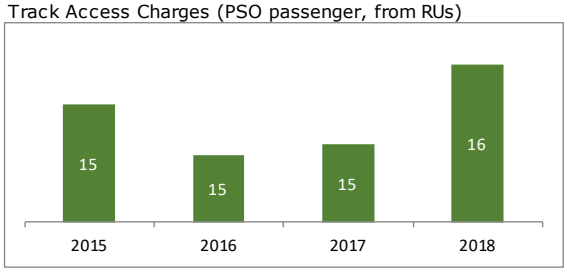
market volume

in million Euro

Revenue (PSO passenger, operators´view)

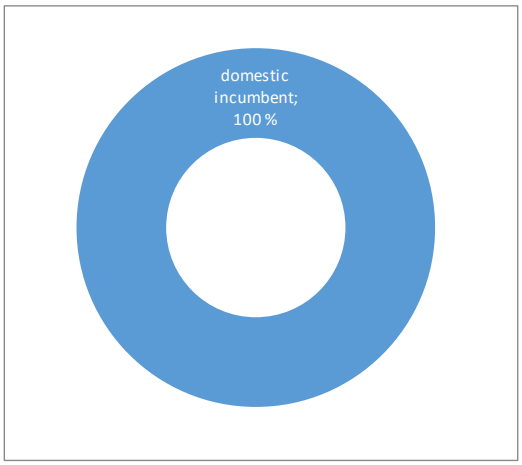


Track Access Charges (PSO passenger, from RUs)



market shares

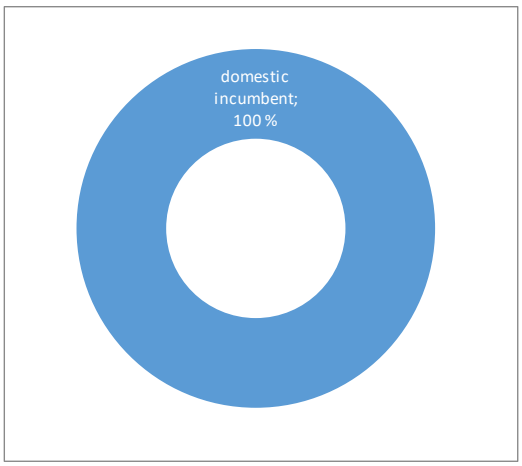
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	CFL	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	CFL	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

Fact sheet for the PSO passenger railway market in the Netherlands

market players and key figures

all data for 2018

number of IMs with passenger services	**0**
incumbent	0
non-incumbent	0
number of active passenger RUs	**12**
incumbent	8
non-incumbent	1
thereof PSO	9

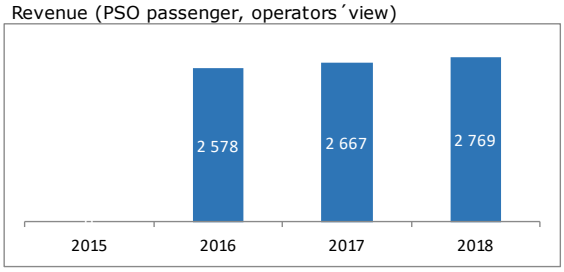
passenger train km	**152 100 000**	
thereof PSO	152 057 486	100 %

passenger km	**19 574 080 010**	
thereof PSO	19 568 695 401	100 %

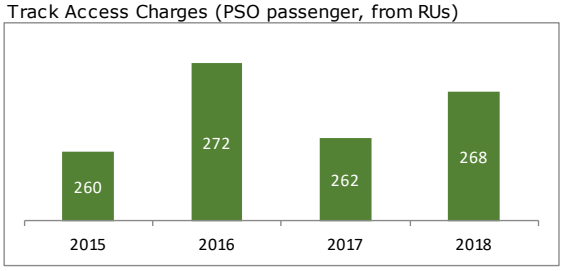
market volume

in million Euro

Revenue (PSO passenger, operators´view)

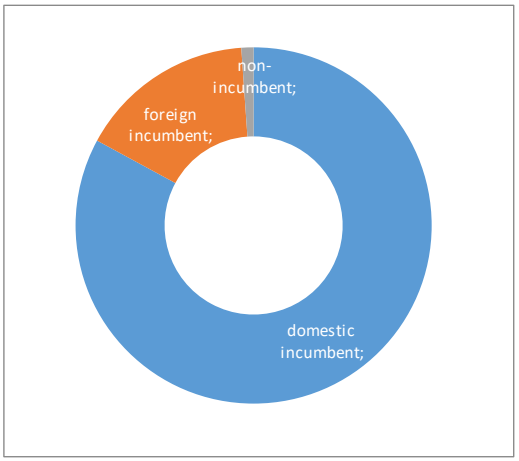


Track Access Charges (PSO passenger, from RUs)



market shares

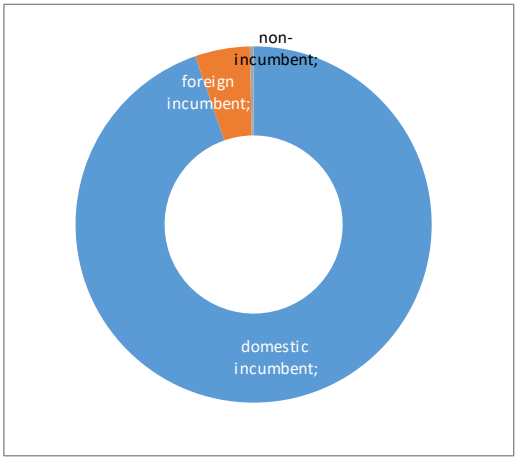
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	NS	**80%-90%**
2	Arriva	**10%-20%**
3	Keolis	**0%-5%**
4	Qbuzz	**0%-5%**
5	Connexxion	**0%-5%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	NS	**90%-100%**
2	Arriva	**0%-5%**
3	Keolis	**0%-5%**
4	Qbuzz	**0%-5%**
5	Connexxion	**0%-5%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Norway

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**5**
incumbent	3
non-incumbent	2
thereof PSO	4

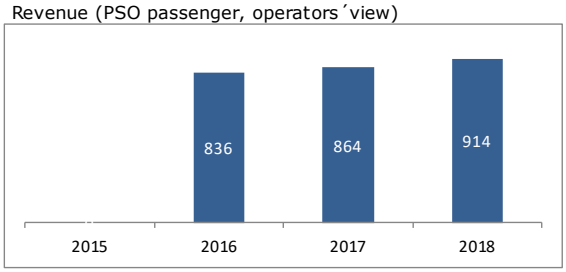
passenger train km	**41 074 592**	
thereof PSO	40 684 578	99 %

passenger km	**3 719 217 072**	
thereof PSO	3 685 209 066	99 %

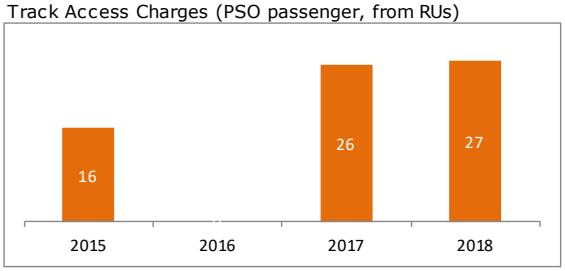
market volume

in million Euro

Revenue (PSO passenger, operators´view)

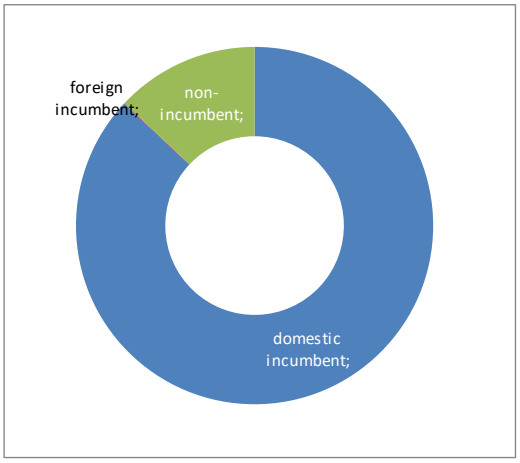


Track Access Charges (PSO passenger, from RUs)



market shares

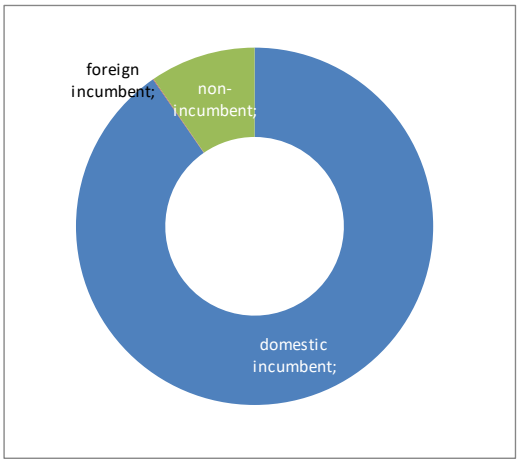
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	Vygruppen AS	**80%-90%**
2	Vy Gjøvikbanen AS	**0%-5%**
3	Flytoget AS	**10%-20%**
4	SJ AB	**0%-5%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	Vygruppen AS	**80%-90%**
2	Vy Gjøvikbanen AS	**0%-5%**
3	Flytoget AS	**5%-10%**
4	SJ AB	**0%-5%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Poland

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**11**
incumbent	1
non-incumbent	3
thereof PSO	4

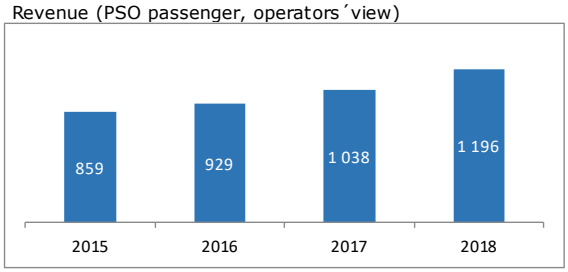
passenger train km	**165 559 242**	
thereof PSO	153 861 615	93 %

passenger km	**20 922 188 295**	
thereof PSO	18 528 850 971	89 %

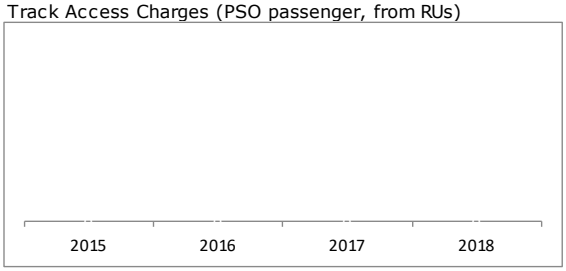
market volume

in million Euro

Revenue (PSO passenger, operators´view)

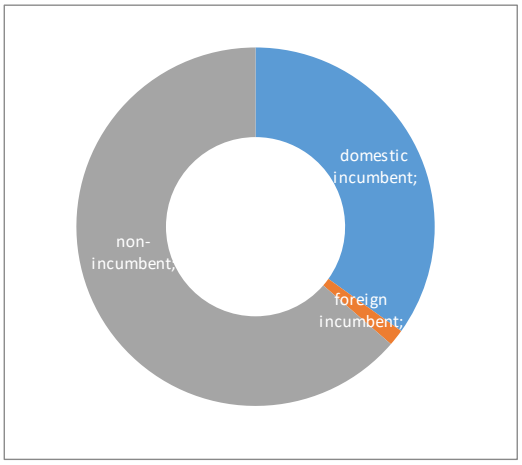


Track Access Charges (PSO passenger, from RUs)



market shares

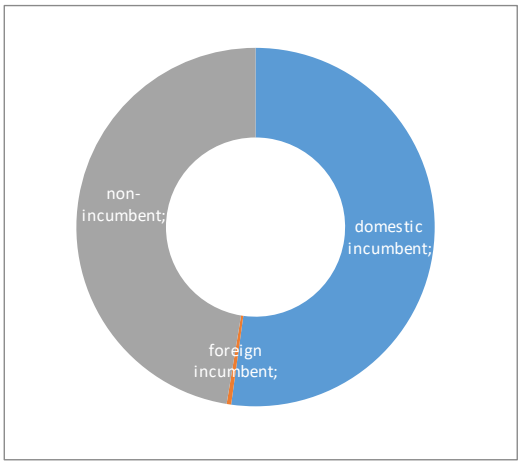
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	Przewozy Regionalne sp. z o.o.	**30%-40%**
2	"PKP Intercity" S.A.	**30%-40%**
3	"Koleje Mazowieckie - KM" sp. z o.o.	**10%-20%**
4	Koleje Dolnośląskie	**5%-10%**
5	Koleje Śląskie Sp. z o.o.	**0%-5%**
6	Koleje Wielkopolskie Sp. z o.o.	**0%-5%**
7	PKP Szybka Kolej Miejska w Trójmieści	**0%-5%**
8	SKM w Warszawie	**0%-5%**
9	"Łódzka Kolej Aglomeracyjna" Sp. z o.o	**0%-5%**
10	"Koleje Małopolskie" sp. z o.o.	**0%-5%**
11	Arriva RP Sp. z o.o.	**0%-5%**
12	Warszawska Kolej Dojazdowa sp. z o.o	**0%-5%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	"PKP Intercity" S.A.	**40%-50%**
2	Przewozy Regionalne sp. z o.o.	**20%-30%**
3	"Koleje Mazowieckie - KM" sp. z o.o.	**10%-20%**
4	PKP Szybka Kolej Miejska w Trójmieści	**0%-5%**
5	Koleje Śląskie Sp. z o.o.	**0%-5%**
6	Koleje Dolnośląskie	**0%-5%**
7	Koleje Wielkopolskie Sp. z o.o.	**0%-5%**
8	SKM w Warszawie	**0%-5%**
9	"Koleje Małopolskie" sp. z o.o.	**0%-5%**
10	"Łódzka Kolej Aglomeracyjna" Sp. z o.o	**0%-5%**
11	Warszawska Kolej Dojazdowa sp. z o.o	**0%-5%**
12	Arriva RP Sp. z o.o.	**0%-5%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Portugal

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	
number of active passenger RUs	2
incumbent	1
non-incumbent	1
thereof PSO	1

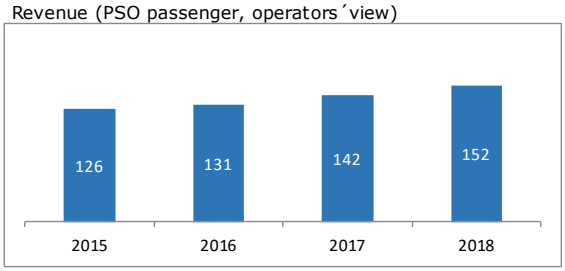
passenger train km	30 312 510	
thereof PSO	12 228 657	40 %

passenger km	4 489 795 000	
thereof PSO	2 396 456 000	53 %

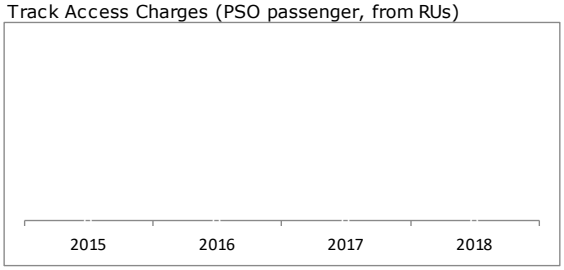
market volume

in million Euro

Revenue (PSO passenger, operators´view)

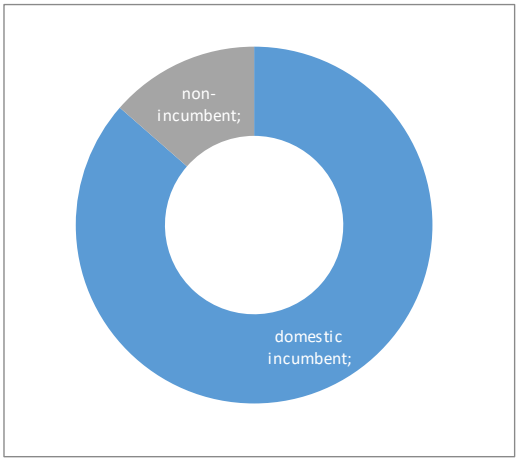


Track Access Charges (PSO passenger, from RUs)



market shares

based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	RU 1	**80%-90%**
2	RU 2	**10%-20%**
3		
4		
5		
6		
7		
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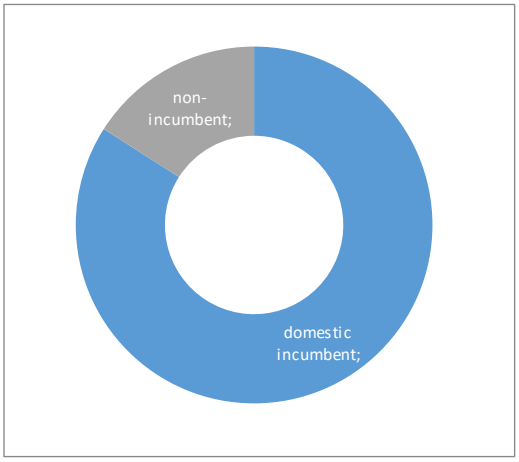
15		
16		
17		
18		
19		
20		

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	RU 1	**80%-90%**
2	RU 2	**10%-20%**
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Fact sheet for the PSO passenger railway market in Romania

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**6**
incumbent	1
non-incumbent	5
thereof PSO	6

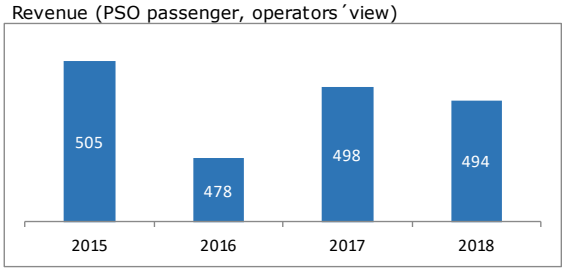
passenger train km	**66 562 104**	
thereof PSO	63 042 104	95 %

passenger km	**5 611 103 571**	
thereof PSO	5 576 703 571	99 %

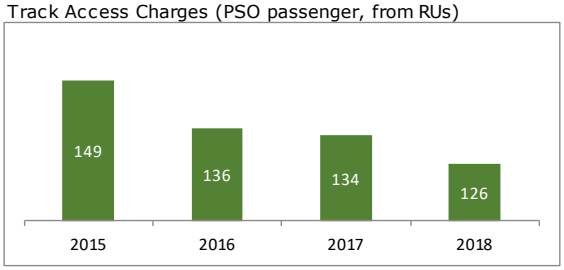
market volume

in million Euro

Revenue (PSO passenger, operators´view)

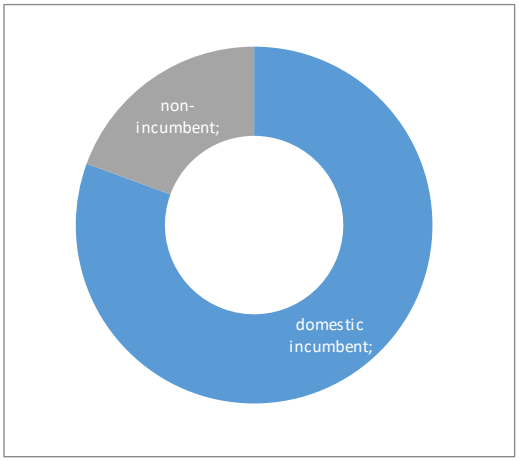


Track Access Charges (PSO passenger, from RUs)



market shares

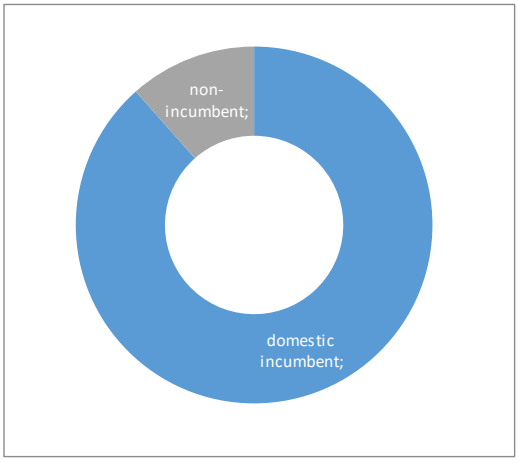
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	CFR Calatori	**80%-90%**
2	Regio Calatori	**5%-10%**
3	Transferoviar Calatori	**5%-10%**
4	Interregional Calatori	**0%-5%**
5	Softrans	**0%-5%**
6	Astra Trans Carpatic	**0%-5%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	CFR Calatori	**80%-90%**
2	Regio Calatori	**5%-10%**
3	Transferoviar Calatori	**0%-5%**
4	Interregional Calatori	**0%-5%**
5	Softrans	**0%-5%**
6	Astra Trans Carpatic	**0%-5%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Slovenia

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**1**
incumbent	1
non-incumbent	0
thereof PSO	1

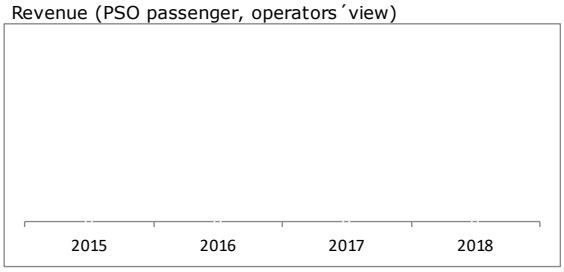
passenger train km	**9 985 305**	
thereof PSO	9 943 878	100 %

passenger km	**655 882 308**	
thereof PSO	645 937 252	98 %

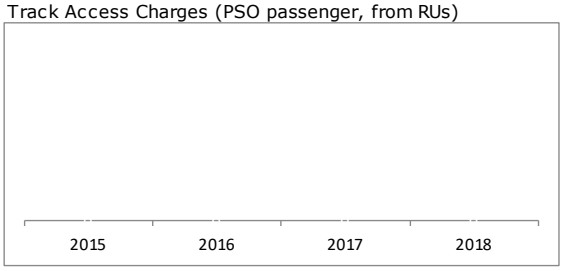
market volume

in million Euro

Revenue (PSO passenger, operators´view)

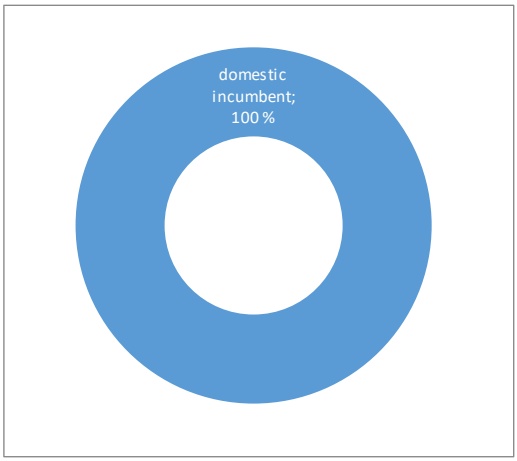


Track Access Charges (PSO passenger, from RUs)



market shares

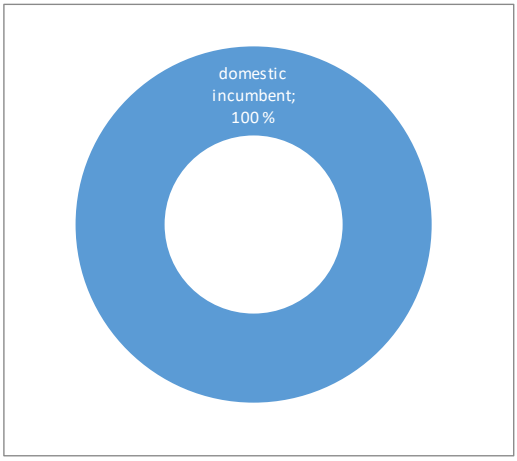
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	SŽ-Potniški promet	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	SŽ-Potniški promet	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in Spain

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**1**
incumbent	1
non-incumbent	0
thereof PSO	1

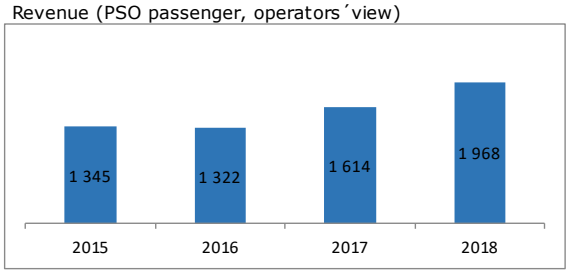
passenger train km	**167 685 823**	
thereof PSO	106 080 458	63 %

passenger km	**26 924 766 664**	
thereof PSO	11 624 170 791	43 %

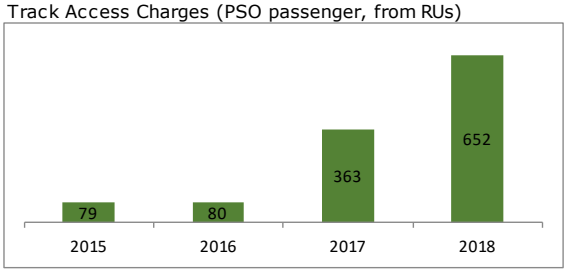
market volume

in million Euro

Revenue (PSO passenger, operators´view)

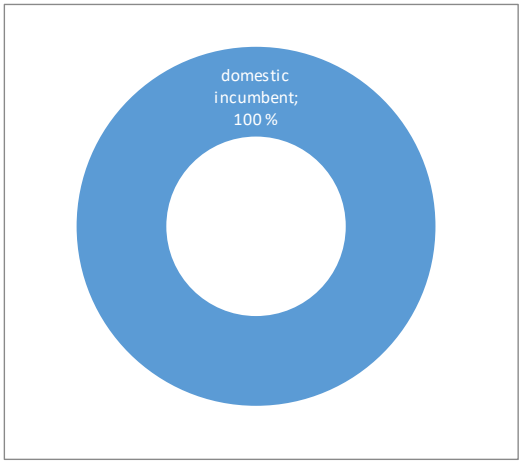


Track Access Charges (PSO passenger, from RUs)



market shares

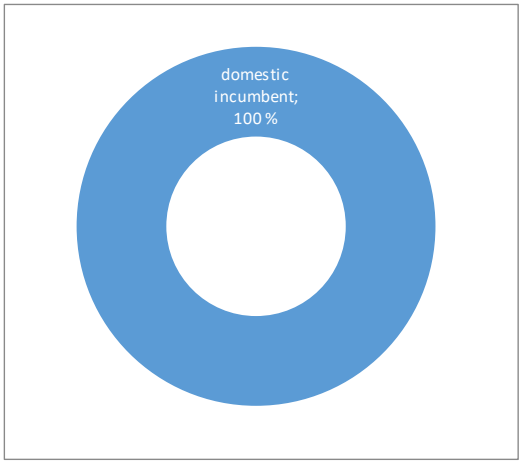
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	Domestic Incumbent	**90-100%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
1	Domestic Incumbent	**90-100%**

Fact sheet for the PSO passenger railway market in Sweden

market players and key figures

all data for 2018

number of IMs with passenger services	**6**
incumbent	1
non-incumbent	5
number of active passenger RUs	**10**
incumbent	4
non-incumbent	6
thereof PSO	5

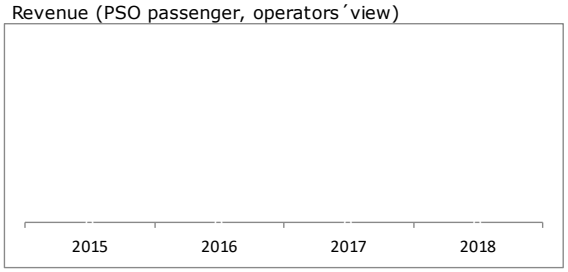
passenger train km	**124 963 000**	
thereof PSO	66 313 358	53 %

passenger km	**13 547 000 000**	
thereof PSO	7 188 904 485	53 %

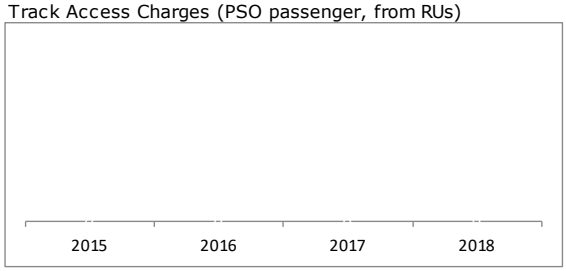
market volume

in million Euro

Revenue (PSO passenger, operators´view)

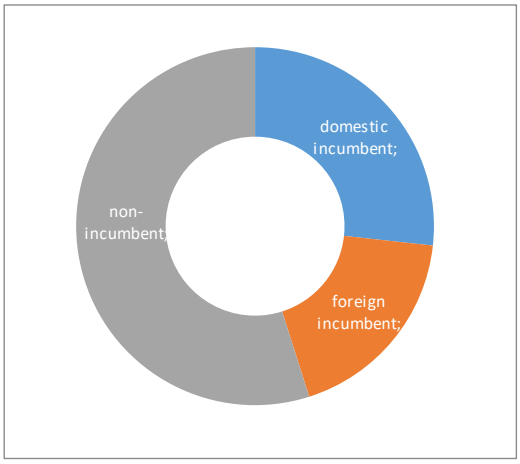


Track Access Charges (PSO passenger, from RUs)



market shares

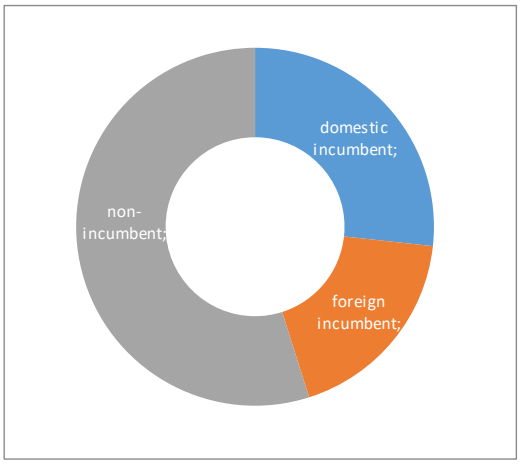
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	SJ	**20%-30%**
2	MTR	**20%-30%**
3	Transdev	**20%-30%**
4	Arriva	**10%-20%**
5	Tågkompaniet	**5%-10%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
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18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the PSO passenger railway market in the United Kingdom

market players and key figures

all data for 2018

number of IMs with passenger services	**3**
incumbent	1
non-incumbent	2
number of active passenger RUs	**26**
incumbent	1
non-incumbent	25
thereof PSO	21

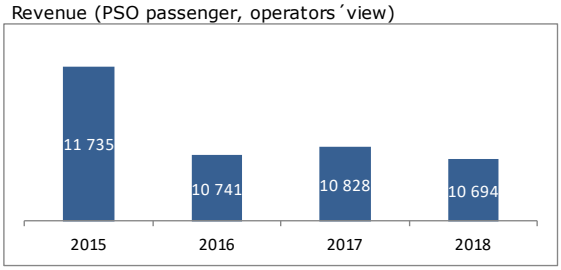
passenger train km	**534 405 932**	
thereof PSO	525 532 031	98 %

passenger km	**69 705 889 648**	
thereof PSO	66 976 547 346	96 %

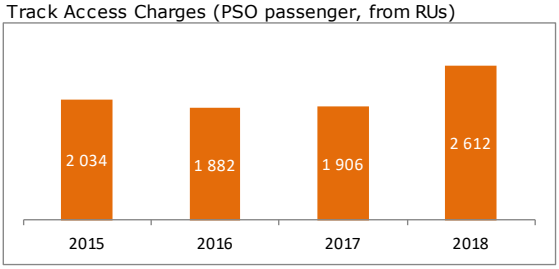
market volume

in million Euro

Revenue (PSO passenger, operators´view)

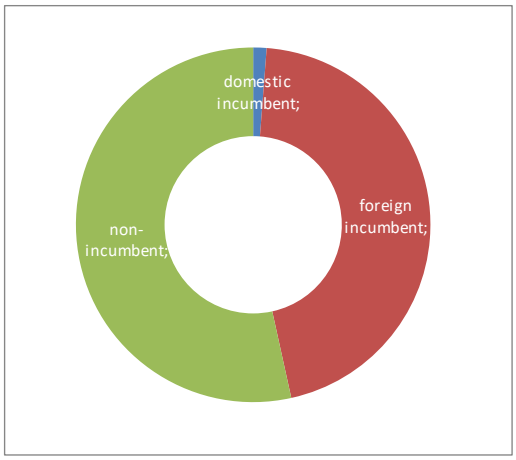


Track Access Charges (PSO passenger, from RUs)



market shares

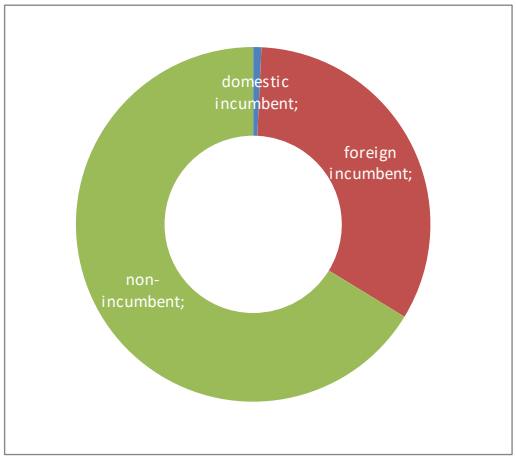
based on **PSO passenger train km**



Top 20 (based on **PSO passenger train km**)

		market share range (%)
1	Arriva Trains Wales	**0%-5%**
2	c2c	**0%-5%**
3	Caledonian Sleeper	**0%-5%**
4	Chiltern Railways	**0%-5%**
5	CrossCountry	**5%-10%**
6	East Midlands Trains	**0%-5%**
7	Govia Thameslink Railway	**10%-20%**
8	Great Western Railway	**5%-10%**
9	Greater Anglia	**5%-10%**
10	London North Eastern Railway	**0%-5%**
11	London Overground	**0%-5%**
12	Merseyrail	**0%-5%**
13	Northern	**5%-10%**
14	ScotRail	**5%-10%**
15	South Western Railway	**5%-10%**
16	Southeastern	**5%-10%**
17	TfL Rail	**0%-5%**
18	TransPennine Express	**0%-5%**
19	Virgin Trains West Coast	**5%-10%**
20	West Midlands Trains	**0%-5%**

based on **PSO passenger km**



Top 20 (based on **PSO passenger km**)

		market share range (%)
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18	TransPennine Express	**0%-5%**
19	Virgin Trains West Coast	**10%-20%**
20	West Midlands Trains	**0%-5%**

Fact sheet for the non-PSO passenger railway market in Austria

market players and key figures

all data for 2018

number of IMs with passenger services	**4**
incumbent	1
non-incumbent	3
number of active passenger RUs	**16**
incumbent	1
non-incumbent	3
thereof Non-PSO	4

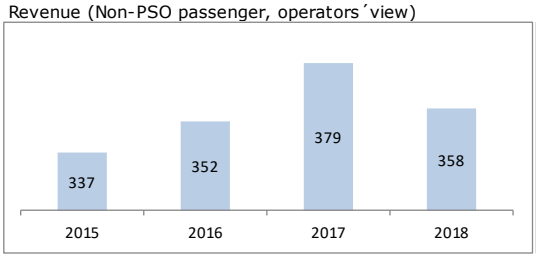
passenger train km	**113 341 621**	
thereof Non-PSO	34 841 621	31 %

passenger km	**13 272 652 808**	
thereof Non-PSO	4 369 615 000	33 %

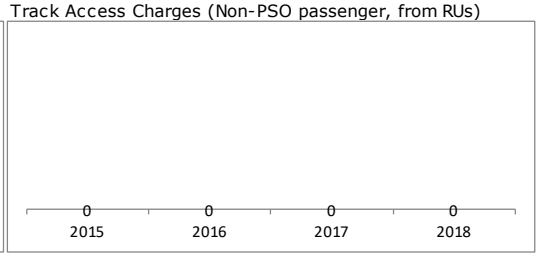
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

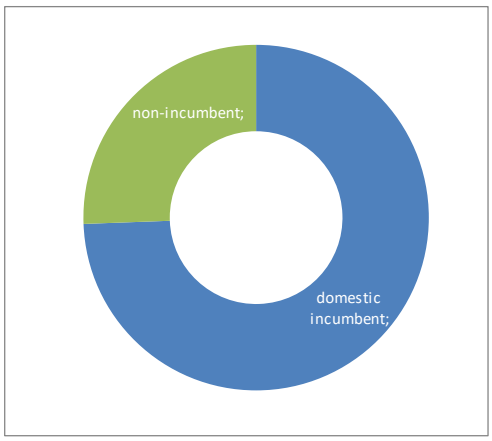


Track Access Charges (Non-PSO passenger, from RUs)



market shares

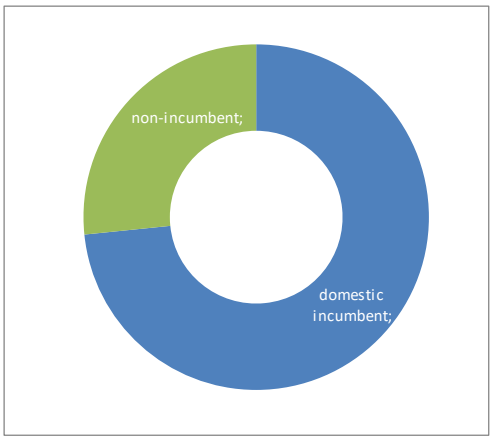
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	ÖBB Personenverkehr AG	**70%-80%**
2	WESTbahn GmbH	**20%-30%**
3	City Air Terminal BetriebsGmbH	**0%-5%**
4	RegioJet	**0%-5%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



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16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Belgium

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	0
non-incumbent	1
number of active passenger RUs	**3**
incumbent	3
non-incumbent	0
thereof Non-PSO	2

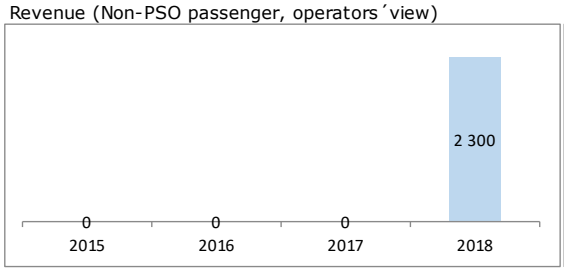
passenger train km	**87 204 177**	
thereof Non-PSO	3 383 757	4 %

passenger km	**13 043 110 200**	
thereof Non-PSO	2 300 000 000	18 %

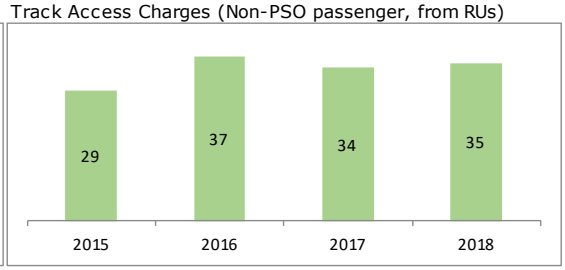
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

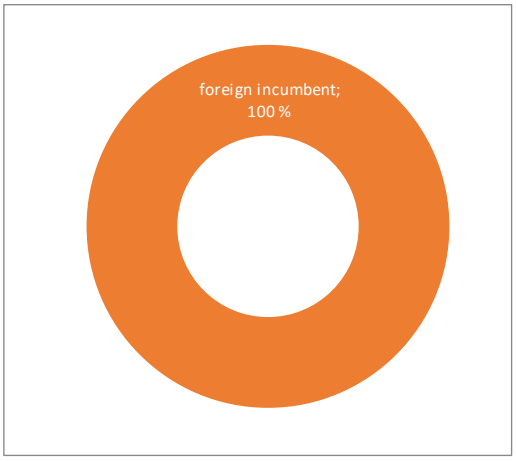


Track Access Charges (Non-PSO passenger, from RUs)



market shares

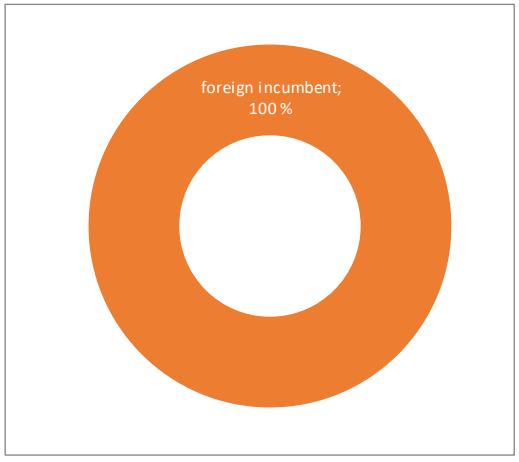
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	Eurostar	**10%-20%**
2	THI Factory	**80%-90%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	Eurostar	**10%-20%**
2	THI Factory	**80%-90%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
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7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Croatia

market players and key figures

all data for 2018

number of IMs with passenger services	
incumbent	
non-incumbent	
number of active passenger RUs	**1**
incumbent	
non-incumbent	
thereof Non-PSO	1

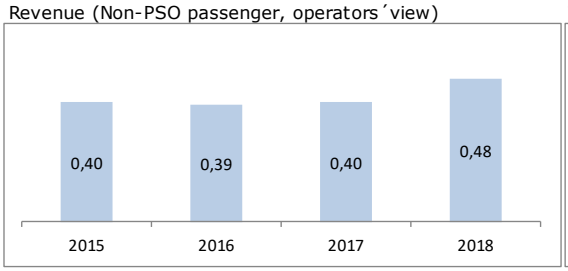
passenger train km	15 235 783	
thereof Non-PSO	56 711	0 %

passenger km	755 882 773	
thereof Non-PSO	8 953 153	1 %

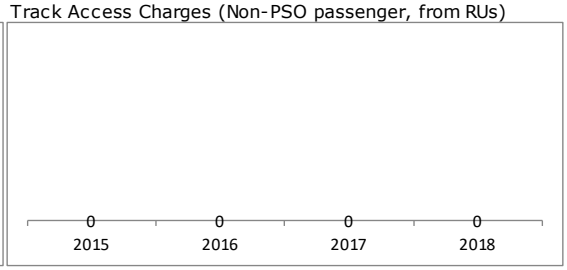
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

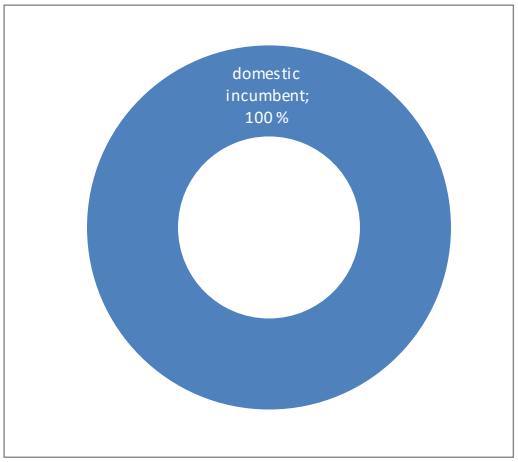


Track Access Charges (Non-PSO passenger, from RUs)



market shares

based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	HŽ Putnički prijevoz d.o.o.	**90%-100%**
2		
3		
4		
5		
6		
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8		
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16		
17		
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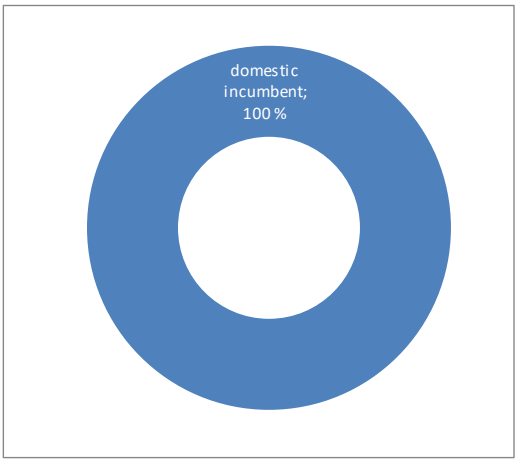
19		
20		

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	HŽ Putnički prijevoz d.o.o.	**90%-100%**
2		
3		
4		
5		
6		
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15		
16		
17		
18		
19		
20		

Fact sheet for the non-PSO passenger railway market in Czech Republic

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	0
non-incumbent	1
number of active passenger RUs	**23**
incumbent	1
non-incumbent	26
thereof Non-PSO	27

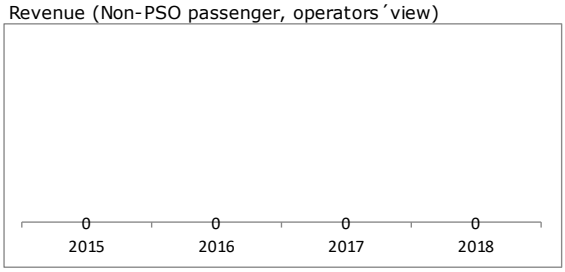
passenger train km	**134 526 211**	
thereof Non-PSO	11 113 256	8 %

passenger km	**10 286 000 000**	
thereof Non-PSO	1 457 797 000	14 %

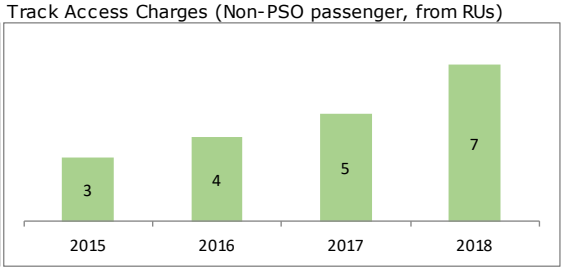
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

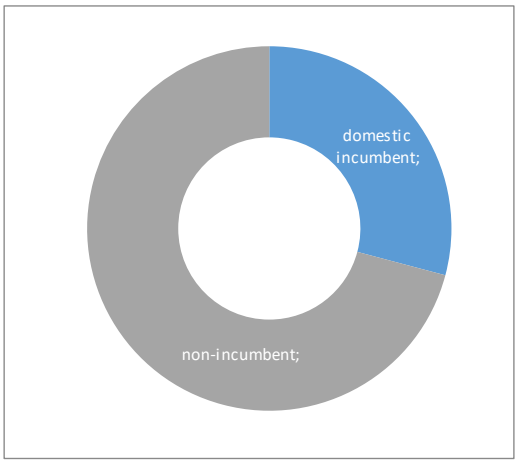


Track Access Charges (Non-PSO passenger, from RUs)



market shares

based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	RegioJet a.s.	**40%-50%**
2	České dráhy, a.s.	**20%-30%**
3	Leo Express Global a.s.	**10%-20%**
4	ARRIVA vlaky s.r.o.	**5%-10%**
5	Leo Express s.r.o.	**0%-5%**
6	Railway Capital a.s.	**0%-5%**
7	Kladenská dopravní a strojní s.r.o.	**0%-5%**
8	AŽD Praha, s.r.o.	**0%-5%**
9	ZABABA, s.r.o.	**0%-5%**
10	ČESKÁ ZÁPADNÍ DRÁHA s. r. o.	**0%-5%**
11	Lokálka Group, spolek	**0%-5%**
12	CityRail, a.s.	**0%-5%**
13	Slezské zemské dráhy, o.p.s.	**0%-5%**
14	METRANS Rail s.r.o.	**0%-5%**
15	Puš s.r.o.	**0%-5%**
16	Rail system s.r.o.	**0%-5%**
17	KK - provoz a opravy lok. s.r.o.	**0%-5%**
18	Advanced World Transport a.s.	**0%-5%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**

Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	n/a	**0,0%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Estonia

market players and key figures

all data for 2018

number of IMs with passenger services	**0**
incumbent	0
non-incumbent	0
number of active passenger RUs	**2**
incumbent	0
non-incumbent	1
thereof Non-PSO	1

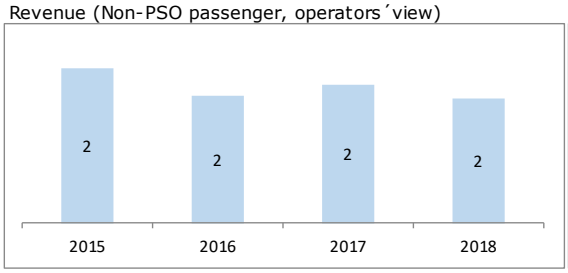
passenger train km	**5 509 875**	
thereof Non-PSO	156 077	3 %

passenger km	**419 750 000**	
thereof Non-PSO	20 350 000	5 %

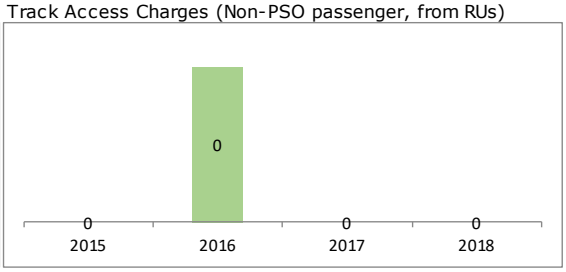
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

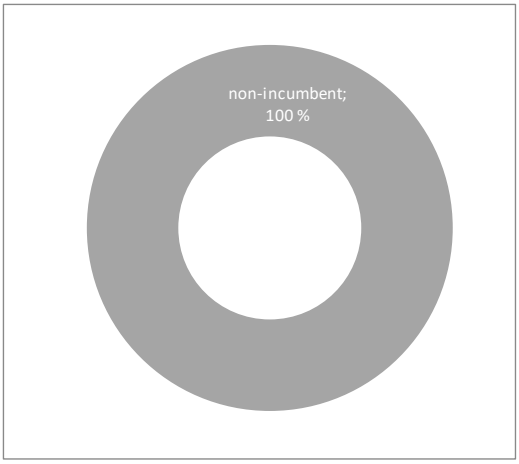


Track Access Charges (Non-PSO passenger, from RUs)



market shares

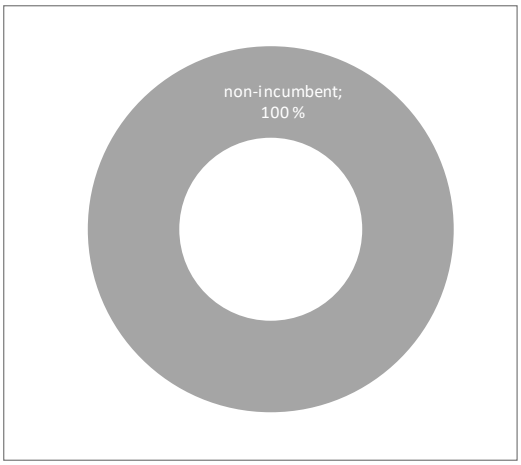
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	AS GoRail	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	AS GoRail	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Finland

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	0
number of active passenger RUs	1
incumbent	1
non-incumbent	0
thereof Non-PSO	1

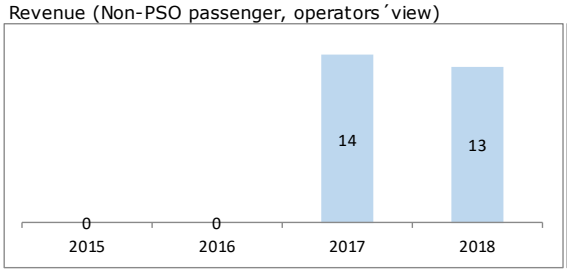
passenger train km	35 003 000	
thereof Non-PSO	910 000	3 %

passenger km	4 534 000 000	
thereof Non-PSO	143 000 000	3 %

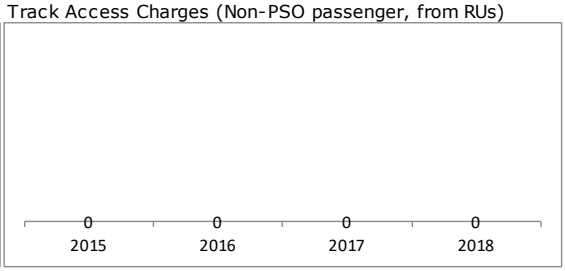
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

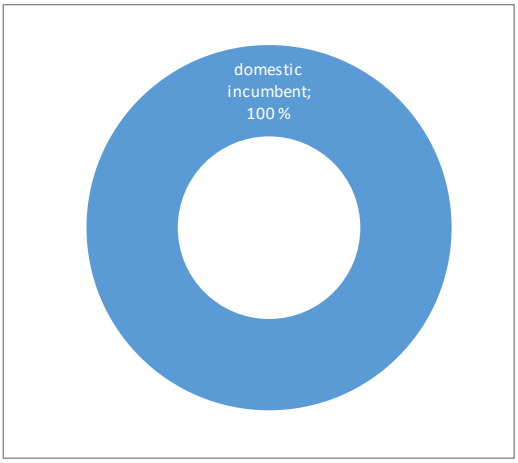


Track Access Charges (Non-PSO passenger, from RUs)



market shares

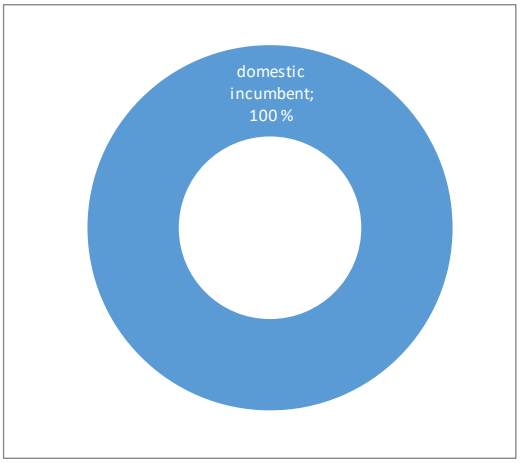
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	VR	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	VR	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

Fact sheet for the non-PSO passenger railway market in France

market players and key figures

all data for 2018

number of IMs with passenger services	4
incumbent	1
non-incumbent	3
number of active passenger RUs	4
incumbent	3
non-incumbent	1
thereof Non-PSO	4

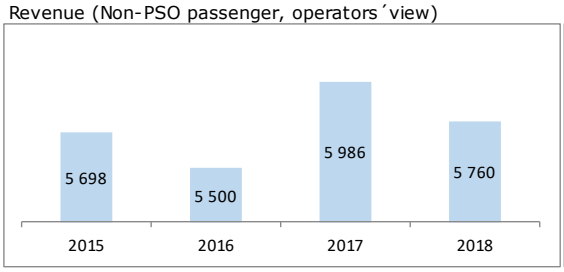
passenger train km	379 358 109	
thereof Non-PSO	127 279 445	34 %

passenger km	88 989 999 170	
thereof Non-PSO	56 270 038 376	63 %

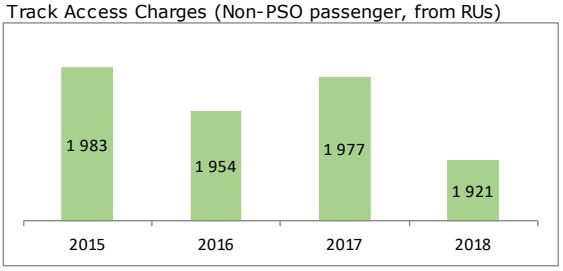
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

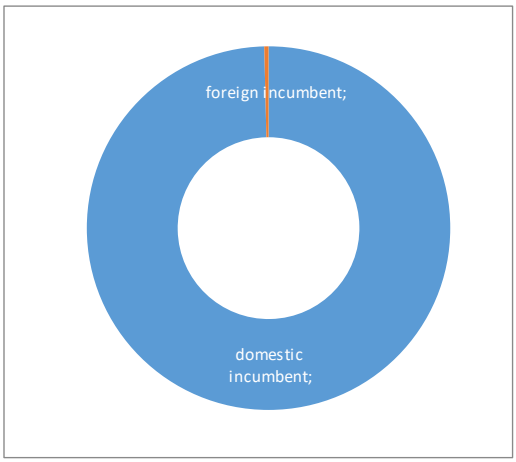


Track Access Charges (Non-PSO passenger, from RUs)



market shares

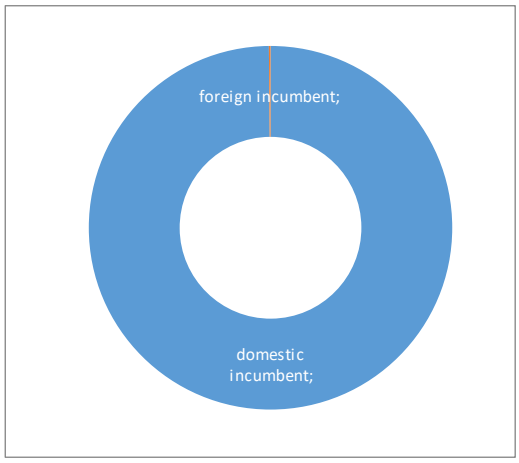
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	SNCF Voyages	**90%-100%**
2	Eurostar	**0%-5%**
3	Thalys	**0%-5%**
4	Thello	**0%-5%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

market share range (%)

Fact sheet for the non-PSO passenger railway market in Germany

market players and key figures

all data for 2018

number of IMs with passenger services	110
incumbent	3
non-incumbent	107
number of active passenger RUs	142
incumbent	7
non-incumbent	135
thereof Non-PSO	91

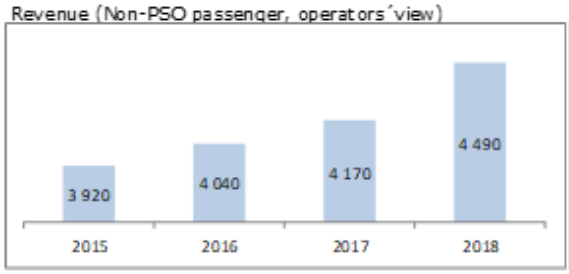
passenger train km	842 000 000	
thereof Non-PSO	147 000 000	17 %

passenger km	99 900 000 000	
thereof Non-PSO	43 100 000 000	43 %

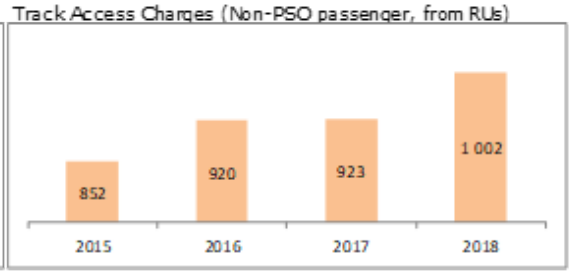
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

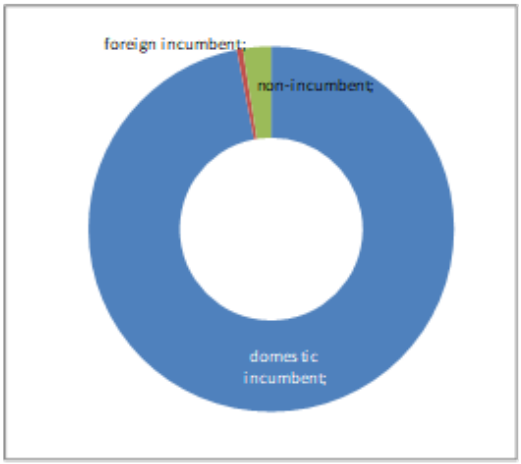


Track Access Charges (Non-PSO passenger, from RUs)



market shares

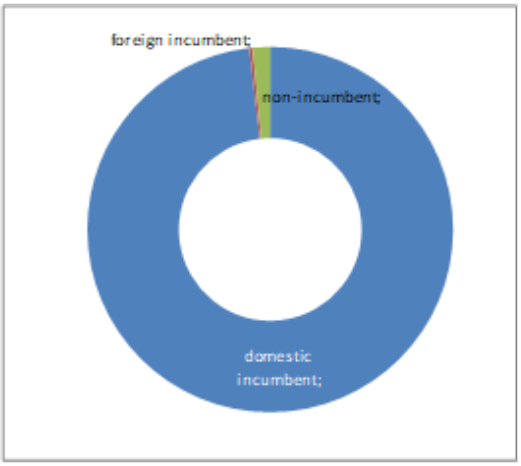
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	DB Fernverkehr AG	90%-100%
2	SNCF Voyages Deutschland GmbH	0%-5%
3	UEF Eisenbahnverkehrsgesellschaft mb	0%-5%
4	Zweckverband ÖPNV im Ammertal	0%-5%
5	Leo Express GmbH	0%-5%
6	DB Regio AG	0%-5%
7	Verkehrsgesellschaft Norderstedt mbH	0%-5%
8	SWEG Südwestdeutsche Landesverkeh	0%-5%
9	BTE BahnTouristikExpress GmbH	0%-5%
10	Laeger & Wöstenhöfer GmbH & Co. KG	0%-5%
11	RDC AUTOZUG Sylt GmbH	0%-5%
12	DB ZugBus Regionalverkehr Alb-Bode	0%-5%
13	Vulkan-Eifel-Bahn Betriebsgesellschaft	0%-5%
14	NEB Betriebsgesellschaft mbH	0%-5%
15	Flix Train GmbH	0%-5%
16	Eisenbahn-Bau- und Betriebsgesellsch	0%-5%
17	Erfurter Bahn GmbH	0%-5%
18	Borkumer Kleinbahn- und Dampfschiff	0%-5%
19	Bayerische Zugspitzbahn Bergbahn AG	0%-5%
20	Eisenbahnen u. Verkehrsbetriebe Elbe-	0%-5%

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	DB Fernverkehr AG	90%-100%
2	Leo Express GmbH	0%-5%
3	Laeger & Wöstenhöfer GmbH & Co. KG	0%-5%
4	SNCF Voyages Deutschland GmbH	0%-5%
5	UEF Eisenbahnverkehrsgesellschaft mb	0%-5%
6	DB Regio AG	0%-5%
7	BTE BahnTouristikExpress GmbH	0%-5%
8	Flix Train GmbH	0%-5%
9	SWEG Südwestdeutsche Landesverkeh	0%-5%
10	Vulkan-Eifel-Bahn Betriebsgesellschaft	0%-5%
11	RDC AUTOZUG Sylt GmbH	0%-5%
12	Zweckverband ÖPNV im Ammertal	0%-5%
13	DB ZugBus Regionalverkehr Alb-Bode	0%-5%
14	Borkumer Kleinbahn- und Dampfschiff	0%-5%
15	DGEG Bahnen & Reisen Bochum AG	0%-5%
16	SVG Schienenverkehrsgesellschaft mb	0%-5%
17	Bayerische Zugspitzbahn Bergbahn AG	0%-5%
18	G.V.G. Georg Verkehrsorganisation Gn	0%-5%
19	NeSA Eisenbahn-Betriebsgesellschaft M	0%-5%
20	Eisenbahn-Bau- und Betriebsgesellsch	0%-5%

Fact sheet for the non-PSO passenger railway market in Greece

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	
number of active passenger RUs	2
incumbent	
non-incumbent	2
thereof Non-PSO	2

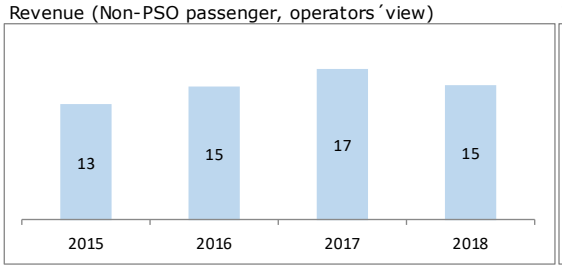
passenger train km	10 123 442	
thereof Non-PSO	615 373	6 %

passenger km	1 157 178 854	
thereof Non-PSO	79 611 200	7 %

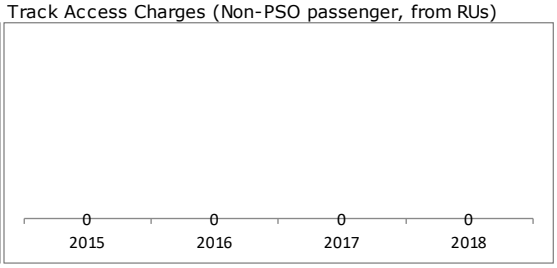
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

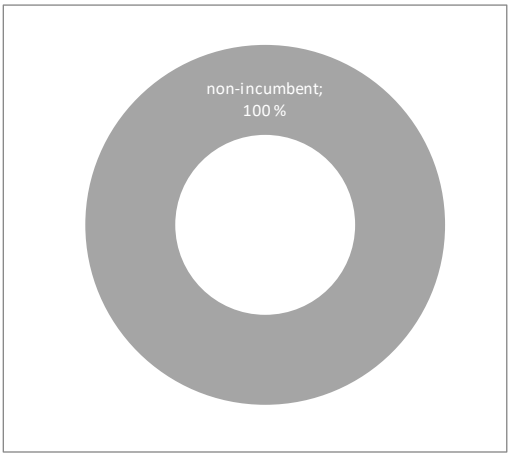


Track Access Charges (Non-PSO passenger, from RUs)



market shares

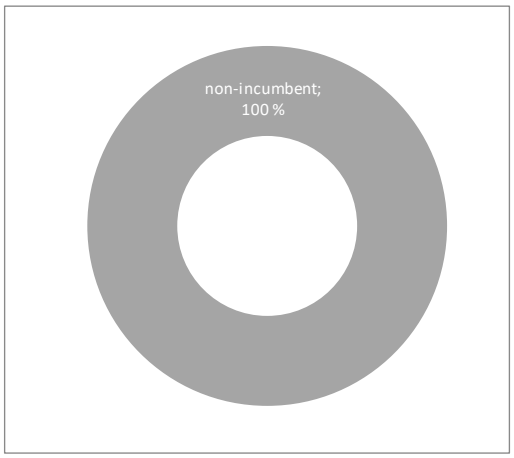
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	trainose	**10%-20%**
2	stasy	**80%-90%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	trainose	**30%-40%**
2	stasy	**60%-70%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Hungary

market players and key figures

all data for 2018

number of IMs with passenger services	**2**
incumbent	1
non-incumbent	1
number of active passenger RUs	**4**
incumbent	1
non-incumbent	3
thereof Non-PSO	2

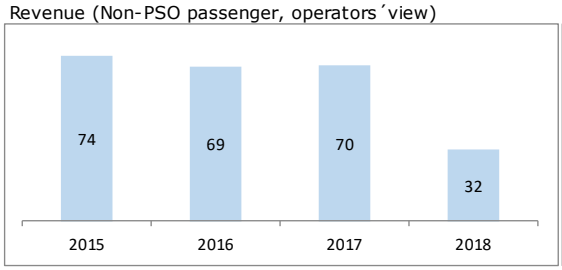
passenger train km	**82 884 172**	
thereof Non-PSO	37 172	0 %

passenger km	**7 769 079 000**	
thereof Non-PSO	8 579 000	0 %

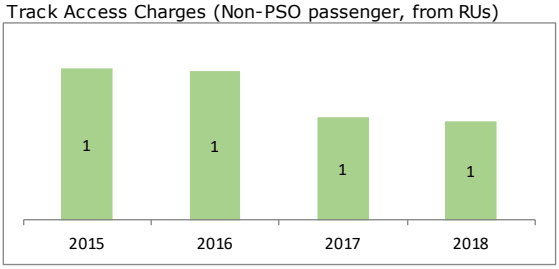
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

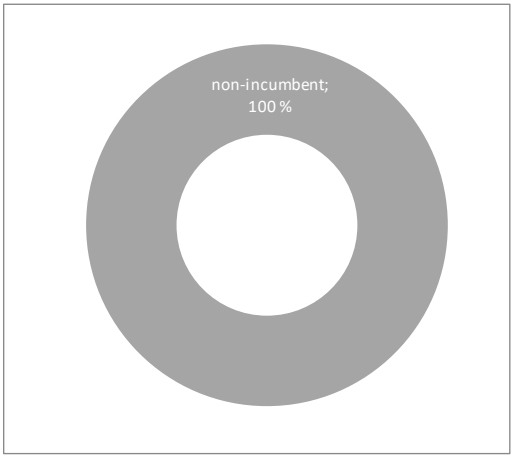


Track Access Charges (Non-PSO passenger, from RUs)



market shares

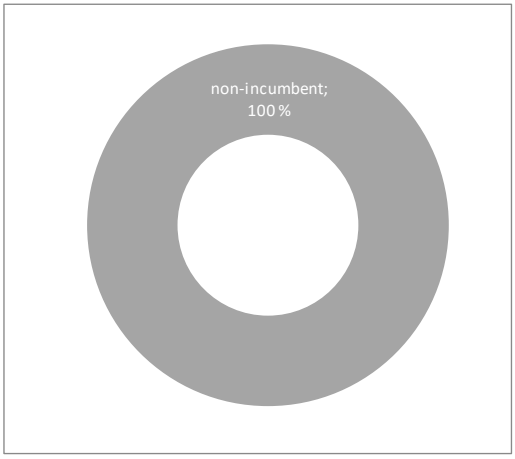
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	MÁV Nosztalgia Kft.	**80%-90%**
2	Continental Railway Solution Kft.	**10%-20%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	MÁV Nosztalgia Kft.	**90%-100%**
2	Continental Railway Solution Kft.	**5%-10%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Italy

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**20**
incumbent	6
non-incumbent	14
thereof Non-PSO	5

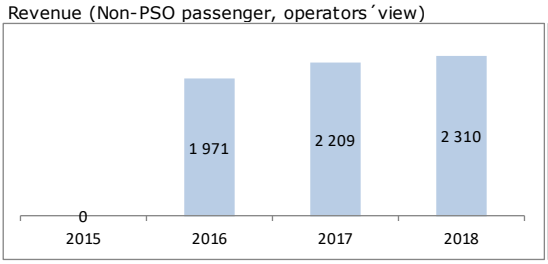
passenger train km	**326 623 763**	
thereof Non-PSO	85 419 415	26 %

passenger km	**53 957 404 968**	
thereof Non-PSO	24 069 989 261	45 %

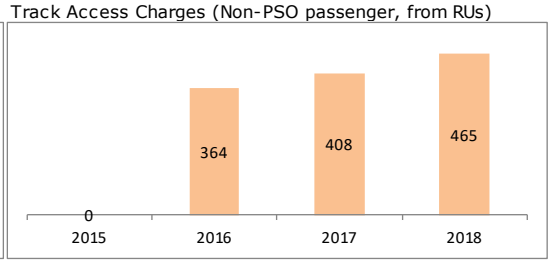
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

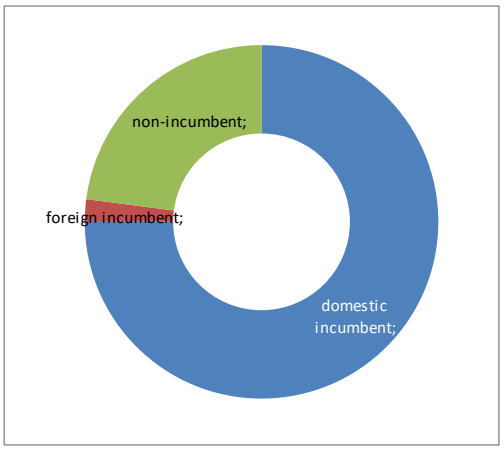


Track Access Charges (Non-PSO passenger, from RUs)



market shares

based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	Arriva Italia Rail S.r.l.	**0%-5%**
2	DB Bahn Italia Srl.	**0%-5%**
3	ITALO - Nuovo Trasporto Viaggiatori S.	**20%-30%**
4	SNCF VOYAGES ITALIA SRL	**0%-5%**
5	Trenitalia SpA	**70%-80%**
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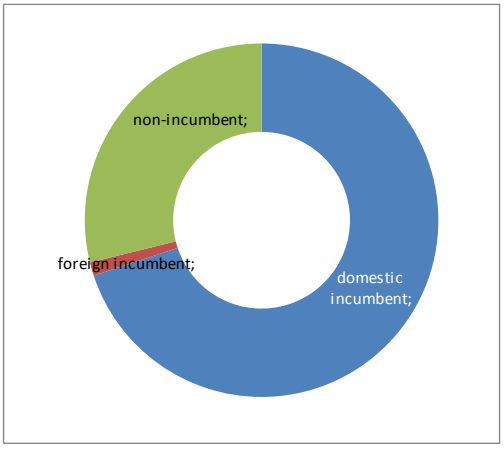
based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	Arriva Italia Rail S.r.l.	**0%-5%**
2	DB Bahn Italia Srl.	**0%-5%**
3	ITALO - Nuovo Trasporto Viaggiatori S.	**20%-30%**
4	SNCF VOYAGES ITALIA SRL	**0%-5%**
5	Trenitalia SpA	**60%-70%**
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Fact sheet for the non-PSO passenger railway market in Latvia

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	
number of active passenger RUs	4
incumbent	1
non-incumbent	3
thereof Non-PSO	3

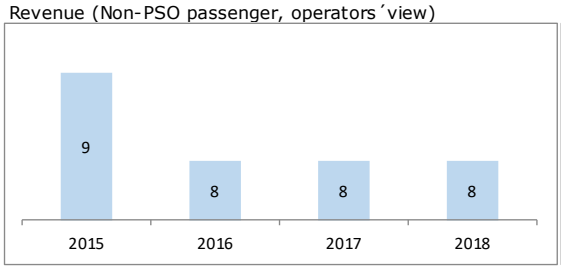
passenger train km	5 912 394	
thereof Non-PSO	329 791	6 %

passenger km	624 313 962	
thereof Non-PSO	41 770 275	7 %

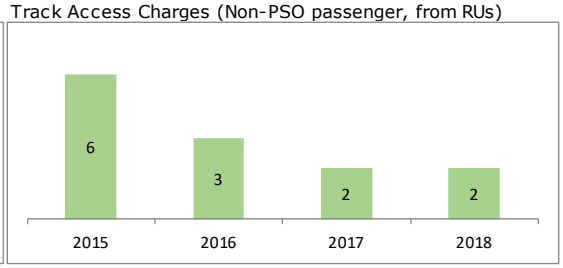
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

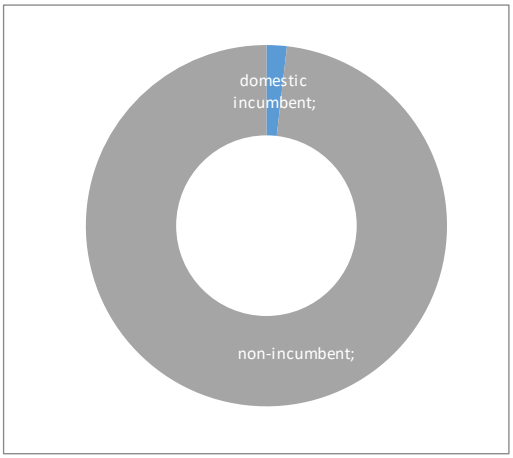


Track Access Charges (Non-PSO passenger, from RUs)



market shares

based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	JSC Pasazieru vilciens	0%-5%
2	Ltd LDZ CARGO	90%-100%
3	AB Lietuvos gelezinkeliai	0%-5%
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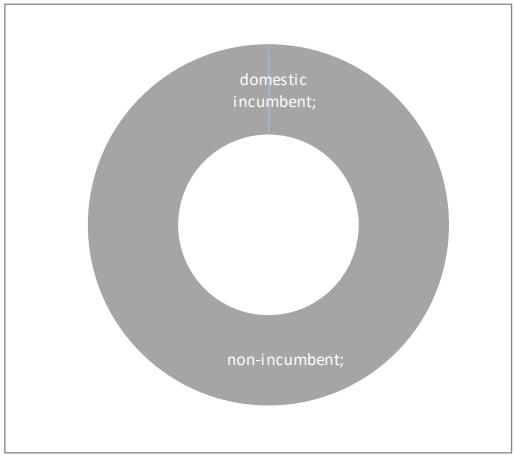
based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	JSC Pasazieru vilciens	0%-5%
2	Ltd LDZ CARGO	90%-100%
3	AB Lietuvos gelezinkeliai	0%-5%
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Fact sheet for the non-PSO passenger railway market in Lithuania

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**1**
incumbent	1
non-incumbent	0
thereof Non-PSO	1

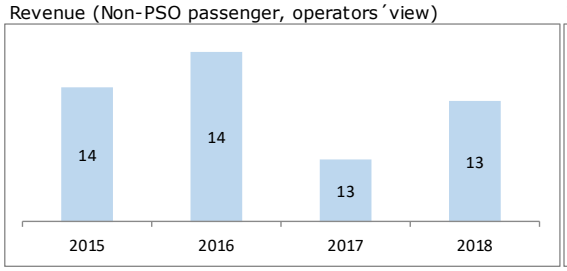
passenger train km	**6 317 081**	
thereof Non-PSO	522 937	8 %

passenger km	**468 113 000**	
thereof Non-PSO	129 016 000	28 %

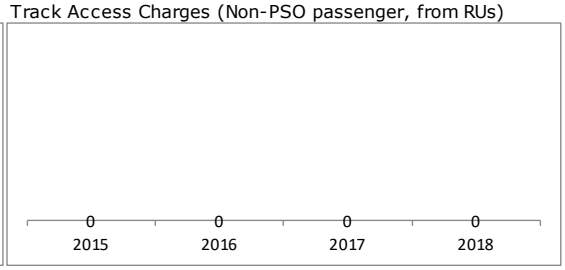
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

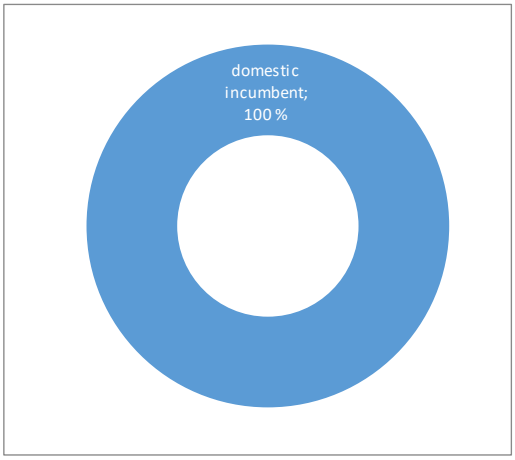


Track Access Charges (Non-PSO passenger, from RUs)



market shares

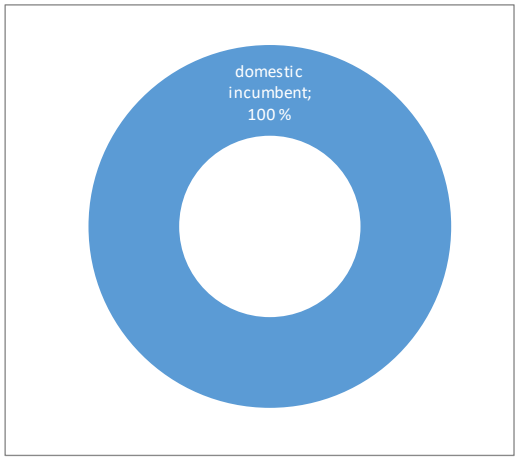
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	JSC "Lietuvos geležinkeliai"	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	JSC "Lietuvos geležinkeliai"	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Luxembourg

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	0
number of active passenger RUs	1
incumbent	0
non-incumbent	1
thereof Non-PSO	1

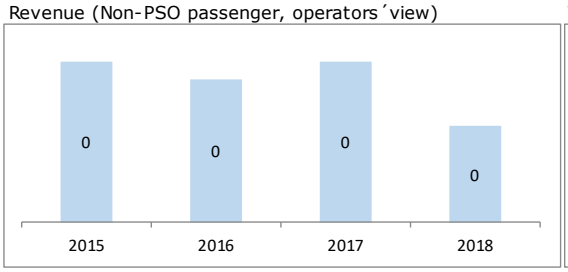
passenger train km	7 490 000	
thereof Non-PSO	80 000	1 %

passenger km	442 000 000	
thereof Non-PSO	n/a	

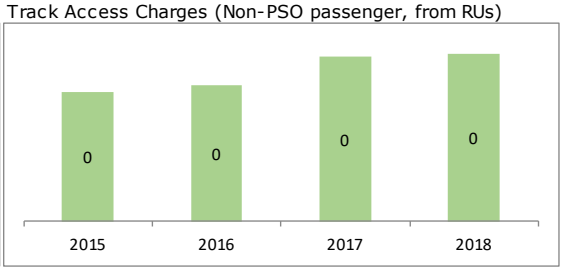
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

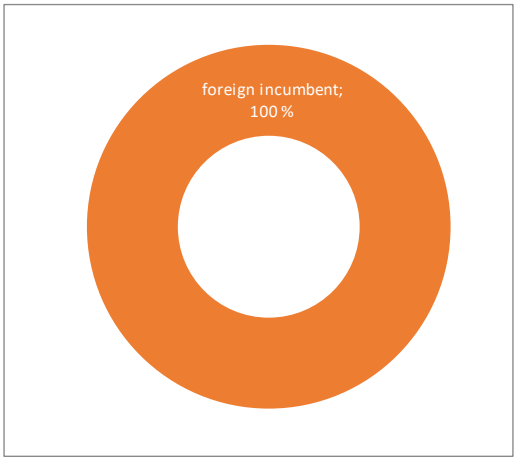


Track Access Charges (Non-PSO passenger, from RUs)



market shares

based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	SNCF	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**

Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	SNCF	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Norway

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**5**
incumbent	2
non-incumbent	1
thereof Non-PSO	3

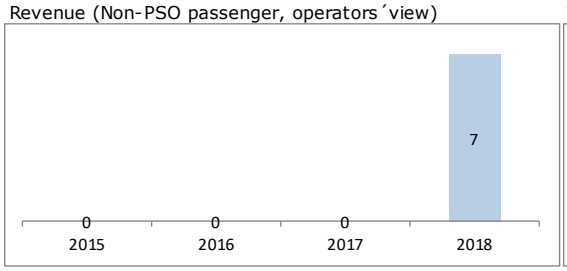
passenger train km	**41 074 592**	
thereof Non-PSO	390 014	1 %

passenger km	**3 719 217 072**	
thereof Non-PSO	34 008 006	1 %

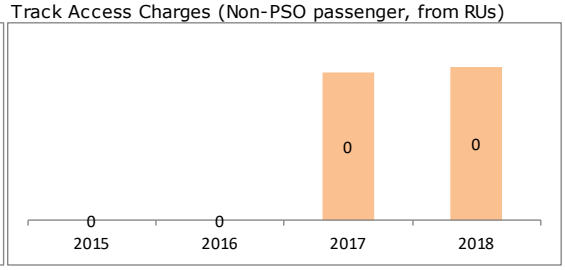
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

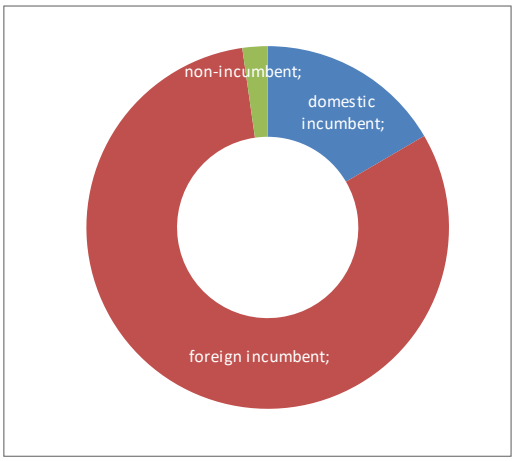


Track Access Charges (Non-PSO passenger, from RUs)



market shares

based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	Vygruppen AS	**10%-20%**
2	SJ AB	**80%-90%**
3	Norsk jernbanemuseum	**0%-5%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
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11	0	**0,0%**
12	0	**0,0%**
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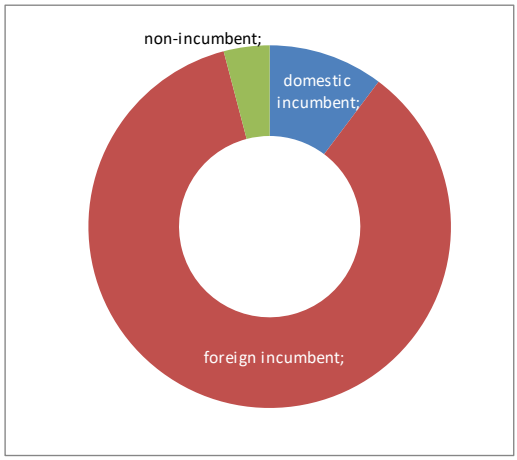
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	Vygruppen AS	**10%-20%**
2	SJ AB	**80%-90%**
3	Norsk jernbanemuseum	**0%-5%**
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6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
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14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Poland

market players and key figures

all data for 2018

number of IMs with passenger services	
incumbent	
non-incumbent	
number of active passenger RUs	**11**
incumbent	
non-incumbent	
thereof Non-PSO	4

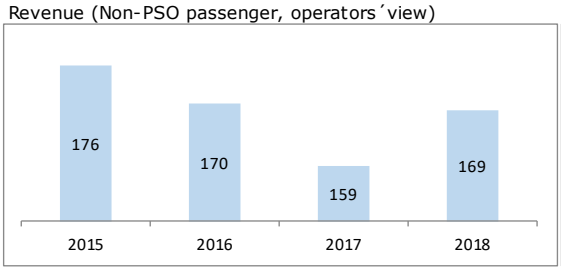
passenger train km	165 559 242	
thereof Non-PSO	11 697 627	7 %

passenger km	20 922 188 295	
thereof Non-PSO	2 393 337 323	11 %

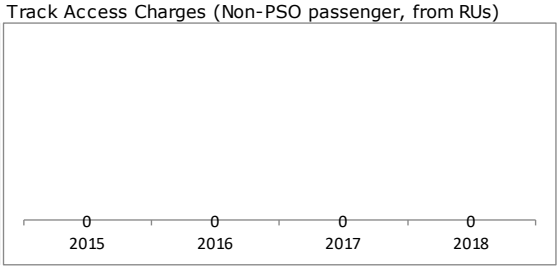
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

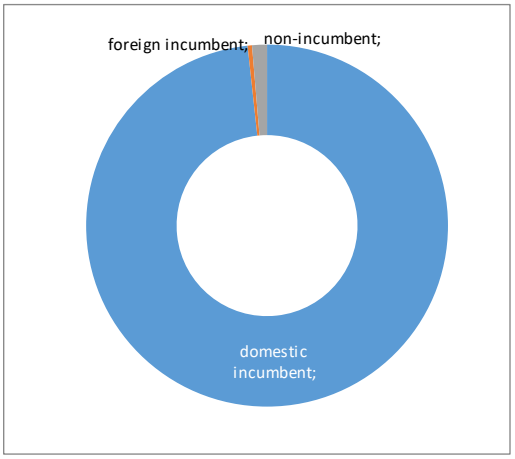


Track Access Charges (Non-PSO passenger, from RUs)



market shares

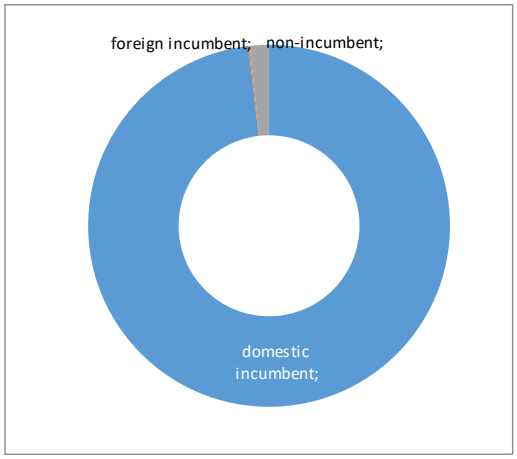
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	"PKP Intercity" S.A.	**90%-100%**
2	"Koleje Mazowieckie - KM" sp. z o.o.	**0%-5%**
3	Arriva RP Sp. z o.o.	**0%-5%**
4	Koleje Dolnośląskie	**0%-5%**
5	UBB Usedomer Bäderbahn GmbH	**0%-5%**
6	LEO Express	**0%-5%**
7	PKP Szybka Kolej Miejska w Trójmieści	**0%-5%**
8	PKP CARGO S.A.	**0%-5%**
9	Koleje Śląskie Sp. z o.o.	**0%-5%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	"PKP Intercity" S.A.	**90%-100%**
2	PKP Szybka Kolej Miejska w Trójmieści	**0%-5%**
3	"Koleje Mazowieckie - KM" sp. z o.o.	**0%-5%**
4	Arriva RP Sp. z o.o.	**0%-5%**
5	Koleje Dolnośląskie	**0%-5%**
6	LEO Express	**0%-5%**
7	PKP CARGO S.A.	**0%-5%**
8	UBB Usedomer Bäderbahn GmbH	**0%-5%**
9	Koleje Śląskie Sp. z o.o.	**0%-5%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Portugal

market players and key figures

all data for 2018

number of IMs with passenger services	
incumbent	
non-incumbent	
number of active passenger RUs	**2**
incumbent	
non-incumbent	
thereof Non-PSO	2

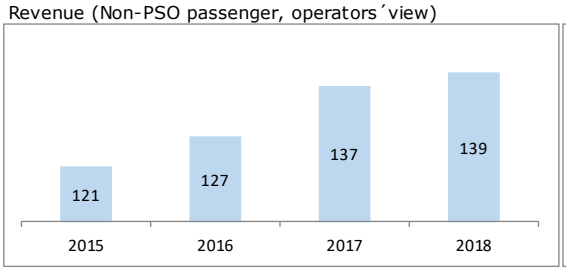
passenger train km	30 312 510	
thereof Non-PSO	18 083 853	60 %

passenger km	4 489 795 000	
thereof Non-PSO	2 093 339 000	47 %

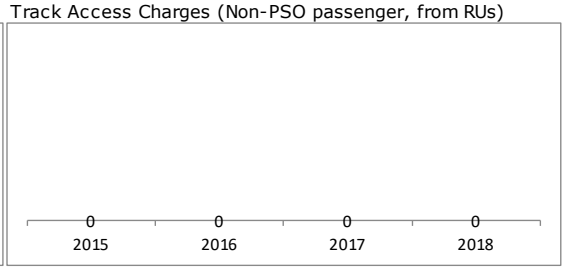
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

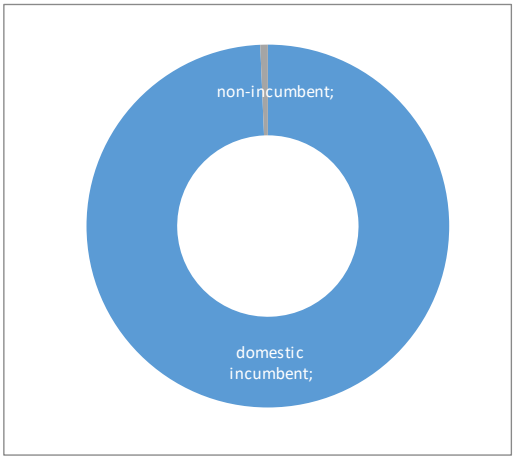


Track Access Charges (Non-PSO passenger, from RUs)



market shares

based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	RU 1	**90%-100%**
2	RU 2	**0%-5%**
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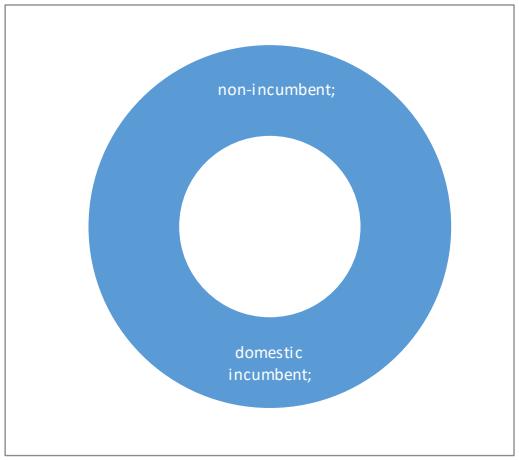
based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	RU 1	**90%-100%**
2	RU 2	**0%-5%**
3		
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Fact sheet for the non-PSO passenger railway market in Romania

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	0
number of active passenger RUs	**6**
incumbent	1
non-incumbent	5
thereof Non-PSO	0

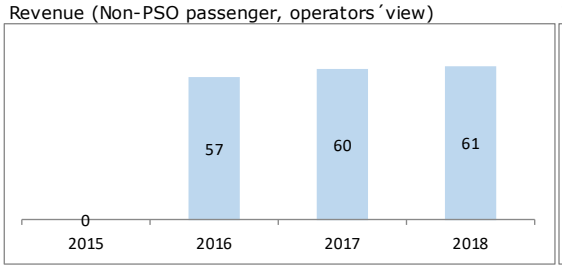
passenger train km	66 562 104	
thereof Non-PSO	3 520 000	5 %

passenger km	5 611 103 571	
thereof Non-PSO	34 400 000	1 %

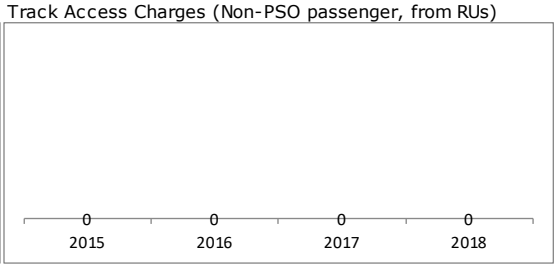
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

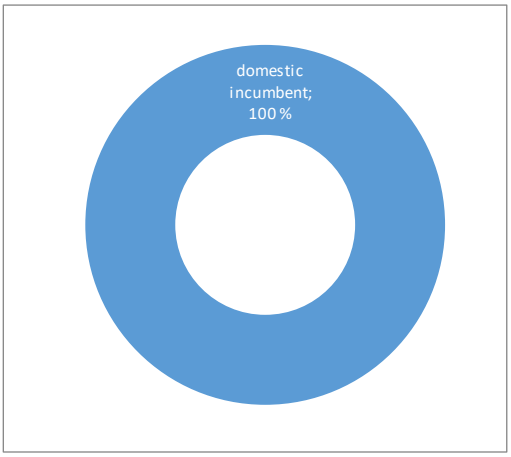


Track Access Charges (Non-PSO passenger, from RUs)



market shares

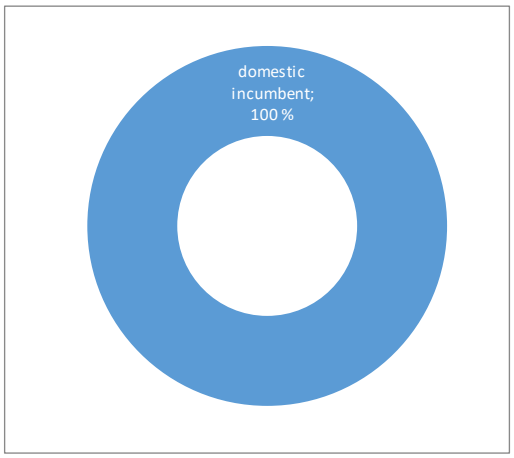
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	CFR Calatori	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	CFR Calatori	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Slovenia

market players and key figures

all data for 2018

number of IMs with passenger services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**1**
incumbent	1
non-incumbent	0
thereof Non-PSO	1

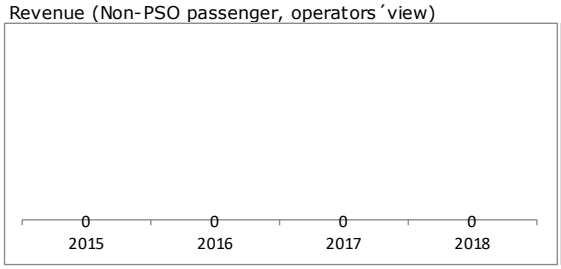
passenger train km	**9 985 305**	
thereof Non-PSO	41 427	0 %

passenger km	**655 882 308**	
thereof Non-PSO	9 945 056	2 %

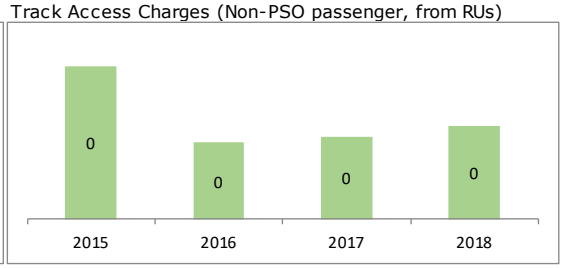
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

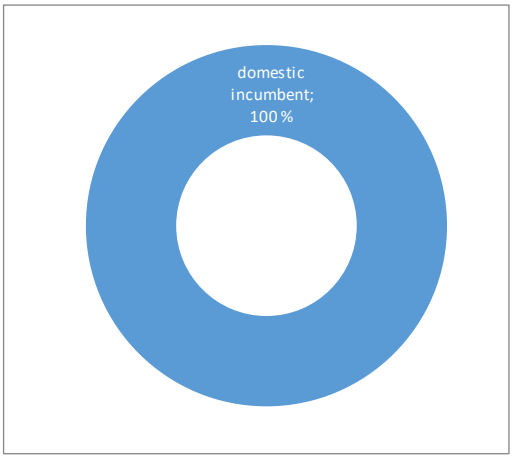


Track Access Charges (Non-PSO passenger, from RUs)



market shares

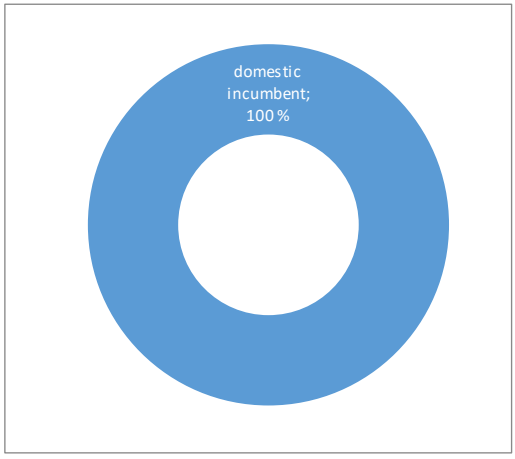
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	SŽ-Potniški promet	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	SŽ-Potniški promet	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in Spain

market players and key figures

all data for 2018

number of IMs with passenger services	1
incumbent	1
non-incumbent	0
number of active passenger RUs	1
incumbent	1
non-incumbent	0
thereof Non-PSO	1

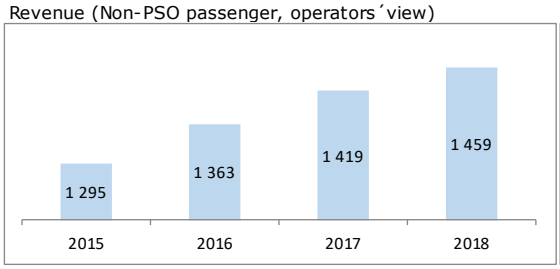
passenger train km	167 685 823	
thereof Non-PSO	61 605 365	37 %

passenger km	26 924 766 664	
thereof Non-PSO	15 300 595 873	57 %

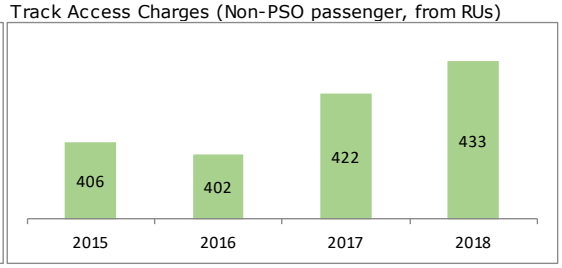
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

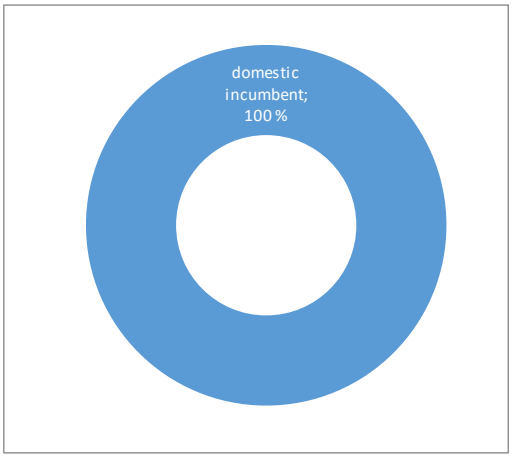


Track Access Charges (Non-PSO passenger, from RUs)



market shares

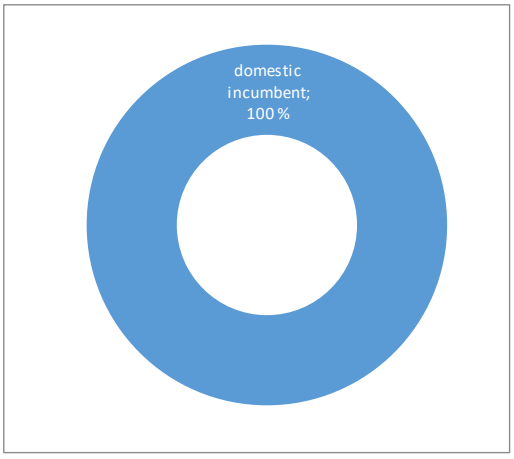
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	Domestic Incumbent	90-100%

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	Domestic Incumbent	90-100%

Fact sheet for the non-PSO passenger railway market in Sweden

market players and key figures

all data for 2018

number of IMs with passenger services	6
incumbent	1
non-incumbent	5
number of active passenger RUs	**10**
incumbent	4
non-incumbent	6
thereof Non-PSO	8

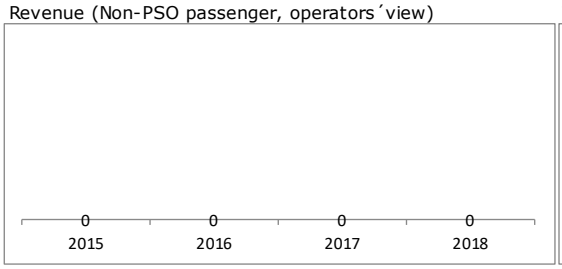
passenger train km	124 963 000	
thereof Non-PSO	58 649 641	47 %

passenger km	13 547 000 000	
thereof Non-PSO	6 358 095 515	47 %

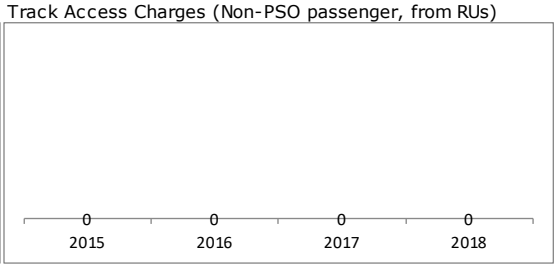
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

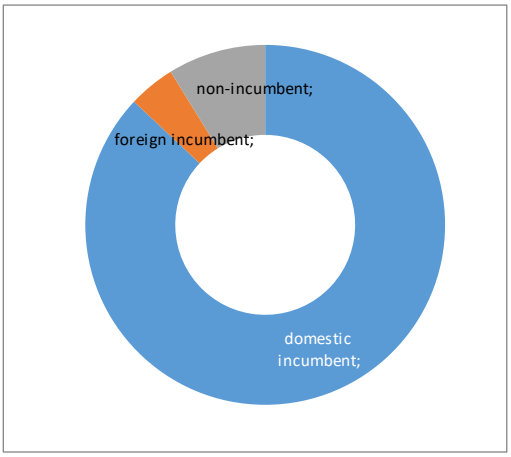


Track Access Charges (Non-PSO passenger, from RUs)



market shares

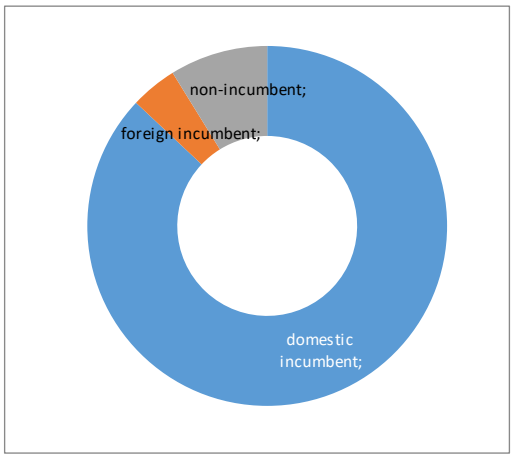
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	SJ	**80%-90%**
2	MTR	**0%-5%**
3	Transdev	**0%-5%**
4	Tågåkeriet i Bergslagen	**0%-5%**
5	A-train	**0%-5%**
6	Skandinaviska jernbanor	**0%-5%**
7	Inlandståget AB	**0%-5%**
8	Saga Rail	**0%-5%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	SJ	**80%-90%**
2	MTR	**0%-5%**
3	Transdev	**0%-5%**
4	Tågåkeriet i Bergslagen	**0%-5%**
5	A-train	**0%-5%**
6	Skandinaviska jernbanor	**0%-5%**
7	Inlandståget AB	**0%-5%**
8	Saga Rail	**0%-5%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the non-PSO passenger railway market in the United Kingdom

market players and key figures

all data for 2018

number of IMs with passenger services	**3**
incumbent	1
non-incumbent	2
number of active passenger RUs	**26**
incumbent	25
non-incumbent	1
thereof Non-PSO	5

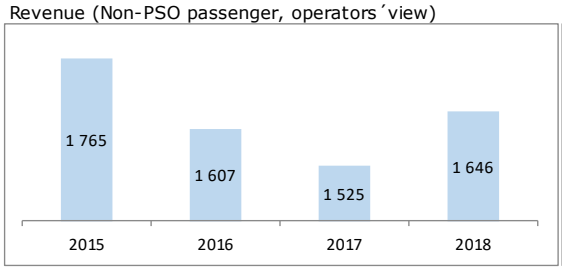
passenger train km	**534 405 932**	
thereof Non-PSO	8 873 901	2 %

passenger km	**69 705 889 648**	
thereof Non-PSO	2 729 342 302	4 %

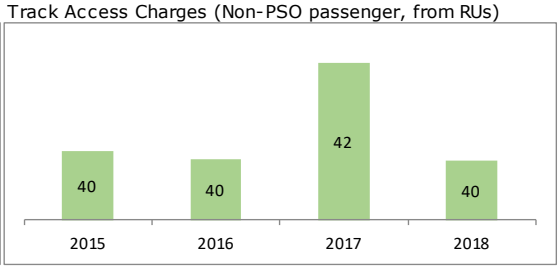
market volume

in million Euro

Revenue (Non-PSO passenger, operators´view)

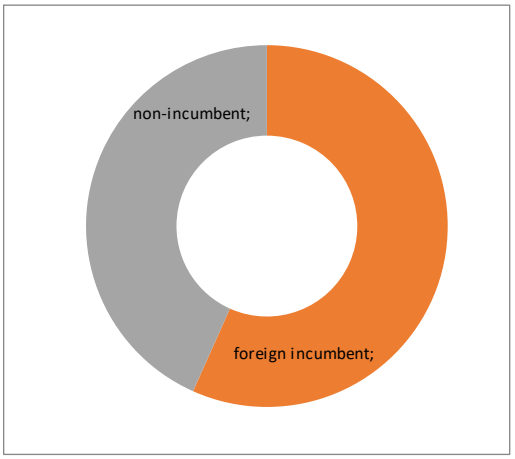


Track Access Charges (Non-PSO passenger, from RUs)



market shares

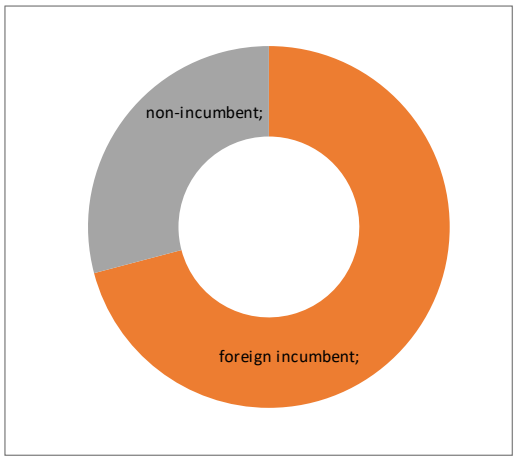
based on **Non-PSO passenger train km**



Top 20 (based on **Non-PSO passenger train km**)

		market share range (%)
1	Grand Central	**20%-30%**
2	Heathrow Express	**10%-20%**
3	Hull Trains	**10%-20%**
4	Eurostar	**20%-30%**
5	Getlink	**10%-20%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **Non-PSO passenger km**



Top 20 (based on **Non-PSO passenger km**)

		market share range (%)
1	Grand Central	**10%-20%**
2	Heathrow Express	**5%-10%**
3	Hull Trains	**5%-10%**
4	Eurostar	**50%-60%**
5	Getlink	**10%-20%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Austria

market players and key figures

all data for 2018

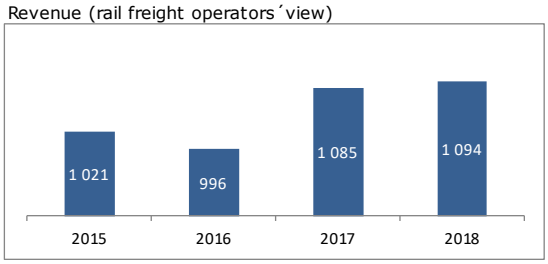
number of IMs with freight services	**5**
incumbent	0
non-incumbent	5
number of active freight RUs	**37**
incumbent	8
non-incumbent	29

freight train km	**51 264 460**
net tonne km	**23 734 110 099**

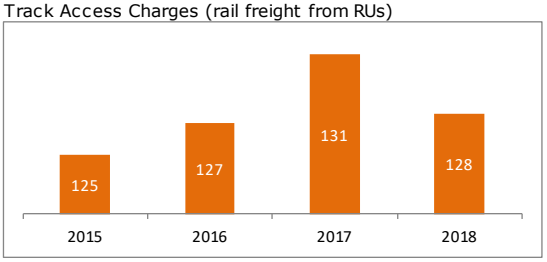
market volume

in million Euro

Revenue (rail freight operators´view)

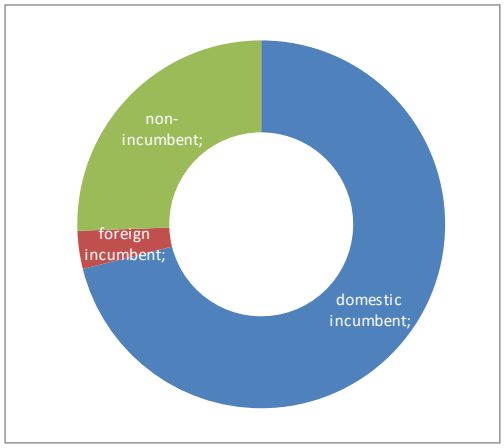


Track Access Charges (rail freight from RUs)



market shares

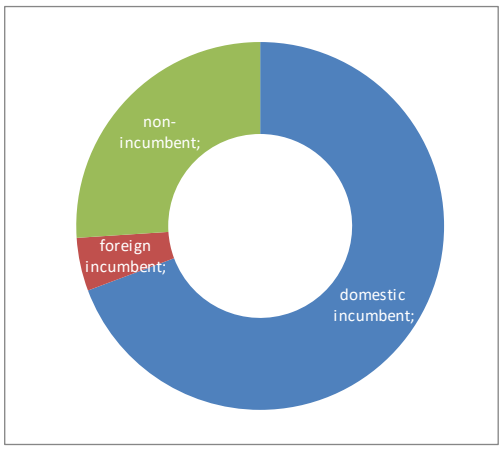
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	Rail Cargo Austria AG	**70%-80%**
2	Lokomotion GmbH	**0%-5%**
3	Wiener Lokalbahnen Cargo GmbH	**0%-5%**
4	LTE Logistik & Transport GmbH	**0%-5%**
5	TX Logistik GmbH	**0%-5%**
6	EccoRail GmbH	**0%-5%**
7	Cargo Service GmbH	**0%-5%**
8	Steiermarkbahn Transport & Logistik	**0%-5%**
9	Metrans Railprofi Austria	**0%-5%**
10	Raaberbahn Cargo GmbH	**0%-5%**
11	Stern & Hafferl Verkehrs GmbH	**0%-5%**
12	MMV	**0%-5%**
13	Grampetcargo Austria	**0%-5%**
14	RTB Cargo Austria	**0%-5%**
15	Floyd Zrt.	**0%-5%**
16	Rail Transport Service GmbH	**0%-5%**
17	Foxrail Zrt.	**0%-5%**
18	Transalpin Eisenbahn	**0%-5%**
19	SZ Cargo	**0%-5%**
20	Walser Eisenbahn GmbH	**0%-5%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	Rail Cargo Austria AG	**60%-70%**
2	Lokomotion GmbH	**0%-5%**
3	LTE Logistik & Transport GmbH	**0%-5%**
4	TX Logistik GmbH	**0%-5%**
5	Wiener Lokalbahnen Cargo GmbH	**0%-5%**
6	Cargo Service GmbH	**0%-5%**
7	EccoRail GmbH	**0%-5%**
8	Raaberbahn Cargo GmbH	**0%-5%**
9	Steiermarkbahn Transport & Logistik	**0%-5%**
10	Metrans Railprofi Austria	**0%-5%**
11	Grampetcargo Austria	**0%-5%**
12	Floyd Zrt.	**0%-5%**
13	Foxrail Zrt.	**0%-5%**
14	MMV	**0%-5%**
15	DB Cargo AG	**0%-5%**
16	RTB Cargo Austria	**0%-5%**
17	SZ Cargo	**0%-5%**
18	Transalpin Eisenbahn	**0%-5%**
19	Walser Eisenbahn GmbH	**0%-5%**
20	Salzburger Lokalbahn	**0%-5%**

Fact sheet for the freight railway market in Belgium

market players and key figures

all data for 2018

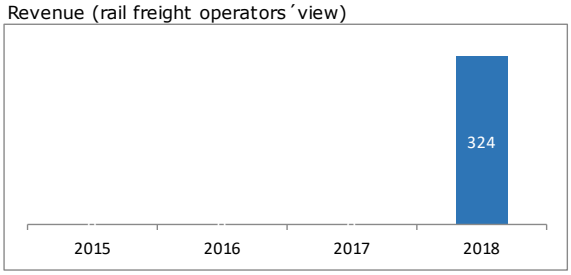
number of IMs with freight services	**1**
incumbent	0
non-incumbent	1
number of active freight RUs	**12**
incumbent	3
non-incumbent	9

freight train km	**13 179 771**
net tonne km	**7 497 357 999**

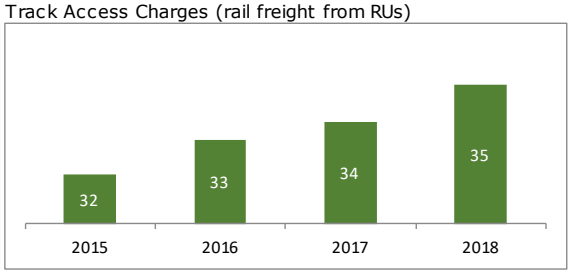
market volume

in million Euro

Revenue (rail freight operators´view)

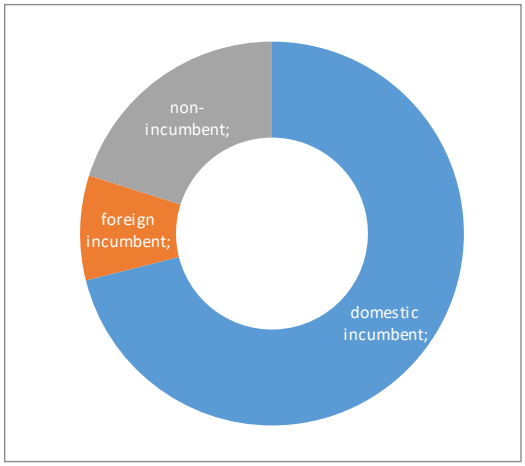


Track Access Charges (rail freight from RUs)



market shares

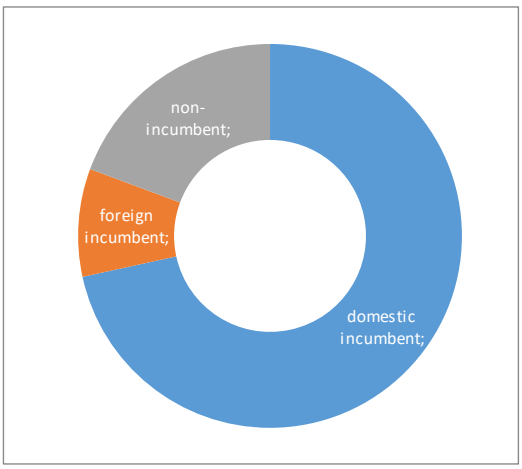
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	Lineas	**70%-80%**
2	Captrain	**0%-5%**
3	CFL Cargo	**0%-5%**
4	Crossrail	**5%-10%**
5	DB Schenker NL	**5%-10%**
6	ECR	**0%-5%**
7	Europorte	**0%-5%**
8	Railtraxx	**0%-5%**
9	RRF	**0%-5%**
10	SCNF-fret	**0%-5%**
11	RBC cargo NL	**0%-5%**
12	HSL Polska	**0%-5%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	Lineas	**70%-80%**
2	Captrain	**0%-5%**
3	CFL Cargo	**0%-5%**
4	Crossrail	**5%-10%**
5	DB Schenker NL	**5%-10%**
6	ECR	**0%-5%**
7	Europorte	**0%-5%**
8	Railtraxx	**0%-5%**
9	RRF	**0%-5%**
10	SCNF-fret	**0%-5%**
11	RBC cargo NL	**0%-5%**
12	HSL Polska	**0%-5%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Croatia

market players and key figures

all data for 2018

number of IMs with freight services	
incumbent	
non-incumbent	
number of active freight RUs	**7**
incumbent	
non-incumbent	

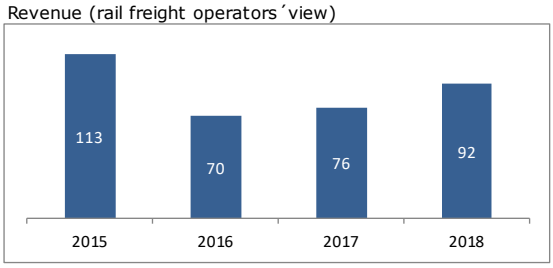
freight train km	**6 044 613**

net tonne km	**2 741 145 593**

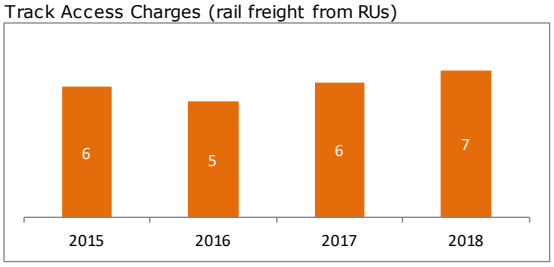
market volume

in million Euro

Revenue (rail freight operators´view)

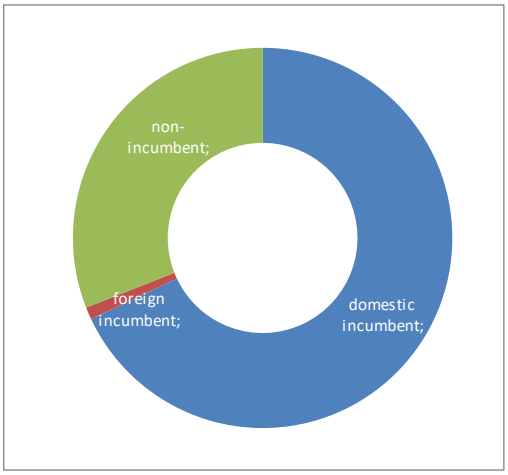


Track Access Charges (rail freight from RUs)



market shares

based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	HŽ Cargo d.o.o.	**60%-70%**
2	Rail Cargo Carrier Croatia d.o.o.	**5%-10%**
3	Train Hungary Maganvasut Ipari	**5%-10%**
4	ENNA transport d.o.o.	**5%-10%**
5	Rail & Sea d.o.o.	**0%-5%**
6	Transagent Rail d.o.o.	**0%-5%**
7	Slovenske železnice – Tovorni promet	**0%-5%**
8		
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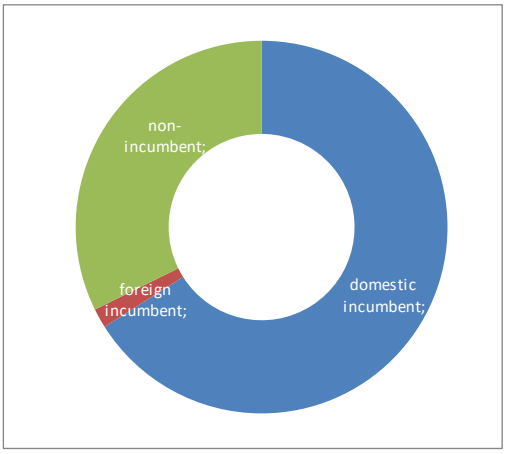
20		

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	HŽ Cargo d.o.o.	**60%-70%**
2	Train Hungary Maganvasut Ipari	**10%-20%**
3	ENNA transport d.o.o.	**5%-10%**
4	Rail Cargo Carrier Croatia d.o.o.	**5%-10%**
5	Rail & Sea d.o.o.	**0%-5%**
6	Slovenske železnice – Tovorni promet	**0%-5%**
7	Transagent Rail d.o.o.	**0%-5%**
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18		
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20		

Fact sheet for the freight railway market in Czech Republic

market players and key figures

all data for 2018

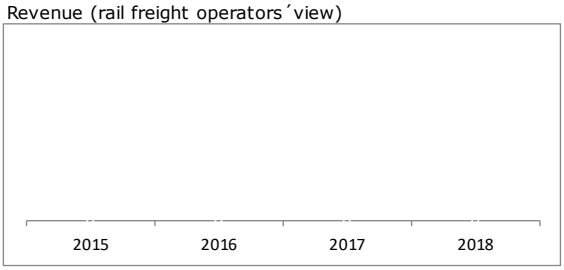
number of IMs with freight services	**0**
incumbent	0
non-incumbent	0
number of active passenger RUs	**87**
incumbent	1
non-incumbent	86

freight train km	**38 821 136**
net tonne km	**16 564 000 000**

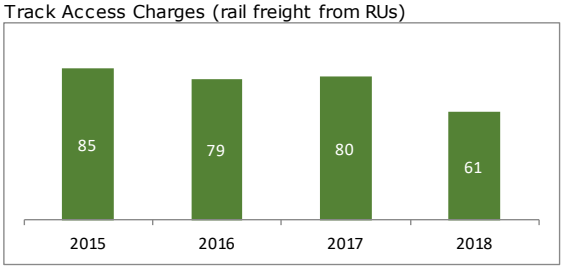
market volume

in million Euro

Revenue (rail freight operators´view)

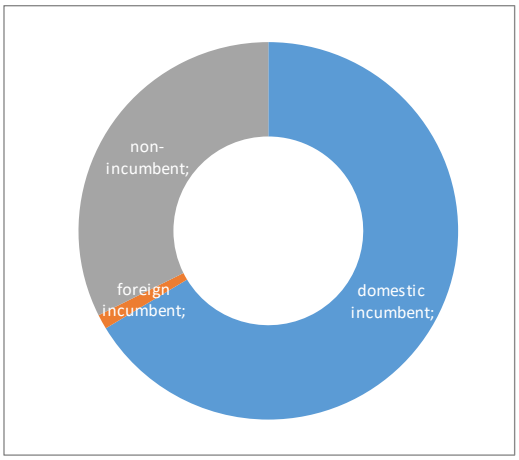


Track Access Charges (rail freight from RUs)



market shares

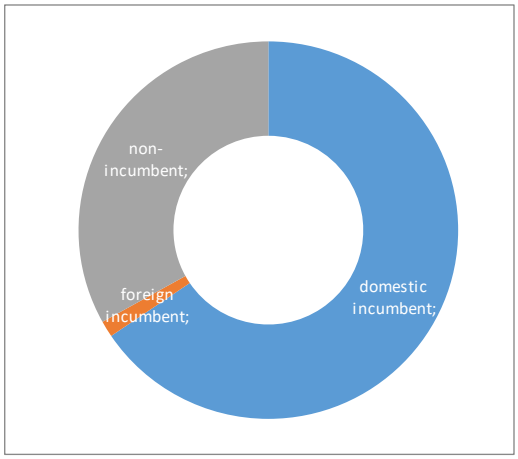
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	ČD Cargo, a.s.	**60%-70%**
2	Advanced World Transport a.s.	**5%-10%**
3	METRANS Rail s.r.o.	**5%-10%**
4	Správa železniční dopravní cesty, státn	**0%-5%**
5	IDS CARGO a.s.	**0%-5%**
6	UNIPETROL DOPRAVA, s.r.o.	**0%-5%**
7	Rail Cargo Carrier - Czech Republic s.r	**0%-5%**
8	PKP CARGO SPÓŁKA AKCYJNA	**0%-5%**
9	České dráhy, a.s.	**0%-5%**
10	SD - Kolejová doprava, a.s.	**0%-5%**
11	others	**0%-5%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	ČD Cargo, a.s.	**60%-70%**
2	Advanced World Transport a.s.	**5%-10%**
3	METRANS Rail s.r.o.	**5%-10%**
4	UNIPETROL DOPRAVA, s.r.o.	**0%-5%**
5	IDS CARGO a.s.	**0%-5%**
6	Rail Cargo Carrier - Czech Republic s.r	**0%-5%**
7	SD - Kolejová doprava, a.s.	**0%-5%**
8	PKP CARGO SPÓŁKA AKCYJNA	**0%-5%**
9	LTE Logistik a Transport Slovakia s.r.o.	**0%-5%**
10	ARRIVA vlaky s.r.o.	**0%-5%**
11	CER Slovakia a. s.	**0%-5%**
12	BF Logistics s.r.o.	**0%-5%**
13	RM LINES, a.s.	**0%-5%**
14	LOKORAIL, a.s.	**0%-5%**
15	STRABAG Rail a.s.	**0%-5%**
16	LTE Logistik a Transport Czechia s.r.o.	**0%-5%**
17	Express Group, a. s.	**0%-5%**
18	Sokolovská uhelná, právní nástupce, a	**0%-5%**
19	VÍTKOVICKÁ DOPRAVA a.s.	**0%-5%**
20	Ostravská dopravní společnost - Cargo	**0%-5%**

Fact sheet for the freight railway market in Estonia

market players and key figures

all data for 2018

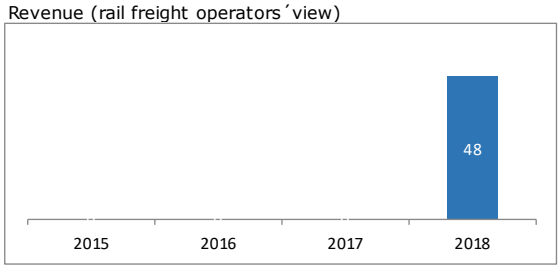
number of IMs with freight services	**0**
incumbent	0
non-incumbent	0
number of active freight RUs	**4**
incumbent	0
non-incumbent	16

freight train km	**1 855 000**
net tonne km	**2 117 960 000**

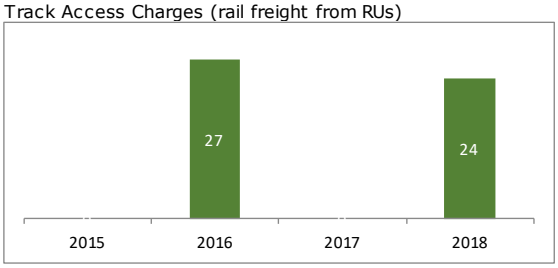
market volume

in million Euro

Revenue (rail freight operators´view)

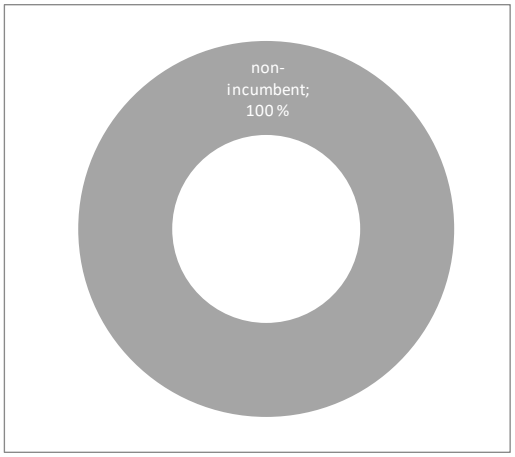


Track Access Charges (rail freight from RUs)



market shares

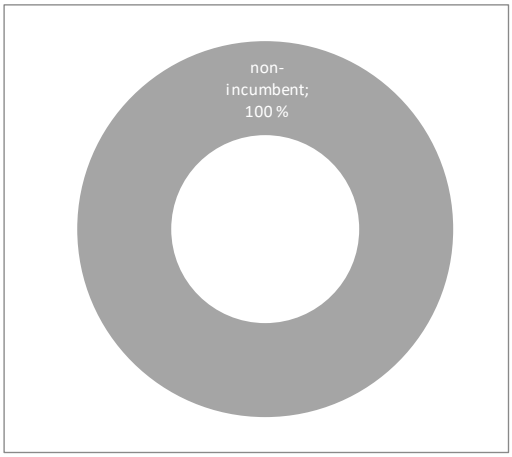
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	LEONHARD WEISS OÜ	**0%-5%**
2	AS Operail	**90%-100%**
3	Edelaraudtee Aktsiaselts	**0%-5%**
4	Aktsiaselts E.R.S.	**0%-5%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	LEONHARD WEISS OÜ	**0%-5%**
2	AS Operail	**90%-100%**
3	Edelaraudtee Aktsiaselts	**0%-5%**
4	Aktsiaselts E.R.S.	**0%-5%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Finland

market players and key figures

all data for 2018

number of IMs with freight services	1
incumbent	1
non-incumbent	0
number of active freight RUs	2
incumbent	1
non-incumbent	1

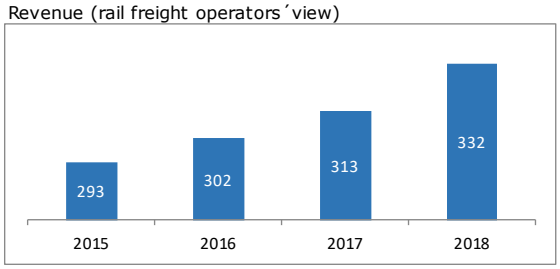
freight train km	15 510 000

net tonne km	11 175 000 000

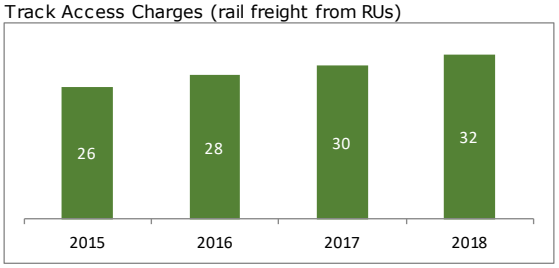
market volume

in million Euro

Revenue (rail freight operators´view)

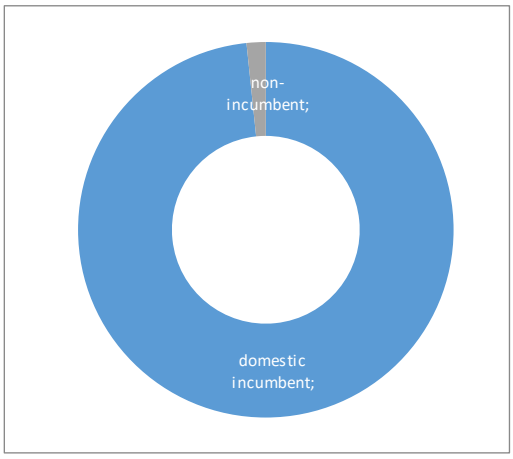


Track Access Charges (rail freight from RUs)



market shares

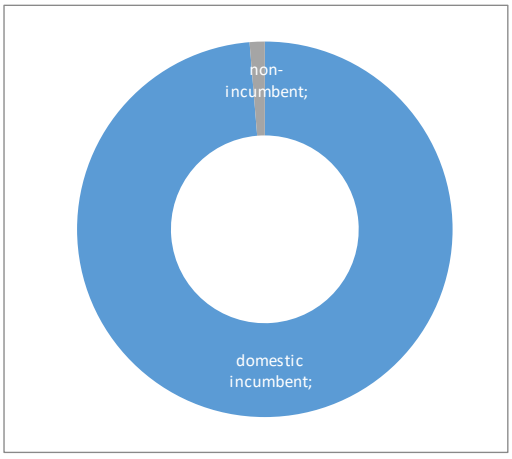
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	VR	90%-100%
2	Fenniarail	0%-5%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	VR	90%-100%
2	Fenniarail	0%-5%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

Fact sheet for the freight railway market in France

market players and key figures

all data for 2018

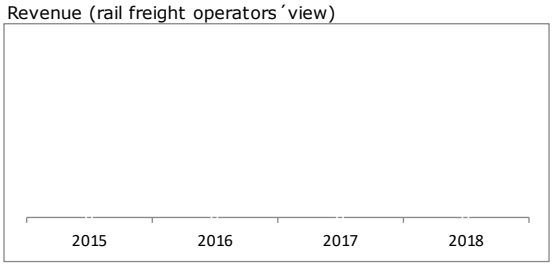
number of IMs with freight services	**3**
incumbent	1
non-incumbent	2
number of active passenger RUs	**23**
incumbent	4
non-incumbent	18

freight train km	**63 859 304**
net tonne km	**32 038 922 000**

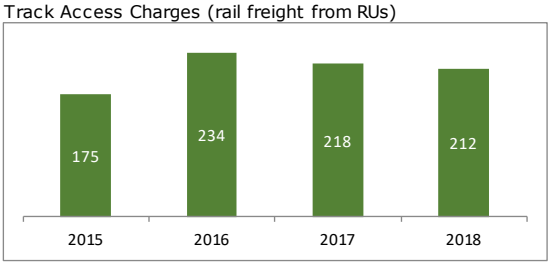
market volume

in million Euro

Revenue (rail freight operators´view)

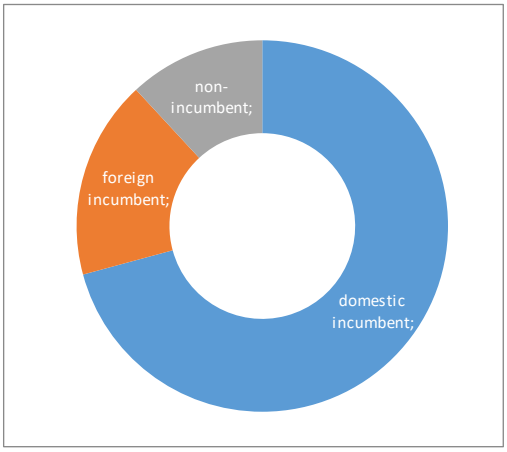


Track Access Charges (rail freight from RUs)



market shares

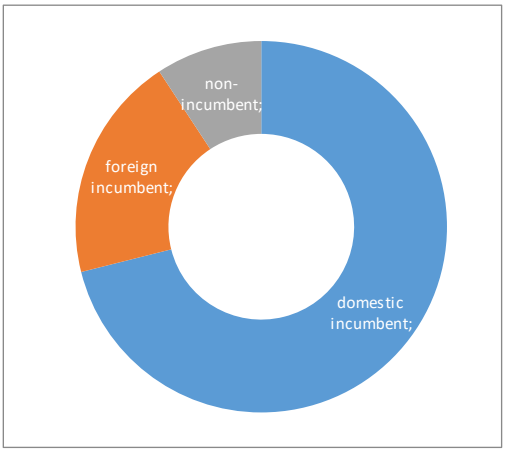
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	SNCF Fret	**50%-60%**
2	Euro Cargo Rail	**10%-20%**
3	VFLI	**10%-20%**
4	Europorte France	**5%-10%**
5	Naviland Cargo EF	**0%-5%**
6	Regiorail France	**0%-5%**
7	Lineas France	**0%-5%**
8	Colas Rail	**0%-5%**
9	CFL Cargo	**0%-5%**
10	Lineas Group	**0%-5%**
11	ETMF	**0%-5%**
12	Ferrivia	**0%-5%**
13	RDT 13	**0%-5%**
14	Mercitalia	**0%-5%**
15	Eiffage Rail services	**0%-5%**
16	Ecorail transport	**0%-5%**
17	CTSF	**0%-5%**
18	Securail	**0%-5%**
19	Ferrotract	**0%-5%**
20	TSO	**0%-5%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

market share range (%)

Fact sheet for the freight railway market in Germany

market players and key figures

all data for 2018

number of IMs with freight services	95
incumbent	3
non-incumbent	92
number of active freight RUs	234
incumbent	8
non-incumbent	226

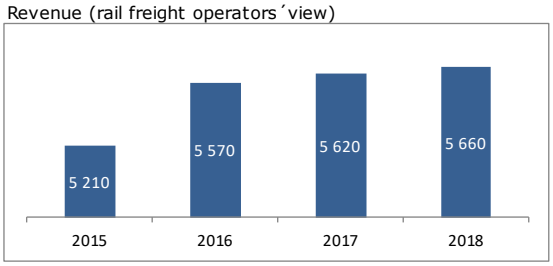
freight train km	274 000 000

net tonne km	131 800 000 000

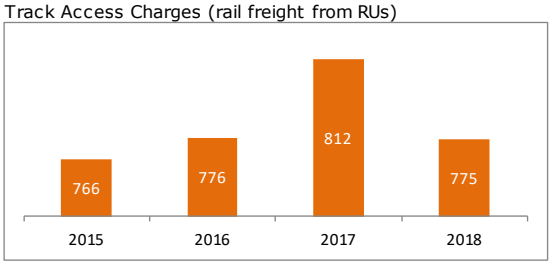
market volume

in million Euro

Revenue (rail freight operators´view)

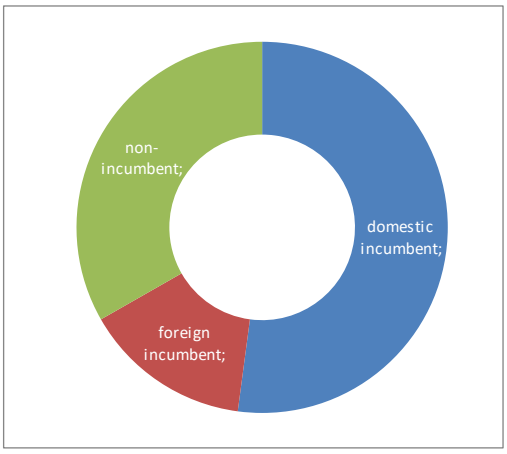


Track Access Charges (rail freight from RUs)



market shares

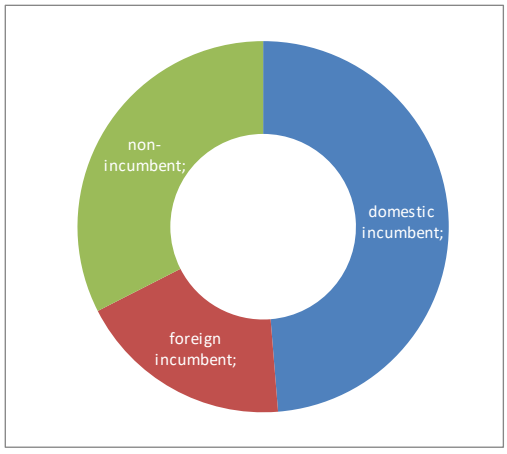
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	DB Cargo AG	40%-50%
2	RBH Logistics GmbH	0%-5%
3	SBB Cargo Deutschland GmbH	0%-5%
4	ITL-Eisenbahngesellschaft mbH	0%-5%
5	RheinCargo GmbH & Co. KG	0%-5%
6	TX Logistik AG	0%-5%
7	HSL Logistik GmbH	0%-5%
8	METRANS Rail (Deutschland) GmbH	0%-5%
9	boxXpress.de GmbH□	0%-5%
10	Captrain Deutschland CargoWest Gmb	0%-5%
11	Rail Cargo Carrier - Germany	0%-5%
12	Eisenbahngesellschaft Potsdam mbH	0%-5%
13	Crossrail AG	0%-5%
14	Hector Rail GmbH	0%-5%
15	Lineas	0%-5%
16	ecco-rail GmbH	0%-5%
17	CTL Logistics GmbH	0%-5%
18	Raildox GmbH & Co. KG	0%-5%
19	Lokomotion Gesellschaft für Schienentr	0%-5%
20	K-Rail GmbH	0%-5%

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	DB Cargo AG	40%-50%
2	SBB Cargo Deutschland GmbH	5%-10%
3	TX Logistik AG	0%-5%
4	HSL Logistik GmbH	0%-5%
5	METRANS Rail (Deutschland) GmbH	0%-5%
6	RCA Rail Cargo Austria AG	0%-5%
7	boxXpress.de GmbH□	0%-5%
8	RheinCargo GmbH & Co. KG	0%-5%
9	ITL-Eisenbahngesellschaft mbH	0%-5%
10	Captrain Deutschland CargoWest Gmb	0%-5%
11	Crossrail AG	0%-5%
12	Lineas	0%-5%
13	RTB CARGO GmbH	0%-5%
14	Eisenbahngesellschaft Potsdam mbH	0%-5%
15	S-Rail GmbH	0%-5%
16	Havelländische Eisenbahn AG	0%-5%
17	CFL Cargo Deutschland GmbH	0%-5%
18	Raildox GmbH & Co. KG	0%-5%
19	Verkehrsbetriebe Peine-Salzgitter Gmb	0%-5%
20	CTL Logistics GmbH	0%-5%

Fact sheet for the freight railway market in Greece

market players and key figures

all data for 2018

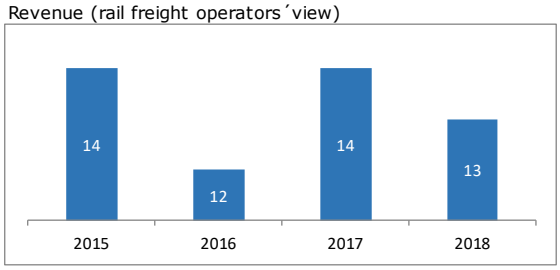
number of IMs with freight services	**1**
incumbent	1
non-incumbent	
number of active freight RUs	**2**
incumbent	1
non-incumbent	1

freight train km	**894 571**
net tonne km	**419 687 283**

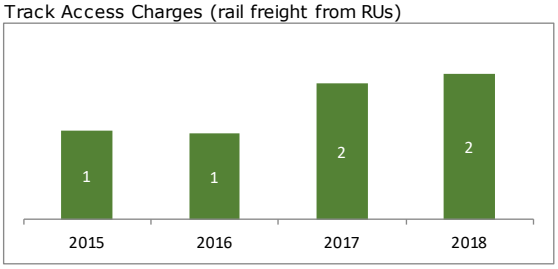
market volume

in million Euro

Revenue (rail freight operators´view)

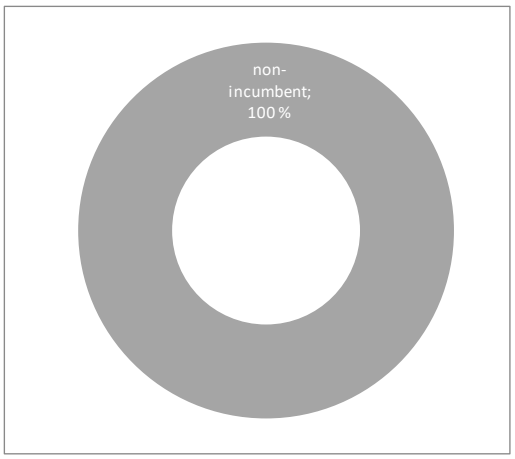


Track Access Charges (rail freight from RUs)



market shares

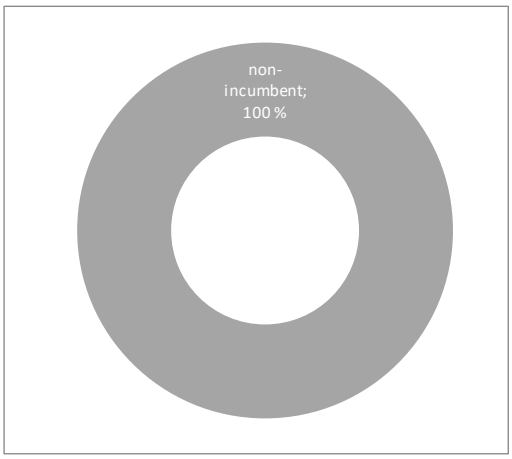
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	trainose	**90%-100%**
2	rail cargo	**0%-5%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	trainose	**90%-100%**
2	rail cargo	**0%-5%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Hungary

market players and key figures

all data for 2018

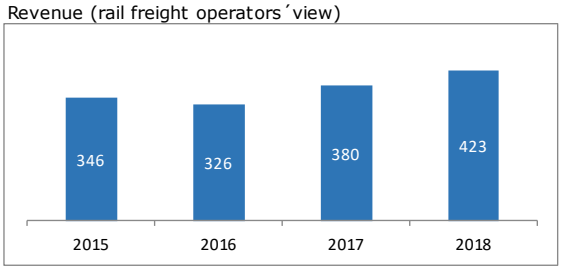
number of IMs with freight services	**2**
incumbent	1
non-incumbent	1
number of active freight RUs	**27**
incumbent	1
non-incumbent	26

freight train km	**21 659 371**
net tonne km	**12 468 618 000**

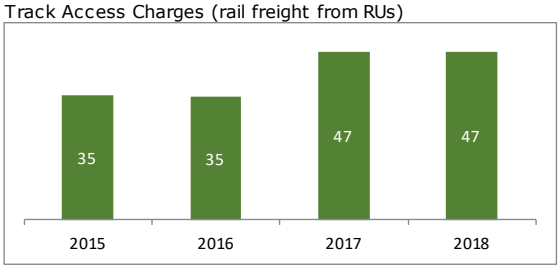
market volume

in million Euro

Revenue (rail freight operators´view)

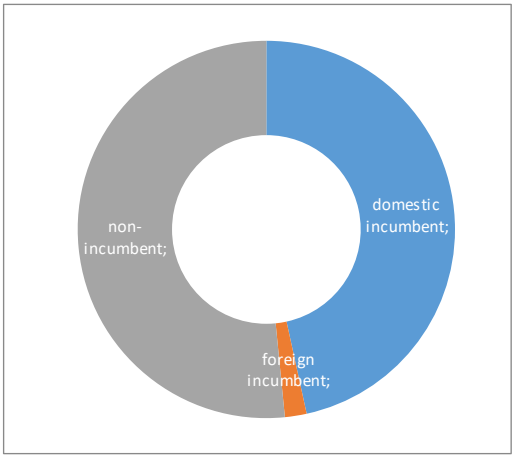


Track Access Charges (rail freight from RUs)



market shares

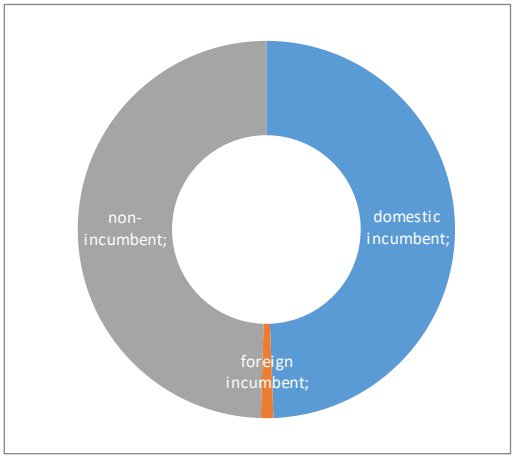
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	Rail Cargo Hungaria Zrt.	**40%-50%**
2	MMV Zrt.	**5%-10%**
3	GYSEV CARGO Zrt.	**5%-10%**
4	TRAIN Hungary Magánvasút Kft.	**0%-5%**
5	LTE Hungaria Kft.	**0%-5%**
6	AWT Rail HU Zrt.	**0%-5%**
7	Metrans Danubia Kft.	**0%-5%**
8	CER Hungary Zrt.	**0%-5%**
9	PETROLSPED Slovakia S.R.O.	**0%-5%**
10	Prvá Slovenska Zeleznicna, a.s.	**0%-5%**
11	FOXRail Zrt.	**0%-5%**
12	DB CARGO Hungária Kft.	**0%-5%**
13	FLOYD Zrt.	**0%-5%**
14	CRW a.s.	**0%-5%**
15	Kárpát Vasút Kft.	**0%-5%**
16	Express Group, a.s.	**0%-5%**
17	Rail Cargo Carrier Kft.	**0%-5%**
18	MÁV Nosztalgia Kft.	**0%-5%**
19	Railtrans International, a.s.	**0%-5%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	Rail Cargo Hungaria Zrt.	**40%-50%**
2	MMV Zrt.	**5%-10%**
3	GYSEV CARGO Zrt.	**5%-10%**
4	LTE Hungaria Kft.	**5%-10%**
5	Metrans Danubia Kft.	**0%-5%**
6	TRAIN Hungary Magánvasút Kft.	**0%-5%**
7	CER Hungary Zrt.	**0%-5%**
8	AWT Rail HU Zrt.	**0%-5%**
9	CRW a.s.	**0%-5%**
10	Prvá Slovenska Zeleznicna, a.s.	**0%-5%**
11	FOXRail Zrt.	**0%-5%**
12	PETROLSPED Slovakia S.R.O.	**0%-5%**
13	FLOYD Zrt.	**0%-5%**
14	Express Group, a.s.	**0%-5%**
15	DB CARGO Hungária Kft.	**0%-5%**
16	Railtrans International, a.s.	**0%-5%**
17	Kárpát Vasút Kft.	**0%-5%**
18	MÁV Nosztalgia Kft.	**0%-5%**
19	Rail Cargo Carrier Kft.	**0%-5%**
20	0	**0,0%**

Fact sheet for the freight railway market in Italy

market players and key figures

all data for 2018

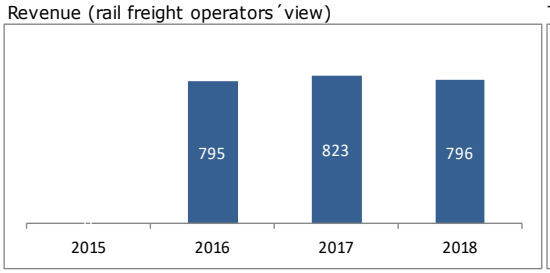
number of IMs with freight services	**4**
incumbent	1
non-incumbent	3
number of active freight RUs	**23**
incumbent	7
non-incumbent	16

freight train km	**47 195 222**
net tonne km	**23 048 420 243**

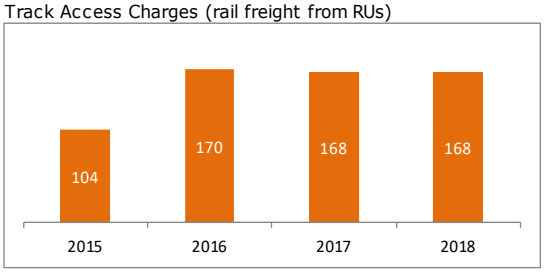
market volume

in million Euro

Revenue (rail freight operators´view)

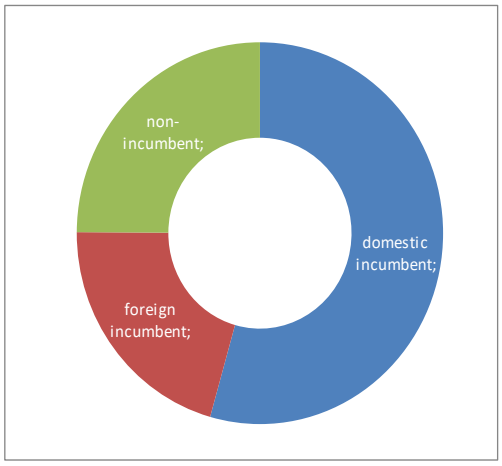


Track Access Charges (rail freight from RUs)



market shares

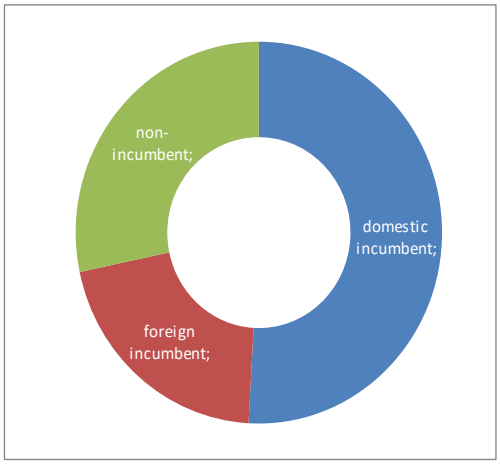
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	ADRIAFER SRL	**0%-5%**
2	CAPTRAIN ITALIA SRL	**5%-10%**
3	DB Cargo Italia S.r.l.	**0%-5%**
4	DINAZZANO PO SPA	**0%-5%**
5	FERROTRAMVIARIA SPA - DIVISIONE ´	**0%-5%**
6	FuoriMuro Servizi Portuali e Ferroviari ¦	**0%-5%**
7	GTS RAIL SPA	**0%-5%**
8	Hupac SpA	**0%-5%**
9	InRail S.p.A.	**0%-5%**
10	MERCITALIA RAIL SRL	**50%-60%**
11	MERCITALIA SHUNTING & TERMINAL S	**0%-5%**
12	Oceanogate Italia S.p.A.	**0%-5%**
13	RAIL CARGO CARRIER ITALY SRL	**0%-5%**
14	RAIL TRACTION COMPANY SPA	**5%-10%**
15	SBB CARGO ITALIA SRL	**0%-5%**
16	CFI	**5%-10%**
17	Trasporto Ferroviario Toscano spa	**0%-5%**
18	TUA	**0%-5%**
19	TX LOGISTIK AG	**0%-5%**
20	ISC	**0%-5%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	ADRIAFER SRL	**0%-5%**
2	CAPTRAIN ITALIA SRL	**5%-10%**
3	DB Cargo Italia S.r.l.	**5%-10%**
4	DINAZZANO PO SPA	**0%-5%**
5	FERROTRAMVIARIA SPA - DIVISIONE ´	**0%-5%**
6	FuoriMuro Servizi Portuali e Ferroviari ¦	**0%-5%**
7	GTS RAIL SPA	**0%-5%**
8	Hupac SpA	**0%-5%**
9	InRail S.p.A.	**0%-5%**
10	MERCITALIA RAIL SRL	**50%-60%**
11	MERCITALIA SHUNTING & TERMINAL S	**0%-5%**
12	Oceanogate Italia S.p.A.	**0%-5%**
13	RAIL CARGO CARRIER ITALY SRL	**0%-5%**
14	RAIL TRACTION COMPANY SPA	**5%-10%**
15	SBB CARGO ITALIA SRL	**5%-10%**
16	CFI	**5%-10%**
17	Trasporto Ferroviario Toscano spa	**0%-5%**
18	TUA	**0%-5%**
19	TX LOGISTIK AG	**0%-5%**
20	ISC	**0%-5%**

Fact sheet for the freight railway market in Latvia

market players and key figures

all data for 2018

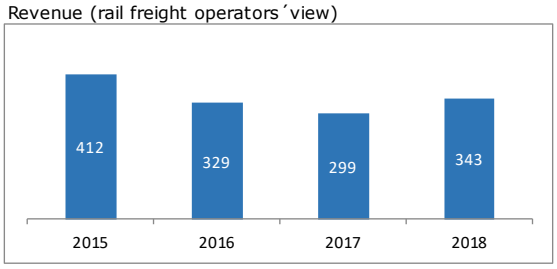
number of IMs with freight services	**1**
incumbent	1
non-incumbent	
number of active freight RUs	**4**
incumbent	1
non-incumbent	3

freight train km	**9 445 550**
net tonne km	**17 864 618 000**

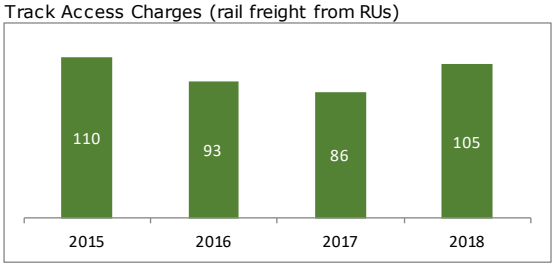
market volume

in million Euro

Revenue (rail freight operators´view)

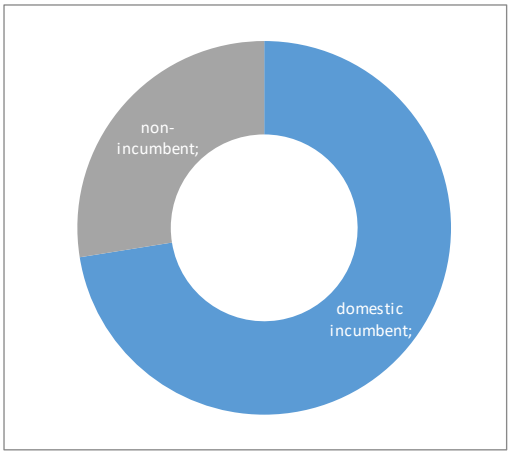


Track Access Charges (rail freight from RUs)



market shares

based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	Ltd LDZ CARGO	70%-80%
2	JSC Baltijas tranzīta serviss	10%-20%
3	JSC Baltijas ekspresis	10%-20%
4	Ltd Euro Rail Cargo	0%-5%
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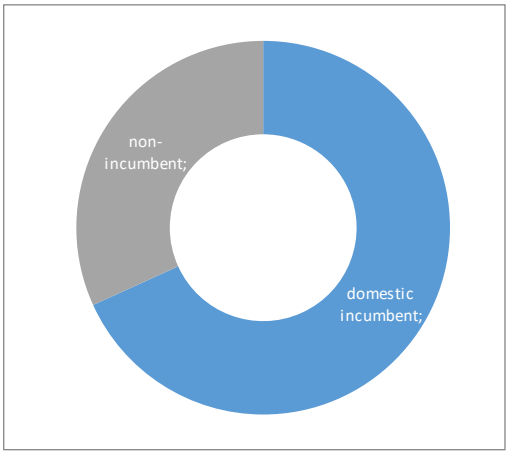
19		
20		

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	Ltd LDZ CARGO	60%-70%
2	JSC Baltijas tranzīta serviss	10%-20%
3	JSC Baltijas ekspresis	10%-20%
4	Ltd Euro Rail Cargo	0%-5%
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18		
19		
20		

Fact sheet for the freight railway market in Lithuania

market players and key figures

all data for 2018

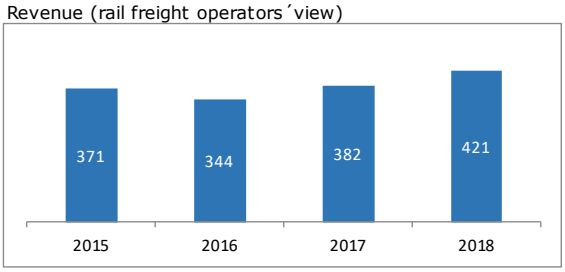
number of IMs with freight services	**1**
incumbent	1
non-incumbent	0
number of active freight RUs	**1**
incumbent	1
non-incumbent	0

freight train km	**9 813 370**
net tonne km	**16 884 825 000**

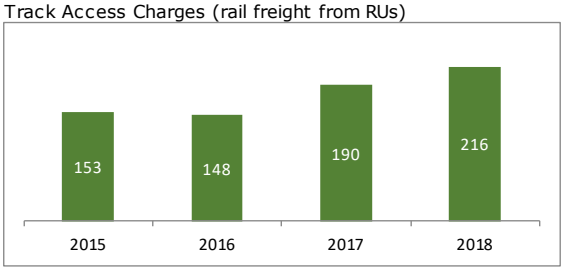
market volume

in million Euro

Revenue (rail freight operators´view)

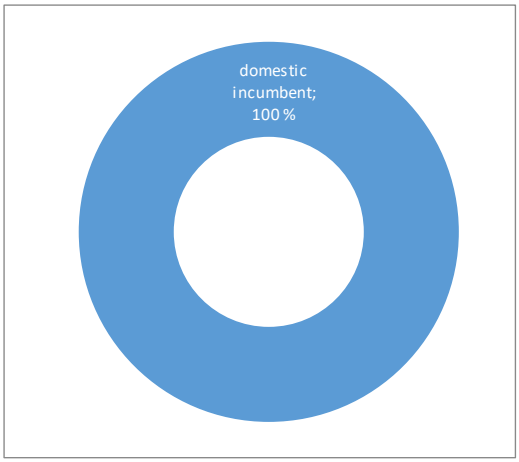


Track Access Charges (rail freight from RUs)



market shares

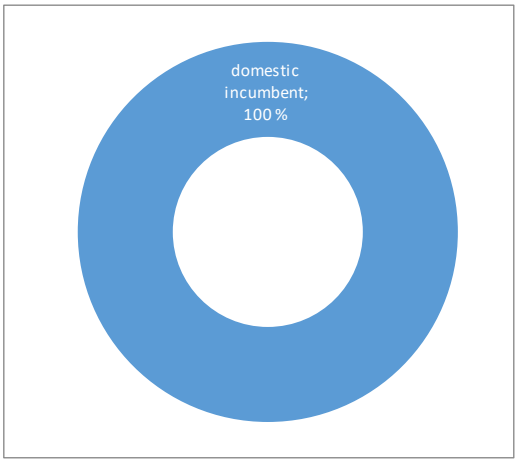
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	JSC "Lietuvos geležinkeliai"	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	JSC "Lietuvos geležinkeliai"	**90%-100%**
2	0	**0,0%**
3	0	**0,0%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Luxembourg

market players and key figures

all data for 2018

number of IMs with freight services	1
incumbent	1
non-incumbent	0
number of active freight RUs	1
incumbent	1
non-incumbent	0

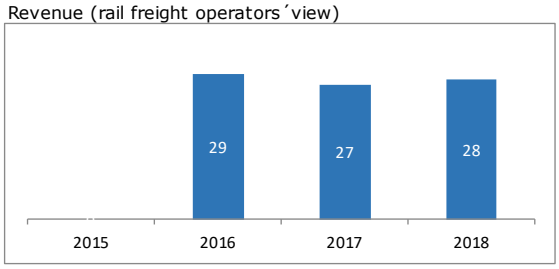
freight train km	525 000

net tonne km	290 757 000

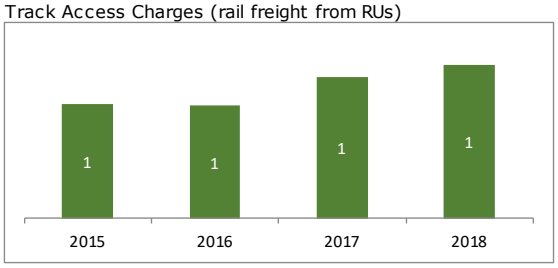
market volume

in million Euro

Revenue (rail freight operators´view)

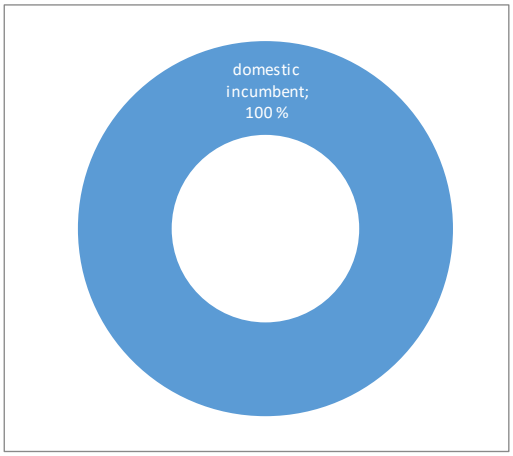


Track Access Charges (rail freight from RUs)



market shares

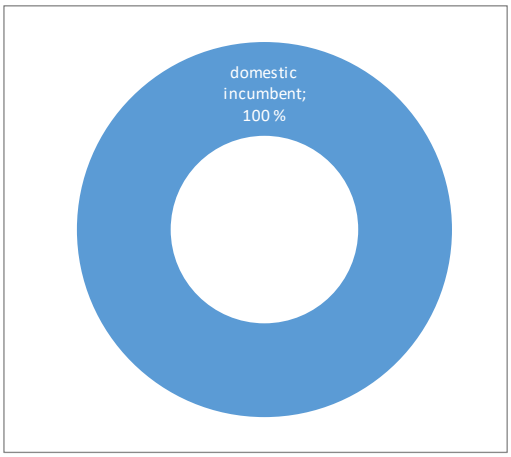
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	CFL Cargo	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	CFL Cargo	90%-100%
2	0	0,0%
3	0	0,0%
4	0	0,0%
5	0	0,0%
6	0	0,0%
7	0	0,0%
8	0	0,0%
9	0	0,0%
10	0	0,0%
11	0	0,0%
12	0	0,0%
13	0	0,0%
14	0	0,0%
15	0	0,0%
16	0	0,0%
17	0	0,0%
18	0	0,0%
19	0	0,0%
20	0	0,0%

Fact sheet for the freight railway market in the Netherlands

market players and key figures

all data for 2018

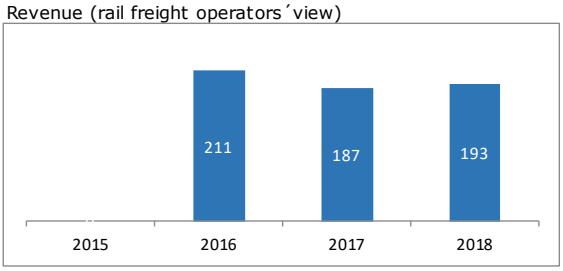
number of IMs with freight services	**0**
incumbent	0
non-incumbent	0
number of active passenger RUs	**26**
incumbent	4
non-incumbent	22

freight train km	**10 700 000**
net tonne km	**8 417 688 316**

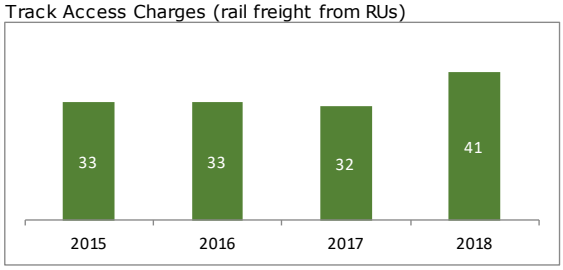
market volume

in million Euro

Revenue (rail freight operators´view)

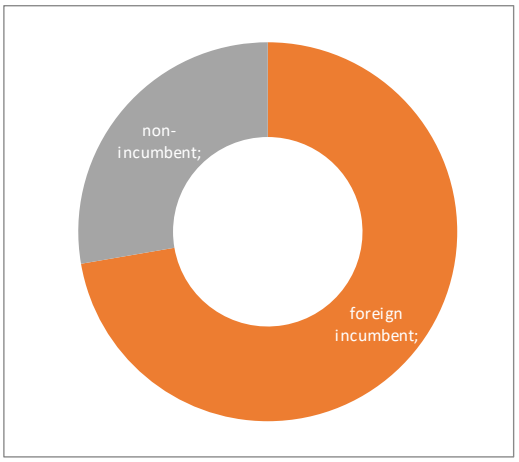


Track Access Charges (rail freight from RUs)



market shares

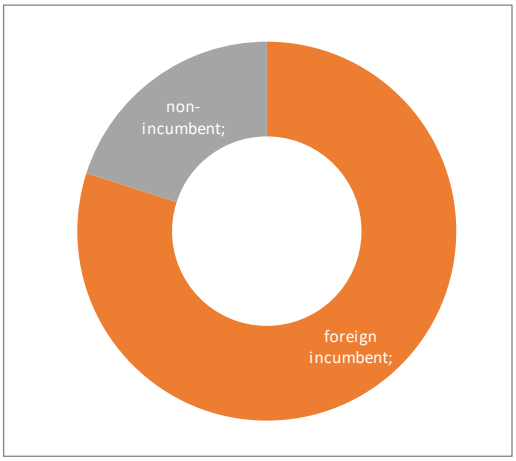
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	captrain	**20%-30%**
2	DB	**40%-50%**
3	rail force one	**0%-5%**
4	rail transport service	**0%-5%**
5	RRF	**10%-20%**
6	RTB	**10%-20%**
7	Rheincargo	**0%-5%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	captrain	**20%-30%**
2	DB	**50%-60%**
3	rail force one	**0%-5%**
4	rail transport service	**0%-5%**
5	RRF	**5%-10%**
6	RTB	**5%-10%**
7	Rheincargo	**0%-5%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Norway

market players and key figures

all data for 2018

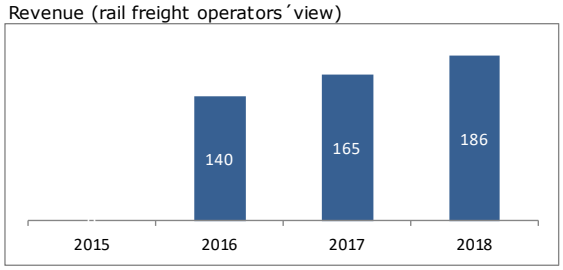
number of IMs with freight services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**6**
incumbent	2
non-incumbent	4

freight train km	**8 064 799**
net tonne km	**4 291 310 939**

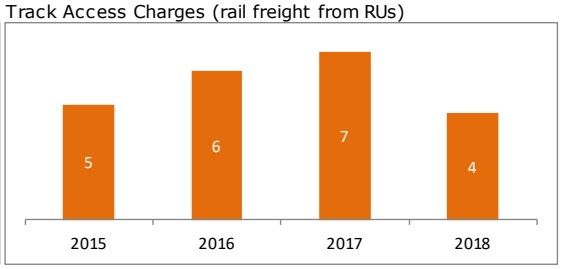
market volume

in million Euro

Revenue (rail freight operators´view)

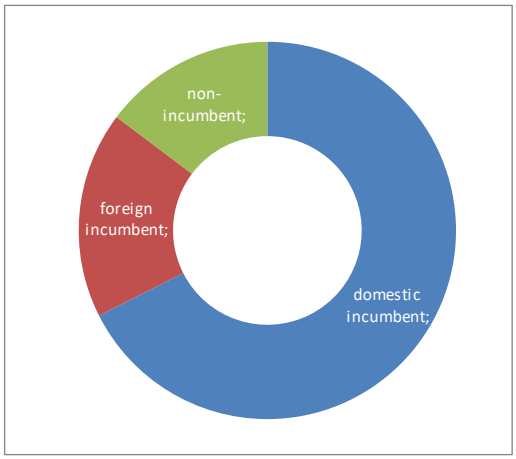


Track Access Charges (rail freight from RUs)



market shares

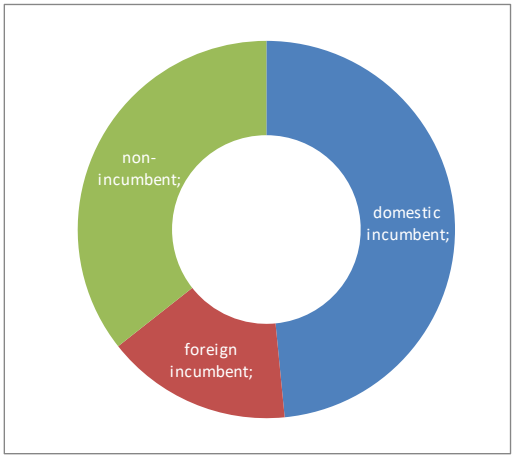
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	CargoNet AS	**60%-70%**
2	LKAB Malmtrafik AB	**0%-5%**
3	Green Cargo AB	**10%-20%**
4	Hector Rail AB	**0%-5%**
5	Grenland Rail AS	**5%-10%**
6	Tågåkeriet i Bergslagen AB	**0%-5%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	CargoNet AS	**40%-50%**
2	LKAB Malmtrafik AB	**10%-20%**
3	Green Cargo AB	**10%-20%**
4	Hector Rail AB	**0%-5%**
5	Grenland Rail AS	**10%-20%**
6	Tågåkeriet i Bergslagen AB	**0%-5%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Poland

market players and key figures

all data for 2018

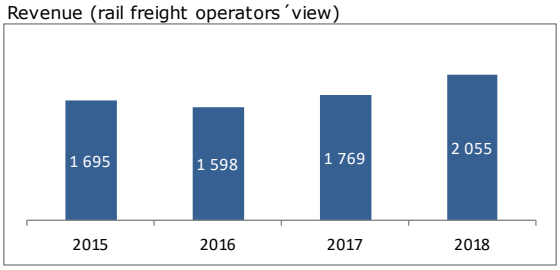
number of IMs with freight services	
incumbent	
non-incumbent	
number of active passenger RUs	**74**
incumbent	
non-incumbent	

freight train km	**88 006 115**
net tonne km	**59 642 032 267**

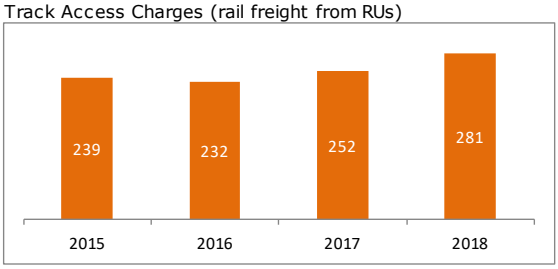
market volume

in million Euro

Revenue (rail freight operators´view)

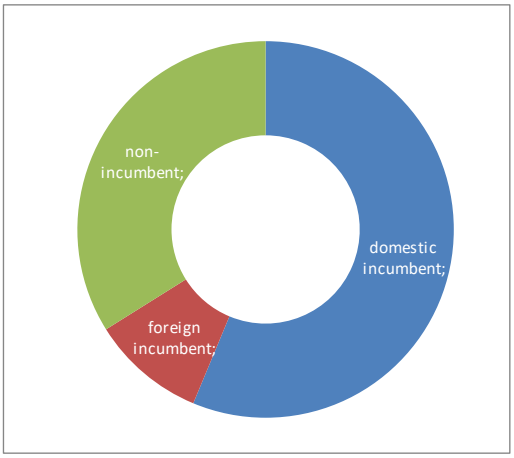


Track Access Charges (rail freight from RUs)



market shares

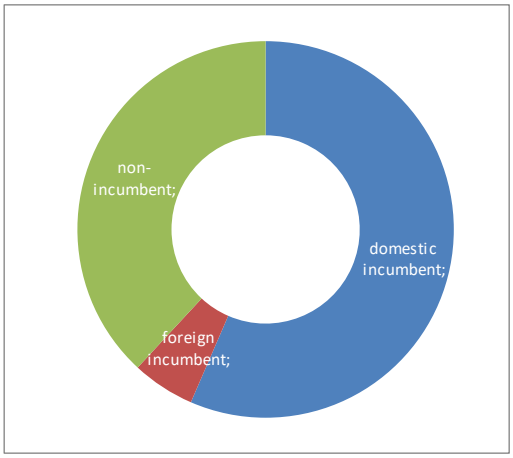
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	PKP CARGO S.A.	**50%-60%**
2	LOTOS KOLEJ Sp. z o.o.	**5%-10%**
3	DB Cargo Polska S.A.	**5%-10%**
4	CTL Logistics Sp. z o.o.	**0%-5%**
5	ORLEN KolTrans Sp. z o.o.	**0%-5%**
6	PKP LHS Sp. z o.o.	**0%-5%**
7	CD Cargo Poland Sp. z o. o.	**0%-5%**
8	Captrain Polska Sp. z o.o. (dawniej ITL	**0%-5%**
9	FREIGHTLINER PL Sp. z o.o.	**0%-5%**
10	RAIL POLSKA Sp. z o.o.	**0%-5%**
11	POL-MIEDŹ TRANS Sp. z o.o.	**0%-5%**
12	Ecco Rail Sp. z o.o.	**0%-5%**
13	Inter Cargo Sp. z o.o.	**0%-5%**
14	STK S.A.	**0%-5%**
15	PUK KOLPREM Sp. z o.o.	**0%-5%**
16	CIECH CARGO Sp. z o. o. (dawniej TR/	**0%-5%**
17	LTE Polska sp. z o.o.	**0%-5%**
18	PCC Intermodal S.A.	**0%-5%**
19	Pomorskie Przedsiębiorstwo Mechanicz	**0%-5%**
20	Colas Rail Polska Sp. z o. o.	**0%-5%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	PKP CARGO S.A.	**40%-50%**
2	LOTOS KOLEJ Sp. z o.o.	**5%-10%**
3	PKP LHS Sp. z o.o.	**5%-10%**
4	DB Cargo Polska S.A.	**5%-10%**
5	CTL Logistics Sp. z o.o.	**0%-5%**
6	ORLEN KolTrans Sp. z o.o.	**0%-5%**
7	FREIGHTLINER PL Sp. z o.o.	**0%-5%**
8	CD Cargo Poland Sp. z o. o.	**0%-5%**
9	Inter Cargo Sp. z o.o.	**0%-5%**
10	Captrain Polska Sp. z o.o. (dawniej ITL	**0%-5%**
11	POL-MIEDŹ TRANS Sp. z o.o.	**0%-5%**
12	RAIL POLSKA Sp. z o.o.	**0%-5%**
13	STK S.A.	**0%-5%**
14	PUK KOLPREM Sp. z o.o.	**0%-5%**
15	CIECH CARGO Sp. z o. o. (dawniej TR/	**0%-5%**
16	PCC Intermodal S.A.	**0%-5%**
17	Ecco Rail Sp. z o.o.	**0%-5%**
18	LTE Polska sp. z o.o.	**0%-5%**
19	Colas Rail Polska Sp. z o. o.	**0%-5%**
20	Logistics & Transport Company Sp. z o	**0%-5%**

Fact sheet for the freight railway market in Portugal

market players and key figures

all data for 2018

number of IMs with freight services	**1**
incumbent	1
non-incumbent	
number of active passenger RUs	**2**
incumbent	
non-incumbent	2

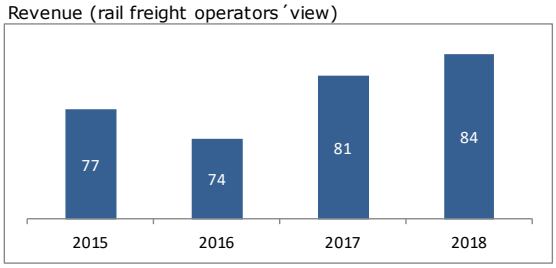
freight train km	**6 583 722**

net tonne km	**2 750 697 000**

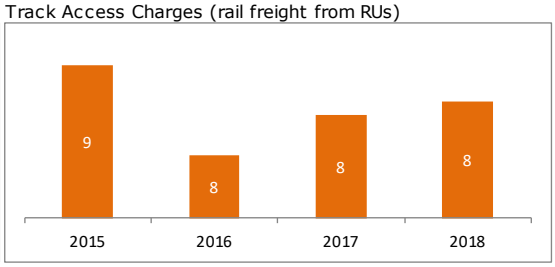
market volume

in million Euro

Revenue (rail freight operators´view)

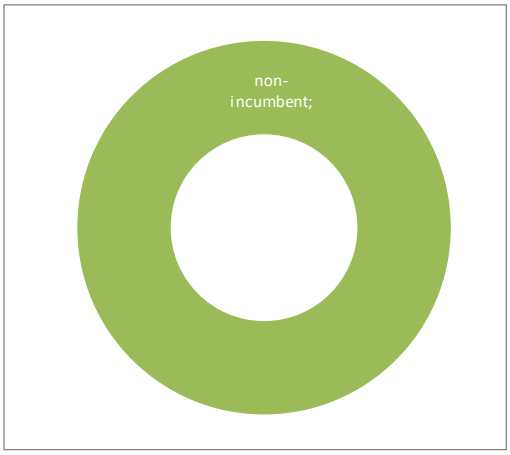


Track Access Charges (rail freight from RUs)



market shares

based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	RU 1	**80%-90%**
2	RU 2	**10%-20%**
3		
4		
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7		
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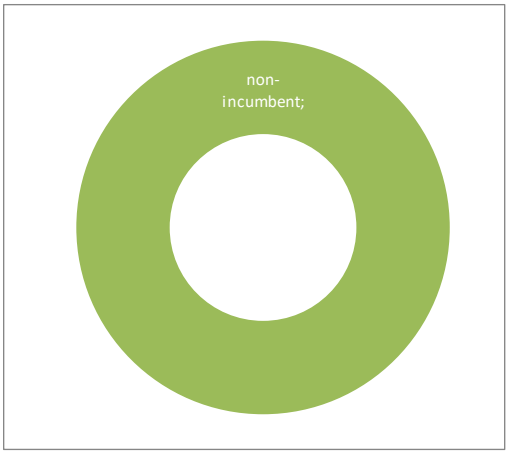
based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	RU 1	**80%-90%**
2	RU 2	**10%-20%**
3		
4		
5		
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7		
8		
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18		
19		
20		

Fact sheet for the freight railway market in Romania

market players and key figures

all data for 2018

number of IMs with freight services	1
incumbent	1
non-incumbent	0
number of active freight RUs	18
incumbent	1
non-incumbent	17

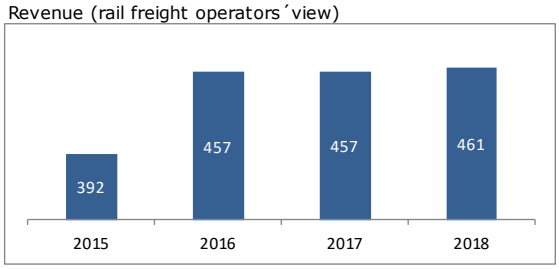
freight train km	23 160 153

net tonne km	13 697 563 042

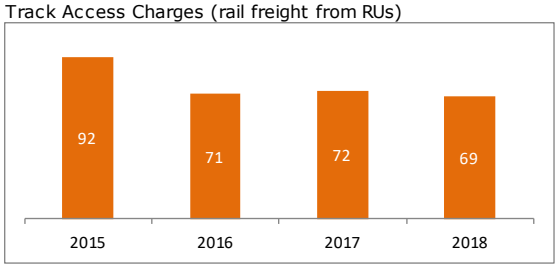
market volume

in million Euro

Revenue (rail freight operators´view)

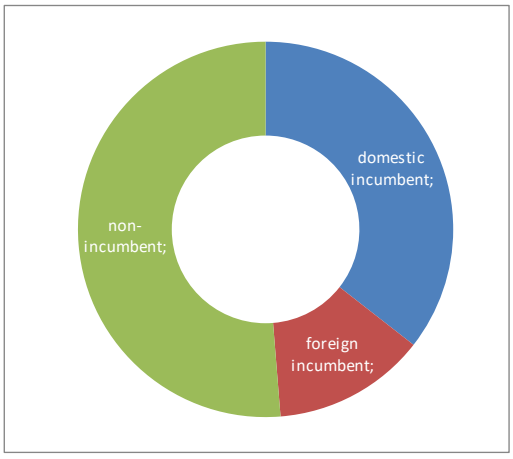


Track Access Charges (rail freight from RUs)



market shares

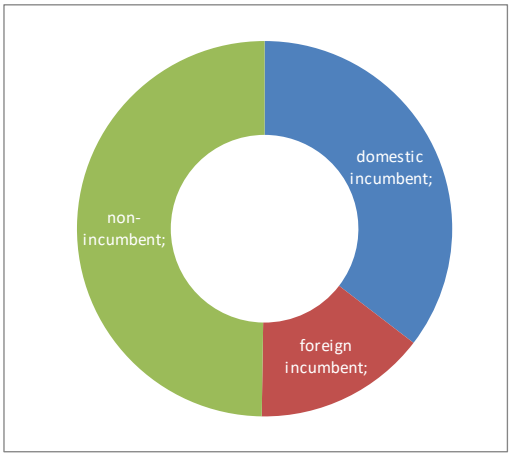
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	Societatea Nationala de Transport Fero	30%-40%
2	GRUP FEROVIAR ROMAN	20%-30%
3	SC VIA TERRA SPEDITION SRL	0%-5%
4	GP RAIL CARGO SA	0%-5%
5	S.C. CONSTANTIN GRUP S.R.L.	0%-5%
6	CARGO TRANS VAGON SA	0%-5%
7	SC MMV Rail Romania SA	0%-5%
8	CER-Fersped SA	0%-5%
9	RAIL FORCE SRL	0%-5%
10	INTERNATIIONAL RAIL TRANSPORT SI	0%-5%
11	TEHNOTRANS FEROVIAR SRL	5%-10%
12	SC TIM RAIL CARGO SRL	0%-5%
13	'Deutsche Bahn Cargo Romania (fosta	5%-10%
14	VEST TRANS RAIL SRL	0%-5%
15	Transferoviar Grup SA	0%-5%
16	UNICOM TRANZIT SA	0%-5%
17	LTE - RAIL ROMANIA S.R.L.	0%-5%
18	Rail Cargo Carrier Romania	0%-5%
19	0	0,0%
20	0	0,0%

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	Societatea Nationala de Transport Fero	30%-40%
2	GRUP FEROVIAR ROMAN	20%-30%
3	SC VIA TERRA SPEDITION SRL	0%-5%
4	GP RAIL CARGO SA	0%-5%
5	S.C. CONSTANTIN GRUP S.R.L.	0%-5%
6	CARGO TRANS VAGON SA	0%-5%
7	SC MMV Rail Romania SA	0%-5%
8	CER-Fersped SA	0%-5%
9	RAIL FORCE SRL	0%-5%
10	INTERNATIIONAL RAIL TRANSPORT SI	0%-5%
11	TEHNOTRANS FEROVIAR SRL	5%-10%
12	SC TIM RAIL CARGO SRL	0%-5%
13	'Deutsche Bahn Cargo Romania (fosta	10%-20%
14	VEST TRANS RAIL SRL	0%-5%
15	Transferoviar Grup SA	0%-5%
16	UNICOM TRANZIT SA	0%-5%
17	LTE - RAIL ROMANIA S.R.L.	0%-5%
18	Rail Cargo Carrier Romania	0%-5%
19	0	0,0%
20	0	0,0%

Fact sheet for the freight railway market in Slovenia

market players and key figures

all data for 2018

number of IMs with freight services	**1**
incumbent	1
non-incumbent	0
number of active passenger RUs	**3**
incumbent	1
non-incumbent	2

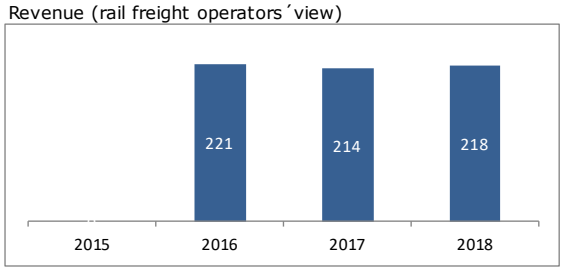
freight train km	**11 204 640**

net tonne km	**5 151 391 417**

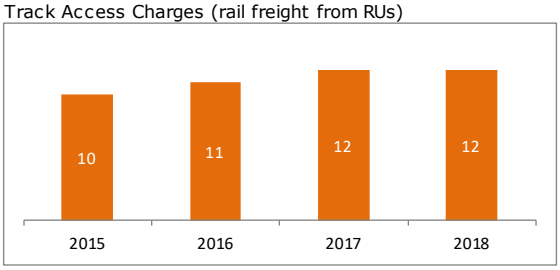
market volume

in million Euro

Revenue (rail freight operators´view)

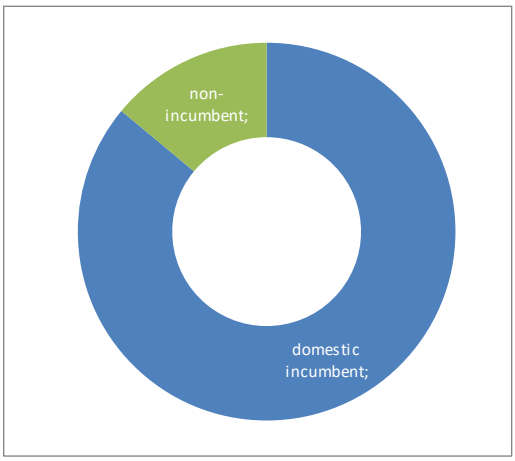


Track Access Charges (rail freight from RUs)



market shares

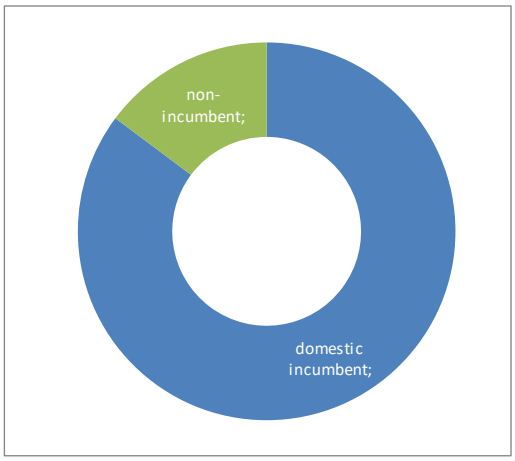
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	SŽ-Tovorni promet	**80%-90%**
2	Rail Cargo Carrier SI	**5%-10%**
3	Adria Transport	**0%-5%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	SŽ-Tovorni promet	**80%-90%**
2	Rail Cargo Carrier SI	**5%-10%**
3	Adria Transport	**5%-10%**
4	0	**0,0%**
5	0	**0,0%**
6	0	**0,0%**
7	0	**0,0%**
8	0	**0,0%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in Spain

market players and key figures

all data for 2018

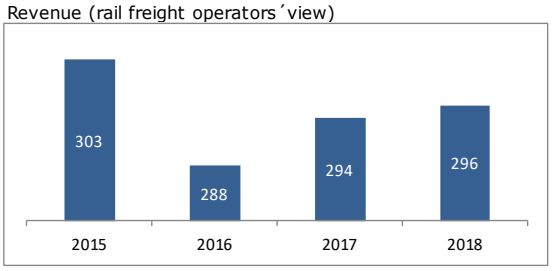
number of IMs with freight services	**1**
incumbent	1
non-incumbent	0
number of active freight RUs	**11**
incumbent	4
non-incumbent	7

freight train km	**25 196 902**
net tonne km	**10 806 884 156**

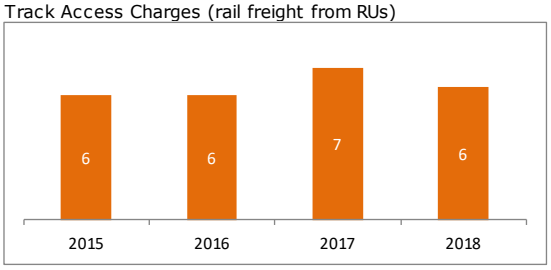
market volume

in million Euro

Revenue (rail freight operators´view)

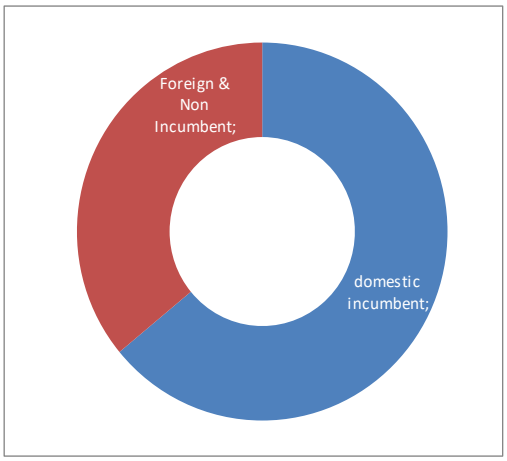


Track Access Charges (rail freight from RUs)



market shares

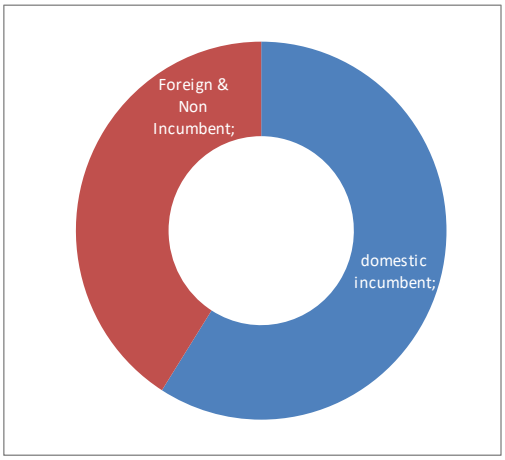
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	Domestic Incumbent	**60-70%**
2	Foreign & Non Incumbent	**30-40%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	Domestic Incumbent	**50-60%**
2	Foreign & Non Incumbent	**40-50%**

Fact sheet for the freight railway market in Sweden

market players and key figures

all data for 2018

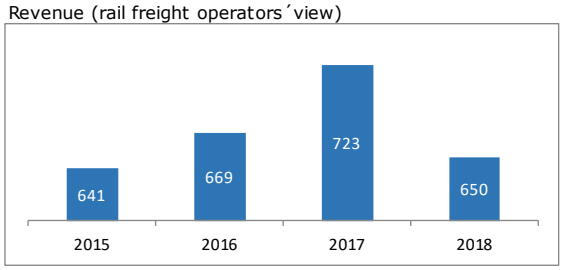
number of IMs with freight services	**3**
incumbent	1
non-incumbent	2
number of active passenger RUs	**11**
incumbent	4
non-incumbent	7

freight train km	**36 600 000**
net tonne km	**23 862 000 000**

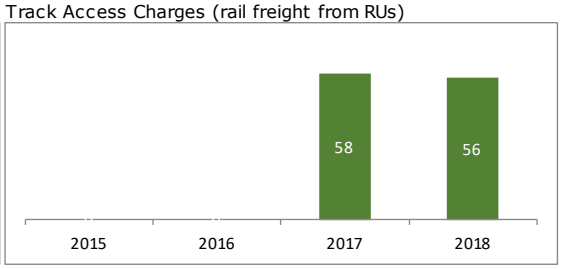
market volume

in million Euro

Revenue (rail freight operators´view)

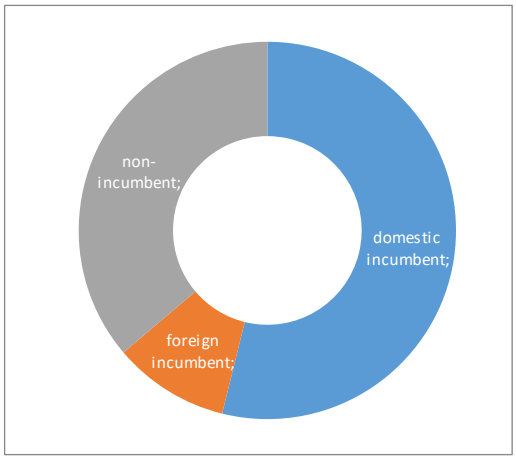


Track Access Charges (rail freight from RUs)



market shares

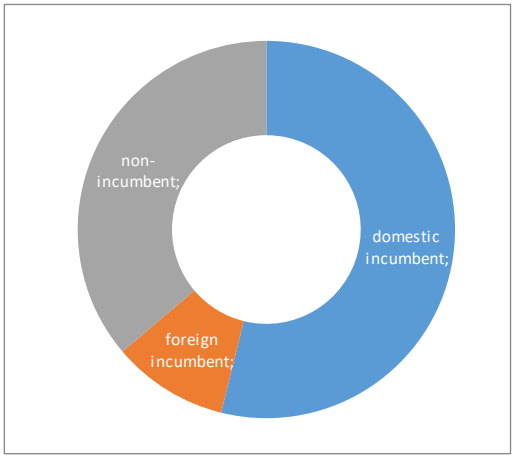
based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	Green Cargo AB	**50%-60%**
2	LKAB Malmtrafik AB	**10%-20%**
3	Hector Rail AB	**10%-20%**
4	CargoNet AS	**5%-10%**
5	TX-Logistik AB	**0%-5%**
6	CFL Cargo Sverige AB	**0%-5%**
7	Tågåkeriet i Bergslagen AB	**0%-5%**
8	DB cargo Scandinavia A/S	**0%-5%**
9	Tågfrakt Produktion Sverige AB	**0%-5%**
10	Railcare T AB	**0%-5%**
11	Inlandståget AB	**0%-5%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

based on **net tonne km**



Top 20 (based on **net tonne km**)

		market share range (%)
1	Green Cargo AB	**50%-60%**
2	LKAB Malmtrafik AB	**10%-20%**
3	Hector Rail AB	**10%-20%**
4	CargoNet AS	**5%-10%**
5	TX-Logistik AB	**0%-5%**
6	CFL Cargo Sverige AB	**0%-5%**
7	Tågåkeriet i Bergslagen AB	**0%-5%**
8	DB cargo Scandinavia A/S	**0%-5%**
9	Tågfrakt Produktion Sverige AB	**0%-5%**
10	Railcare T AB	**0%-5%**
11	Inlandståget AB	**0%-5%**
12	0	**0,0%**
13	0	**0,0%**
14	0	**0,0%**
15	0	**0,0%**
16	0	**0,0%**
17	0	**0,0%**
18	0	**0,0%**
19	0	**0,0%**
20	0	**0,0%**

Fact sheet for the freight railway market in the United Kingdom

market players and key figures

all data for 2018

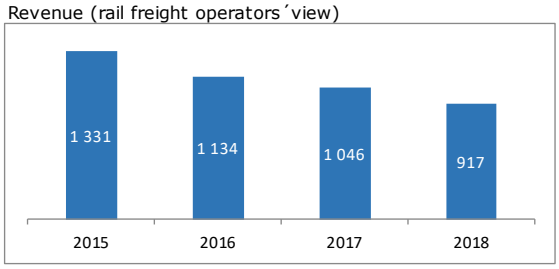
number of IMs with freight services	**2**
incumbent	1
non-incumbent	1
number of active passenger RUs	**9**
incumbent	1
non-incumbent	8

freight train km	**33 479 574**
net tonne km	**17 205 693 315**

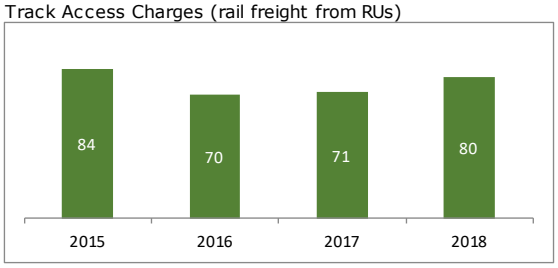
market volume

in million Euro

Revenue (rail freight operators´view)

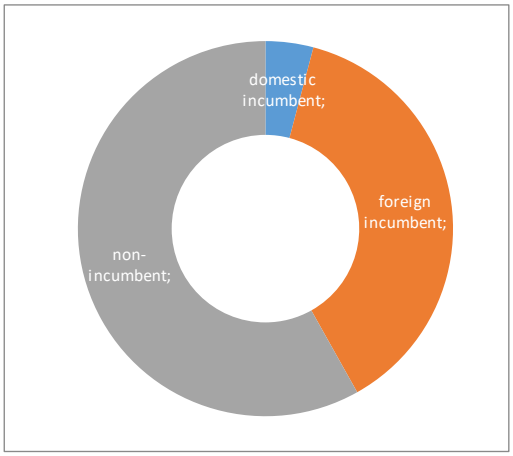


Track Access Charges (rail freight from RUs)



market shares

based on **freight train km**



Top 20 (based on **freight train km**)

		market share range (%)
1	DB Cargo UK	**30%-40%**
2	Freightliner Intermodal	**20%-30%**
3	GB Railfreight	**20%-30%**
4	Freightliner Heavy Haul	**5%-10%**
5	Colas Freight	**0%-5%**
6	Direct Rail Services	**0%-5%**
7	Devon and Cornwall Railways	**0%-5%**
8	Rail Operations Group	**0%-5%**
9	0	**0,0%**
10	0	**0,0%**
11	0	**0,0%**
12	0	**0,0%**
13	0	**0,0%**
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16	0	**0,0%**
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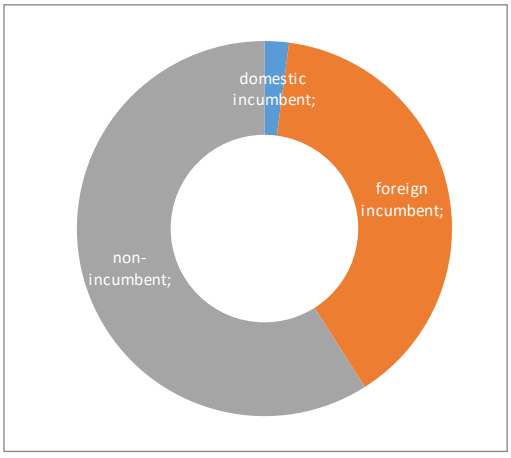
based on **net tonne km**



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