

# RAIL MARKET IN FRANCE IN 2023

## > OVERVIEW



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# INTRODUCTION

## 8TH RAIL REPORT OF THE TRANSPORT REGULATORY AUTHORITY (ART-FRANCE)

The Transport Regulatory Authority's eighth annual report on the rail transport market is published in the form of two deliverables:

- **This report named "Essentiel", which includes the main structural indicators of rail activity for the year 2023** and their annual and multi-year evolution since 2015;
- **The full report (in French only)**, will include additional thematic analyses.

These two reports cover all rail freight and passenger transport markets in France (including the exhaustive activity of the regional express network (RER), both the scope of the national rail network (RFN) and that of the Régie Autonome des Transports Parisiens (RATP)). They provide a detailed and independent analysis of the main descriptive indicators of these markets and their evolution until 2023. They have been enriched with new indicators and thematic analyses on:

- a balance sheet of the **financial flows of the railway infrastructure manager's activity** in France;
- a photo of the railway **rolling stock fleet** in France;
- a new-chapter dedicated to the activity of **railway stations**;
- a finer-grained analysis of the **evolution of PSO markets** in 2023.

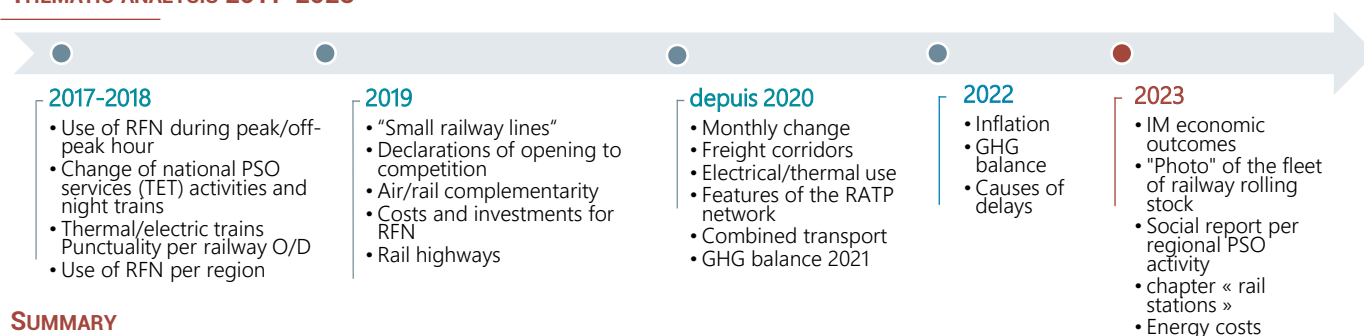
*The impacts of the pandemic crisis on the transport sector affected rail activities for both years 2021 and 2022; Some analysis do not allow, at this stage, to characterize long-term developments and are presented essentially with an annual evolution. No definitive conclusions should be drawn from these developments.*

## CONTEXT OF THE ANNUAL MARKET MONITORING REPORT

Directive 2012/34/EU establishing a single European railway area requires sectoral regulatory authorities to monitor competition in the market for rail services. In France, among the tasks that the legislator has entrusted to the Transport Regulatory Authority, is primarily that of contributing "to the monitoring and proper functioning, in its technical, economic and financial dimensions, of the national rail transport system, in particular the public service and competitive activities, for the benefit of users and customers of rail transport services" (Article L. 2131-1 of the French Transport Code). To carry out this mission, ART has been given the power to regularly collect information from infrastructure managers, service infrastructure operators, rail operators and other authorised candidates with activities in the national rail network and in the RATP network, enabling it to carry out expert appraisals and studies and to conduct the necessary information action in the rail sector that this report constitutes. Finally, "the Transport Regulatory Authority draws up each year an overview of the opening to competition of rail transport services" (Article L. 2133-1-1 of the French Transport Code) which appears in this report.

The Authority's collection decisions provide for the transmission of the data of infrastructure managers and railway undertakings relating to year n-1 by mid-September of year n at the latest as regards economic and financial data. This calendar thus leads to publications relating to year n-1 to be made in December of year n.

## THEMATIC ANALYSIS 2017-2023



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# SYNTHESIS (1/2)

## 01. Characteristics and usage intensity of the national rail network



- **The national rail network (RFN\*) has not yet returned to the level of traffic observed in 2019 in 2023**, compared to an annual fall of 3.8% and a decrease of 3.2% compared to the 2019 level. This decline was caused, for passenger services (particularly for PSO activities), by the strikes of 2023<sup>S1</sup>, while freight activities suffered a much greater decline (-12%).
- **The age of the network has only stabilized (since 2021) at just over 28 years old.** While this reflects efforts to regenerate the rail network and in particular the tracks considered "outdated" (still representing 8% of the structuring network), these efforts remain insufficient to date to converge on the track renewal objectives pursued by SNCF Réseau.
- **The rail sector employs more than 150,000 employees (FTEs) in 2023, including 29,000 employees assigned to the TER activity** of SNCF Voyageurs, representing between 800 and 5,000 jobs per region.

## 02. IM Economic Outcomes



- **Revenues from infrastructure and station tolls were down -1.0% (in constant euros) compared to 2019** and -1.6% since 2022. The amount of tolls collected by SNCF Réseau (€6.4 billion) is thus close to the level established in the performance contract, despite lower traffic than expected, thanks to the increase in electricity charges and the access charge.
- **Rail network maintenance expenditure is on the rise (in constant euros)**, after three years of decline, without reaching their 2019 level. Energy purchases re-invoiced to hauliers have more than doubled in one year (+135%).
- **Investments made by SNCF Réseau have remained stable and relatively low since 2022.** Expenditure on network modernisation (deployment of the centralised network control, CCR\*, and the European traffic management system, ERTMS\*) also remains low.

## 03. Modal shares



- **Rail passenger transport has again increased its modal share (which remains close to 10%).** The latter has a higher dynamic than that of domestic air transport and road transport, and stronger growth than that observed in neighbouring countries. **Conversely, the modal share of rail freight fell in France by 1.3 points to fall below the 9% threshold, which is already low compared to the European average.**

## 04. Rail freight services



- **Rail freight fell sharply in 2023 (-17% of tonne-km).** This notable decline, of a greater magnitude than during the health crisis, is caused by multiple factors (energy costs, landslide of the Maurienne Valley, social movements). Combined transport was more affected by the decline in traffic (-19%). Despite a strong increase (+27% between 2019 and 2022), actual traffic (tonne-km) is declining, returning to the level of 2020. **The sector's profitability therefore appears to have deteriorated more than in 2021** despite maintaining operators' revenues (the increase in prices having only partially offset the increase in energy costs).
- **Fret SNCF remains the majority operator** with a market share of 48% (down 2 points year-on-year), but the discontinuity plan initiated since 2024 should lead to a strong reorganisation of the sector due to the sale of 30% of the incumbent operator's business.

## 05. Rail passenger services



- **The offer of train-km passengers in 2023 was again affected by strikes**, leading to a fall of supply since 2019 of nearly 3% for commercial (ie. non-PSO) services and 7% for Transilien-RER services. These decreases are compensated however by increases in carrying capacity.
- **Ridership increased sharply (+5%) and exceeded the 2019 level for TER-Intercités services by 21%.** Occupancy rates are up by 2 to 3 points in one year for TER-Intercités and reach 77% on average for non-PSO services.
- **At the end of 2023, the rolling stock fleet in France consisted of more than 4,000 motor vehicles** (self-propelled and locomotives) **and reaches almost 27 years on average.** The number of TGVs of the incumbent operator amounts to more than 360 trains, down sharply since 2019 when it exceeded 400 trains.
- **The non-PSO market in France is not fully competitive in 2023 in terms of market shares.** However, the arrival of Trenitalia and Renfe has already led to increases in rail supply of more than 10%, and the maintenance, in a context of inflation, of price pressure on competing routes.

*\* See "Definitions/Glossary" appended to the report for terms marked with a star (\*)*



## SYNTHESIS (2/2)

### 06. Passenger station activity



- **More than 100 railway stations of local interest were poorly served or not served by rail services in 2023**, and the vast majority of these stations or stops see less than 10 passengers per train stopping there (on average annually).
- **Very large stations recorded a drop of train departures by 8% since 2019**, compared to an average increase of 4% for all stations combined. Train transport and passenger traffic at stations increased since 2019 for all categories of stations and for all regions outside Île-de-France.
- **While the revenues of the stations include more than 72% of the fees collected for regulated services**, large stations record up to 46% "other" income from the rental of their station spaces for various commercial activities.

### 07. Economic performance of passenger rail transport



- **Railway undertakings' revenue reached in 2023 to their 2019 level (in constant euros)**, benefiting from a significant increase in revenue per train-km for all services. These increases are the result of both an increase in the cost of the occupancy rate and in prices. However, they were offset by a similar increase in costs (track and station access charges plus energy charges), which increased by 5% in one year for PSO services and 8% for non-PSO services. These cost components represented 35% of the revenue of railway companies, an increase of 1 point since 2019.
- **Average revenue per passenger-km continues to grow in 2023 and the first half of 2024**. It increased by 2% and 8% in 2023 compared to 2022 for TER-Intercités services and non-PSO services respectively. For the latter, the increase concerns all fare classes and distances travelled, but it is higher for low-cost Ouigo services (up nearly 10% year-on-year, compared to 6% for other domestic services).

### 08. Quality of passenger service



- **The scheduled supply of high-speed trains decreased by 15% in five years**, a trend also observed for Transilien services. In addition, the increase in late cancellations again downgraded the rate of effective and on-time trains compared to the scheduled supply in 2023.
- **Punctuality also decreased for all services excluding international trains**. Delays for PSO, affected in particular by 2023 climatic hazards, increased more sharply during peak hours. The distribution of the causes of passenger train delays is stable on average, attributable (excluding external causes) to similar proportions by railway undertakings and infrastructure managers.
- **The rate of passengers compensated for their delay is stable on average**, but on a downward trend for the longest delays.

### 09. Regional PSO services (TER)



- **TER train ridership increased in 2023 for all regions** (by more than 10% in the regions of Bretagne, Pays de la Loire and Occitanie). This increase went along with an increase in train occupancy rates (by more than 5 points in Occitanie and Normandie). The increase of subscribers ridership notably explained this trend, even if the weight of non-subscribers remains preponderant and reaches more than 70% for several regions.
- **Revenue for TER activities increased along with the increase in passenger numbers**. This is the result of the 6% to 14% increase in revenue per train-km and the slight increase in public assistance per train-km (in constant euros) for most regions.
- **Operating expenses of TER activities increased sharply (+7%) despite the decline in effective supply**, due to the increase of both energy expenditure (+38% per train-km on average) and other operating expenses. The latter still show strong disparities between regions.
- **The regularity and punctuality rates of TER services worsened in 10 out of 11 regions**, particularly in Nouvelle-Aquitaine.

### 10. PSO services in region Île-de-France (Transilien and RER)



- **The Transilien-RER offer and ridership in 2023 remained below their 2019 level** for almost all lines with the exception of the Transilien R line, which recorded a +3% increase in passenger-km, and on the supply side, the RER A (with an increase of +2% in train-km and seat-km).
- **In 2023, the rate of effective and on-time trains of Transilien and RER services fell by two points compared to 2022**, consequence of an increase in descheduling. The punctuality rate also deteriorated by one point. The majority of lines were affected by these two decreases.

\* See "Definitions/Glossary" appended to the report for terms marked with a star (\*)

# CHARACTERISTICS AND USAGE INTENSITY OF THE NATIONAL RAIL NETWORK (1/4)

## Characteristics and use of the national rail network

(including the routes managed by SNCF Réseau, SEA and BPL high-speed lines and the loop railway around Nîmes and Montpellier (see glossary))

	Level (as of 31/12/2023)	Annual change (2022-2023)	4-year change (2019-2023)
▪ Total route length (km)	27 586 km	-7 km	-544 km
▪ Total track length (km)	48 828 km	-38 km	-673 km
▪ Age of the national rail network (RFN)	28,6 years	+1 month	-7 months
▪ Electrified track length (km)	34 855 km	-20 km	+147 km
▪ ERTMS*-compatible network (% of route length)	4,0 %	+0,1 point %	n/d
▪ Volume of train-km	450 M	-3,8 %	-3,2 %
▪ 80% of railway traffic (train-km) operated on...	40 % of RFN	-1 point %	+1 point %

### The operated rail network remained stable in 2023. Rail traffic dropped however.

The length of the national rail network (RFN) stabilised in 2023 (slight decrease of 38 km of track), after several years of continuous closure of the least trafficked lanes (tracks 7 to 9<sup>1</sup>). 670 km of track have been removed from the operated network since 2019.

The decline in rail traffic observed over the last three years has also led to track reclassifications. Nearly 900 km of lanes, categorized in 2022 as the most used ("2 to 4"), switched in 2023 to the "5 to 6" lane categories (for 240 km) and to the least used categories "7 to 9 AV" (for nearly 630 km). The most used categories of roads now represent only 26% of the network, compared to 34% in 2019.

These reclassifications, by affecting the theoretical lifespan of the track<sup>2</sup>, lead to "apparent" reduction in the need for renewal. However, this approach is only indicative for the infrastructure manager, who will implement a regeneration operation after assessing the actual wear and tear of the tracks.

### After a decline between 2015 and 2022, the age of the network stabilized in 2023

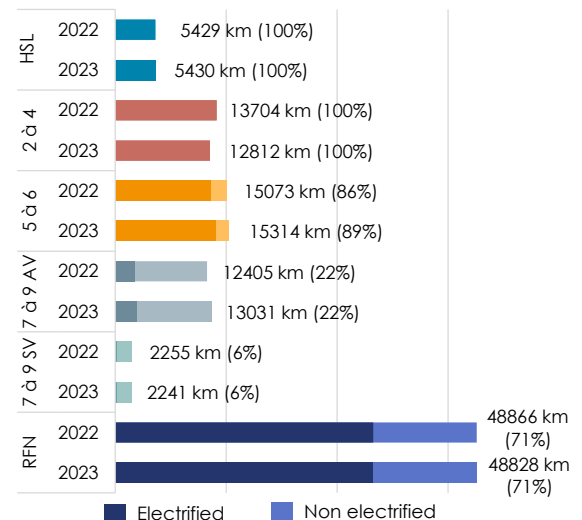
The age of the RFN tracks stabilized at 28.4 years in 2023 (+1 month). This age represents 55% of the theoretical life of the tracks<sup>2</sup>.

This stabilisation marks a halt to the rejuvenation observed between 2015 and 2022 of the tracks under SNCF Réseau's management (a little less than two years<sup>3</sup>).

In 2023, regeneration efforts focused primarily on the busiest network (tracks 2 to 6). In 2023, these categories of routes were rejuvenated by almost five months, bringing their average age to 23.9 years. This decreasing age is thus close to SNCF Réseau's half-life target<sup>2</sup> by reaching 51.4% of the theoretical lifespan of tracks 2 to 6 in 2023. At the same time, the network with the least traffic (tracks 7 to 9 AV) has aged by more than six months to reach 34.6 years (for a theoretical lifespan of 61 years), while the dedicated high-speed network (LGV) has aged by more than 7 months.

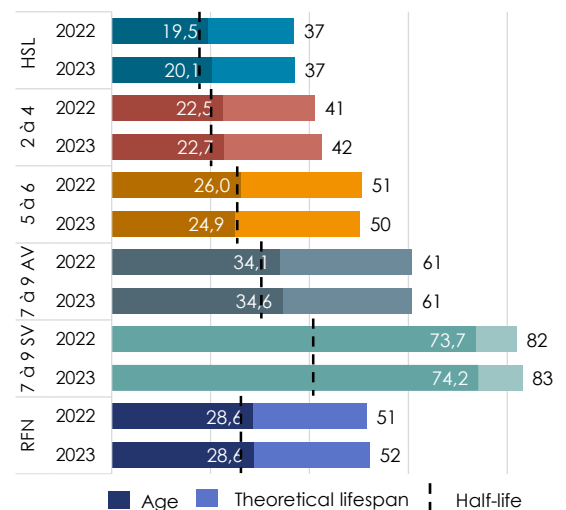
The sections of the network that have already reached or exceeded their theoretical lifespans represent, in 2023, 13.9% of the RFN, compared to 14.4% a year earlier, reflecting the regeneration efforts made. In detail, this stock decreased by -370 km for tracks of categories 2 to 6, stabilized for high-speed lines (+25 km) and increased by 80 km for categories 7 to 9 (appendix A1.1). Thus, in 2023, the equivalent of 8% of tracks 2 to 6 have reached their theoretical lifespan, compared to 11% for the high-speed lines (HSL) and 26% for the lines of category 7 to 9.

Figure 1.1 – Track lengths and electrification of the RFN, by track category, at the end of 2022 and the end of 2023  
kilometres of track (% of electrified track)



Source : ART according to infrastructure managers

Figure 1.2 – Measured age and theoretical lifetime, by RFN category of tracks (years)



Source : ART according to infrastructure managers

<sup>1</sup> See additions in the glossary at the end of the publication regarding the [classification of the tracks by SNCF Réseau](#).

<sup>2</sup> See additions in the glossary at the end of the publication regarding the [theoretical service life](#) and [track consistency index \(ICV\)](#).

<sup>3</sup> On the perimeter of SNCF Réseau excluding the new SEA, BPL lines and the Nîmes and Montpellier bypass. The age of the entire RFN has dropped by two and a half years.

# CHARACTERISTICS AND USAGE INTENSITY OF THE NATIONAL RAIL NETWORK (2/4)

The use of the RFN fell by 3.8% over one year, mainly due to strikes.

In 2023, rail traffic reached 450 million train-kilometres operated on the RFN, down more than 3% from 2022 and 2019 levels. Over one year, the drop in traffic can be explained by the impact of social movements in 2023, particularly during the 35 days of national strikes in the 1st half of the year. In the 2nd half of the year, the volume of train-km remained stable between 2022 and 2023. Freight transport is penalised by other factors (energy costs, landslide of the Maurienne,...), which have led to a drop in traffic of more than 10% over one year ([see section dédiée](#)) compared to a 2% decrease in the same context for passenger transport. Within passenger activities, Intercity services and freely organised services (TAGV\* and TGL\*) maintained their 2022 traffic levels, while train-km of regional PSO services fell (-3% for the TER, and -4% for the Transilien and RER).

On a stable network, the level of RFN usage is down 3.8% year-on-year. Compared to 2019, the contraction in the linear number of lines (-2%) limited the decline in the level of network use to 1.3%. In 2023, the average level of use of the RFN is 45 daily trains per km of line (including 38 passenger trains). The French network is therefore structurally less used than the average of European networks (54 daily trips in 2022). The use of the LGVs amounts to 96 trains per day per line kilometre, well above the level observed in Spain, but more than half that of the Italian network (34 and 232 trains on average in 2022, respectively<sup>1</sup>).

The Trans-European Transport Network (TEN-T\*) extends over nearly 16,000 km of RFN lines and includes major rail traffic routes in France. The "Core" and "Extended Core" parts of the network consist of 48% of heavily used tracks (categories 2 to 4). More than 60 trains per km of line per day were operated in 2023, 30% more than the average of the RFN. Nearly 370 million train-km travelled on the French part of the TEN-T in 2023, i.e. 82% of the total traffic on the TEN-T.

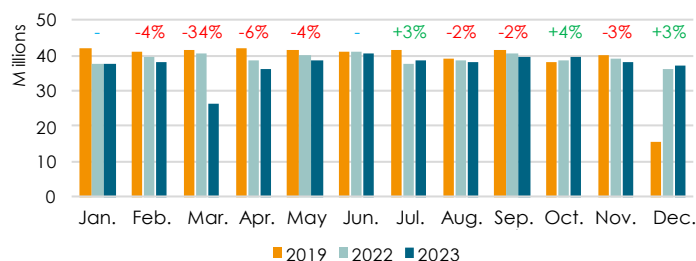
Lines 2 to 6 handle two-thirds of the traffic, the largest contributors to which are the regional activities under agreement, with 206 million<sup>2</sup> train-km to the total of TER-Transilien activities. TER trains also account for 90% of the use of lines 7 to 9 with passengers (7 to 9 AV).

\* See definitions and acronyms in the glossary at the end of the publication.

<sup>1</sup> See 12<sup>th</sup> IRG-Rail market monitoring report.

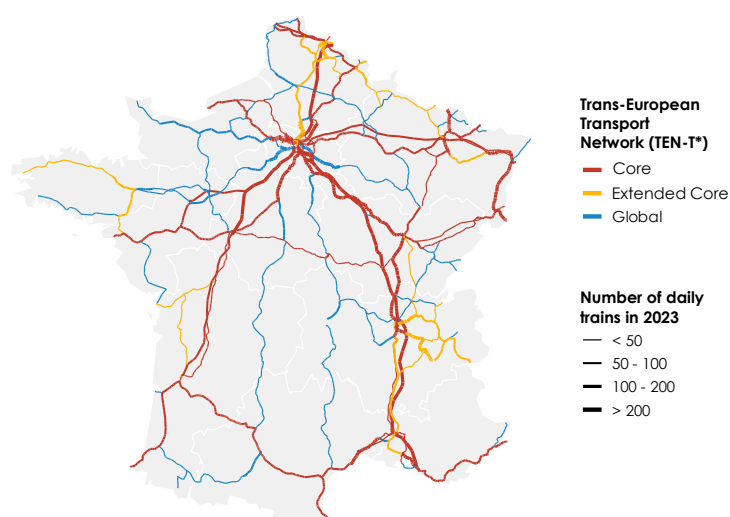
<sup>2</sup> Including non-commercial train-km.

Figure 1.3 – Monthly train-km on the RFN between 2019 and 2023 (evolution between 2023 and 2022 in label)



Source : ART according to SNCF Réseau

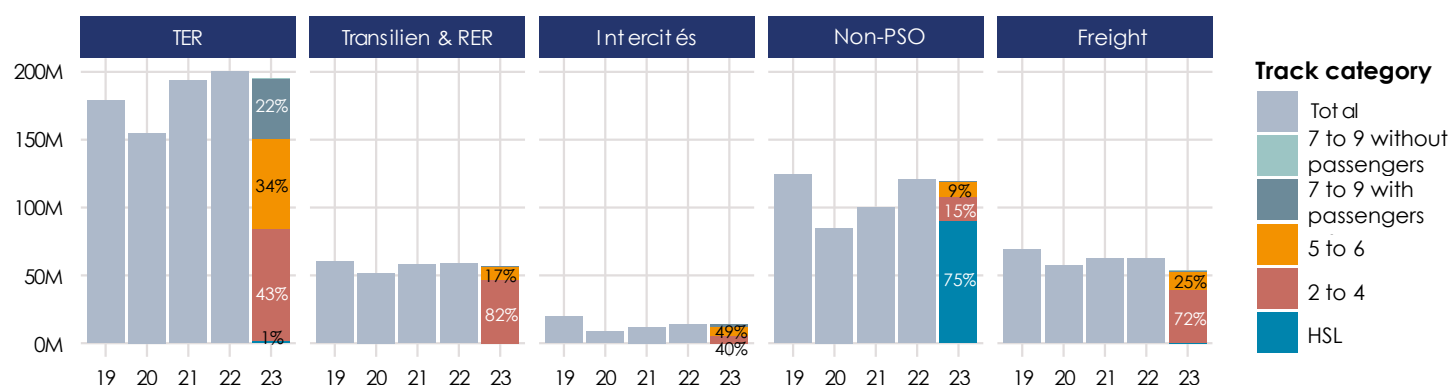
Figure 1.4 – Number of daily trains on the Trans-European Transport Network (TEN-T\*) in 2023



Network Category	Distance (km)	Number of daily trains	Change 2023/2022	Change 2023/2019
TEN-T – Core	8 022	84	-3,0%	-3,9%
TEN-T – Extended core	2 556	61	-8,0%	-8,0%
TEN-T – Global	5 255	35	-4,1%	-2,1%
RFN outside TEN-T	11 747	18	-5,3%	-0,9%
Total RFN	27 586	45	-3,8%	-1,3%

Source : ART d'après SNCF Réseau

Figure 1.5 – Distribution and volume of train-km on the RFN by activity and by category of tracks (million)



Note: TER activity totalled 195 million train-km on the RFN in 2023, nearly half of which (43% or 83 million train-km) on lines 2 to 4.

Source : ART according to SNCF Réseau

# CHARACTERISTICS AND USAGE INTENSITY OF THE NATIONAL RAIL NETWORK (3/4) – EMPLOYMENT

## The railway sector has 25 freight and passenger railway companies...

At the end of 2023, four passenger rail companies offered domestic/international intercity rail service (excluding partnerships) on the RFN: SNCF Voyageurs, Eurostar (having absorbed the Thalys brand in October 2023), Trenitalia France (having succeeded the Thello business in 2021), and Renfe Viajeros (operating independently of the 'Renfe-SNCF in cooperation' partnership since 13 July 2023).

In 2024, five new companies have been granted a railway company licence and a safety certificate to operate passenger transport services: SNCF Voyageurs Étoile d'Amiens, SNCF Voyageurs Loire Océan, SNCF Voyageurs Sud Azur, Transdev Rail Sud Inter-métropoles and Le Train. The three new subsidiaries of the incumbent operator, which won the award of lots in the South, Hauts-de-France and Pays de la Loire regions through a call for tenders, are expected to start their activity by the end of 2024. In November 2021, the subsidiary of the alternative operator Transdev was awarded the operation, scheduled from June 2025, of the Marseille-Toulon-Nice line. The Train would aim to start freely organised activity in 2027.

Rail freight activities are organised (at the end of 2023) by 21 railway undertakings (RUs), 2 less than at the end of 2022:

- 5 RUs from the Rail Logistics Europe division of the SNCF group: the incumbent operator Fret SNCF, Captrain France and its subsidiary Ecorail Transports, Naviland Cargo and Normandie Rail Services;
- 5 RUs subsidiaries of European incumbents: CFL Cargo, DB Cargo France, Lineas France, Lineas NV, Mercitalia Rail ;
- 2 active RUs on boundary sections of the RFN: Captrain España and Renfe Mercancías ;
- and 9 other railway undertakings active in 2023: CTSF, ETMF, Europorte France, Millet Rail, Combi Rail, RTM (former RDT13), Regiorail France, Securail and Railcoop (which was the subject of judicial liquidation in June 2024).

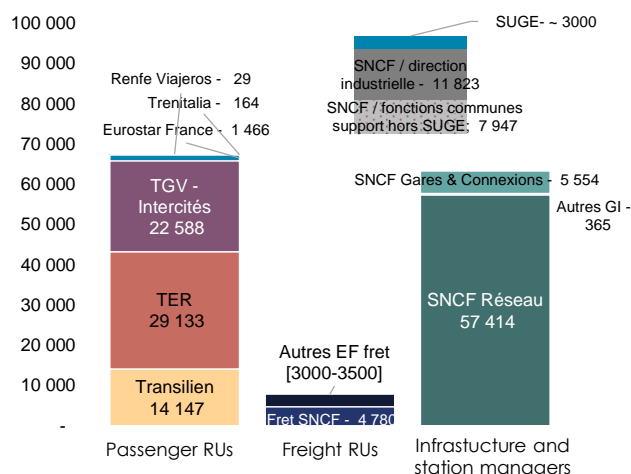
2 freight railway companies ceased their activities during 2023: ESIFER and Ouest Rail (whose activity was taken over by Millet Rail). 11 other railway companies also carry out transport services for infrastructure needs (works) or the transport of railway equipment: Colas Rail, Bombardier, S2TF, Trackfer, Transifer, Time Fret Express, Eiffage Rail Services, ETF Services, Ferrotract, Claisse Rail and TSO.

## ... and generates the employment of more than 150,000 employees (FTEs) in France for the management and maintenance of infrastructure and stations as well as freight and passenger transport activities

Within this overall workforce in the rail sector, **More than 60,000 employees work in the management and maintenance of railway infrastructure and passenger stations.** Almost 67,000 employees of railway undertakings are engaged in rail passenger transport activities and more than 8,000 employees work in freight railway undertakings. In 2023, the SNCF group represents more than 95% of salaried employment in the rail sector in France.

Compared to the total headcount of rail transport activities, the RATP Group represents a total of 45,000 employees for all of the group's activities (including intercity and urban guided transport activities as well as road transport). This workforce also includes the RATP Security activity ("GPSR"), which includes nearly 1,000 employees.

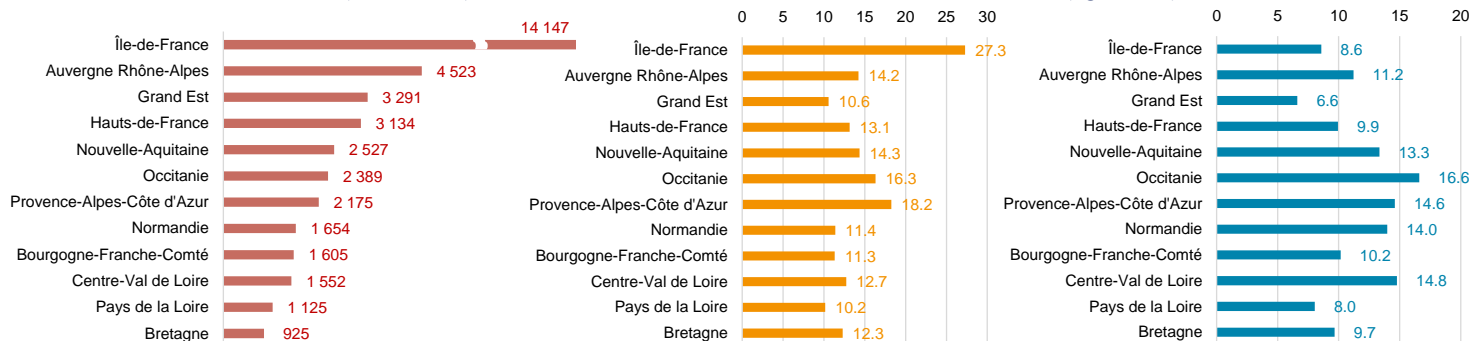
Figure 1.6 – Full-time equivalent employees in the rail sector in France as of 31 December 2023<sup>1</sup>



Source : ART after IM and RUs

The TER activity represents a total workforce of 29,000 jobs in 2023, i.e., depending on the region, between 900 and 4,500 jobs. However, the ratios of staff to the volume of activity (in train-km or volume of traffic) show very variable levels depending on the region, close to 11 jobs per 100,000 train-km for 5 regions compared to nearly 18 in the southern region. These differences can be explained in part by the heterogeneity of the TER and Transilien activities, particularly in terms of service frequencies and line lengths, but also by other factors including the allocation of staff within the SNCF group's activities and entities.

Figure 1.7 - TER and Transilien staff by region at the end of 2023 (left-hand chart), ratio 'headcount for 100,000 sales train-km achieved' (center chart), and ratio 'staff for 1000 commercial circulations carried out' (right chart)



Reading note: 2,389 agents work in the Occitanie Region. Compared to the rail offer made, this corresponds to 16 agents per 100,000 train-km in 2023. It should be noted that the "Auvergne-Rhône-Alpes" activity also covers the activity of the Léman Express.

Source : ART, according to SNCF Voyageurs and SNCF Réseau

<sup>1</sup> This quantification excludes the support and maintenance activities of the operators Trenitalia and Renfe Viajeros, which were mainly carried out in 2023 outside France.

<sup>2</sup> It should be noted that this number includes the staff of DG TER assigned entirely to the Auvergne Rhône Alpes region.

\* The "Other Freight EFs" activity includes the employees of the other subsidiaries of the SNCF group and Rail Logistics Europe operating rail freight transport activities in France (Captrain France, Naviland Cargo, VILIA). The SNCF Réseau business includes the subsidiaries Sferis, Altameris, Eurailsout, SNCF Immoréseau and Terralpha Leyfa Measurement.



# CHARACTERISTICS AND USAGE INTENSITY OF THE NATIONAL RAIL NETWORK (4/4)

## Outside the national rail network, focus on the RER RATP network

RATP shares the management of the infrastructure and the operation of RER lines A and B in Île-de-France with SNCF Voyageurs, on more than 120 km out of 200 km in total of these lines.

	Level (31/12/2023)	Annual change (2022-2023)	4-years change (2019-2023)
▪ Length of the RER RATP network operated (lines)	123,4 km	-	-
▪ Length of the RER RATP network operated (tracks, incl. service roads)	377 km	-	-
▪ Percentage of lifespan achieved for the RATP RER network <sup>1</sup>	66 %	+2 points	ND
▪ Use of the RATP RER network (million train-km, including HLP*)	12,9 M	-2,8 %	+2,7 %
of which RER A	8,8 M	-2,6 %	+3,6 %
RER B	4,1 M	-3,2 %	+0,8 %

### Traffic on the RER A and B on the RATP network has fallen over one year but remains 3% above the pre-crisis level

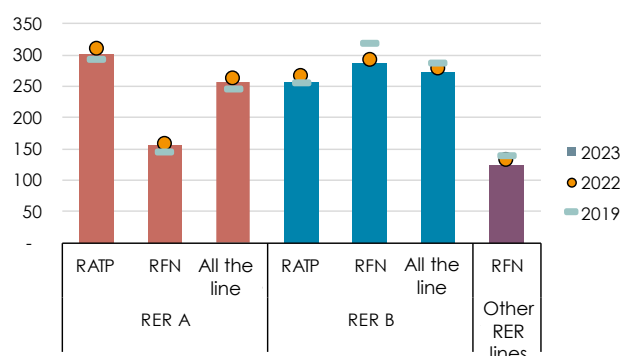
Nearly 13 million train-km were travelled on the RATP RER network in 2023, a decrease of 3% over one year. The year-on-year drop in traffic is partly explained by the effects of the social movements that occurred in 2023, and affected both the RER A and B.

Compared to 2019, RER A traffic on the RATP network increased by 3.6%. Traffic seems to be stagnating on line B (+0.8%), affected by work on the sections of lines on RFN, which has caused frequency reductions on the entire line.

The traffic density on the RER A and B lines reaches nearly 290 trains per day on average, compared to 125 trains for the other RER lines (entirely on RFN and operated by SNCF Voyageurs) and 242 trains on the most used conventional lines of the RFN (category 2 tracks).

In 2023, the track components of the RER RATP network reached an average of 66% of their lifespan (+2 points over one year). By comparison, the RFN lines used by the RER have reached 56%<sup>2</sup> of the life of the track components.

Figure 1.8 – Number of daily services per line on lines A and B of the RER in Île-de-France



Source : ART according to RATP and SNCF Réseau

## Outside the national rail network, focus on metre-gauge networks

	Level (au 31/12/2023)	Annual change (2022-2023)	4-years change (2019-2023)
▪ Length of the network of <i>Chemins de fer de la Corse</i> (route length)	232 km	-	-
▪ Length of the network of <i>Chemins de fer de Provence</i> (route length)	151 km	-	-
▪ Network usage, <i>Chemins de fer de la Corse</i> (train-km)	1 030 732 <sup>3</sup>	+7,1 % <sup>3</sup>	ND
▪ Network usage, <i>Chemins de fer de Provence</i> (train-km)	517 561 <sup>4</sup>	-1,7 % <sup>4</sup>	+22 % <sup>4</sup>

France has two regional rail networks outside the RFN with a length of more than 100 km: the *Chemins de fer de la Corse* and the *Chemins de fer de Provence*, formed in 2023 of the Digne-Nice line (or "Train des pignes"). The former are operated by a company dedicated to the Collectivity of Corsica and the latter by the Régie régionale des transports de Provence-Alpes-Côte d'Azur (RRT PACA). These two networks are among the five secondary networks of single gauge (non-electrified) tracks operated in France<sup>5</sup>. The Corsican network serves 16 stations and 60 railway stops, compared to 20 stations and 48 railway stops for the Digne-Nice line.

In 2023, the traffic of the Corsican Railways represented more than 1 million train.km, soit plus de 12 trains par km de ligne par jour. Ce réseau a transporté 45 millions de voyageurs.km, une fréquentation en hausse régulière, de 2 % par rapport à 2022 et de près de 9 % par rapport à 2019.

In 2023, the Digne-Nice line recorded nearly 520,000 train-km (9.4 train-km per km of line per day), In addition, nearly 145,000 km are covered by replacement coaches<sup>4</sup>. Ridership on the Digne-Nice line reaches 0.9 million voyageurs.km in 2023, up 7% year-on-year but down 10% compared to 2019.

<sup>1</sup> The average age of the RER RATP network in relation to its lifespan is the average of the ages of each asset (sections of the line, switches and crossings) in relation to their respective lifespans, which is then weighted by the product of the size of each asset and its renewal cost.

<sup>2</sup> The percentage of achievement of the lifespan established by the RATP (indicator increasing between 0% and 100%) can thus be compared with the ICV index monitored by SNCF Réseau – see footnote at the beginning of part 01.

<sup>3</sup> Value as of 31/12/2022, the latest information available to date. The year-on-year change is that of 2022 and 2021.

<sup>4</sup> Traffic on the Digne-Nice line is proposed alternatively by autocars.km (145,000 in 2023, 146,000 in 2022, 37,000 in 2019) replacing trains due to bad weather affecting rolling stock or infrastructure work. This phenomenon, which was not very present before 2020, has accelerated since 2021.

<sup>5</sup> The three other secondary metre-gauge networks are the Cerdanya line (known as "Le Train Jaune", 63 km), the Mont-Blanc Express (37 km) and the Blanc-Argent Line (56 km). These are part of the RFN, unlike the Chemins de fer de la Corse and the Chemins de fer de Provence.



	Level (2023)	Annual change constants Euros* (2022-2023)	Compound average growth rate constant Euros* (2019-2023)
▪ Tolls collected by infrastructure managers <sup>1</sup>	6,7 Mds€	-1,6 %	-1,0 %
of which LISEA	282 M€	+2 %	+0,0 %
of which public subsidies <sup>2</sup>	2,4 Mds€	-3,9 %	+0,1 %
▪ SNCF Réseau operating costs <sup>3</sup>	5,8 Mds€	+7,4 %	+1,8 %
of which maintenance and monitoring costs	3,0 Mds€	+6,0 %	-1,3 %
▪ SNCF Réseau investments <sup>4</sup>	5,4 Mds€	-0,1 %	-1,0 %

<sup>1</sup> Measured by year of service (allowing the reconciliation presented below with rail traffic measured by calendar year).

<sup>2</sup> Access fee paid by the State and Île-de-France Mobilités (IdFM), and freight compensation (increased by exceptional aid following the health crisis).

<sup>3</sup> Excluding operating subsidies (€100 million) and commercial allowances (€20 million).

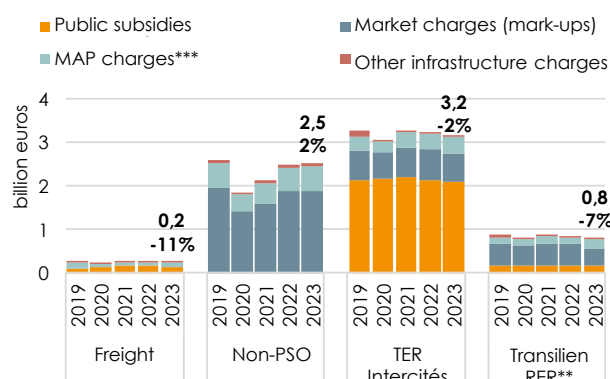
<sup>4</sup> Including project Opex (€357 million) and excluding industrial investments (€318 million) and financial expenses (€129 million).

### Excluding inflation, infrastructure managers' toll revenues fell by 1.6% in 2023

Infrastructure managers (SNCF Réseau and LISEA) collected €6.7 billion in fees in 2023, down 1.6% in constant euros\* compared to 2022 (up 4% in current euros). The amount of tolls collected by SNCF Réseau (€6.4 billion) is thus close to that established in the performance contract, despite less dynamic traffic than anticipated. In 2023, this situation is mainly due to an increase in electricity fees, re-invoiced on an actual basis (+€206 million for RCTE component A) and an increase in the access charge (+€78 million), which is not affected by the actual level of traffic.

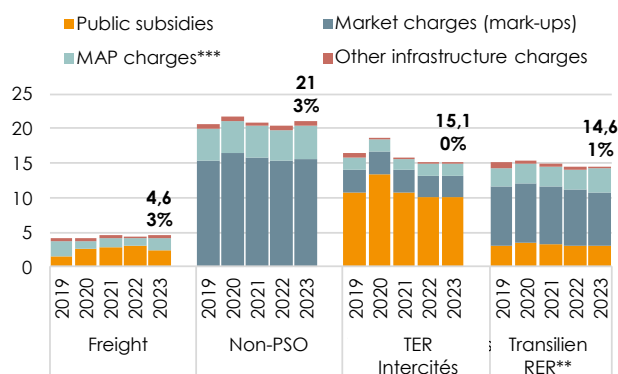
Only revenues from the activity of non-PSO passenger services increased (+2%), while they fell sharply for freight services (-11%) as well as for Transilien and RER activities (-7%). These decreases are mainly due to a decrease in public subsidies (by -3.9% in constant euros) and the annual decrease of passenger and freight traffic (-4.3% in train.km).

Figure 2.1 – Income of infrastructure managers  
(constant Euros\* – labels : change 2023/2022)



Source : ART according to infrastructure managers

Figure 2.2 – Income of infrastructure managers  
(constant Euros 2023\* per train-km invoiced – labels : change 2023/2022)



Source : ART according to infrastructure managers

The decline in the volume of invoiced train-km was partly offset by an increase in the fee per train.km (in constant euros):

- for PSO services, the average level of charges collected per train.km for TER, Intercités, Transilien and RER services stagnated in 2023 compared to 2022 (+0% and +1% respectively) but remains below 2019 levels (-8% and -4%);
- Non-PSO services saw an annual increase in the charge per train.km of 3%, exceeding the 2019 level by 2%;
- for freight services, Revenue growth per train.km continues for the fourth consecutive year (+3%) and is 9% higher than in 2019. For the first time since the health crisis, the share of fees paid by railway companies has increased to 44%, an annual increase of 10 percentage points.

\* See Appendix for the indices used for inflation adjustment (Appendix 0).

\*\* The fee amounts invoiced by SNCF Réseau are established on the basis of capacity allocations on the RFN and not only on the actual train-km. The market charge collected by SNCF Réseau is therefore only partially affected by variations in supply. Cancellations of bookings and late-cancellations lead to regularizations or penalties, in particular through reciprocal incentive schemes.

\*\*\* MAP (Minimum Access Package) charges : charges set at the cost that is directly incurred as a result of operating the train service (Article 31 of Directive 2012/34/EU)

# ECONOMIC RESULTS OF INFRASTRUCTURE MANAGERS (2/4)

## SNCF Réseau's operating expenses increased by 6.6% in 2023 (constant euros)

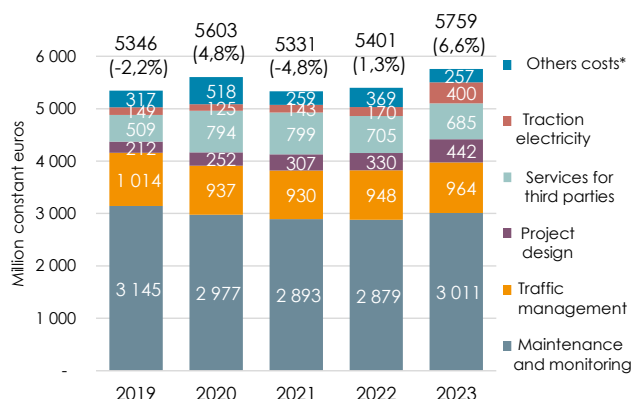
After being relatively stable in 2022, SNCF Réseau's operating expenses increased in 2023 by 6.6% (in constant euros).

The network maintenance and monitoring costs, largest expense of the IM with €3 billion in 2023, increased by 4.6% in constant euros. Considered per track kilometer<sup>1</sup>, they amount 59,200 euros in 2023. After three consecutive years of decline, expenditure per kilometre increased by 6.3% in constant euros in 2023, but it is still 3.7% lower than in 2019.

The second largest expense item, traffic management costs, also increased in 2023, by +1.7% in constant euros, while remaining below the 2019 level (-4.9%).

There is also significant increase in energy costs for electric traction, qui sont passés de 170 à 400 M€ (en euros courants, ces charges étant directement refacturées aux transporteurs).

**Figure 2.3 – SNCF Réseau operating cost excluding operating subsidies**  
(Constant euros 2023 except traction electricity in current euros)



Note : "Other costs" include train path management and marketing activities (€128 million), taxes (€50 million) and miscellaneous costs (€79 million). Third-party services include sales outside the SNCF group or internal sales (mainly for SNCF Gares & Connexions). The costs of traction electricity are isolated from this balance sheet from the costs of traffic management. These costs differ from those presented in page 12, net of operating subsidies (€100 million) and commercial allowances (€20 million).

Source : ART according to SNCF Réseau

## In 2023, the amount of rail investment remained stable at €5.4 billion

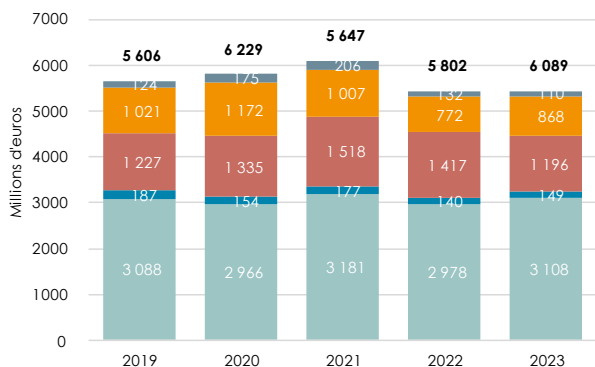
After a significant decline in 2022 (-11%), SNCF Réseau's capital expenditure remained stable in 2023 (in constant euros). According to SNCF Réseau's 2023 financial report, this is the 1st year of implementation of its programme to accelerate the regeneration of the network, which has led to a 7% increase (in current euros) in renewal expenditure and the maintenance of the target value of the performance contract concluded for the period 2021-2030 (€2.9 billion per year on average over the period). Nevertheless, based on 2020 prices, the average renewal expenditure is only €2.6 billion between 2021 and 2023, below the objectives of the contract.

Nearly 60% of "renewal and performance" investments are dedicated to tracks in 2023. However, this proportion has been declining continuously since 2018 in favour of investments in centralised grid control (CCR) and fixed electric traction systems. Investments in CCR jumped in 2023 (+26% in constant euros) to

reach €370 million. This amount is still much lower than what is provided for in the performance contract (€450 million per year), whose modernisation investment trajectories will only allow for deployment across the entire network by 2070<sup>3</sup>. In addition, after several years of growth, investments in the deployment of the European traffic management system, ERTMS, are stalling in 2023, with an annual decrease of 13% (in constant euros).

In total, 69% of the investments in 2023 are intended for track categories 2 to 6, allowing for a 5-month rejuvenation of this network. The share of investments allocated to the territory's fine service lines is 12% (+2 points over one year) and that of high-speed lines is 6% (-1 point).

**Figure 2.4 – SNCF Réseau capital expenditure**  
(including Opex and excluding financial expenses - 2023 euros)

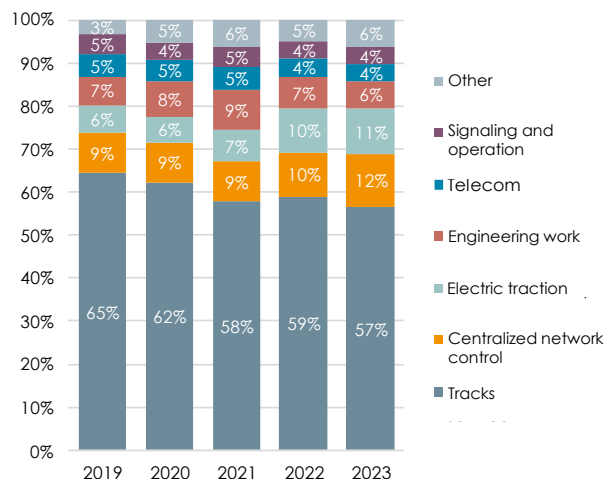


Note : the graph does not show industrial investments (€318 million in 2023) and financial expenses (€129 million) but includes project Opex (€357 million).

Land and other  
Regional development projects  
Major development projects  
Network upgrades  
Renewal and performance

Source : ART according to SNCF Réseau

**Figure 2.5 – Distribution of "renewal and performance" investments**



Source : ART according to SNCF Réseau

<sup>1</sup> Excluding costs related to service roads. Service roads account for just over 5% of the maintenance and monitoring costs of the national rail network.

<sup>2</sup> Price index at the time of the preparation of the 2021-2030 performance contract.

<sup>3</sup> Consult the [report](#) on long-term scenarios for the French rail network (2022-2042).



# ECONOMIC RESULTS OF INFRASTRUCTURE MANAGERS (3/4)

**In 2023, SNCF Réseau's expenses amounted to €11.7 billion, of which €6.4 billion was financed by track access charges**

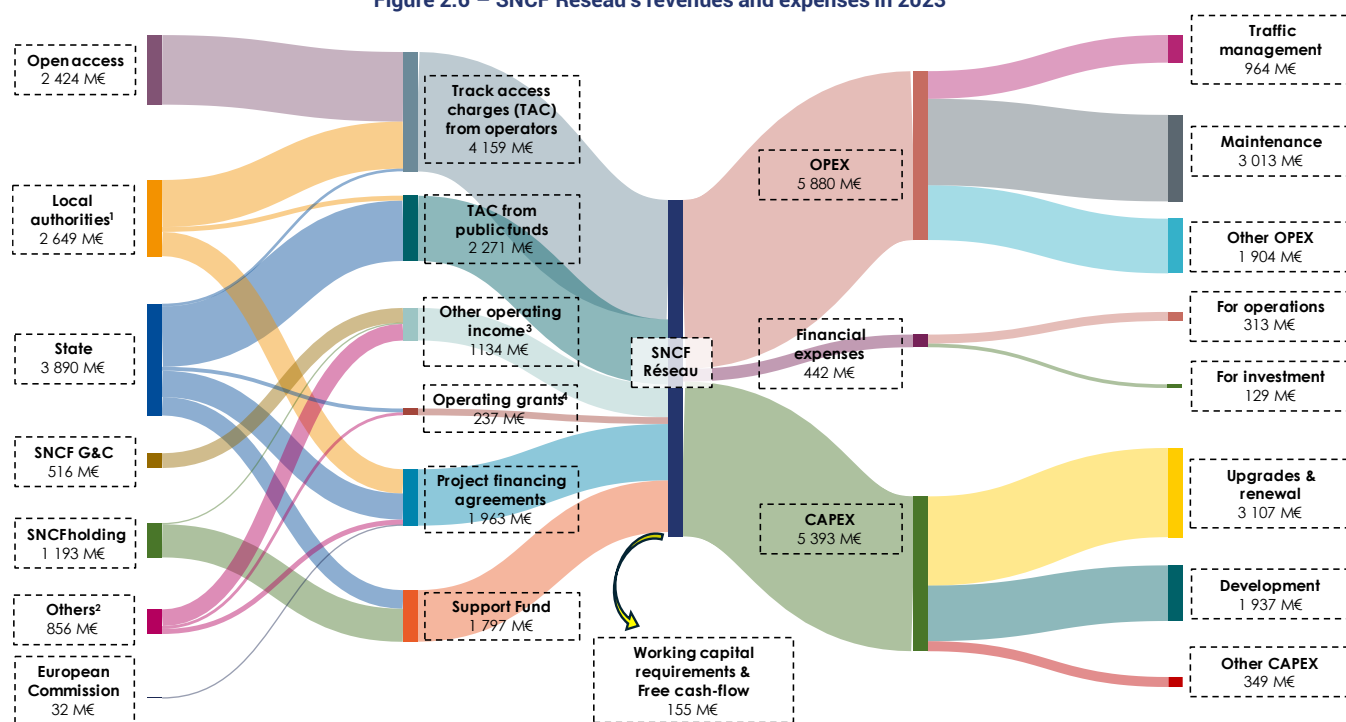
Rail traffic charges, representing €6.4 billion, are the main source of revenue for SNCF Réseau. Of these tolls, €4 billion comes from PSO services (Transilien, TER and Intercités). A substantial part (57%) comes from the access fee, paid directly by the State and Île-de-France Mobilités. This charge is used to cover the fixed costs of operating and maintaining the network. The other fees (€2.4 billion) are paid by non-PSO services (HST and freight). In addition, SNCF Réseau benefits from €135 million subsidies for tolls related to rail freight (for an analysis of tolls, [see page 10](#)). SNCF Réseau also received €1.1 billion in other income, including €976 million for services provided to third parties, notably to SNCF Gares & Connexions (€439 million).

To finance its investment projects, SNCF Réseau receives €3760 million in subsidies through two mechanisms. On the one hand, thanks to financing agreements signed with public and private entities for just under €2 billion. Among contributors, the

government is in first place (47%)<sup>5</sup>, followed by the Regions and other local administrations (43%), private third parties (9%) and finally the European Commission (2%)<sup>6</sup>. On the other hand, investment subsidies are received through the State assistance fund (€1.8 billion). This fund is funded thanks to dividends from the parent company SNCF SA (€1 billion), the sale of the SNCF group (€125 million) and €644 million from recapitalization by the State<sup>7</sup>.

Excluding costs and financial flows, SNCF Réseau's expenses in 2022 were divided equally between operating expenses and capital expenditures. In 2023, operating expenses represented 53% of expenses, an annual increase (in current euros) of 10.7% to reach €5.9 billion. Investment expenditure remained stable (+0.9% in current euros). For a more precise analysis of SNCF Réseau's expenses, [see page 11](#).

**Figure 2.6 – SNCF Réseau's revenues and expenses in 2023**



Source : ART according to SNCF Réseau

## Methodological precision

The amounts of SNCF Réseau's revenues and expenses (Figure 2.6 above) include differences in scope compared to those presented in this report (differences specified in the table opposite).

In addition, the figures in Figure 2.6 show differences in scope with those of the "Annual Transport Report" published by SDeS (statistical unit of the French ministry of transport), in particular with regard to the investment subsidies received by SNCF Réseau. These differences can be explained in particular by the exclusion, in the figure above, of subsidies relating to investment projects carried out by third parties, and which therefore do not generate any expenditure for SNCF Réseau. They therefore only pass through the accounts of the IM.

	Figure 2.6	Other figures
Track access charges	Calendar accounting year	Calendar operational year
Operating expenses	With operating subsidies (€100 million) and commercial allowances (€20 million)	Excluding operating subsidies and commercial allowances
Capital expenditure	Excluding non-immovable expenditure	Including non-immovable operating expenses

<sup>1</sup> The local authorities include the Regions (AOM), Île-de-France Mobilités, the Departments, Municipalities, Groupings of Municipalities and various local administration bodies (ODAL).

<sup>2</sup> Other payers include SNCF Voyageurs and Fret SNCF (for intra-group services), SNCF Réseau (for the proceeds of their own asset sales) and other third parties (for other revenues, or who participate in the financing agreements for SNCF Réseau's investment projects).

<sup>3</sup> Other income includes the sale of SNCF intra-group services (€652 million), studies and works for third parties (€101 million), dividends received (mainly from SNCF Gares & Connexions, €77 million), proceeds from asset disposals (from SNCF Réseau, €81 million), and other income (€224 million).

<sup>4</sup> Operating subsidies include freight compensation (increased by exceptional aid following the health crisis) and subsidies that aim to compensate for operating expenses (general studies, preliminary studies)

<sup>5</sup> In 2023, the financing agreements paid to SNCF Réseau include the first tranche of the "new railway deal", for €100 million paid by the AFIT

<sup>6</sup> The recapitalisation of the SNCF group in 2020 amounts €4,050 million as part of the France Relance plan, is financed a posteriori by the European Union's recovery and resilience plan

<sup>7</sup> The proceeds from disposals (€125 million) and the recapitalisation by the State (€644 million) stem from the commitments made as part of the September 2020 recovery plan.

# ECONOMIC RESULTS OF INFRASTRUCTURE MANAGERS (4/4)

## Outside the national rail network, focus on the RER RATP network

	Level (at 31/12/2023)	Annual change actual value <sup>1</sup> (2022-2023)
■ Overall maintenance and monitoring costs on the RER RATP network	175,3 M€	+ 7,4 %
of which expenses concerning RER A	64,2 M€	- 1,2 %
expenses concerning RER B	33,5 M€	- 0,9 %
■ Investments in the RER RATP network	230,6 M€	- 1,6 %
of which investments concerning RER A	96,0 M€	- 3,9 %
investments concerning RER B	115,0 M€	- 1,7 %

### A year-on-year increase in RATP's maintenance expenses on RER lines despite the drop in traffic

Maintenance and monitoring expenses for RATP's RER A and B lines amounted to more than €175 million in 2023, up 7% year-on-year in constant euros<sup>1</sup> (+12% in current euros). RER traffic fell by 3% over the same period. Maintenance costs allocated to the RER A and B remained stable (-1%) while non-geographical cost increased sharply (+20%). **Compared to the track length, the RATP's maintenance costs for the RER are nearly 465,000 euros**, of which 21% is devoted to track and track equipment.

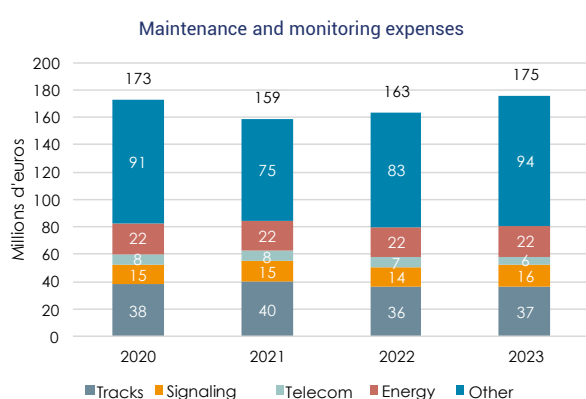
More than €230 million in capital expenditure was allocated by RATP to the RER network under its management in 2023, i.e. a stable amount over one year (-2% in constant euros) but down 13% compared to 2020 and 18% compared to 2021. These investments represent a 9% share of the overall investment envelope made in 2023 by the RATP<sup>2</sup> group (which, however, appears to be up slightly by 4% in constant euros over one year).

The structure of investments also remains stable over one year,

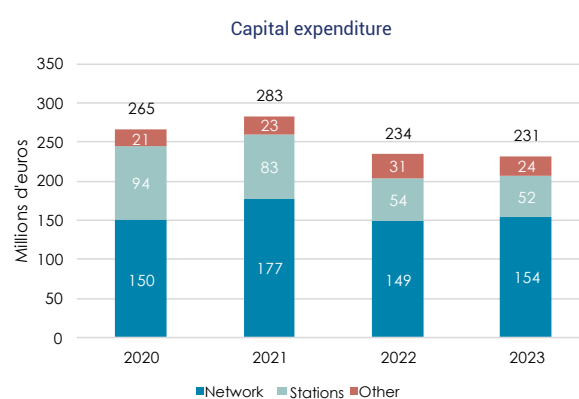
by asset (more than 65% are intended for the network) or by line (42% for the RER B). Expenditure on major maintenance for track in 2023 (€40.4 million) is the highest since 2020. These expenditure led to the renewal of 40 km of rail and 13 switches and crossings. However, this effort seems insufficient, to date, to reduce the ageing of the network, in view of the increase (+2 points in 2023) of the relative age of the RER RATP network (see part 1).

The modernisation of the infrastructure of line B continues in 2023 with resources comparable to those of 2022. Since 2020, nearly €174 million (constant euros 2023) have been devoted to the modernisation of the RER B infrastructure, to which is added nearly €90 million (constant) for the adaptation of the infrastructure to accommodate the new rolling stock (MI 20 trains) from 2025.

**Figure 2.7 – RATP's maintenance and monitoring costs and capital expenditure for the RER A and B**  
(constant euros 2023)



Note : other expenses include electromechanical and civil engineering equipment, as well as expenses that cannot be assigned to RER A or B lines.



Note : The other investments concern the workshops or both the network and the stations.

Source : ART according to RATP

<sup>1</sup> Changes measured in constant euros, in 2023 value. See appendix for the indices used to adjust for the effects of inflation, the time series ([Appendix A0](#))

<sup>2</sup> According to the Annual Report 2023 (page 26) of the RATP Group, the Group's investments amounted to €2,546 million in 2023. The amount in 2022 (as per the Annual Report 2022, page 26) amounted to €2,386 million. This corresponds to €2,455 million in 2023 value.

# 03

## MODAL SHARES (FREIGHT AND PASSENGERS)



	Level (2023)	Annual change (2022-2023)	4-year change (2019-2023)
▪ Modal share of rail passenger transport	10,4 %	+0,6 point %	+1,2 point %
▪ Modal share of rail freight transport	8,6 %	-1,3 point %	-0,8 point %

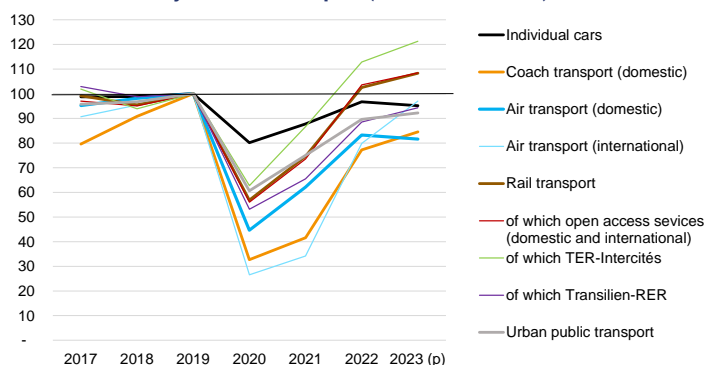
**The train is the only mode of transport to have exceeded its pre-crisis level of ridership in France by 2023, increasing its modal share while car and air use dropped on domestic routes.**

Rail passenger transport experienced a year of robust growth in 2023 compared to other modes of transport in France. Road passenger car traffic and air transport recorded annual declines of -1.6% and -2% respectively. These decreases are associated, for the road mode, with a decrease in traffic on the departmental and local network, and, for the air mode, with a significant decrease in traffic on radial links. On the other hand, non-PSO coach transport and international air transport experienced strong recoveries in 2023 (+9.5% for coach mode and +21% for air transport), but later than rail transport. The modal share of rail mode thus stood at

10.4%<sup>1</sup> in 2023, up +0.6 point year-on-year and +1.2 point since 2019.

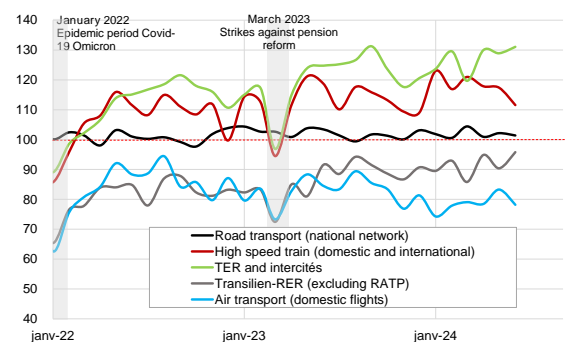
**Freight transport by rail fell more in 2023 than by road mode (down 2.3% year-on-year).** As a result, the modal share of rail freight transport fell significantly in 2023 (-1.3 points), reaching the lowest level observed by the Authority in 5 years (8.6% modal share).

**Figure 3.1 – 2017-2023 evolution of annual passenger numbers by mode of transport (100 index in 2017)**



Source : ART, DGAC, SDeS

**Figure 3.2 – 2022-2023 evolution of monthly passenger numbers by mode of transport (100 index in 2017)**



Source : ART, DGAC, SDeS

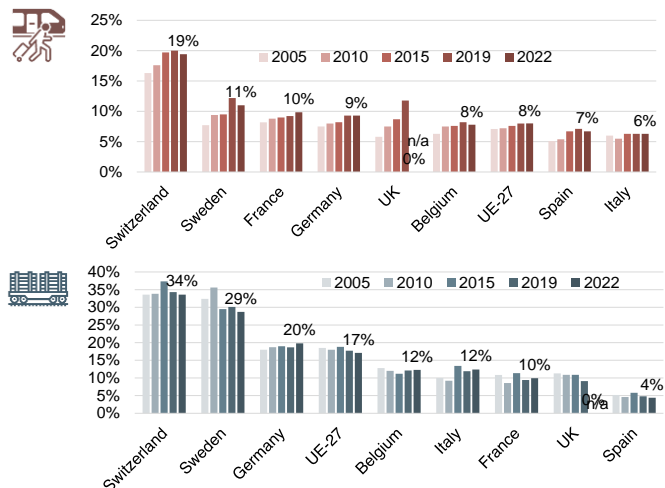
**The 2022 modal share of rail transport stagnated in Europe for passenger transport, and decreased for freight transport compared to pre-crisis levels**

In 2022, the modal share of rail passenger transport reached 8% on average in Europe. Unlike France, where modal share grew since 2019, it has remained stable on average in Europe, particularly in Germany and Italy, and has decreased in Switzerland, Sweden, Spain and Belgium.

Despite the decline observed in 2023, the modal share of domestic rail freight transport in France remains significantly higher than in Spain (almost 4% in 2022), but lower than most other neighbouring countries. In 2022, modal share increased steadily in Germany (+1 point), up to 20% level, ie twice the level in France.



**Figure 3.3 – Evolution 2005-2022 of the modal shares of rail passenger and freight transport in Europe**



Source : ART, Eurostat, IRG-Rail

<sup>1</sup> The SDeS "Individual cars" series was revised in 2023 to include light commercial vehicles. This leads to a downward correction of the estimated modal share of rail transport presented in previous rail balance sheets, reaching 9.6% in 2019, 9.9% in 2022, and exceeding 10% in 2023.



## RAIL FREIGHT SERVICES (1/3)

	Level (2023)	Annual change (2022-2023)	4-year change (2019-2023)
▪ Rail freight transport offer (train-km)	52,3 millions	-11,6 %	-11,1 %
▪ Actual traffic (tonne-km)	29,4 billions	-16,7 %	-13,4 %
▪ Average train load capacity (tonnes per train)	562	-5,8 %	-2,6 %
▪ Traffic revenue (change in current euros)	1 140 M€	+0,6 %	+2,5 %
▪ Share of combined transport (tonne-km)	39,8 %	-1,1 pts of %	+6,5 pts of %
▪ Freight train delay rate at 30 minutes	16,7 %	+0,8 pt %	+1,2 pt %

## After a historic drop in traffic in 2023...

In 2023, rail freight transport totalled 29.4 billion tonne-km, a drop of almost -17% compared to 2022. As a result of a less marked decline in the volume of traffic (-11.6% of train-km), the average capacity of trains fell to 560 tonnes compared to 600 tonnes in 2021 and 2022. This drop puts an end to the continuous increase in the payload observed between 2017 and 2021.

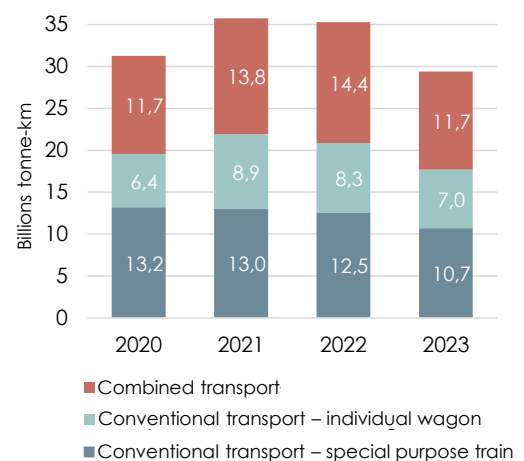
This volume of tonne-km is a lower historical low than those of 2010 and 2020. These two years had been affected by major events (strikes and the aftermath of the financial crisis, then the health crisis).

The sharp 2023 decline can be explained by a series of concomitant events: strikes against the French reform of pension system, landslide in the Maurienne valley on August 27, increase in energy costs ([see page 17](#)), and economic slowdown.

A slightly smaller decline was observed for international transport (-15%) while domestic transport dropped of -17%. On the opposite, **traffic from/to Italy fell by -27%, as a result of the closure of the cross-border rail link.**

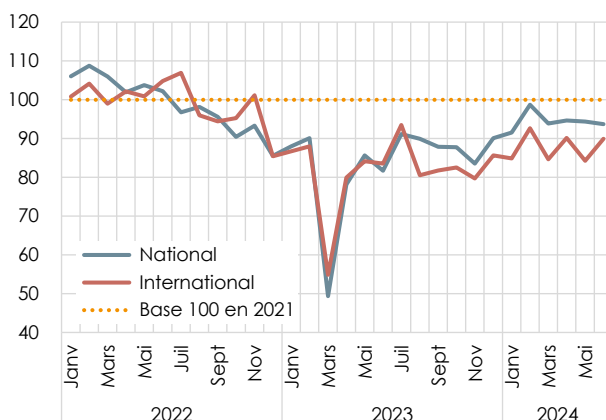
After a strong increase (+27% between 2019 and 2022), combined transport dropped in 2023 (-19% in tonne-km transported).

Figure 4.1 – Tonne-km of rail freight transport by market segment



Source : ART according to railway undertakings

Figure 4.2 – Tonne-km of rail freight transport (base 100 in 2021 – adjusted for working days and seasonal variations)



Source : ART according to SDES

## ...activity rebounds in the first half of 2024 but remains lower than in 2022

**The first half of 2024 marks a recovery in activity.** Indeed, the tonne-km achieved by the sector marked a rebound of +16% in the first half of the year compared to the same period in 2023.

Nevertheless, the tonne-km carried out in the first half of 2024 remain lower than in the first half of 2022: -10% for national transport and -14% for international transport (-11% overall).

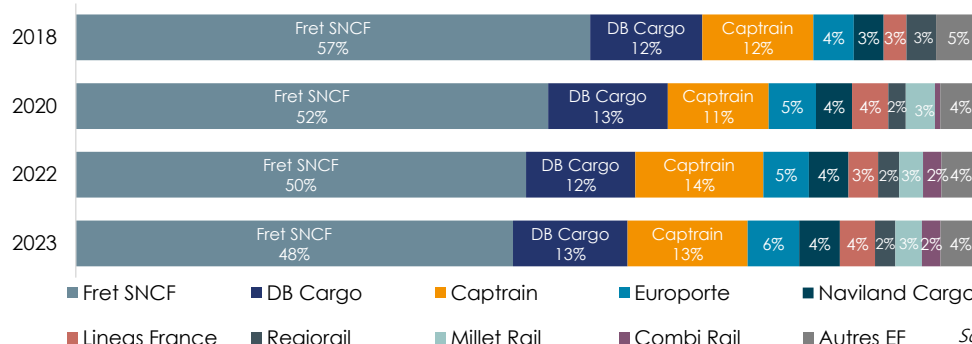
This difference is partly explained by the closure of the rail link to Italy for the whole of 2024.

# RAIL FREIGHT SERVICES (2/3)

**In a context where all railway companies saw their freight traffic decline in 2023, the SNCF group's market share fell by two points.**

After stabilising between 2021 and 2022, the activity measured in tonne-km of the incumbent operator, Fret SNCF, contracted in 2023 by nearly 19%, leading to a drop in its market share of 1.5 percentage points. The SNCF<sup>1</sup> group's railway undertakings still represent just under 68% of tonne-km in 2023, a drop of nearly 2 points in market share compared to 2022. **This trend is expected to continue in 2024, with Fret SNCF having begun the divestment of 23 segment markets (whole train activities) to alternative railway undertakings** (See box below). In addition, while the activity of other railway companies also declined in 2023, the declines were relatively less marked for three railway undertakings: Lineas France (-1.3%), Europorte France (-5.6%) and Millet Rail (-7.7%).

**Figure 4.3 – Market share of freight railway undertakings (tonne-km)**



Millet Rail includes in this figure the activities previously carried out by Ouest Rail (deregistered on 9 March 2023 and whose activities were merged into Millet Rail).

Source : ART according to railway companies

## Implementation of a "discontinuity" plan for Fret SNCF from 1 January 2024

The European Commission opened an in-depth investigation on 18 January 2023 into the French state's support measures for Fret SNCF between 2007 and 2019. This investigation aims to determine whether these measures were in line with EU State aid rules, in accordance with Article 108(2) of the Treaty on the Functioning of the European Union. Considering, as a possible outcome of the formal investigation procedure, a requirement by the Commission to reimburse the aid received by the operator (representing an amount of €5.3 billion), the French government has initiated in 2024 the implementation of a "structural transformation of Fret SNCF and Rail Logistic Europe (RLE)"<sup>1</sup>. This solution could thus be recognised by the Commission as an "economic discontinuity between Fret SNCF and new entities that could be created", allowing the abandonment of the requirement to repay aid that would be deemed non-compliant with the Treaty.

In practice, the discontinuity plan provides for:

- the gradual withdrawal by Fret SNCF, since the beginning of 2024, of 23 traffic flows known as "dedicated whole trains": as of 30 June 2024, 22 of the 23 flows targeted had been taken over by alternative Fret SNCF operators. In its financial report of June 30, 2024, the SNCF Group indicates that the 39 locomotives used to carry out this traffic "have not been the subject of a request for purchase by the acquiring operators", the latter having wished to use their own rolling stock. The sale of the 39 locomotives could take place in the coming months.
- creation, on 1 January 2025, two new entities within Rail Logistics Europe. A first company, **Hexafret**, will take over the unsold activity of Fret SNCF, specialising in conventional transport in single wagons. A second company, **Technis**, will take over a rolling stock maintenance activity.

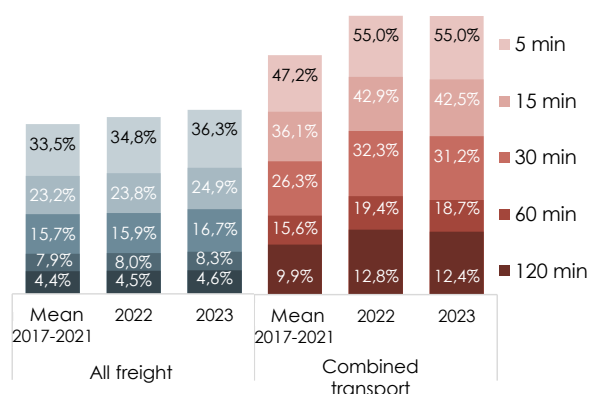
## Further deterioration in freight train punctuality in 2023

In 2023, 16.7% of trains arrived at their terminus more than 30 minutes late, i.e. a deterioration in punctuality of 0.8 points compared to 2022, and one point compared to the period between 2017 and 2021. This trend is observed for all lagging levels, but it is particularly marked for the weakest levels, which are more likely to fluctuate. Thus, punctuality has deteriorated since 2019 by 2.8 points at 5 minutes and by 0.4 points at 60 minutes.

The punctuality of combined transport trains<sup>1</sup> improved slightly between 2022 and 2023, with a delay rate down by 1.1 points at the 30-minute threshold and by 0.8 points at the 60-minute threshold.

However, despite this positive trend, **Delay rates for combined freight remain much higher than those observed on average over the period 2017-2021 and structurally higher than those for rail freight transport**, with 31.2% of trains arriving more than 30 minutes late.

**Figure 4.4 – Freight train terminus delay rate**



Source : ART according to SNCF Réseau

<sup>1</sup> Les sociétés réunies au sein de la branche Rail Logistic Europe sont : Fret SNCF, Captrain France, Naviland Cargo, Ecorail Transport et Normandie Rail Services.

<sup>2</sup> Rapport de l'Assemblée nationale de décembre 2023 fait au nom de la commission d'enquête sur la libéralisation du fret ferroviaire et ses conséquences pour l'avenir (pages 191-193).



# RAIL FREIGHT SERVICES (3/3)

**Freight operators have been able to preserve their revenues by raising prices, but the sector's profitability remains degraded in the context of sharply rising energy costs**

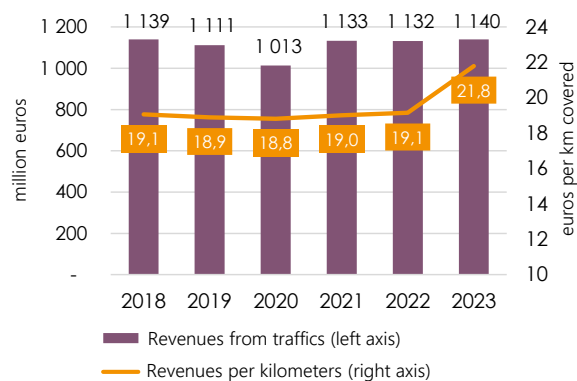
Despite the significant decrease in rail freight transport, railway undertakings managed to maintain (+0.6%) the level of 2023 revenues related to rail traction.

The decline in traffic (-11.6% of train-km) was offset by a strong price effect. **Mileage revenue thus increased substantially (+14%)**, helping to limit the negative impact on revenues of the decline in traffic.

While the sector posted encouraging, but still fragile, economic results in 2021 and 2022, the year 2023 marks a further deterioration in profitability. Considering 10 railway companies representing 97% of tonne-km, the sector suffered an operating loss of around €60 million, whereas it had recorded a positive result of just under €30 million in 2021 (€21 million in 2022). However, these results mask major disparities. Despite the difficult context, six of the ten companies make an operating profit in 2023.

**Higher energy prices weighed on profitability.** Indeed, mileage energy expenditure has more than doubled between 2021 and 2023 (+€1.7/km). They now represent 15% of revenues, compared to 8.4% on average between 2019 and 2021 (see box below).

**Figure 4.5 – Traffic revenue and mileage revenue of rail freight companies (current euros)**



Note : revenues are restated to reflect journeys made on the RFN (excluding international journeys)

Source : ART according to railway undertakings

## Energy expenditure on rail freight transport

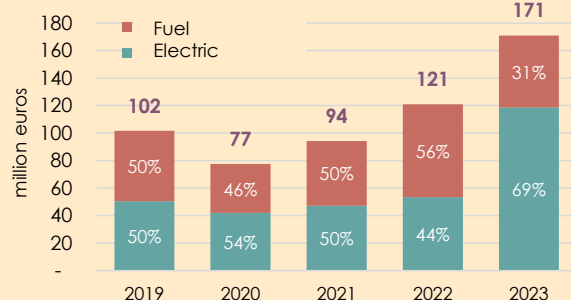
Routes using an electric traction mode are predominant for rail freight transport: nearly 75% of train-km and 81% of gross tonne-km were made with electric traction (average observed between 2019 and 2023).

Between 2019 and 2021, energy expenditure is divided equally between diesel and electricity, due to the higher cost per kilometre of thermal traction.

In 2022, energy expenditure saw a first significant increase mainly due to the increase in diesel prices, bringing the cost of thermal traction from €3.1/km to €4.7/km. Although diesel prices fell partially in 2023, energy expenditure continued to grow, with the sharp increase in electricity prices: the average expenditure of railway companies was €3/km in 2023 compared to €1.2/km the previous year.

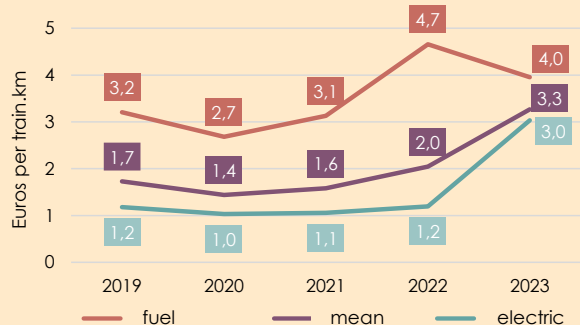
The rail freight sector avoided a price surge that could have been much greater. Many freight railway companies have historically obtained traction energy from SNCF Réseau by paying the electricity supply charge (RFE). SNCF Réseau's purchasing policy has led it to obtain supplies under unfavourable market conditions (€474/MWh in 2023 compared to €112/MWh in 2022). As this quadrupling calls into question the sustainability of the rail freight activity, the Autorité recommended that SNCF Réseau, in the [notice 2023-010 of february 9, 2023](#), to facilitate the termination by railway undertakings of their contractual commitments in relation to the supply of electricity. [ART-France noticed, in February 2024](#), that this recommendation had indeed been implemented by SNCF Réseau, allowing railway companies to seek supply conditions on the markets at more favourable rates.

**Figure 4.6 – Energy expenditure by type of traction<sup>1</sup>**



Source : ART according to railway undertakings

**Figure 4.7 – Energy mileage expenses<sup>1</sup>**



Source : ART according to railway undertakings

<sup>1</sup> Les dépenses d'énergie sont établies sur le déclaratif des entreprises ferroviaires ayant répondu et représentant 88 % des train-km. Afin d'être représentatives de l'ensemble du transport ferroviaire de marchandises, ces dépenses sont extrapolées. L'extrapolation s'appuie sur le prix et la consommation kilométrique moyenne constatée des entreprises répondantes en litre de gasoil et en kWh.

## RAIL PASSENGER SERVICES (1/6)



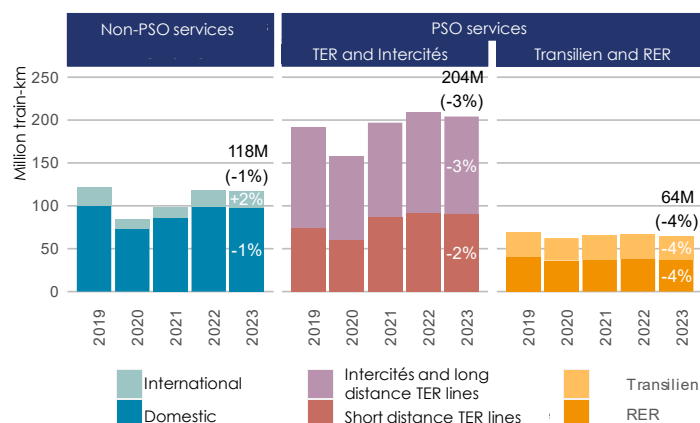
	Level (2023)	Annual change (2022-2023)	4-year change (2019-2023)
▪ Rail passenger transport offer (train-km)	386 millions	-2 %	+1 %
▪ Rail passenger transport offer (seat-km)	210 billions	+0 %	+1 %
▪ Train carrying capacity (seats per circulation)	544	+2 %	-0 %
▪ Attendance (passenger-km)	107 billions	+5 %	+8 %
▪ Occupancy rate of rail transport	51 %	+2 points %	+3 points %
▪ Share of non-PSO activities	30 % (train-km)	+0 point %	-1 point %
	61 % (pass-km)	+0 point %	+0 point %
	77 % (occ-rate)	+3 points %	+5 points %

### The offer of non-PSO rail services remained down in 2023 by 3% compared to 2019

Over one year, rail supply, measured in train-km, is down slightly, in particular due to the strikes of March 2023, by around -1% for non-PSO services (domestic and international high-speed trains – hereinafter non-PSO) and by almost -2% for PSO services (Intercités, TER or Transilien-RER). Outside the periods affected by strikes, however, the supply is up 2% per year. Compared to 2019, the offer of non-PSO rail services remains down by nearly -3% and that of PSO services in Île-de-France (Transilien and RER) by -7%, while the offer of TER and Intercités PSO services has exceeded its pre-crisis level since 2021.

The decline in the number of trains operated by non-PSO services, observed since 2015, continues, while seat-km increased slightly, benefiting from a trend increase in the carrying capacity of high-speed trains in France. Carrying capacity also increased overall for contracted services in Île-de-France, due to a 5% increase for RER trains, but remained stable for TER and Intercités trains.

Figure 5.1 – Passenger rail services  
(million train-km – 2023/22 developments in brackets)



Source : ART according to railway companies and RATP

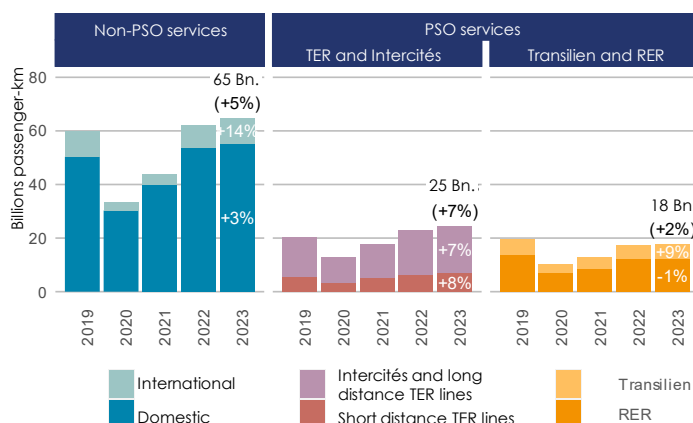
### The number of rail passenger is up sharply and reached a record level in 2023

With 107 billion passengers.km transported, rail ridership reached a record level in France for the second consecutive year, 5% higher than in 2022 for non-PSO services as well as for PSO services. Among the latter, the trends are contrasted between the Île-de-France services, with a relative increase of 2% in traffic, and the TER and Intercités services, which have seen a 7% increase in traffic. Thanks to already significant growth in 2022, ridership on TER and Intercités services is well above its 2019 level (+21%), while it remains below for PSO services in Île-de-France (-9%).

The use of non-PSO services has also increased sharply (+5% since 2022 and +8% compared to the 2019 level), driven in particular by the later resumption of international journeys, up +15% year-on-year and 5% higher than the 2019 level of ridership.

The annual increase in passenger rail ridership occurred despite the strikes of spring 2023, which led to a sharp drop in train ridership during the month of March for all services (-8% on average compared to March 2022 and -15% for non-PSO domestic services). Outside of March, the annual growth in attendance reached 6%.

Figure 5.2 – Passenger rail use  
(in billions of passenger-km – 2023/22 developments in brackets)



Source : ART according to railway undertakings and RATP



## RAIL PASSENGER SERVICES (2/6)

## Occupancy rates continue to increase for all rail services

The growth in ridership contributed to the increase in occupancy rates for all services in 2023. Up 3 points, the average occupancy rate of non-PSO services (domestic and international) reached 77% in 2023.

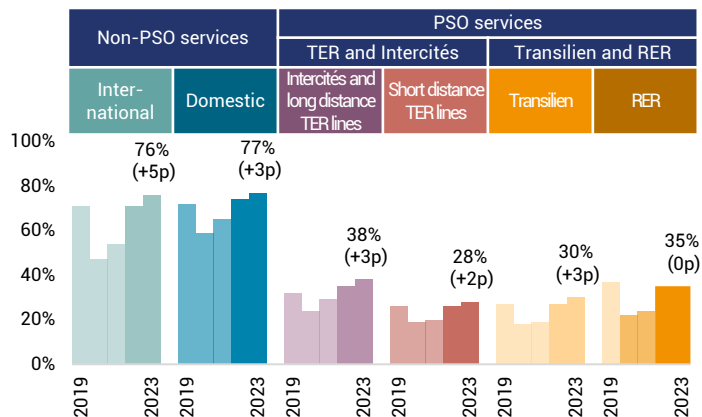
This development continues a long-term trend of optimising train payloads, with the occupancy rate of HST services increasing by more than 14 points since 2015. Coupled with an increase in train carrying capacity, the number of passengers transported per traffic has increased by an average of more than 150 passengers in eight years, to exceed 550 passengers on average.

The PSO services also saw their occupancy rate increase and reached an average of 34%. This seemingly low average masks strong disparities, for each PSO service (the rate is 10 points higher for lines of more than 100 km (38%) compared to local TER routes (28%)) but also within PSO services (between off-peak and peak hours and between proximity to main stations and the ends of lines).

## Passenger train ridership increased by more than 10% in Europe in 2023

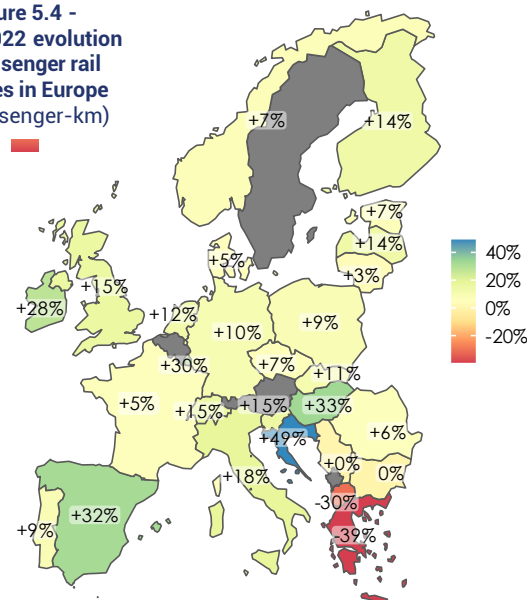
This increase in 2023 is the result of a return (which was still partial in 2022) to the levels observed before the health crisis for **several countries**. Passenger train ridership has thus returned to 97% of the 2019 level in Italy, while Germany and Switzerland recorded levels higher in 2023 by +4% and +3% above their respective pre-crisis levels. **However, Spain differs very clearly from all European countries by an annual growth of more than 30%.** This increase follows the strong development of the domestic rail offer in a now competitive market, and has led to a 2023 passenger level in Spain that is 18% higher than the level set in 2019. On the other hand, despite an annual growth rate of 15% in 2023 in the United Kingdom, there was a low catch-up rate in passenger numbers, representing only 84% of the 2019 level in 2023.

**Figure 5.3 – Passenger train occupancy rate  
(in % – 2023/22 changes in PP in brackets)**



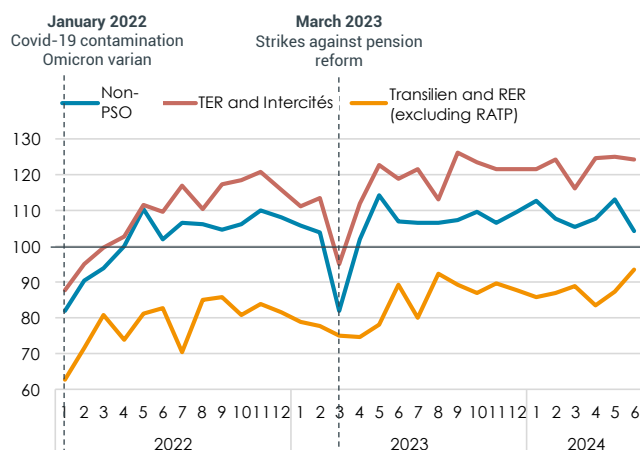
Source : ART according to railway undertakings and RATP

**Figure 5.4 -  
2023/2022 evolution  
of passenger rail  
services in Europe  
(in passenger-km)**



Source : Eurostat (Europe outside France), ORR (United Kingdom) and ART (France)

**Figure 5.5 – Monthly Rail Service Ridership**  
(base 100 in 2019)



*Note : Comparison with November 2019 for the months of December to correct for the effect of the 2019 end-of-year strike.*

*Source : ART according to railway undertakings and RATP*

**In the first half of 2024, rail ridership remains more than 10% below the 2019 level for services in the Ile-de-France region, while it has stabilised at 2023 levels for other services.**

After a strong catch-up in attendance in the first half of 2022 and a record year in 2023 despite the strike in March, **Rail ridership levels for domestic services appear to be stabilising in the first half of 2024:**

- Attendance at non-PSO services is hovering around 10% above its 2019 level;
- The use of PSO services outside Île-de-France is 20% higher than in 2019;
- On the other hand, Transilien and RER services remain in sharp decline at the beginning of 2024 and seem to reach a cap at around 90% of the 2019 level, confirming a lasting break for these services.

# RAIL PASSENGER SERVICES (3/6)

**At the end of 2023, the rolling stock fleet in France had more than 4,000 motor vehicles, including 363 high-speed trains from the incumbent railway undertaking, nearly minus 40 trains compared to 2019.**

**Note on terminologies used:** Passenger rail rolling stock is divided into motor vehicles (locomotives and self-propelled units) and towed vehicles (coaches). The combination of these elements can form multiple units (composed of one or more self-propelled units) or towed/pushed trains (composed of a locomotive coupled to coaches).

At the end of 2023, the railway fleet "in service" in France had more than 6,300 elements<sup>2</sup>, of which 61% were self-propelled vehicles, 6% locomotives and 33% coaches. The high-speed fleet has only self-propelled vehicles, including 363 trains operated by SNCF Voyageurs for the domestic and international services in OUI and Ouigo, and 51 trains operated by Eurostar. These figures confirm the sharp decline in the number of high-speed trains in service in France over the last ten years, while this fleet had more than 400 trains (excluding Eurostar) at the end of 2019 and more than 450 trains 10 years ago<sup>3</sup>. Unlike Ouigo Grande Vitesse services, Ouigo Train Classique operates trains pulled on the basis of 9 locomotives and 36 "Corail" coaches. Finally, Trenitalia's activity in France, with 5 daily trains scheduled for 2023, mobilizes a rather minor part of the fleet of 50 Frecciarossa trains that the operator exploits for all its high-speed activities in Italy, Spain and France.

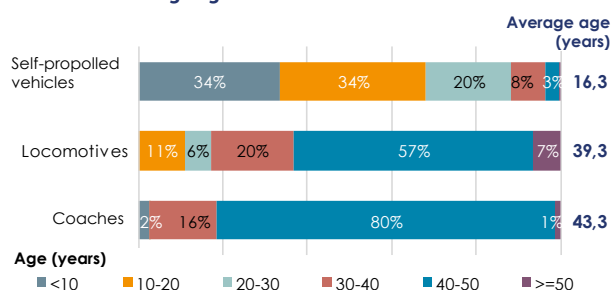
TER PSO activities are operated by more than 2,000 self-propelled vehicles and, for 7 out of 11 regions, by towed trains (via a fleet of nearly 180 locomotives - cf. [Appendix 5.1](#)). At the end of 2023, the TER fleet consisted of more than a quarter (26%) of diesel equipment and 23% of dual-mode equipment. While only 11% of locomotives use thermal energy, this rate is 27% for self-propelled vehicles. This volume of thermal equipment therefore appears to be significant in relation to the use of this equipment (less than 15% of TER train-km). This can be explained by the higher degree of use of dual-mode and electric equipment within TER services. The Nouvelle Aquitaine, Bourgogne-Franche Comté and Grand Est regions have the highest rates of thermal equipment, representing a third or more of their overall fleet.

**The average age<sup>4</sup> of rolling stock operated on the French market is nearly 27 years.**

This average masks strong disparities between families of equipment and between activities (cf. [Appendix 5.2](#)). With an average age of 15.6 years, the HST fleet has 14% of trains between 30 and 35 years old. Despite possible operations to extend their lifespan (from +2 to +10 years<sup>5</sup>), this is putting more pressure on the overall fleet in operation, in addition to the difficulties and delays observed in the commissioning of new high-speed rolling stock<sup>6</sup>.

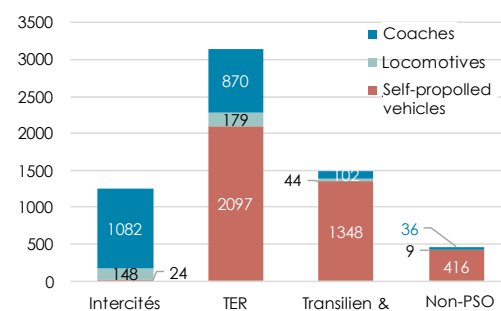
The Transilien-RER fleet is, on average, less than 20 years old, which is almost 5 years less than the TER fleet. Indeed, more than 30% of equipment in the Île-de-France region has been renewed over the last decade. This is also the case for the Pays de la Loire, Brittany and Nouvelle Aquitaine regions, resulting in a fleet that is more than five years younger than in the other regions. However, at the end of 2023, the average age of rolling stock was approaching 30 years in the Provence-Alpes-Côte d'Azur, Centre-Val de Loire and Grand-Est regions.

**Figure 5.8 – Distribution of the fleet<sup>2</sup> by age category and average age<sup>4</sup> of the fleet at the end of 2023**



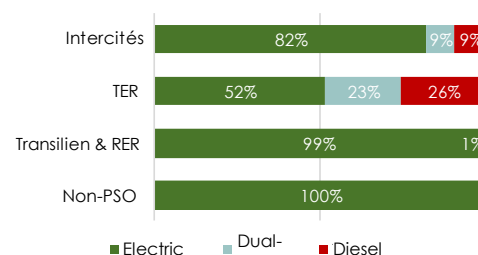
Source : ART according to railway undertakings and IDFM

**Figure 5.6 – Passenger rolling stock<sup>2</sup> in service on the French rail market at the end of 2023**



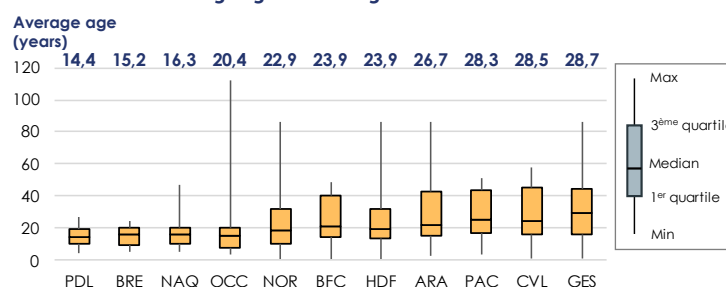
Source : ART according to railway undertakings and IDFM

**Figure 5.7 – Distribution of vehicles<sup>2</sup> by traction energy**



Source : ART according to railway undertakings and IDFM

**Figure 5.9 – Distribution of the regional TER fleet by age and average age<sup>4</sup> of the regional fleet at the end of 2023**



Source : ART according to SNCF Voyageurs

<sup>1</sup> Unlike locomotives, self-propelled vehicles are composed of driving elements that are most of the time associated with load-bearing elements that are inseparable in their commercial use. The functions of traction and payload transport are intertwined and therefore carried out by the same vehicles, unlike towed trains, where the locomotive that provides traction can be dissociated from coaches (payload transport).

<sup>2</sup> Excluding equipment operated by Trenitalia France, Renfe Viajeros and Deutsche Bahn (for France-Germany services in partnership with SNCF Voyageurs).

<sup>3</sup> According to [study of September 2023](#) of the consulting firm trans-missions.

<sup>4</sup> The age of the rolling stock is the time (in years) that has elapsed between the date of entry into service and the reference date (here, 31 December 2023). This calculation includes new equipment as well as renovated and/or recomposed equipment. The average age of a fleet is the average age of all its components (self-propelled vehicles, locomotives, coaches).

<sup>5</sup> According to [SNCF Voyageurs « deprogrammed obsolescence » programme](#).

<sup>6</sup> See in particular [an article of the newspaper Le Point from septembre 1st 2024](#).

## RAIL PASSENGER SERVICES – STATE OF THE OPENING TO COMPETITION (4/6)

**By the end of 2024, 7 approved rail tender lots had been awarded following a competitive bidding process, including 3 to alternative operators**

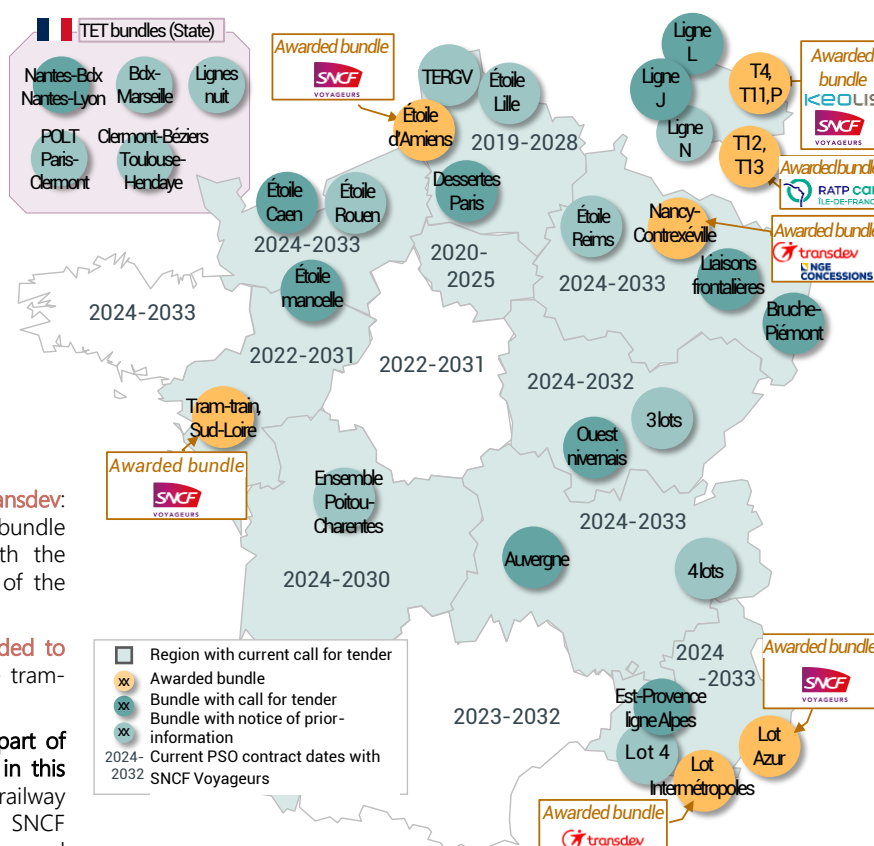
As provided for in the fourth European railway package, the competitive bidding of PSO rail services has been mandatory in France since 25 December 2023.

At the end of 2024:

- ▶ **4 bundles have been awarded to the incumbent**  
**RU SNCF Voyageurs** (and the grouping Keolis-SNCF Voyageurs in Île-de-France) : the bundle **Azur** (region Sud PACA), the bundle **Étoile d'Amiens** (Hauts-de-France), the bundle **Tram-train Sud-Loire** (Pays de la Loire) et, en Île-de-France, the bundles of lines **tram-train T4 and T11** (and a branch of the P line).
- ▶ **2 bundles have been awarded to the operator Transdev**: the bundle **Intermétropoles** (Sud PACA) and the bundle **Nancy-Contrexéville** (Grand-Est), integrating both the resumption of operation and the management of the railway line.
- ▶ **Finally, 1 bundle in Île-de-France has been awarded to RATP Cap Île-de-France**, constitué des lignes de tram-train T12 et T13.

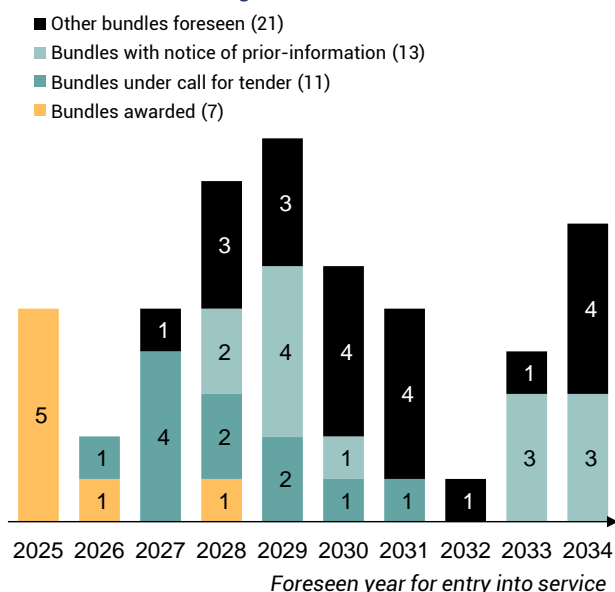
The regional bundles “Azur”, “Étoile d’Amiens” and part of “Tram-train Sud-Loire” are the first to be operated in this context, from December 2024 by dedicated railway companies subsidiaries of the incumbent operator: SNCF Voyageurs Sud Azur, SNCF Voyageurs Étoile d’Amiens and SNCF Voyageurs Loire Océan. The Intermétropoles bundle will be operated from June 2025 by Transdev Rail Sud Intermétropoles.

**Figure 5.10 - Lots awarded/in the process of being tendered for the opening up of PSO services to competition and dates of the operating agreements in force**



Source : ART according to BOAMP / TED communications

**Figure 5.11 - Bundles awarded/in the process of being called for tenders for the opening up to competition of PSO regional services**



Source : ART according to BOAMP / TED, communications from Regions and [rapport 2024 de la Cour des Comptes](#) (Appendix n°2)

*Reading note for graph 5.11: at the end of 2024, 8 bundles have been announced to be put into service for the 2028 service schedule, including, to date, 1 bundle awarded (Nancy-Contrexéville), 2 bundles under a call for tenders (Dessertes parisiennes and line J), 2 bundles are the subject of a pre-information notice (Étoile de Lille and Ensemble Poitou-Charentes), and 3 additional lots are planned by the regions for the start of operation by this time (lines R, P and E in Île-de-France).*

**More than 40 approved bundles will still have to be awarded by competitive bidding by 2034**

The provisional timetable for the competitive bidding of the regions' rail supply bundles shows a strong risk of "congestion" between now and the regulatory deadline for the end of the current delegations (calendar opposite, detailed by planned year of commissioning of the bundles):

- ▶ **28 TER and Transilien bundles still not awarded plan to be put into service by 2030.** Of these, only 10 had been the subject of a call for tenders by the end of 2024, 7 others had been the subject of a prior information notice and 11 had been the subject of a simple public announcement by the regions.
- ▶ **17 other bundles foreseen by the regions for commissioning by 2034 have been the subject, at best, of a simple pre-information for competitive bidding.** In addition to these bundles, the regional offers under agreement from the Centre-Val-de-Loire, Occitanie and Brittany regions, have not been structured so far into bundles, and regions have not informed about the provisional timetable for their competition between now and the expiry of their current agreement (scheduled between 2031 and 2033 for these three regions).

This tight timetable reduces the available time slot to award regional rail services through a competitive bidding process, and to benefit from the contributions already observed at the French and European levels of this competitive bidding process (see next page), without threatening the ability of railway undertaking to apply for it.

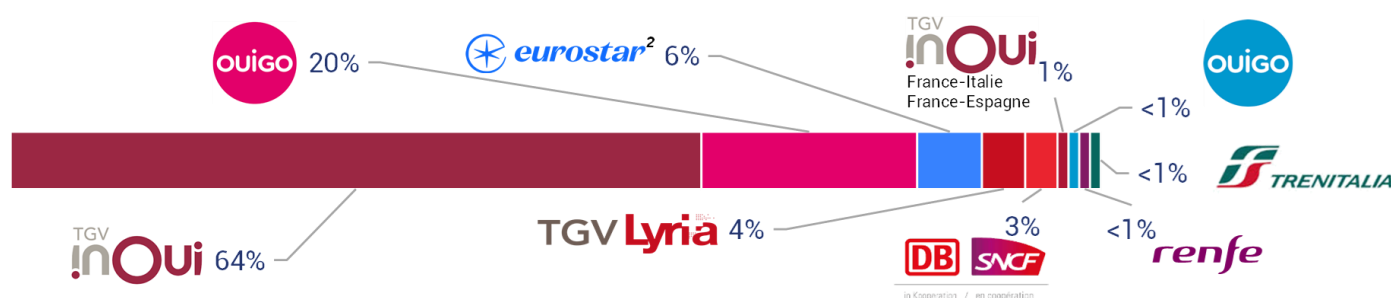
# RAIL PASSENGER SERVICES – STATE OF THE OPENING TO COMPETITION (5/6)

## The opening of the market for non-PSO rail services in France remains very gradual in 2023

In 2023 as in 2022, non-PSO rail activity in France remains largely dominated by the various brands and subsidiaries of high-speed services of SNCF Voyageurs, which represent, in the aggregate of the operators inOui et Ouigo, nearly 85% of the market share, ahead of the subsidiaries of the SNCF group Eurostar (6%) and Lyria (4%), the SNCF partnership with Deutsche Bahn (3%), and the two new railway undertakings Trenitalia France (Italian incumbent RU) and Renfe Viajeros (Spanish incumbent RU) each of which represents less than 1% of the market share. Since October 2023, Eurostar absorbed the Thalys brand into its network, now serving France, the United Kingdom, Belgium, the Netherlands and Germany.

At the end of 2024, direct non-PSO competition was limited to the Paris-Lyon line : operated by both Trenitalia France and SNCF Voyageurs, the extension to Italy of this direct rail service by the two operators remains cut off (at least until the first quarter of 2025) since the Maurienne landslide of 27 August 2023 and is only offered via a replacement coach junction by SNCF Voyageurs. Renfe Viajeros operates two international routes (Lyon-Barcelona and Marseille-Madrid), without direct competition for the time being with the incumbent operator, which operates on the Paris-Barcelona route. The Spanish operator has announced, for 2025, the opening of new cross-border lines to Toulouse, as well as the commissioning of new rolling stock (AVE s-106) with much higher capacity (500 seats) than that of its current trains. The rail service between Paris and Berlin has also been opened both by night train since December 2023 by the Austrian operator ÖBB Nightjet (in addition to the Paris-Vienna night service operated since the end of 2021) and, on a daytime train since December 2024, by the partnership DB-SNCF Voyageurs in cooperation.

Figure 5.12 – 2023 ridership of non-PSO rail services in France<sup>1</sup>  
(% of the number of voyageurs.km transported in France)



Source : ART according to railway undertakings

Two new notifications of non-PSO rail services were received by the ART in the second half of 2024, concerning the high-speed service, planned from 2025 by Trenitalia France, on the line from Paris (Gare de Lyon) to Lyon (Saint-Exupéry) and Marseille (4 trains per day), as well as the strengthening of the rail service operated on the Paris-Milan line through the marketing of all services between French stations (between Lyon stations and Chambéry station in particular) and the service to Saint-Jean de Maurienne station. These notifications add to other projects made public by several actors :

- Domestic offer projects : the railway undertakings Le Train and Proxima plan to operate services in the west of France, while the operator Kevin Speed aiming to offer a high-frequency service (16 trains per day) from Paris to Lille, Strasbourg and Lyon. In this regard, the latter has signed with SNCF Réseau 3 capability framework agreements, constituting the first implementation of such a scheme in France, for which the Autorité has issued recommendations in its [advisory opinion](#).
- International offer projects : the railway undertakings Arriva, Evolyn, Virgin Trains and Heuro plan to operate on services between Paris, London and Brussels, and night train offer for the company European Sleeper.

The night train project of Midnight Trains was stopped in 2023, as were those of Railcoop et Flixbus, previously planned on the French rail network.

## Competition from the operators SNCF Voyageurs, Trenitalia and Renfe has led to increases in the rail offer above 10% and the continued pressure on prices in an inflationary environment

In 2023, an average of 160 daily trains were operated on the Paris-Lyon axis by the TAGV InOui (still providing more than three-quarters of the services), Ouigo (18% of high-speed trains on the axis) and Trenitalia (6% of the train service).

The number of traffic on the Paris-Lyon axis was thus 13% higher in 2023 than in 2019, and stable compared to 2022, despite the impacts, on the one hand, of the 2023 social movements (which led to the cancellation of nearly 1/5th of the scheduled traffic), and on the other hand, of the interruption, as of August 2023, of France-Italy rail traffic, following the landslide in the Maurienne, which represents nearly 8% of the traffic on the Paris-Lyon axis.

Passenger numbers on the Paris-Lyon route in 2023 were also almost 10% higher than in 2019, while the average price level on this route remains almost 10% below the level observed before the opening to competition.

On the France-Spain international route, the arrival of the operator Renfe Viajeros in the second half of 2023 also generated growth in overall supply, about +15% compared to the second half of 2022.

<sup>1</sup> Night train services in partnership with ÖBB Nightjet – SNCF Voyageurs operated between Paris and Vienna and Paris and Berlin are not shown on this graph with a significantly lower weight than other services in 2023.

<sup>2</sup> The Thalys trademark disappeared in October 2023 following the merger of Eurostar and Thalys into the Eurostar Group holding company.



# RAIL PASSENGER SERVICES – STATE OF THE OPENING TO COMPETITION (6/6)

## European assessments of the opening up of PSO and non-PSO rail services

### Non-PSO rail competition has led to beneficial effects in terms of traffic induction and price reductions in Europe

Non-PSO competition on the domestic rail markets has been effective and noticeable for several years now in Italy and Spain:

- Since 2012, in Italy, the operator of high-speed trains **Italo S.p.A.** (formerly NTV) is in direct competition with the incumbent operator **Trenitalia** on a large part of the Italian network ;
- Since 2021, in Spain, operators **Ouigo** et **Iryo**, subsidiaries of the French and Italian incumbent operators, operate in competition with the RU **Renfe Viajeros**. In order to prevent rail operators from favouring the rail routes with the greatest potential, the Spanish rail network operator (ADIF) has created three lots, each comprising the three main axes of the high-speed network from Madrid (Barcelona, East-Valencia-Murcia, South-Seville-Málaga), thus obliging the new entrants and the incumbent operator, holders of these bundles, to run trains on all three axes.

The arrival of this competition has had similar positive effects on the development of the rail mode, according to three studies<sup>1</sup> :

- ▶ **an increase in supply**: in Spain, between 2019 and 2023, the number of available seats increased by +60% on the Madrid-Barcelona, Madrid-Levante and Madrid-Sud routes. In Italy, train-km supply on the high-speed line (HSL) network increased by around +80% from 2012 to 2019, thanks to the combined effect of the opening up to competition and the development of the network. For example, on the Rome-Milan line, between 2010 and 2013, train frequency increased by +56.4% ;
- ▶ **a drop in prices**: on average, in Europe, prices fell by -28% after opening up to competition, with great variability depending on the route. These declines were also observed in Spain, representing up to -40% on the competing lines with 3 operators<sup>2</sup>. In Italy, on the other hand, the observed fall in prices seems to have been only temporary<sup>3</sup> and it is difficult to dissociate the effects of a concomitant reduction in railway tolls ;
- ▶ **increased demand** : in Italy, demand on high-speed lines increased by +64% between 2012 and 2017 according to the European Commission, while the FS Research Centre (the historic Italian railway group's centre for mobility studies) indicates that the number of passenger-km on high-speed lines doubled between 2012 and 2019 ;
- ▶ **an increase in the modal share of trains, in particular trains operating on high-speed lines**: in Spain, the modal share of rail (within public transport) has increased, at the national level, by +5pts% between 2019 and 2023<sup>4</sup>. In Italy, the rail modal share increased by +24pts% on the Milan-Rome route between 2012 and 2023, including +18pts% over the first 5 years of opening up to competition;
- ▶ **an improvement in the quality of service for rolling stock (new equipment<sup>5</sup>, new on-board services)**, greater differentiation of service levels and associated prices, but an increase in delays: for example, in Spain, the average delay time increased by +21% between 2019 and 2023.

### The competitive bidding of rail transport services under contract in Germany confirms the beneficial effects also anticipated in France

**In Germany**, the introduction of competition between regional rail services has enabled the organizing authorities to make significant savings, representing, according to the European Commission's study, a total amount of €0.2 billion over the period 2005-2019, and a decrease in public assistance of €14 to €11 per 100 passenger-km over the same period. These savings were not reflected in the price paid by the users of these services, but in **an improvement in the offer (in terms of frequency of services offered, in particular)**, which may have favoured the **observed increase in attendance** (by more than 50%) for these services between 2002 and 2019.

**In France**, the first tenders for public rail passenger transport services anticipate similar effects:

- ▶ **a sharp increase in rail supply** for the first 4 regional bundles awarded (including a near doubling for the 2 bundles in region Sud-PACA);
- ▶ **for identical or significantly lower cost for organizing authorities** (by more than 20% for bundles in the Hauts-de-France and Pays de la Loire regions);
- ▶ **as well as more incentive contractual conditions** (penalties, termination conditions, etc.).

<sup>1</sup> This analysis repeats the conclusions drawn: (1) for Spain from [Report on the liberalisation of passenger rail transport](#), CNMC (2024), (2) for Italy [A short history of high-speed rail development in Italy](#), Mario Tartaglia, FS Research Centre/RFI (2024), (3) for the European average of [Study on passenger and freight rail transport services' prices for final customers](#), Commission européenne (2024).

<sup>2</sup> A smaller decrease (between -10% and -24%) was also observed on more recently opened routes operated by only 2 operators

<sup>3</sup> According to the European Commission, prices fell by -31% between 2011 and 2012. However, the FS Research Centre indicates that, while the TGV price index fell sharply after the arrival of NTV (20% decrease), it recovered in 2017 to 90% of the level observed before the arrival of the competition.

<sup>4</sup> This modal share would have increased on the Madrid-Barcelona route by +25 pts% over the first two years of opening up to competition.

<sup>5</sup> In Italy, the new entrant NTV introduced new rolling stock in 2012 and 2017, which may have had an incentive effect on the incumbent operator, which renewed part of its rolling stock in 2015.



	Level (2023)	Annual change (2022-2023)	4-years change (2019-2023)
▪ Number of stations with little or no service*	140	-10 stations	+13 stations
▪ Average number of daily services per station	37	-2 %	+4 %
▪ Average daily passengers per station	2 703	+7 %	+2 %
▪ Average number of passengers per train	74	+10 %	2 %
▪ Station charge	923 M€	+7 % (real term)	+9 % (real term)
▪ Unified base service per train departure	24,3 €	+8 % (real term)	+4 % (real term)

**Note on the segmentation of passenger stations presented in this chapter:**

The reference document for passenger stations ("DRG") drawn up by SNCF Gares & Connexions defines the conditions, in particular fares, for access to stations, and is subject to the assent of the Authority. The DRG is based on a classification of passenger stations reviewed every three years according to the volume and typology of traffic of the previous two years. Four classes of stations have been defined<sup>1</sup> in the 2023 DRG classification for the period 2023-2025: **category A**, including stations with more than 0.25 million national or international passengers, or where these same passengers represent 100% of passengers, sub-split in a category of « **very large A stations** » (TGA) (welcoming more than 7 million passengers/year) ; **category B**, concerning stations with more than 0.1 million passengers/year; and **category C**, including the so-called "local interest" stations, concerning stations of less than 0.1 million passengers/year.

<sup>1</sup>According to the definitions adopted by the Decree of 9 July 2012 (amended by the Decree of 15 June 2023) implementing Article 13-1 of Decree No. 2003-194 of 7 March 2003 on the use of the national rail network.

### More than 100 railway stations of local interest are poorly served or not served by rail services in 2023

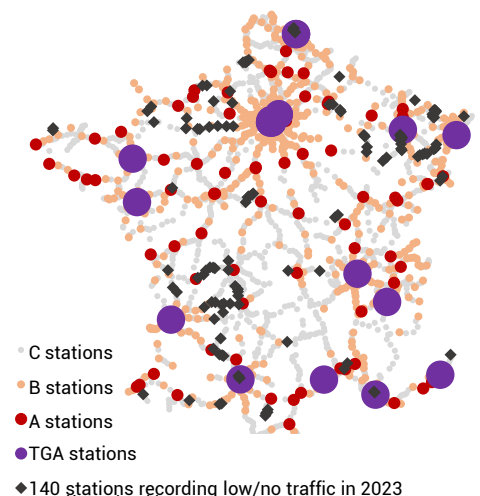
In 2023, the panel of passenger stations in France includes **21 «very large A stations»** (including six stations in Paris city and the Paris-CDG airport station), **79 other A stations** (including 17 stations dedicated to high-speed services), **919 B stations** (including **346 stations in Île-de-France**, for chapter analyses in a « **BIDF** » category), and more than 1 900 stations of local interest (C stations).

22 Category A and 99 Category B stations have been "downgraded" from the previous DRG classification to the lower B and C categories respectively (cf. map in appendix 6). This downgrading, which affects the pricing level of these stations for the three years 2023 to 2025, thus reflects, for several of them (excluding possible threshold effects), a significant decrease in the average traffic observed over the period 2021-2022 compared to the period 2018-2019 due to the health crisis. At the same time, 7 stations have moved from category B to category A, reflecting an increase in traffic.

140 stations of local interest (out of the total of 2,965 stations and railway stops in the RFN) are poorly (or not at all) served\* in 2023, a stable volume since 2019. This panel, which concerns nearly 1 in 10 stations in the Normandy, Grand Est and Nouvelle-Aquitaine regions, includes stations on lines that are partially or totally closed in 2023, or that offer a single coach service in 2023.

In addition, all stations host PSO services (TER, Intercités or Transilien-RER), but non-PSO services, which account for nearly two-thirds of the passagers.km transported, serve only 6% of stations (185) in 2023 (a level that has remained stable since 2019).

**Figure 6.1 – 2023-2025 ranking of stations and stations with very little/no service in 2023**



Source : ART according to SNCF Gares&Connexions

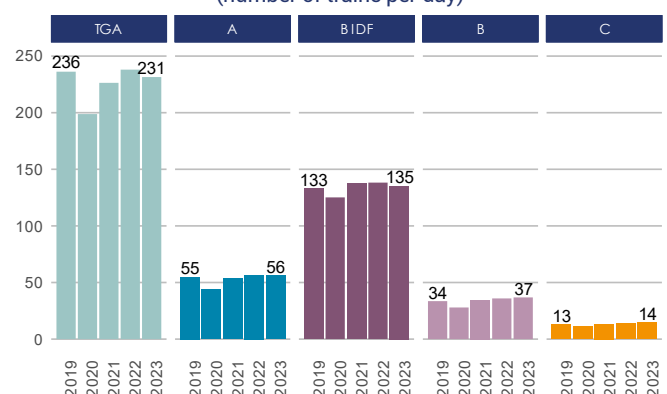
### Very large stations have seen the largest annual variations in their level of rail activity

The level of service at stations (measured in train frequencies) contracted slightly in 2023 compared to 2022 (-2%), following the evolution of the offer in train-km, but remains significantly higher than the pre-crisis level of services (+4%) thanks to a clear increase in the Intercités and TER offer over the period (+7%). TGA stations, which concentrate much more activity than other stations with more than 200 services per day on average, have thus seen the strongest changes since 2019, due to stronger annual variations in the non-PSO rail offer compared to the TER and Transilien offers.

The high heterogeneity of French stations can be observed with regard to the average level of service of stations, representing nearly 135 trains per day in Île-de-France, compared to nearly 10 times less for stations of local interest.

\* For this analysis, a railway station is considered to be regularly served (or, conversely, "underserved") if it has seen at least 50 train services (arrivals/departures) during the year.

**Figure 6.2 – Average frequency of station service (number of trains per day)**



Source : ART according to SNCF Gares&Connexions

# RAIL PASSENGER STATIONS (2/3)

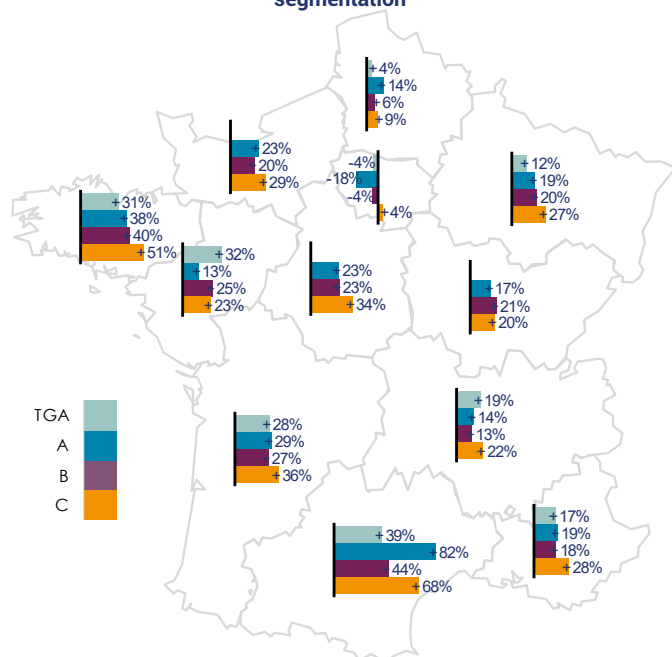
**Despite an average decrease in the supply of trains in stations in 2023, the number of trains carried and the overall number of passengers at stations has increased since 2019 for all categories of stations outside Île-de-France**

With 2,700 passengers welcomed daily, the average number of passengers per station has increased by 7% in one year and exceeded the pre-crisis level by 2%. This growth is explained by the increasing number of passengers per service (+10% in 2023) which exceeded the 2019 level for all services, excluding PSO services in Île-de-France.

In the stations of categories A, B outside Île-de-France and C, the average daily volume of passengers has far exceeded the level of 2019 (respectively +19%, +18% and +27%, at constant scope of the 2023 segmentation), thanks to a sharp increase in passenger volumes per service, benefiting from the growth of TER and Intercités contracted services. In terms of passenger volume, these services represent 85% of the number of passengers at stations outside Île-de-France and have seen an increase of +21% since 2019, and even +29% excluding connections to/from Paris stations. The share of national traffic handled at these stations has increased sharply since 2019, from 19% to 22% of passengers in 2023.

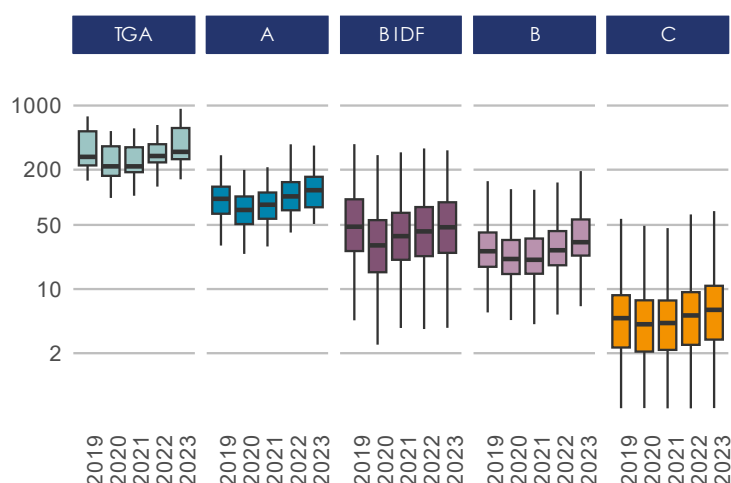
On the other hand, stations in Île-de-France (categories TGA and B) saw their passenger numbers increase in 2023, but remain lower than in 2019, due to the more moderate recovery of Transilien-RER services. Category B stations in Île-de-France have seen their average frequency of services exceed the 2019 level in 2023 (partly due to the entry into service of several tram-train lines), but a decline in ridership (-7%) due to an increase in the number of passengers per train but still lower than that observed in 2019.

**Figure 6.5 – 2023/2019 evolution of the number of passengers at the station according to the 2023 DRG segmentation**



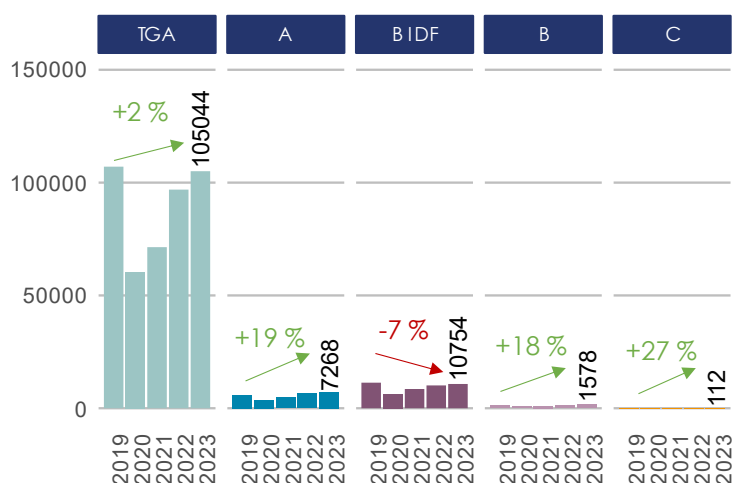
Source : ART according to SNCF Gares & Connexions

**Figure 6.3 – Distribution of the number of passengers by service (logarithmic scale)**



Source : ART according to SNCF Gares & Connexions

**Figure 6.4 – Average daily passengers per station**



Source : ART according to SNCF Gares & Connexions

**Since 2019, station traffic has increased in all regions, with the exception of Île-de-France, in contrasting proportions**

Passenger numbers in stations (excluding TGA stations) in the various regions increased sharply between 2019 and 2023 (+21%). This increase was particularly significant in the Occitanie region, where the growth in passenger numbers at category A stations (+82%) was boosted by the opening of the new Montpellier Sud de France station (in July 2018) and Nîmes Pont du Gard station (in December 2019) stations. The Occitanie and Brittany regions also saw the strongest TER traffic increase over the period (more than 50% in passenger-km).

Conversely, the Hauts-de-France region saw its volume of passengers welcomed at stations grow the slowest between 2019 and 2023, reflecting a weaker dynamic in TER traffic over the period (+2% of passenger-km).

The Île-de-France region is the only one whose station ridership remains below its 2019 level (-4%), due to a structural decline in Transilien traffic since the health crisis.



# RAIL PASSENGER STATIONS (3/3)

## Unregulated activities account for between 7% and more than 45% of station revenue

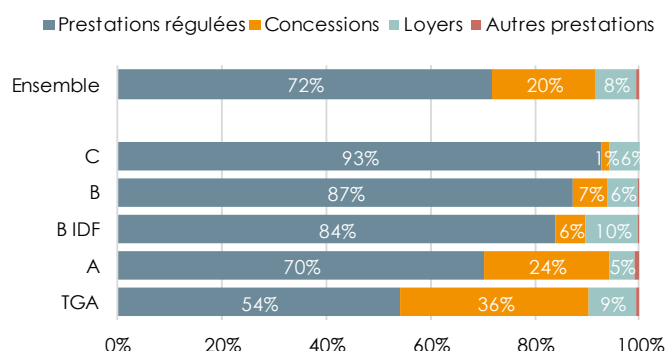
The activity of railway stations, as well as that of bus stations or airports, includes a breakdown of regulated and unregulated activities: regulated activities include all the essential services provided to railway undertakings for the use of basic infrastructure and the rental of space at stations (in particular for ticketing activities). Unregulated activities include all other services developed in stations: commercial services, concessions of available spaces, car parks, etc. Station revenues are therefore made up of the fees (or rents) associated with all these activities and collected by SNCF Gares & Connexions from railway companies and other customers of railway stations.

In 2023, revenues from regulated activities represented 72% of revenues from station activity. The weight of unregulated activities is the greatest for category A and TGA stations. Commercial concessions represent 24% and 36% of revenues respectively, compared with less than 7% for category B and C stations.

**Note :** non-regulated activities are part of SNCF Gares & Connexions' station business model and may affect the level of regulated charges. The principle of retrocession for passenger stations provides that « 50% of the profit from the non-regulated activities of a management perimeter<sup>1</sup>, when positive, may be used to reduce the expenses of regulated activities, within the same management perimeter » (point 7.1.1 du DRG 2023).

<sup>1</sup> For station of category B or C, the management perimeter corresponds to all the stations which belongs to the segment (B or C) of a given region. For stations of national interest, the management perimeter corresponds to a passenger station or a functional group of passenger stations.

**Figure 6.6 – Structure of revenue from the management of passenger stations**



Source : ART according to SNCF Gares & Connexions

## Fees sharply increased in 2023 to cover the increase in expenses

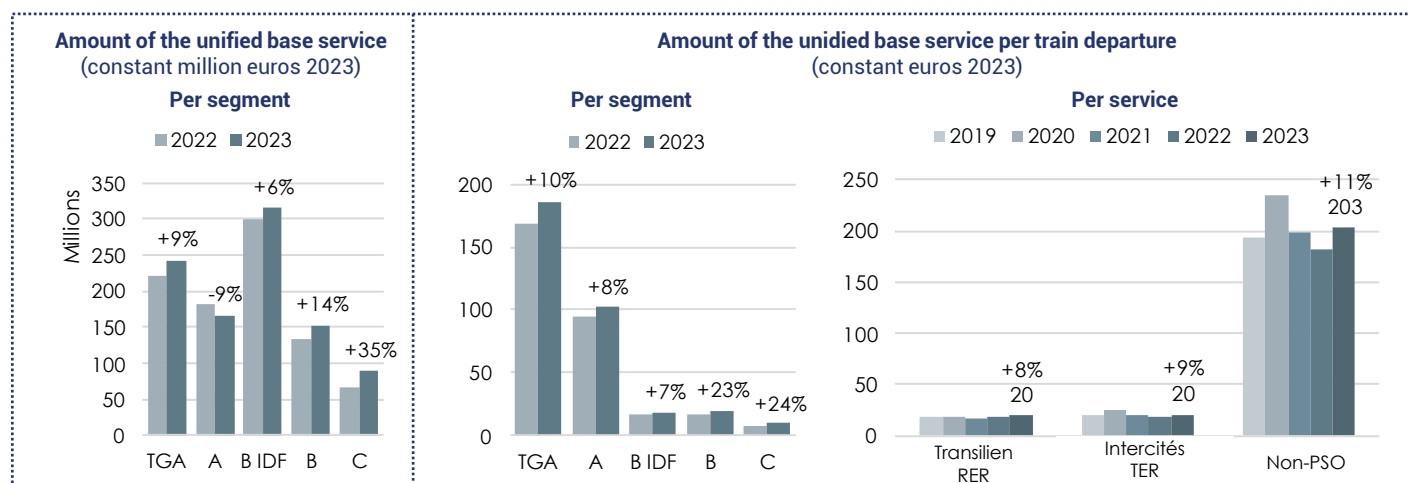
The main regulated fee is linked to the unified base service, which represents 93% of regulated revenues and includes a base of inseparable services, provided to any railway undertaking operating in the station. Its amount is defined each year by the reference document for stations ("DRG") and aims to cover the regulated costs borne by SNCF Gares & Connexions. The DRG 2023 forecasts a sharp increase in authorised income (+15%), in line with the increase in expenses (particularly linked to inflation). This increase has led SNCF Gares & Connexions to propose the implementation of a "price shield" for the unified base service, consisting of limiting the increase in bills per customer to around 10%, excluding the volume effect.

In practice, the level of charges per train departure has increased by 10% in nominal terms, i.e. a real increase of 8%. The increase is

particularly significant for non-PSO services (+11%), where the average bill for the unified basic service exceeded €200 per train departure in 2023, ten times more than for PSO services. However the growth of charges per train departure was the strongest (+23% and +24% respectively) in B and C stations of regional and local interest outside Île-de-France, with regional disparities, as forecasted by the DRG.

Overall, revenues related to the unified base service increased by 10% in nominal terms in 2023, i.e. a real increase of 7%, observed for all services, as the cost increase per train departure more than offsetted the decrease in the number of train departures (by -1%).

**Figure 6.7 – Amount of the unified base service perceived by SNCF Gares & Connexions**



Source : SNCF Gares & Connexions

# ECONOMIC RESULTS OF RAIL PASSENGER TRANSPORT (1/2)

## Activity results on RFN only

(RATP perimeters of RER A and B lines excluded as well as parts outside the RFN of international traffic (and connections))

	Level (2023)	Annual change real terms (2022-2023)	4-year change real terms (2019-2023)
■ Total revenues from passenger rail activity	16,8 Bn€	+5%	+2%
of which revenue from fares	10,0 Bn€	+5%	+1%
of which revenue from public subsidies	6,8 Bn€	+5%	+5%
■ Average revenue per passenger-km	16,5 cents €	-1%	-5%
■ Average revenue from fare per passenger-km	9,9 cents €	-1%	-7%
■ Average revenue from fare per train-km	26,8 €	+7%	+1%

## The revenue of railway undertakings increased in 2023, exceeding the 2019 level in real terms for the first time

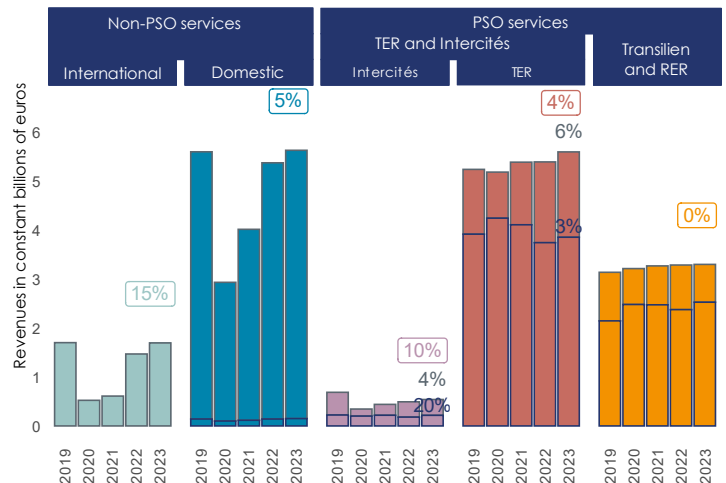
In 2023, revenue increased in real terms for all services, with the exception of PSO "Transilien" and "RER" activities, which remained stable.

Revenue from non-PSO services increased in real terms by 7% in 2023, thanks in particular to international activity which increased by +15%. The real level of revenues from non-PSO services reached 2019 levels thanks to strong traffic growth and despite higher-than-inflation price growth.

Revenue from PSO "TER" and "Intercités" services increased by 4% in real terms (+9% in nominal terms) thanks, in particular, to an increase of more than 5% in revenue from fares (+10% in nominal terms). Since 2019, real revenue increased by nearly 4%, boosted by strong growth in revenue from fares (+15%) and despite stagnating public subsidies. Revenue from fares represent 34% of the total revenue of TER and Intercités activities in 2023, compared to 30% in 2019.

Revenue from Transilien and RER services remained stable in 2023 (in real terms) and increased by 5% compared to 2019.

Figure 7.1 – Passenger rail revenue by service, on the RFN portion of journeys (in constant euros 2023)  
[% change 2023/2022]

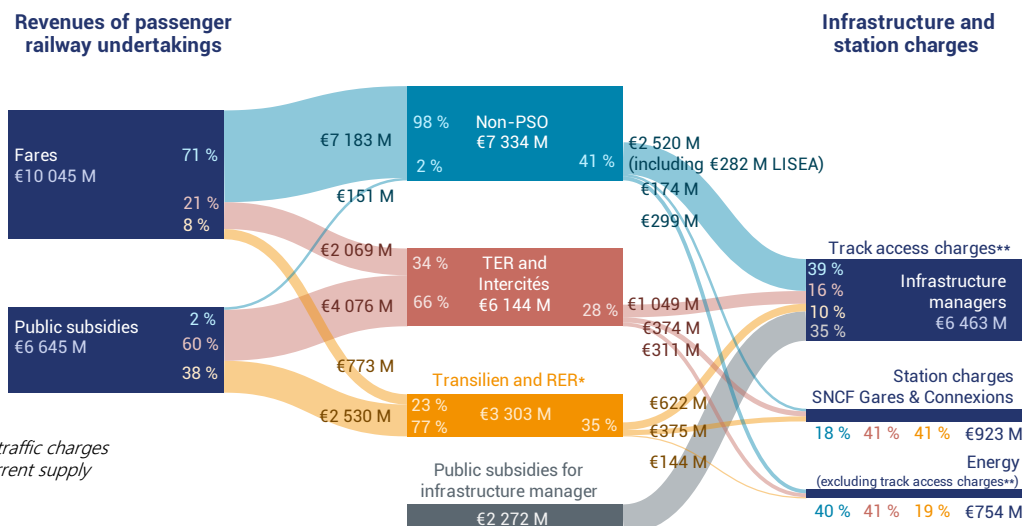


Note: for the Transilien and RER activity, direct revenue from fares have been perceived directly since 2020 by Île-de-France Mobilités and no longer by SNCF Voyageurs: the level of revenue from fares displayed in this report is an indicative share of the amount paid by users.

Source: ART, according to railway undertakings

## In 2023, track access charges represented between 23% (for PSO "TER" and "Intercités" activities) up to 37% (for non-PSO activities) of railway undertakings' total revenue, and energy costs weighted 4%

Figure 7.2 – Structure of passenger revenue and track access charges by activity in 2023



Notes :

\* cf. note Figure 6.1

\*\*track access charges include electric traffic charges (RCE, RCTE-A, RCTE-B) and traction current supply charges (RFE)

Source : ART according to railway undertakings

# ECONOMIC RESULTS OF RAIL PASSENGER TRANSPORT (2/2)

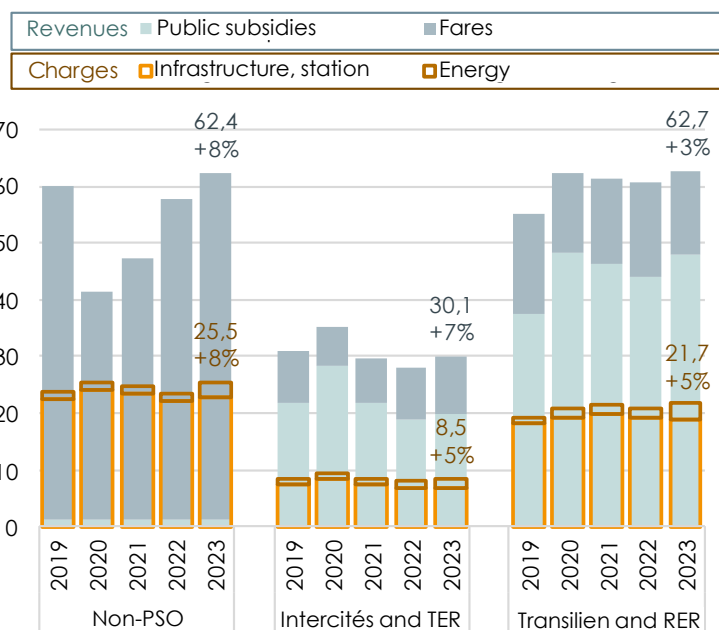
## Revenue per train.km increased at the same rate as costs, for all services

The level of revenue per train-km increased in 2023 compared to 2022 (+7% in real terms) thanks to higher volume of revenue (+5%) and a lower supply in train-km (-1%). This increase concerned all services, with marked growth for non-PSO services (+8%) and for PSO "TER" and "Intercités" services (+6%). A lower increase was seen for Transilien and RER services (+3%), induced by a decrease in the supply in train-km with stable level of income.

The increase in revenue per train.km in 2023 offset a similar increase (+7%) in the track access charges, station charges and energy costs. Over the period 2019-2023 however, the cost increase exceeded the revenue growth for non-PSO and PSO services outside Île-de-France. The share of these costs in revenue increased by 1.5 point of percentage for these services, up to 41% and 28% respectively in 2023.

Energy charges increased sharply in 2023 for all services, as the ratio per train.km increased by more than half compared to 2022. This cost almost doubled for non-PSO services. This increase, in view of the inflation of energy charges, led to an increase of the ratio of energy over income, reaching 4% on average in 2023, compared to 2% in 2019.

Figure 7.3 – Revenues and expenses per train.km, on the RFN portion of trips (in constant euros 2023) [% of change 2023/2022]



Source : ART according to railway undertakings

## Rail transport prices increased in 2023 and the first semester 2024, especially for Ouigo services

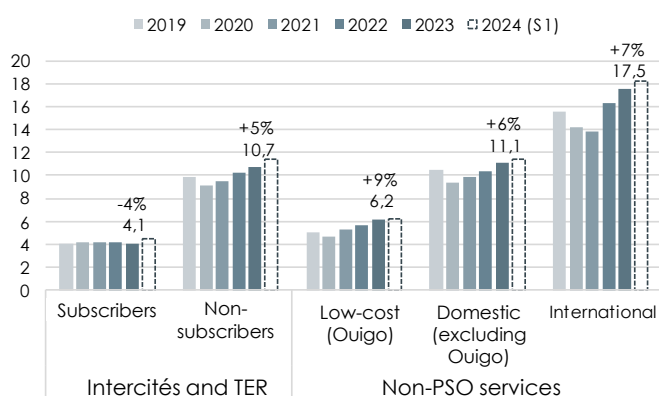
The effective prices of non-PSO rail services (average revenue per passenger-km), which had fallen sharply with the health crisis, increased in 2023 by +8% and by +2% in the first half of 2024, exceeding – in current euros – their 2019 level. Prices increased for all fare classes and distances travelled, but more strongly for low-cost Ouigo services (up nearly 10% year-on-year, compared to 6% for other domestic services).

Prices of non-PSO services increased more strongly than annual inflation (+5.7%), being affected by the increase of occupancy rates. Prices are higher in June and July, at the same time as the average occupancy rate of trains, while they are lower in January and February. Despite high occupancy rates, the average first class revenue per passenger appears to be lower in August, possibly due to the decline in business traffic during this period. However, the average price masks heterogeneity for price levels according to the date of travel, the date of purchase, the type of rail connection and the fare class (See dedicated analysis in our [mid-year release \(FR\)](#)).

Since 2019, the price increase of non-PSO services (+5%) has remained below overall inflation (+15%).

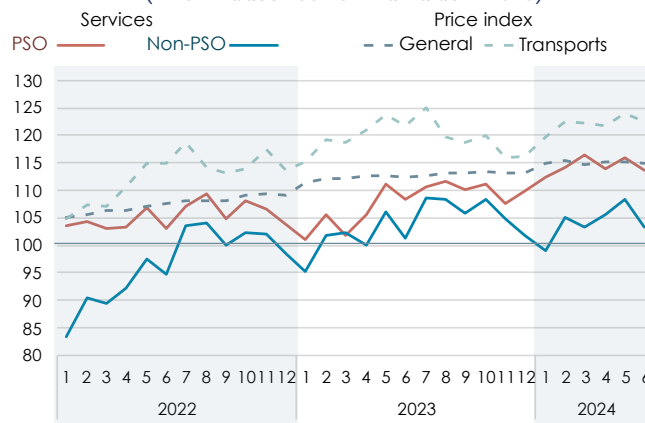
The average revenue per passenger.km (measured in nominal value) of PSO services outside Île-de-France increased annually in 2023 (+2%) and in the first half of 2024 (+8%). The significant increase between 2019 and 2023 (+10%) is the result of growth in revenue per passenger.km for non-subscribers (+8%) and an increase in the share of non-subscribers traffic over the period (67% or +3pp) whose average revenue is more than twice as high. Average revenue per passenger.km remained stable for subscribers.

Figure 7.4 – Annual level of revenue from fares per passenger per 100 km (in current euros) (2023 values and 2023/2022 evolution in labels)



Source : ART according to railway undertakings

Figure 7.5 – Average monthly level of revenue from fares per passenger.km (Index in base 100 nominal value in 2019)



Source : ART according to railway undertakings

# QUALITY OF SERVICE FOR PASSENGER SERVICES (1/3)



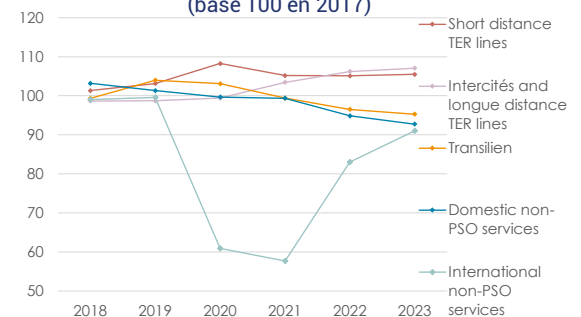
*Common scope of all the indicators/graphs on the page: RER SNCF only, except tram-train services for TER and Transilien. By default, the delay threshold considered is 05min00s. Cancellations are counted after 4pm the day before departure.*

	Level (2023)	Annual change (2022-2023)	4-year change (2019-2023)
▪ Rate of cancellations before D-1 4 p.m.	9%	+2 points %	+0,6 point %
▪ Rate of "last minute" cancellations after D-1 4 p.m.	1,9%	-	+0,2 point %
▪ Rate of running trains compared to scheduled trains	89%	-2 points %	-0,8 point %
▪ Rate of train delays at the 05min00s threshold	12%	+1,3 point %	+1 point %
▪ Regularity and punctuality of PSO services	94 % circ. effect. 76 % circ. <5mn	-0,5 point % -0,7 point %	+0,1 point % -1 point %

## The number of scheduled high-speed trains has decreased by 10% in five years...

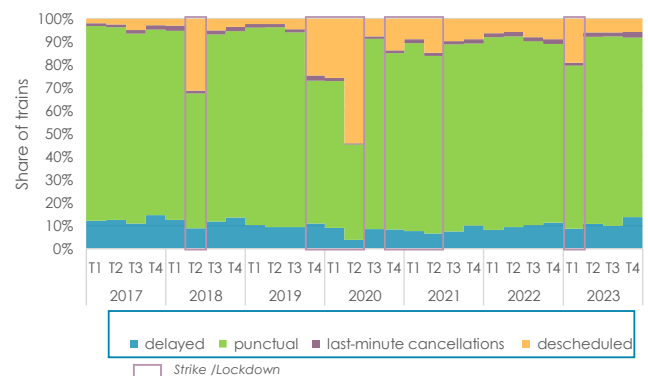
Scheduled traffic changed differently per rail service over the period 2017-2023. For the TER and Intercités services, the volume of scheduled traffic reached/overpassed the 2017 level over the entire period. Conversely, the programmed supply of rail traffic has been on a downward trend since 2017 for Transilien services and for domestic non-PSO services, with a level 5% and 7% lower in 2023 respectively than that observed six years ago. Finally, although the trend has been upward for international non-PSO services since the end of the health crisis, the 2017 level has not yet been caught up (-9%).

Figure 8.1 – Annual change of the scheduled train offer (base 100 en 2017)



Source : ART according to SNCF Réseau

Figure 8.2 – Quarterly change of the rate of running trains compared to scheduled trains (2019-2023)



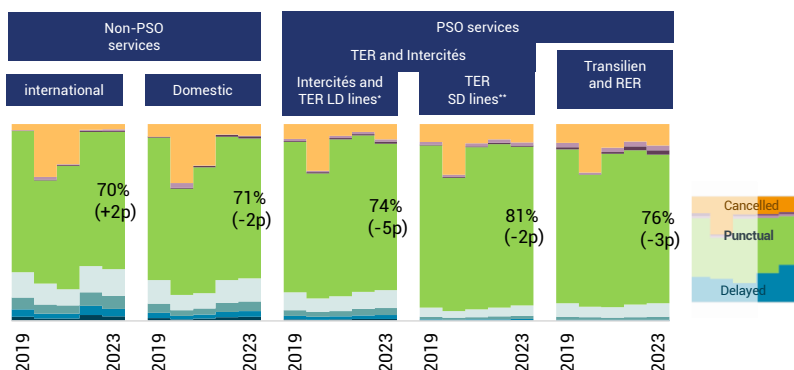
Source : ART according to SNCF Réseau

## ... And the completion rate of this offer deteriorated again in 2023.

With the exception of the first quarter (marked by strikes in March), deprogramming rates observed in 2023 return to their lowest level since Q4 2019. Over the last three quarters of 2023, the deprogramming rate fell to 6%, compared to 9% on average (and 19% for Q1).

On the other hand, the rates of total "last-minute" cancellations increased with a peak in Q4 2023 (2.5% of traffic cancelled), partly explained by deteriorating weather conditions in November 2023.

Figure 8.3 – Annual evolution by service of the rate of completion of the scheduled offer (2019-2023)



\*TER LD lines : Longue distance TER lines

\*\*TER SD lines : Short distance TER lines

Source : ART according to SNCF Réseau and railway undertakings

## Punctuality also decreased for all services excluding international trains

Train punctuality (measured at the terminus) has thus decreased by one point on average, and by up to two points for Intercités and TER long-distance services.

Delays are also up compared to 2019 for all services and all thresholds considered (with the exception of Transilien delays of more than 30 minutes) (cf. Appendix 7.2).

Overall, the rate of running and punctual trains (compared to scheduled trains) reached 78% in 2023, down three points annually. This rate is very heterogeneous from one service to another, reaching 70% for international SLO services (due to high delay rates), compared to 81% for local TER services.

# QUALITY OF SERVICE FOR RAIL PASSENGER TRANSPORT (2/3)

## Note on the scope of indicators and graphs on this page:

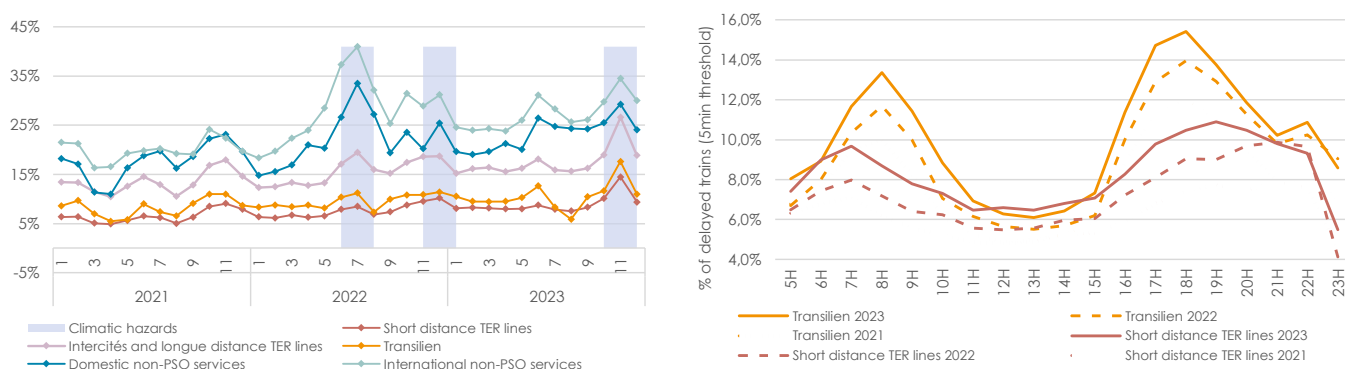
- The delay threshold considered is 5 minutes and 0 seconds. Cancellations are counted after 4pm the day before departure.
- SNCF RER services only, excluding tram-train services for TER and Transilien trains.

## PSO trains delays also increased in 2023 partly due to climatic hazards, and affected traffic especially during peak hours

In 2023, the delay rates observed for PSO services increased in almost all months of the year, the months of July and August were the exception due to the significant delays recorded in 2022 due to the insolvencies caused by the high temperatures. The month of November 2023 was also marked by a new peak in delays for all services (19% compared to 11% on average for the rest of the year), again largely due to failures induced by deteriorating weather conditions.

Train punctuality in 2023 deteriorated especially during daily peak hours, penalizing as a consequence more users. Delay rate increased of +1.4 point for Transilien during daily peak-hour (compared to +0.9 during off-peak hours) with up to +1.8 points for trains leaving at 5 p.m. Similarly, for short-distance TER, the delay rate increased by nearly +1.7 point for departures at 7 a.m. and 5 p.m. (+1.5 point on average between 6 a.m. and 8 a.m. and between 4 p.m. and 7 p.m.) compared to +1 point during off-peak hours.

Figure 8.4 – Delay rate (measured at the last stop) at the threshold of 5min00s per month (left) and according to train departure time (right)



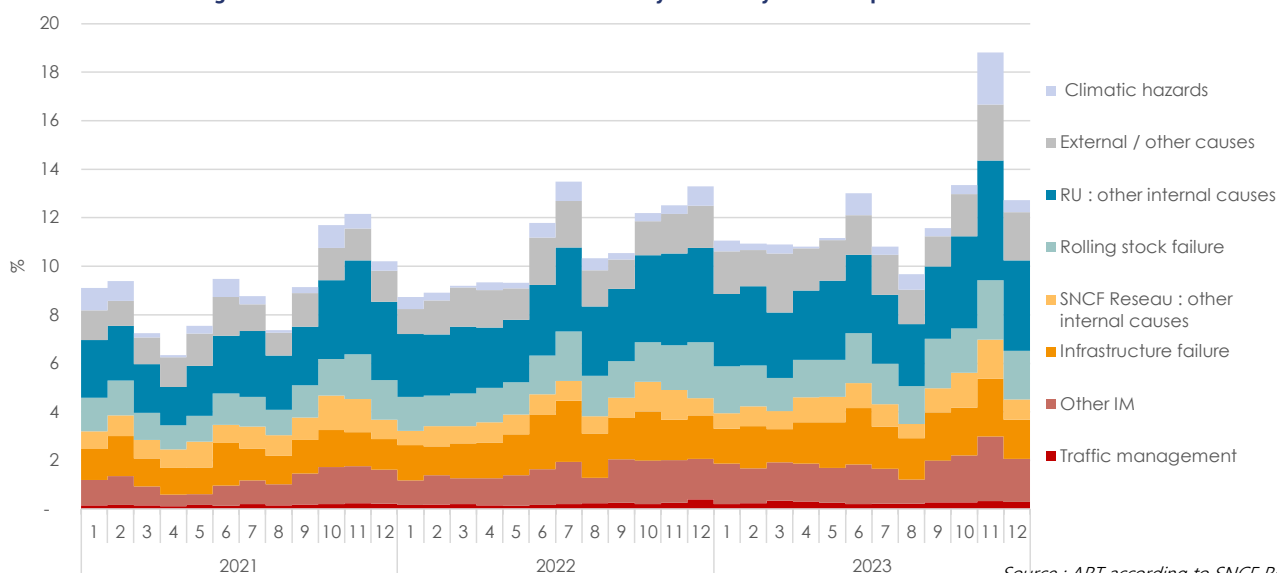
Source : ART according to SNCF Réseau

## A stable distribution of the causes of passenger train delays on average, attributable (excluding external causes) to railway undertakings and infrastructure managers in similar proportions

The distribution of the causes of delay changes little on average. The weight of delays attributable to rolling stock problems varies by more or less one point depending on the service compared to 2022 and that of infrastructure failures decreases by one to two points. The weight of "other infrastructure managers" causes increased over the last two years for international non-PSO services, which is partly explained by the gradual recovery of traffic after the health crisis period (cf. [Appendix 7.3](#)).

The punctuality of trains appears to be very affected by weather conditions. While bad weather accounted for only 4% of the causes of delays on average over the period 2021 – 2023, its weight is close to 10% for the months affected by intense climatic events over the last three years (cf. [Appendix 7.4](#)). These events also seem to lead to an increase in other types of incidents. In November 2023, 5% of traffic was delayed by more than five minutes at the terminus due to damage to rolling stock or infrastructure, compared to an average of 3.5% for the rest of the year.

Figure 8.5 – Breakdown of the causes of monthly train delays over the period 2021 - 2023



Source : ART according to SNCF Réseau



# QUALITY OF SERVICE FOR RAIL PASSENGER TRANSPORT(3/3)

	Level (2023)	Annual change (2022-2023)	4-years change (2019-2023)
▪ Rate of passengers affected by delays when getting off the train at the threshold of 5 minutes 0 seconds	12 %	+1 point %	-
▪ Rate of passengers compensated for domestic HSTs (excluding Ouigo) and international trains delayed by more than 60 minutes	51 %	-3 points %	-4 points %

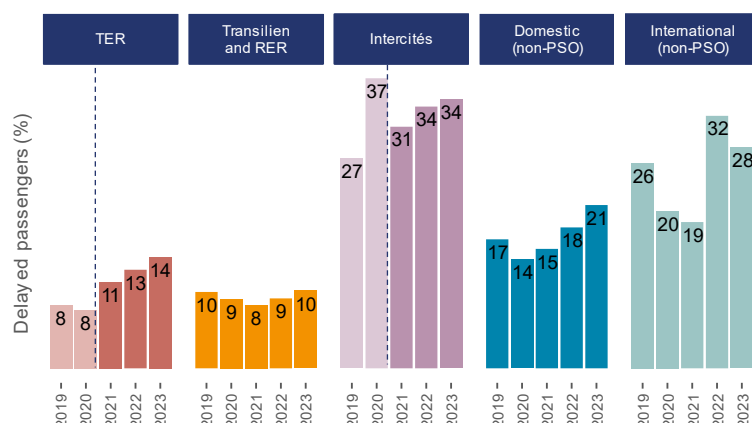
## The punctuality rate of passengers at their disembarkation station deteriorated by one percentage point compared to 2022

The punctuality rate of trains (observed at last stop) deteriorated similarly for passengers on average : they saw an annual increase in the delay rate at their point of disembarkation of almost one percentage point, affecting 12% of passengers in France.

On the other hand, the delay rate for passengers on domestic HST services deteriorated more sharply than that for trains (+3 points), due to increased ridership during periods when delays are the most significant.

Only passengers on international non-PSO services saw their punctuality rate improve – with the sharp increase in the delay rate for these services in 2022 being linked to operational difficulties amid a strong recovery in activity in 2022, which had reached 95% of the 2019 volume of passenger-km compared to only 42% in 2021, and an overall increase in train delays.

Figure 8.6 – Rate of late passengers at their arrival station, at the 5-minute threshold, by activity and year

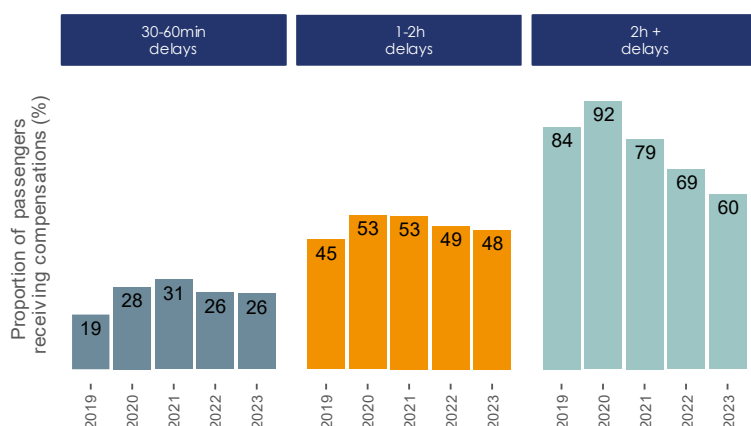


Scope: TER incl. tram-trains, HST incl. Ouigo.

Note: a series break occurred in 2021 for TER and Intercités services due to a change in the methodology for calculating the number of passengers by SNCF Voyageurs.

Source : ART according to the railway undertakings and RATP

Figure 8.7 – Rate of passengers compensated\* according to the length of the delay and per year for domestic HST (excluding Ouigo) and international trains



Scope : HST (excl. Ouigo) and international non-PSO services.

Source : ART according to the railway undertakings

## A stable rate of passengers compensated on average but a downward trend for the longest delays.

In 2023, 21% of delayed passengers on freely operated services experienced a delay of more than 30 minutes, entitling to compensation for the services inOui, Trenitalia, Thalys and Renfe Viajeros.

In addition, 9% of delayed passengers were delayed by more than an hour, which constitutes the reimbursement threshold required by European regulations<sup>2</sup> for all activities, which therefore includes in addition the Eurostar and Ouigo activities.

However, the rate of compensated passengers appears to be low: on average, just under 4 out of 10 delayed passengers (excluding Ouigo service) have used the compensation schemes offered by the operators (often in the form of vouchers). This ratio falls below 30% for delays of less than 60 minutes and is close to 50% for delays of one to two hours. On the other hand, there has been a downward trend in the rate of passengers compensated for delays of more than two hours, even though the rate of TGV passengers affected by long delays has increased.

<sup>1</sup> The station of descent is that located on the RFN or the station of descent internationally for all railway undertakings, with the exception of Trenitalia, which has only provided, for passengers bound for an Italian station, the delay measured at the last station served in France.

<sup>2</sup> Regulation (EC) No 1371/2007 of the European Parliament and of the Council of 23 October 2007 on rail passengers' rights and obligations.

## RAIL PSO SERVICES (TER) (1/3)



*Common scope of the overall page: the services Intercités in Normandie have been merged with TER service for the year 2019 in order to have a constant perimeter except for the completion rate and the delay rate.*

	Level (2023)	Annual change (2022-2023)	4-years change (2019-2023)
▪ Daily traffic	6 300	-2 %	+7 %
▪ Train carrying capacity	345 seats	+2 %	-
▪ Train occupancy rate	31%	+2 points %	+3 points %
▪ Rate of subscribers passengers.kilometers	39%	+1 point %	-4 points %
▪ Weight of public subsidies in total revenue	68%	-0,6 point %	n/d
▪ Rate of completion of the scheduled offer	90%	-2 points %	-0,6 point %
▪ Delay rate at the train terminus at the 5min00s threshold	11%	+1 point %	+2 points %

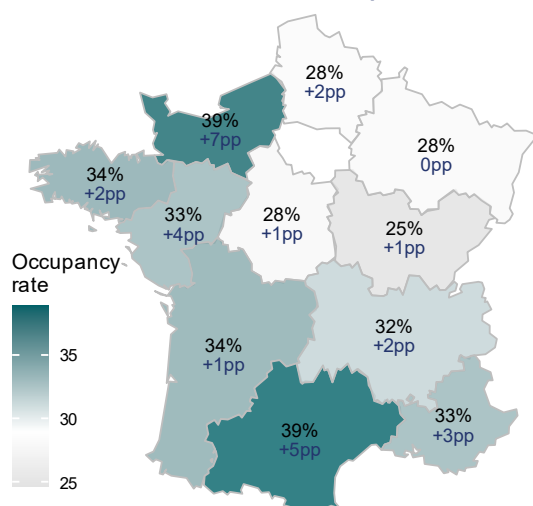
**The number of passengers on TER trains increased in 2023 for all regions (from +3% to +16%), accompanied by an increase in train occupancy rates**

TER ridership increased by more than 10% annually, particularly for three regions: Bretagne, Pays de la Loire and Occitanie.

This increase was observed despite a decrease in TER service for most regions, mainly due to the social movements of March 2023. The supply of train-km fell for 10 of the 11 regions (and down to -8% in Bourgogne-Franche-Comté). This decrease in the supply of train-km is nevertheless accompanied by an increase in the volume of sièges.km for several regions, due to an overall increase in the carrying capacity of trains (+2%) (an increase that may be induced both by changes in rolling stock and by changes in the composition of trains on the various lines).

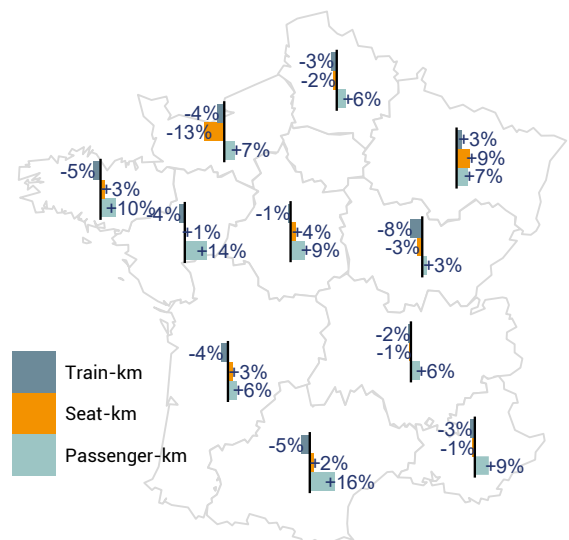
further increase in the occupancy rate of the TER was observed in 2023, three points higher than in 2019, although growth seems to be slowing since Q4 2022. The Occitanie and Normandie regions also recorded a new record level with an occupancy rate of 39%, eight points higher than the average. It is a direct result of the strong increase in passenger numbers for Occitanie, while the seven-point increase for Normandie was partly explained by a sharp drop in the volume of seat-km (linked to changes in rolling stock, in particular the replacement of trains operating on the "Intercités" services Normandie).

**Figure 9.2 – Average occupancy rates by region in 2023 and evolution 2023/2022**



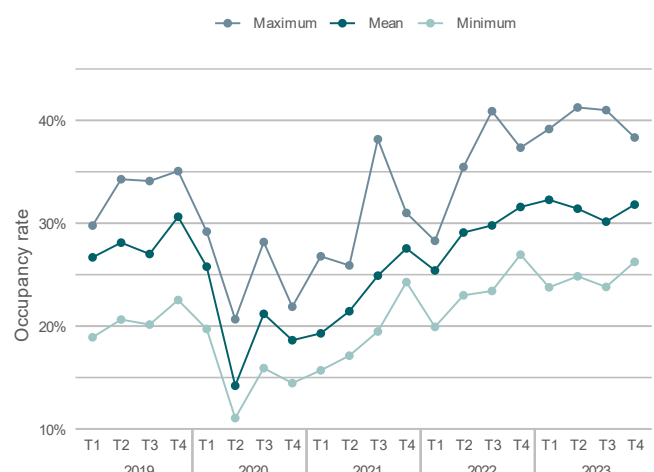
Source : ART according to SNCF Voyageurs

**Figure 9.1 – Evolution of the TER offer and ridership between 2022 and 2023**



Source : ART according to SNCF Voyageurs

**Figure 9.3 – Quarterly evolution of occupancy rates by region since 2019**



Source : ART according to SNCF Voyageurs



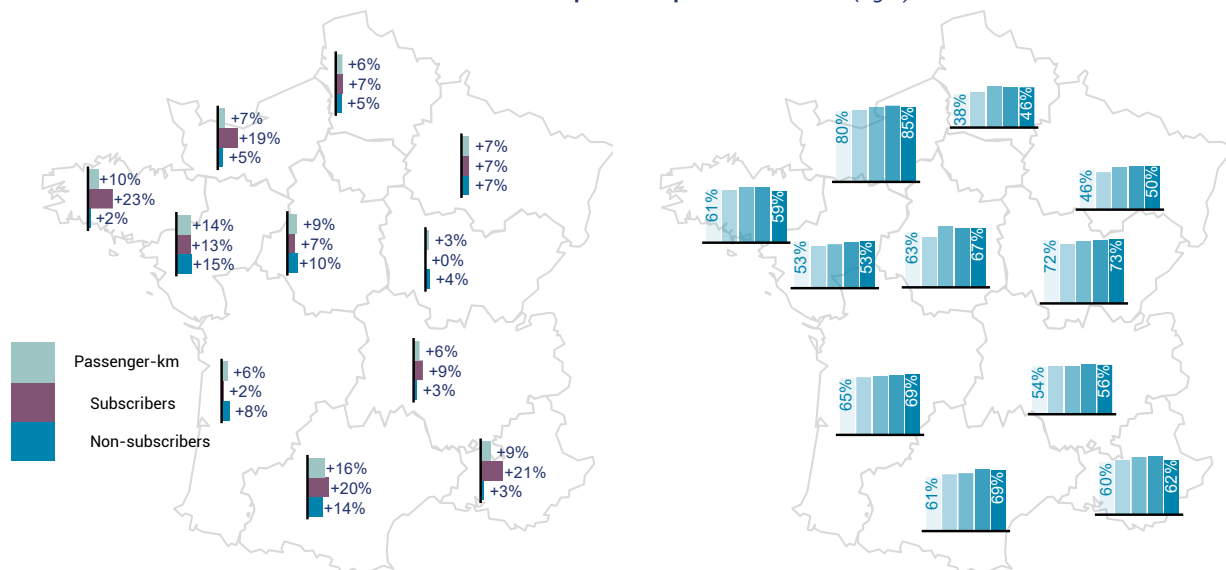
# RAIL PSO SERVICES (TER) (2/3)

**The number of subscribers increased more strongly in 2023 than that of non-subscribers.**

The number of subscribed users increased sharply in 2023 (+10% in one year) with nearly or more than 20% increases in Bretagne, PACA, Occitanie and Normandie. However, it is still below the 2019 level for three regions close to Île-de-France (-1% for the Centre-Val de Loire region, -11% for the Hauts-de-France region and -19% for the Normandie region).

The ridership of non-subscribers kept on growing in 2023 but at a slower pace (+6% compared to 2022). The ratio of non-subscribers in TER ridership dropped in 2023 (by -1 point) after almost three years of increase for most regions. The ratio of non-subscribers' attendance approached or even exceeded 70% for 4 regions: Normandie (85%), Bourgogne-Franche Comté (73%), Nouvelle-Aquitaine (69%) and Occitanie (69%), regions for which it has increased the most over the past 4 years (+8 points).

**Figure 9.4 – 2023/2022 change of TER subscribers and non-subscribers' ridership (left) and ratio of non-subscribers' ridership over the period 2019-2023 (right)**



*Scope: the Normandie Intercités lines have been integrated into the TER service for the year 2019 in order to have a constant perimeter.  
Source: ART according to SNCF Voyageurs*

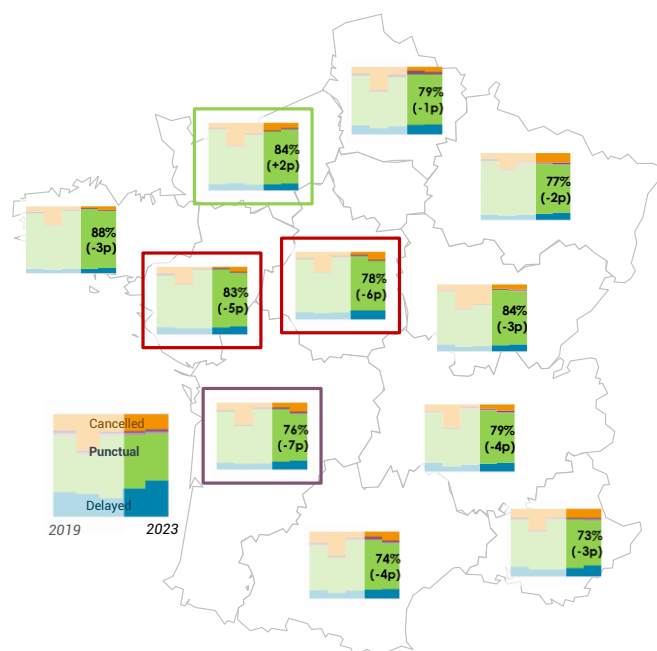
**The regularity and punctuality of TER services worsened in 10 out of 11 regions, particularly in the region Nouvelle-Aquitaine**

The lowest rate of effective and on-time TER traffic was observed in the Sud-PACA region (Only 73% of scheduled trains ran and arrived at their terminus on time or with a delay of less than five minutes). It is explained by a historically high delay rate (15% in 2023, up three points).

The most important decrease in the 2023 rate of effective and on-time traffic was observed in the Nouvelle-Aquitaine region (-7 points). This is explained by a notable deterioration in punctuality, as well as by a 5-point increase in the rate of train cancellations, which are also up sharply in 2023 for the regions Centre-Val de Loire (+6 points), Occitanie and Pays de la Loire (+4 points).

All regions recorded a downgraded rate of effective and punctual traffic, but Normandie. Normandie is also the only region, along with Hauts-de-France and PACA, not to record an increase in the rate of cancelled trains.

**Figure 9.5 – Reliability of PSO regional rail services (2019-2023)**



*Methodological note: the perimeter considered is that of TER services excluding tram-trains. The delay threshold considered is 5 minutes and 00 seconds at the terminus. The cancellations include trains descheduled before D-1 4 p.m. as well as total last-minute cancellations (after D-1 4 p.m.). Cancellation rates are calculated on all initially scheduled traffic.  
Source: ART according to SNCF Réseau*

# RAIL PSO SERVICES (TER) (3/3)

**Revenues from the TER activity increased by 4% on average, with a stable share of public subsidies**

In 2023, the revenue from fares for TER services increased by 6% compared to 2022 (in constant euros), driven by a further increase in passenger numbers. This increase concerns all regions and is close to 10% in the Provence-Alpes-Côte d'Azur and Grand Est regions.

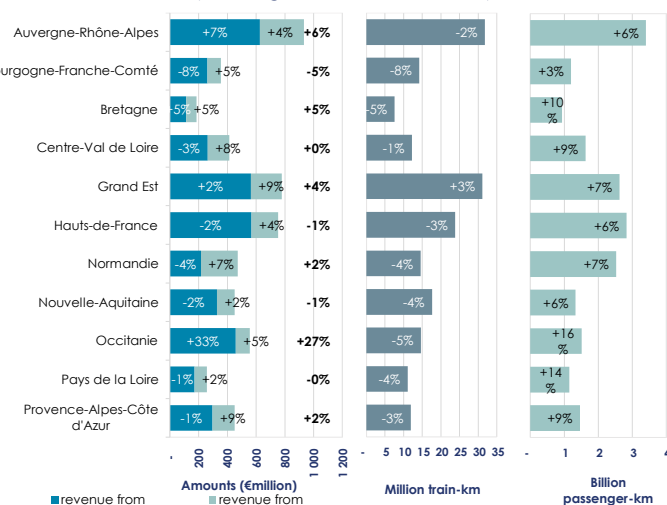
However, the high growth in subscribers, for whom revenue per passenger is lower than for subscribers and lower than in 2022, led to lower increase in revenue from fares than that observed for passenger numbers in most regions.

Public subsidies also increased (+3% in constant euros compared to 2022), with contrasting trends by region, from -4% in Normandie to +7% in the Auvergne-Rhône-Alpes region.

*Note: in the Occitanie region, the changes in public assistance and charges are associated with a change in the tax regime for the region (see below).*

Revenue for the TER activity thus increased in constant euros by 4% compared to 2022 (in constant euros), with a relatively stable share of public subsidies (-0.6 point).

**Figure 9.6 – 2023 breakdown of TER revenue (in 2023 constant euros) and supply and ridership by region (% change 2023/2022 in labels)**



Reading note: the Auvergne-Rhône-Alpes region recorded a 2% drop in train-km and a 6% increase in passenger-km in 2023 compared to 2022. At the same time, revenues from the TER business in this region, which amounted to €933 million, increased (in constant euros) by 6% overall (with an increase of 4% for the "revenue from fares" component and 7% for the "public subsidies" component).

Source: ART according to SNCF Voyageurs

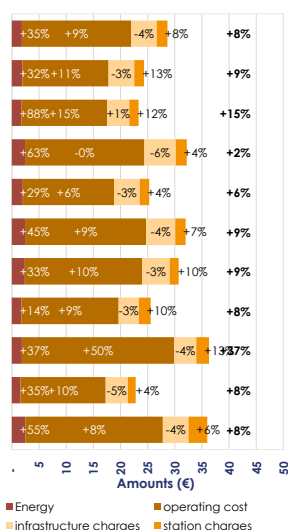
**In addition to the increase in energy costs experienced by all regions in 2023, other operating expenses also increased (excluding inflation) despite the drop of TER supply for most regions**

TER operating expenses increased in 2023 by +7% on average in constant euros (+5% excluding the Occitanie region), despite the decline in effective supply. This led to high increase in mileage charges for all regions, from +2% for the Centre-Val de Loire region to nearly 10% for several regions and +15% in Bretagne (and +37% in Occitanie<sup>1</sup>). Energy expenditure in particular rose sharply, by +38% per train-km on average and by more than 50% for the Bretagne, Centre-Val de Loire and PACA regions. Their weight in expenditure has thus increased from 5.7% in 2022 to 7.1% in 2023. The amount of other operating expenses has also increased significantly (from nearly 8% to 10% per train-km for most regions), with strong disparities: these charges represent nearly €15/train.km in Bourgogne-Franche Comté, Bretagne and Pays de la Loire, compared to more than €25/train.km in the Occitanie and PACA regions.

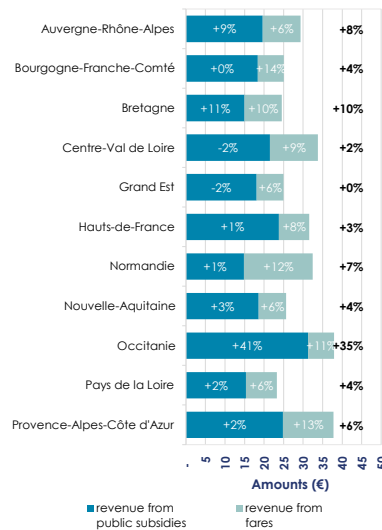
The amount of access charges paid by the State (based on an estimated cost in 2011 and revised in 2017 to record the transfer of Intercités train services to the regions), compared to train-km, increased by +1% on average, with very contrasting trends by region.

**Figure 9.7 – 2023 breakdown of the revenue and expenses of the TER activity, by train-km (in constant euros 2023) (% Evolution 2023/2022 in labels)**

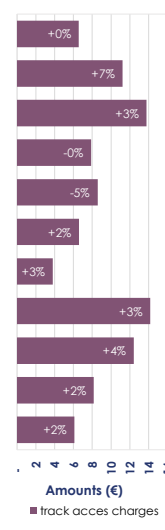
**a. Charges (of which energy and charges)**



**b. Revenue**



**c. Access charges**



Source: ART according to SNCF Voyageurs

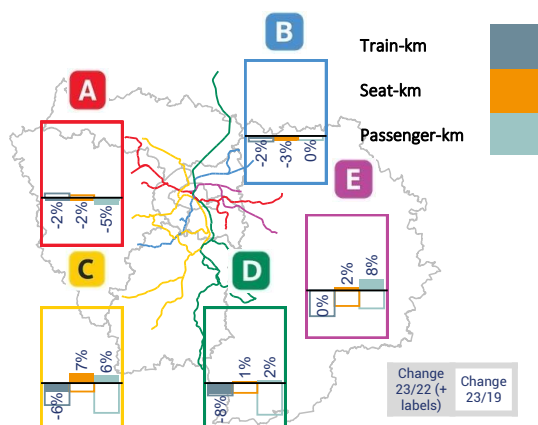
<sup>1</sup> According to 2024 report of the French Cour des Comptes, « the increase in TER public subsidies in 2023 is partly due – around €0.1 billion – to a change in the legal regime for TER operations in Occitanie. Since 2023, for tax purposes, the region has been the operator of the service. This change makes the region the owner of the transport tickets that SNCF Voyageurs must buy back from it in order to be able to market them (non-disclosed intermediation). To maintain the economic balance of the agreement and compensate for the cost of purchasing tickets borne by SNCF Voyageurs, the region has increased its contribution.»

# PSO SERVICES IN PARIS REGION (TRANSILIEN AND RER)(1/2)



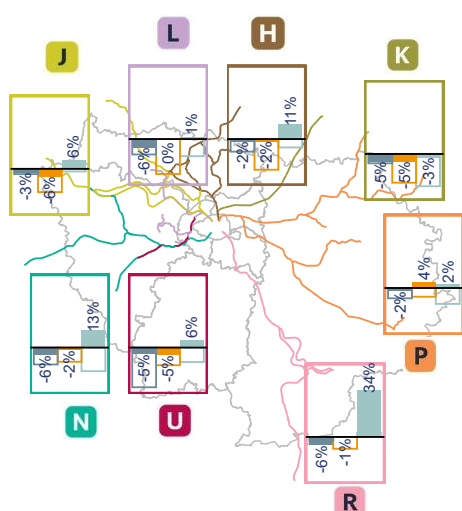
	Level (2023)	Annual change (2022-2023)	4-years change (2019-2023)
▪ Daily traffic (excluding RATP and tram-trains)	3 700	-3%	-5%
▪ Train carrying capacity	834 seats	+4%	-1%
▪ Train occupancy rate	33%	+1 point %	-
▪ Rate of effective and on-time train (compared to schedule)	87%	-2 points %	-1 point %
▪ Delay rate at last stop at the 5min00s threshold	9%	+1 point %	-

**Figure 10.1 – Evolution of the supply (trains-km and seat-km) and ridership (passenger-km) per RER line between 2022 and 2023 (solid bars) and between 2019 and 2023 (transparent bars)**



Source : ART according to SNCF Voyageurs and RATP

**Figure 10.2 – Evolution of the supply (trains-km and seat-km) and ridership (passenger-km) per Transilien line between 2022 and 2023 (solid bars) and between 2019 and 2023 (transparent bars)**



Source : ART according to SNCF Voyageurs

## Ridership was still below 2019 levels in 2023 for most of the Transilien and RER lines, despite annual increase

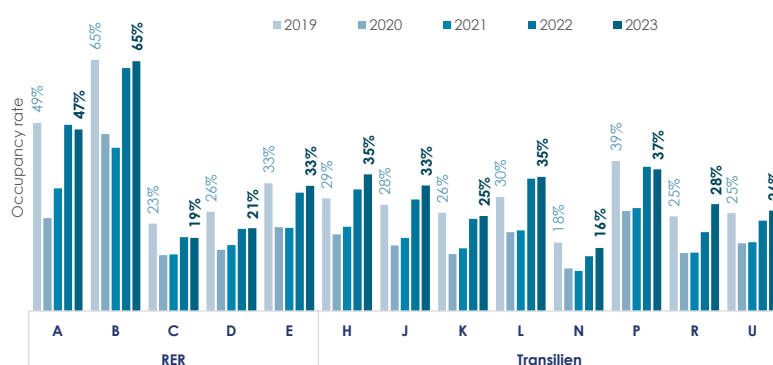
The number of passengers on the Transilien and RER lines seems to have been durably affected by the health crisis. Despite an increase between 2022 and 2023 for almost all lines, only the R line has returned to a higher level of ridership than in 2019 (by +3%). This observation seems to confirm structural changes in travel habits in Île-de-France, associated in particular with an increase in the use of teleworking on weekdays, as traffic decreases are indeed less than in 2019 for weekend days.

## However, the transport offer is reduced compared to 2022, leading to an increase in the occupancy rate

The transport supply dropped compared to 2022 for almost all lines, in particular due to the strikes in March which led to a 28% drop in train-km on average. It also remained below the 2019 level for all lines, except for the RER A (+2% in train-km and seat-km).

As a result, the occupancy rate of the Transilien and RER increased between 2022 and 2023 by +1 point on average and up to +7 points for the R line due to a sharp increase in ridership in one year.

**Figure 10.3 – Train occupancy rate by line since 2019 (2019 and 2023 labels)**



Source: ART according to SNCF Voyageurs and RATP

# PSO SERVICES IN PARIS REGION (TRANSILIEN AND RER) (2/2)

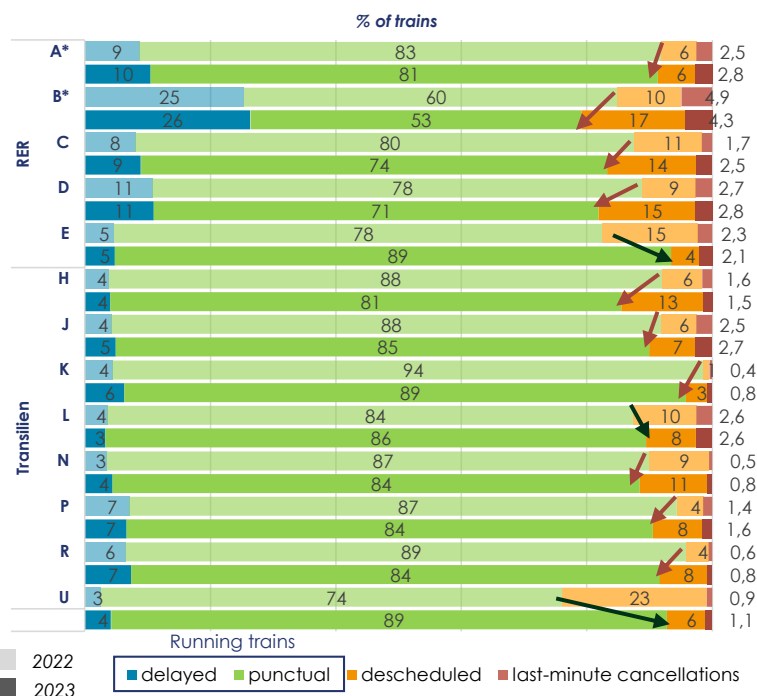
**In 2023, the rate of effective and on-time train for the Transilien services was 87%, down two points over one year**

This deterioration can be explained by an increase in cancellations (by +2 points on average). It concerned almost all lines with higher rates on average for the RER. Only three lines saw their deprogramming rate improve : line U, for which nearly 1 in 4 trains had been deprogrammed or cancelled in 2022 and whose deprogramming rate has fallen by 17 points in 2023, line E (-11 points for the programming rate) and, to a lesser extent, line L (-2 points). A large number of these deprogramming are linked to closures for works, particularly in the context of the extension of line E, the creation of the CDG Express line or modernisation projects.

The rate of total "last minute" cancellations (cancellations after D-1 4 p.m.) remains stable for most lines, with variations of -0.1 to +0.3 points. Line C is the only one to record higher increase (by +0.8 points) while line B recorded a decrease of 0.6 points.

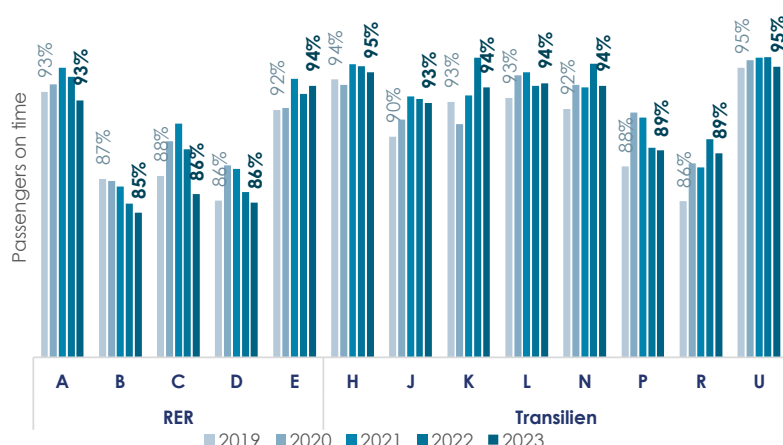
The rate of scheduled traffic arriving late at the terminus at the 5-minute threshold also increased by +1 point on average in 2023, and by +2 points for lines A, K and U. Line B recorded the highest rate with more than 1 in 4 scheduled traffic delayed.

**Figure 10.4 – Rate of delayed, punctual, descheduling and last-minute cancellations of Transilien and RER rail services (\*excluding RATP) in 2022 and 2023**



Scope: the indicators for the RER A and B are computed on the RFN alone (excluding RATP).  
Source : ART according to SNCF Voyageurs

**Figure 10.5 – Punctuality rate of passengers per line of the Transilien and RER rail services at the threshold of 04min59s**



Scope: RATP punctuality rate data exclude the months of December 2019, January 2020, April 2020 and May 2020 which were neutralized in the monitoring of the RATP punctuality rate indicator, motivated by the impacts of social movements and the COVID-19 crisis.

Source : ART according to SNCF Voyageurs and RATP

**In 2023, 1 out of 10 Transilien and RER passengers saw a delay of five minutes or more at the arrival station**

The increase in the rate of train delays is having an impact on passengers, with a drop of one point in the punctuality rate on average.

This decline concerns almost all the Transilien and RER lines and appears to be higher for several lines. The RER C recorded the highest drop (-3 points in punctuality) but the line with the lowest rate remains the RER B (85%). The Transilien N and K lines and the RER A line also saw their punctuality rate deteriorate more sharply than the average (by -2 points).

The RER E line and, to a lesser extent, the Transilien L line are the only ones for which the punctuality rate has improved (by +0.6 points and +0.2 points respectively), but it is for the H and U lines that it is the highest, with 95% of passengers on time.

## APPENDIX 0

Figure A0.1 – Indices used to deflate time series

Partie	Indicateur	Déflateurs
Part 02	Infrastructure charges (collected by SNCF Réseau and Lisea)	100% HICP
Part 02	Maintenance and surveillance costs (SNCF Réseau and RER RATP network)	50% TP01 ; 50% HICP
Part 02	Traffic management costs (SNCF Réseau)	80% CMA* ; 20% HICP
Part 02	Other expenses (SNCF Réseau)	50% CMA* ; 50% HICP
Part 02	Regeneration investments (SNCF Réseau)	80% TP01 + 20% HICP
Part 02	Other investments (SNCF Réseau)	80% TP01 + 20% HICP
Part 02	Investments (RER RATP network)	80% TP01 + 20% HICP
Part 09	Revenues and expenses (TER services)	100% HICP

\*CMA : Average cost of SNCF Réseau workers. The index is sourced from the financial reports of the infrastructure manager.

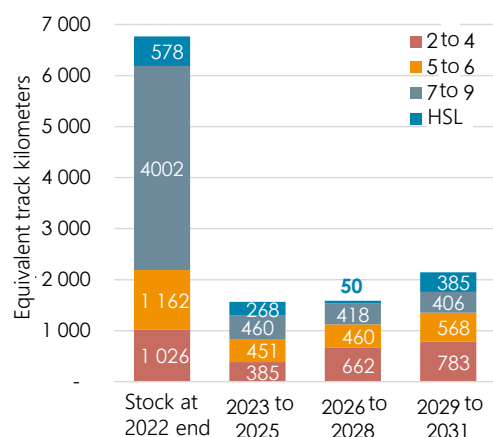
HICP : Harmonized Index of Consumer Prices, published by INSEE. See glossary

TP01 : General index of public works - all categories of works, published by INSEE



# APPENDIX – CHAPTER 1

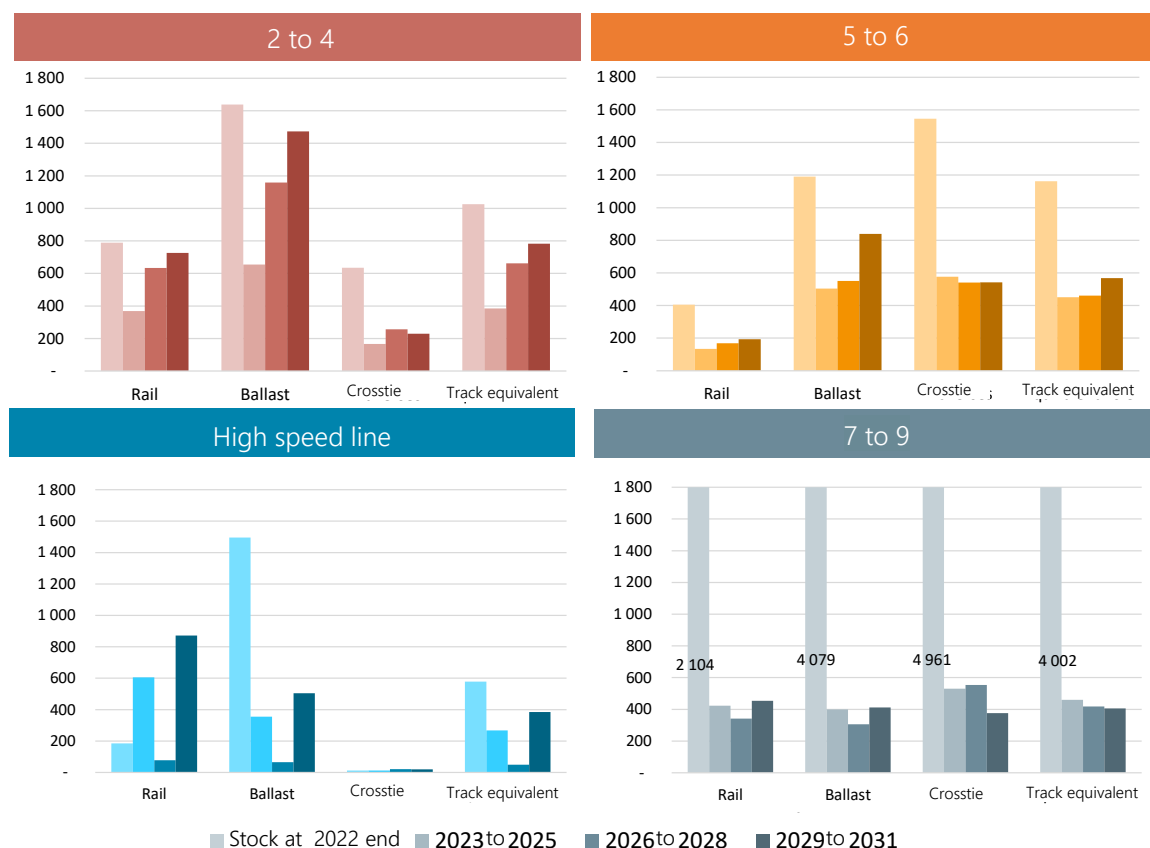
**Figure A1.1 – Equivalent track kilometres\* that have reached their service life by track category**



\*Track equivalent kilometres are computed from track components that have reached their design life. The weight of each component depends on the economic weight of the asset in the track: 22.6% for rail, 35.5% for ballast, and 41.9% for sleepers. If 1 km of rail has reached its service life (ICV < 10) then it will count as 0.226 km of track. The breakdown by component of the kilometres that have reached their service life is shown below (Figure A1.2).

Source: ART according to SNCF Réseau

**Figure A1.2 – Track components stock that reached their theoretical life by category for different deadlines between the end of 2022 and 2031**

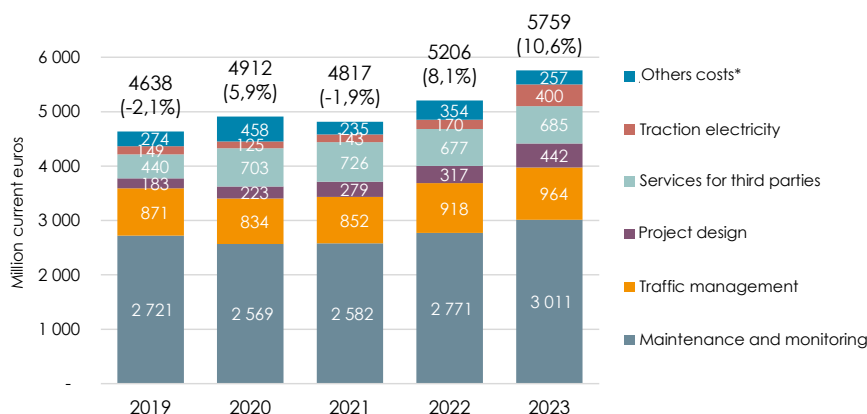


Track equivalent kilometres are computed from track components that have reached their design life. The weight of each component depends on the economic weight of the asset in the track: 22.6% for rail, 35.5% for ballast, and 41.9% for sleepers. If 1 km of rail has reached its service life (LCI < 10), then it will count as 0.226 km of track.

Source: ART according to SNCF Réseau

## APPENDIX – CHAPTER 2

**Figure A2.1 – SNCF Réseau operating costs in current euros**  
excluding operating subsidies (Year-on-year change in %)

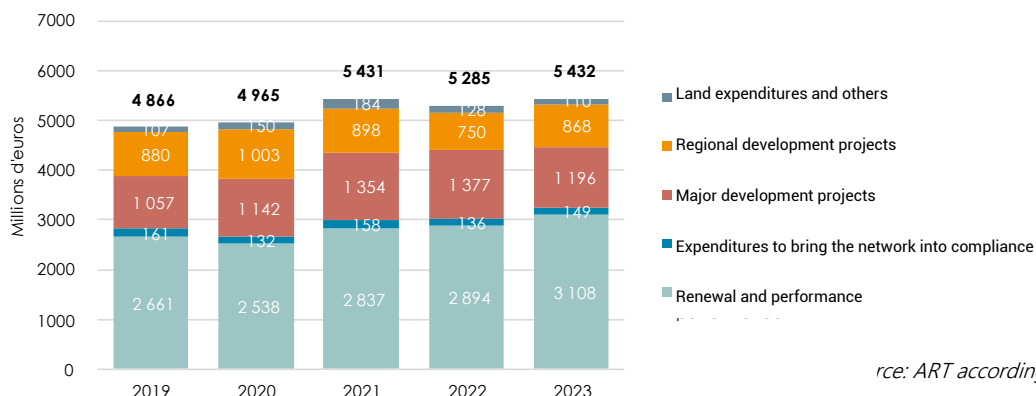


Note: in 2023, "Other costs" include train paths and marketing (€128 million), taxes (€50 million) and miscellaneous costs (€79 million). Third-party services correspond to sales to external third parties or other entities of the SNCF group (mainly Gares & Connexion). In previous publications, traction electricity was included in the costs of "traffic management", this destination is now presented separately.

These costs differ from those presented in [page 15](#), because they are net of operating subsidies (for around €100 million) and commercial allowances (€20 million)

Source: ART according to SNCF Réseau

**Figure A2.2 – SNCF Réseau capital expenditure (current euros)**



Source: ART according to SNCF Réseau

Note: The graph does not show industrial investments (€318 million in 2023) and financial expenses (€129 million) but includes project Opex (€357 million).

Figure A5.1 – Photo of the TER service fleet at the end of 2023

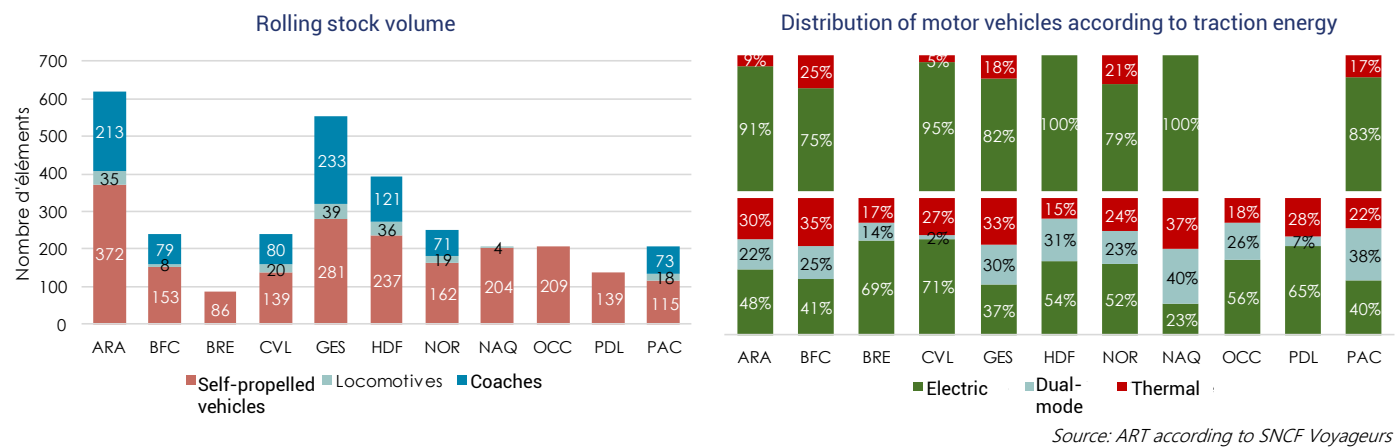
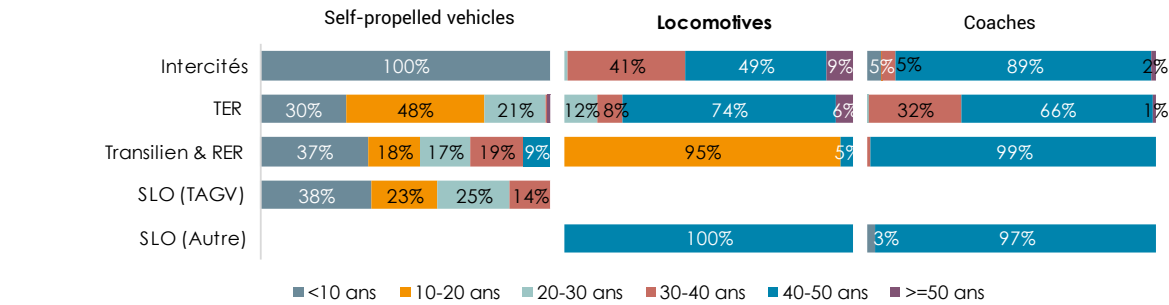


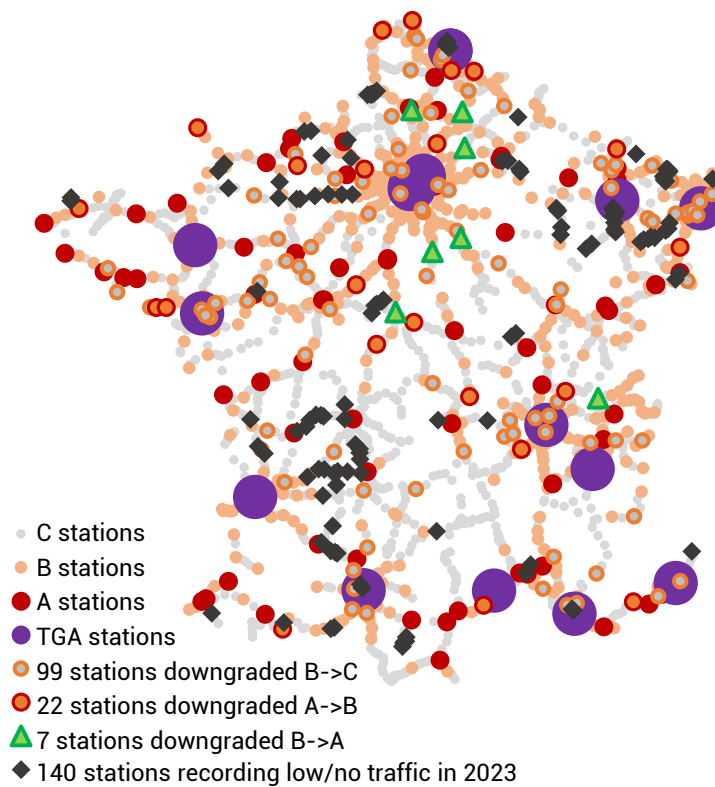
Figure A5.2 – Distribution of equipment by age category and average age by type of equipment



	Self-propelled vehicles		Locomotives		Coaches		Total	
	Age (average)	Number	Age (average)	Number	Age (average)	Number	Age (average)	Number
Intercités	5,8	24	40,7	148	44,0	1082	42,9	1254
TER	15,7	2097	43,4	179	42,1	870	24,4	3146
Transilien & RER	17,7	1348	17,0	44	46,1	102	19,6	1494
non-PSO (HST)	15,6	416					15,6	416
non-PSO (Others)			44,5	9	44,9	36	44,8	45

Source: ART according to SNCF Voyageurs

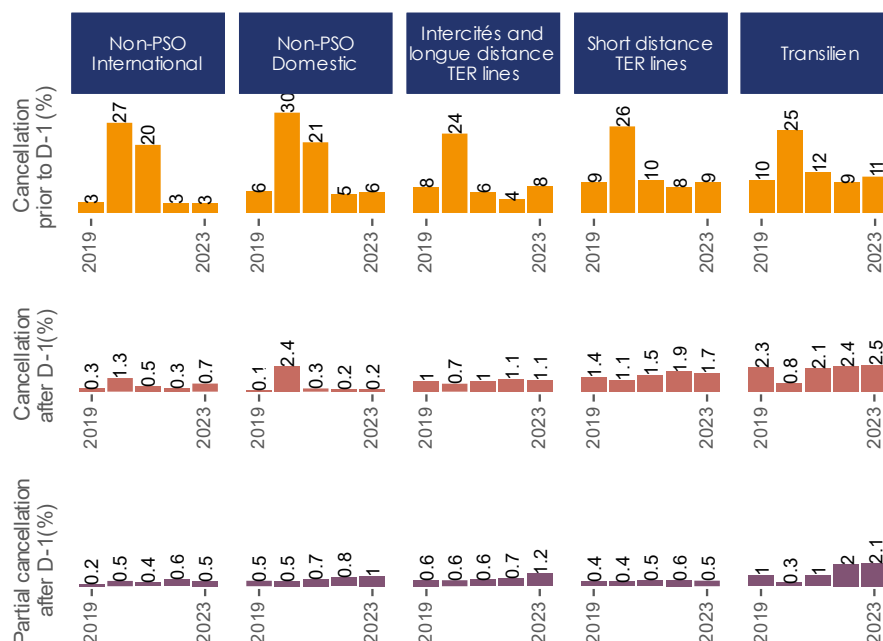
Figure A6.1 – Evolution of the station ranking between the periods 2020-2022 and 2023-2025



Source: ART according to SNCF Gares&Connexions

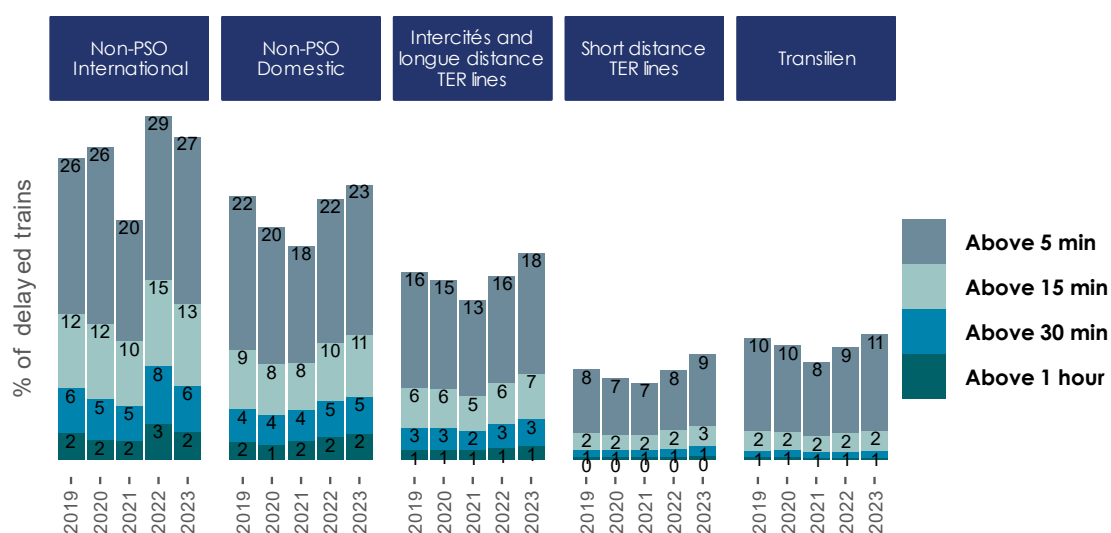
# APPENDIX – CHAPTER 7

Figure A7.1 – Rate of deprogramming, and cancellations (total or partial) by service between 2019 and 2023



Scope: RER SNCF only, excluding tram-train services for TER and Transilien.  
Source: ART according to SNCF Réseau and railway companies

Figure A7.2 – Train delay rate by activity and by terminal delay threshold between 2019 and 2023



Reading note: In 2022, 30% of Intercités trains are at least 5 minutes late on arrival, 2% of domestic TAGVs reach their destination more than 1 hour late.

Scope: RER SNCF only, excluding tram-train services for TER and Transilien.  
The rate of delay "at the last station" is the rate at the last station of the train on RFN, which can therefore constitute an intermediate point for the circulation of international trains originating from a foreign country and Transilien traffic originating on the RATP network.

Source: ART according to SNCF Réseau



# APPENDIX – CHAPTER 7

Figure A7.3 – Distribution of the causes of train delays by service between 2019 and 2023

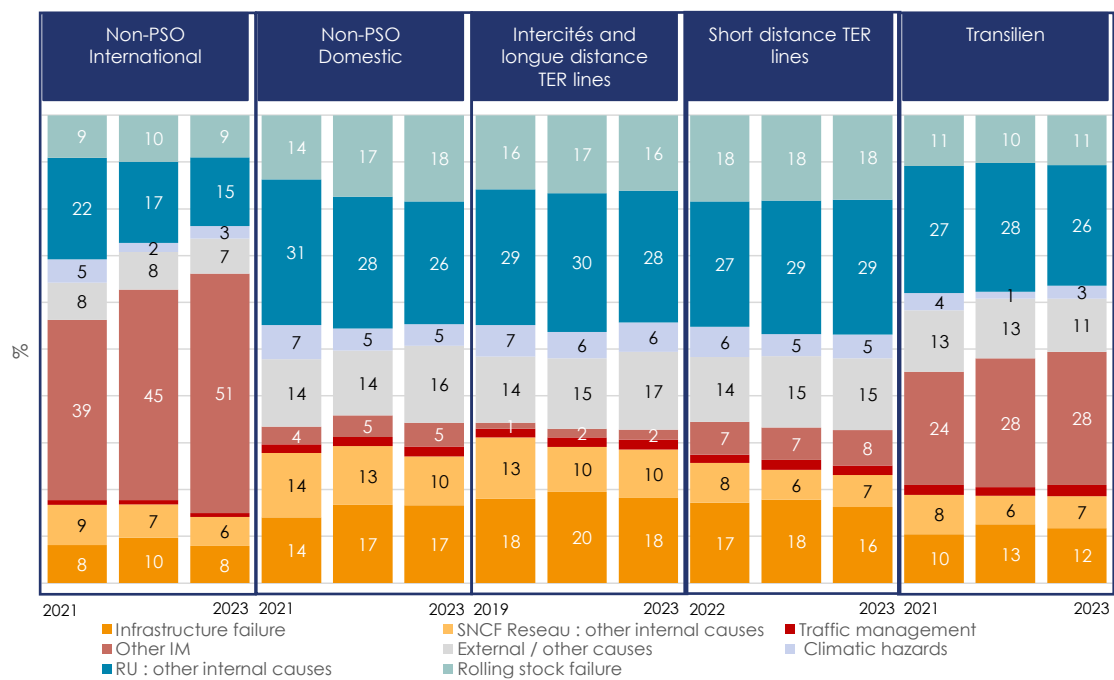
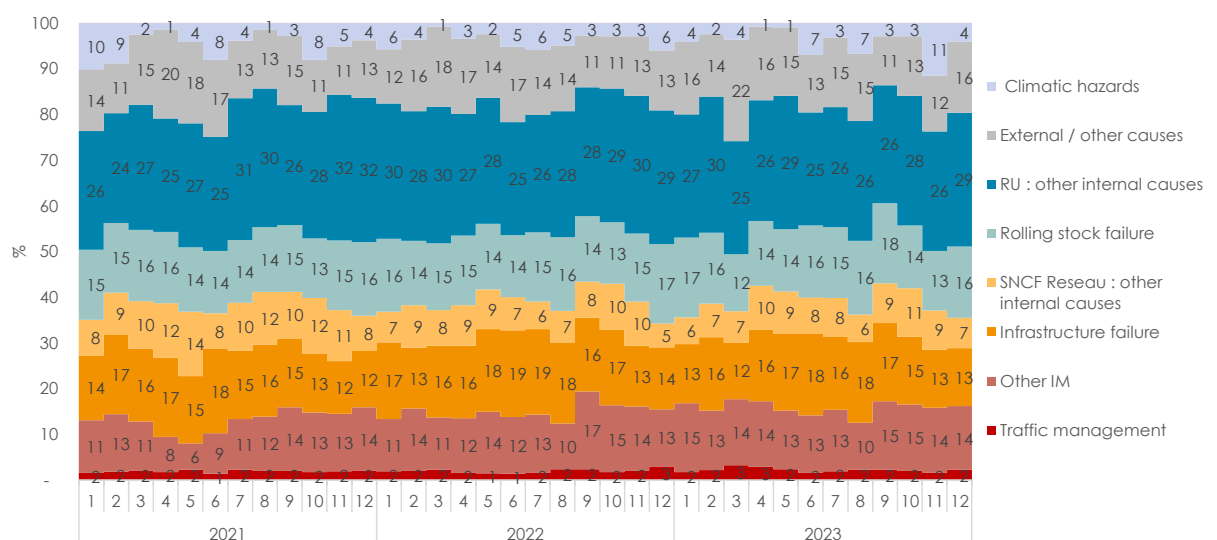


Figure A7.4 – Distribution of the causes of train delays by month for the period 2021 – 2023 (all services combined)



# DEFINITIONS/GLOSSARY

Wording	Acronym(s) / unit(s)	Definition
Average age of the rail network	years	For SNCF Réseau, the average age of a track corresponds to the average age of the components weighted by the economic weight of each (rail accounts for 22,6%, sleepers for 41,9% and ballast for the rest).
Cancellations	-	Traffic not carried out on D-Day, even though it was provided for in the transport plan set at D-1 5 p.m.
Candidate	-	An organization with commercial or public service reasons to acquire infrastructure capabilities. An applicant may be a railway undertaking (RU), a group of RUs, a mobility organising authority (AOM), a combined transport operator, a port, a shipper, a freight forwarder.
Average Carrying Capacity	Nb. seats	Number of seat places commercialized per train circulation.
SNCF Network classification of lines and tracks  (SNCF Réseau classification follows a UIC method)	-	Classification of railway lines adopted by SNCF Réseau according to the traffic loads supported by the infrastructure as well as the type of traffic, following a UIC method. Group 1 corresponds to very busy lines and, on the other hand, group 9 corresponds to very lightly loaded lines. High-speed lines are classified separately. The structuring network is defined as all high-speed lines, the rail network in Île-de-France and all lines classified in UIC categories 1 to 6. Category 7 to 9 lines are often referred to as "small lines".
Government Contributions to RUs	€ excl. VAT	Public subsidies consisting of fare compensation (all activities are concerned) and flat-rate equilibrium compensation (for PSO services only: TER, Transilien, Intercités).
Deprogramming	-	Balance between scheduled circulations (open for commercialization) and scheduled circulations at D-1 5 p.m.
Network Reference Document	DRR(for « Document de Référence du Réseau »)	Document specifying the general rules for access to infrastructure, deadlines, procedures and criteria for charging and allocation systems for infrastructure capacity, including all other information necessary to enable applications for infrastructure capacity (train paths) to be submitted.
Railway undertaking	RU	Any company with a private or public status, which has obtained a licence and a safety certificate in accordance with the applicable legislation, providing services for the transport of goods or passengers by rail, the traction of which must be provided by this undertaking; This term also covers companies that only provide traction.
European Rail Traffic Management System	ERTMS	European Rail Traffic Management System allowing interoperability between the different European networks while ensuring train safety. It integrates two components: the Railway-Specific Radio System (GSM-R), and the Train Control System (ETCS). The latter has three levels of operation; the network defined as 'interoperable' in this report is the one that has achieved at least ETCS level 1 interoperability.
Infrastructure Manager	IM (french « GI »)	Any entity or undertaking responsible in particular for the management and maintenance of the railway infrastructure, including traffic management, and the signalling and control system. SNCF Réseau is the main IM in charge of the national rail network (RFN).
Service Schedule	French « HDS » (for « Horaire de service »)	Twelve-month period beginning on the second Saturday in December at midnight in year A-1. HDS 2019: from December 9, 2018 to December 14, 2019 HDS 2020: December 15, 2019 to December 11, 2020 HDS 2021: December 12, 2020 to December 10, 2021 HDS 2022: December 11, 2021 to December 9, 2022
Track Consistency Index	French « ICV » (for « indice de consistance des voies »)	Indicator specific to SNCF Réseau, which allows infrastructures to be rated between 0 and 100. An index of 100 indicates infrastructure in new condition. An index of 10 indicates a theoretical end-of-life infrastructure (the remaining lifetime is zero). A grade of 0 is only achieved after an additional 5 years. SNCF Réseau considers that an ICV of 55 is an objective to be achieved for the sustainability of the track.

# DEFINITIONS/GLOSSARY

Wording	Acronym(s) / unit(s)	Definition
Index of Consumer Prices (harmonised)	IPC(H)	A reference instrument for measuring inflation, which makes it possible to estimate, between two given periods, the change in the general level of prices of goods and services consumed by households in France. It is a synthetic measure of price changes at constant quality. The CPI and the HICP (designed for international comparison) have fairly similar trends in the case of France, reflecting their methodological proximity. <a href="https://www.insee.fr/fr/metadonnees/source/indicateur/p1654/description">https://www.insee.fr/fr/metadonnees/source/indicateur/p1654/description</a> The HICP is also the index used in the DRR to express in current euros the forecast cost trajectories (personal OPEX for operating costs, maintenance cost per kilometre of track and Gopeq) resulting from the multi-year performance contract between the State and SNCF Réseau.
"Small lines" (LDFT for "Lignes de desserte fine du territoire")	LDFT	In contrast to the RFN's structuring network, the RFN's category 7 to 9 lines are the least used.
High-speed line/network	HSL (LGV for « Ligne à grande vitesse »)	The portion of the national rail network on which trains can travel at speeds of more than 220 km/h.
High-speed line "Bretagne-Pays de Loire"	HSL BPL	High-speed line under the scope of Eiffage Rail Express' infrastructure management (maintenance and renewal of the infrastructure).
High-speed line « Sud Europe Atlantique »	HSL SEA	High-speed line under LISEA's infrastructure management perimeter (path marketing, maintenance and renewal of infrastructure).
Classical line	(french « LC »)	The portion of the national rail network on which trains travel at speeds of less than 220 km/h.
(Investments of) compliance of the RFN		Capital expenditure related to safety (79%) (securing sites, pedestrian crossings, safety, cybersecurity, etc.), interoperability (ERTMS, 16%), environment and sustainable development (4%) and the adaptation of rail systems to (new) rolling stock.
Combined Transport Operator	CTO	Combined (road-rail) transport operator (in French OTC (for <i>opérateur de transport combiné</i> )). CTO are defined as authorised candidates and railway undertakings whose entire activity is dedicated to combined transport and which carry out handling services on combined transport sites.
Operational expenditure	Opex	
Passenger-kilometers	pax.km ou vk	Unit of measurement of rail service demand corresponding to the movement of a passenger over one km.
Charges paid by the RUs to SNCF Réseau	€ HT	Charges collected by SNCF Réseau from railway undertakings for the minimum access package (directly attributable costs and mark-up charge). This amount does not include the access fee, paid by the State (for TER and TET) and by IDF Mobilités (for Transilien), nor does it include the non-regulated services invoiced by SNCF Réseau.
Access charge	RA (for <i>redevance d'accès</i> )	Flat mark-up charge applied to PSO passenger services in accordance with Article 32 of Directive 2012/34/EU, directly paid by the State (for TER PSO services) and IdFM (for Transilien PSO services in Île-de-France)
Operating charge	RC (for <i>redevance de circulation</i> )	Charge for the minimum access package to cover the cost that is directly incurred as a result of operating the train service in accordance with Article 31 of Directive 2012/34/EU
Electric traction charge	RCE (for <i>redevance de circulation électrique</i> )	Charge for the minimum access package to cover the costs incurred as a result of operating electric traction trains - see annex 5.2 of DRR of SNCF Réseau
Electrical System Loss Charge (RCTE for <i>redevance pour le transport et la distribution de l'énergie de traction</i> )	RCTE-A (component A)	Charges for the transmission and distribution of traction energy, including the component A charge for the minimum access package - see annex 5.2 et 5.4 of DRR of SNCF Réseau

# DEFINITIONS/GLOSSARY

Wording	Acronym(s) / unit(s)	Definition
Passenger Stations charge Paid by RUs	€ HT	Amount received by SNCF Gares & Connexions for the minimum package, excluding additional/optional services.
Market charge	RM (for Redevance de marché)	Mark-up charge applied in accordance with Article 32 of Directive 2012/34/EU
National Rail Network	RFN (for réseau ferré national)	The RFN covers all railway lines belonging to the State, the consistency and main characteristics of which are fixed by regulation (under the conditions provided for in Articles L. 1511-1 to L. 1511-3, L. 1511-6, L. 1511-7 and L. 1512-1 of the Transport Code). The RFN integrates the lines under SNCF Réseau management, as well as the HSL BPL, the HSL SEA and the Nîmes and Montpellier rail bypass (CNM). However, it does not integrate the RATP network.
Delay	-	Unless otherwise specified, passenger trains with a time difference of more than 5 minutes and 0 seconds on arrival at the train terminus shall be considered late.
Seat-kilometers	Seat-km	A unit of measurement for rail service that corresponds to the movement of a train seat over one km.
Train path	-	The infrastructure capacity required to move a given train from one point to another over a given period of time.
Commercial (or non-PSO) service	HST	Non-PSO train service operated on HSL or conventional lines.
High-speed trains	HST (or TAGV « for Trains aptes à la grande vitesse »)	Non-PSO high-speed train service operated on HSL or conventional lines. The service is operated in 2021 as a monopoly in France by SNCF Voyageurs for domestic routes, and by SNCF Voyageurs' subsidiaries or by international agreements with other european RUs for international routes. The HST service is subdivided by SNCF Voyageurs into 4 geographical « axis » : Atlantic, Northern, Eastern and South-East.
Long-distance non-PSO trains	(TGL for « Trains grandes lignes »)	This is a distinction to HST services or trains, operating only on the conventional line network – this is particularly the case in 2022 for “Ouigo train Classique” services
Cancellation rate	%	Ratio of (total) cancellations to scheduled traffic
Deprogramming rate	%	Ratio of deprogramming to scheduled traffic
Rate of passengers compensated (for train delays)	%	Ratio of passengers affected by a train delay who have applied for compensation and have been awarded a compensation voucher or refund by the railway undertaking.
Effective train rate	%	Ratio of the number of effective train circulations to scheduled train circulations. The number of effective runs is equal to the differential (scheduled train circulations – deprogramming – cancellations).
Delay rate	%	Ratio of the number of late trips to scheduled trips on D-1 4 p.m.
Occupancy rate	%	Ratio passenger.km/seat.km
« Transport express régionaux »	TER	SNCF Voyageurs' trademark that applies to the trains and coaches operated under PSO agreements with the regions. The term TER is used to refer to the entire activity of regional transport or a train that is part of this activity (regional express train). All regional and local service trains operated by SNCF Voyageurs are TER trains, except in Île-de-France, where the Transilien brand is used.
« Trains d'équilibre du territoire »	TET	PSO rail services of national interest organised by the State in accordance with Article L. 2121-1 of the Transport Code. From the end-user's point of view, TET circulations are grouped together under the name "Intercités".
Trains.kilometres	train-km	Unit of measurement of rail service supply corresponding to the movement of a train over one km.
Out-of-age track		SNCF Réseau determines a theoretical service life for each track component. The qualification "out-of-age track" is determined on the basis of the components of the route whose age is beyond the regeneration threshold defined in the regeneration policy that applies to them. See also the definition of network age.

# METHODOLOGICAL GUIDE

## WARNING

The results presented were obtained by statistical processing by ART-France, based on data transmitted as part of the regular data collection set up in application of the provisions of the legal Transportation Code. In this reporting process, it is the responsibility of railway undertakings, authorised applicants, infrastructure managers and the *Régie autonome des transports parisiens* (RATP) to transmit reliable and complete data to ART-France. The sources of the other data used in this report are systematically mentioned.

When using the data collected, ART-France services made every effort to correct any errors or inconsistencies detected in the data transmitted by successive iterations with the stakeholders. However, ART-France cannot guarantee the perfect reliability of all the data received.

Whenever possible, the data are subject to statistical processing by cross-referencing data from different sources to obtain indicators and graphs that are more robust to errors and inconsistencies in the data collected. However, this is data collection and processing for statistical purposes and not audits or surveys; under these conditions, the published data, indicators and graphs cannot be regarded as validated by ART-France. These data, indicators and graphs are of statistical value only and cannot be used against it in the context of any procedure.

The completion of this report has resulted in the updating of statistical data for fiscal years 2015 to 2022. All of this data relating to the rail passenger transport market for the years 2015 to 2022 has therefore also been updated in the statistics database accessible in Open Data in the website of ART-France and can be considered semi-definitive. The new data contained in this report, relating to the year 2023, are to be considered provisional.



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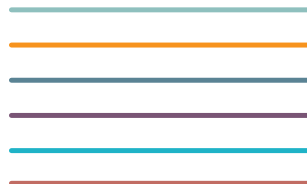
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**Legal deposit:** December 2024 (french version), February (english version)

**ISSN :** 2678-6575

The 2023 edition of the Rail Transport Market is published on the website of the Transport Regulatory Authority: <https://www.autorite-transport.fr>



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