



CHAMBER OF DEPUTIES
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International Forum | June 9, 2023 | Prague
High-Speed Rail in Europe & Private Capital
Contracting & Financing Options for the Czech HSR

PPP High-Speed Line Sud Europe Atlantique (SEA)



Marc Milosevic

*Director of Business Development
VINCI Railways*



Vinci Concessions into the VINCI group

Introduction



● ● ● CONCESSIONS *

- VINCI is Europe's leading **transport infrastructure concession operator**
- VINCI Concessions operates airports, highways and railways in more than **23 countries**

Turnover : € 9.2 bn

Number of employees : 22,000

Net result : € 2.7 bn

2022 KEY FIGURES



● ● ● CONTRACTING

- VINCI Energies and VINCI Construction and Cobra IS form an **unrivalled network of expertise and companies**
- In 2018, VINCI employees worked on **270,000 projects throughout the world**

Turnover : € 53.0 bn

Number of employees : 240,000

Net result : € 1.6 bn

*Consolidated data for VINCI Group's concessions, including VINCI Autoroutes and VINCI Stadium

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VINCI Concessions overview

Introduction

2022 KEY FIGURES



+65
Airports



+10,000
Employees



12
Countries



€ 2,679 M
Turnover



3 362 km
Total Network



+5,000
Employees



15
Countries



€ 727 M
Turnover



340 km
Total network



243
Employees



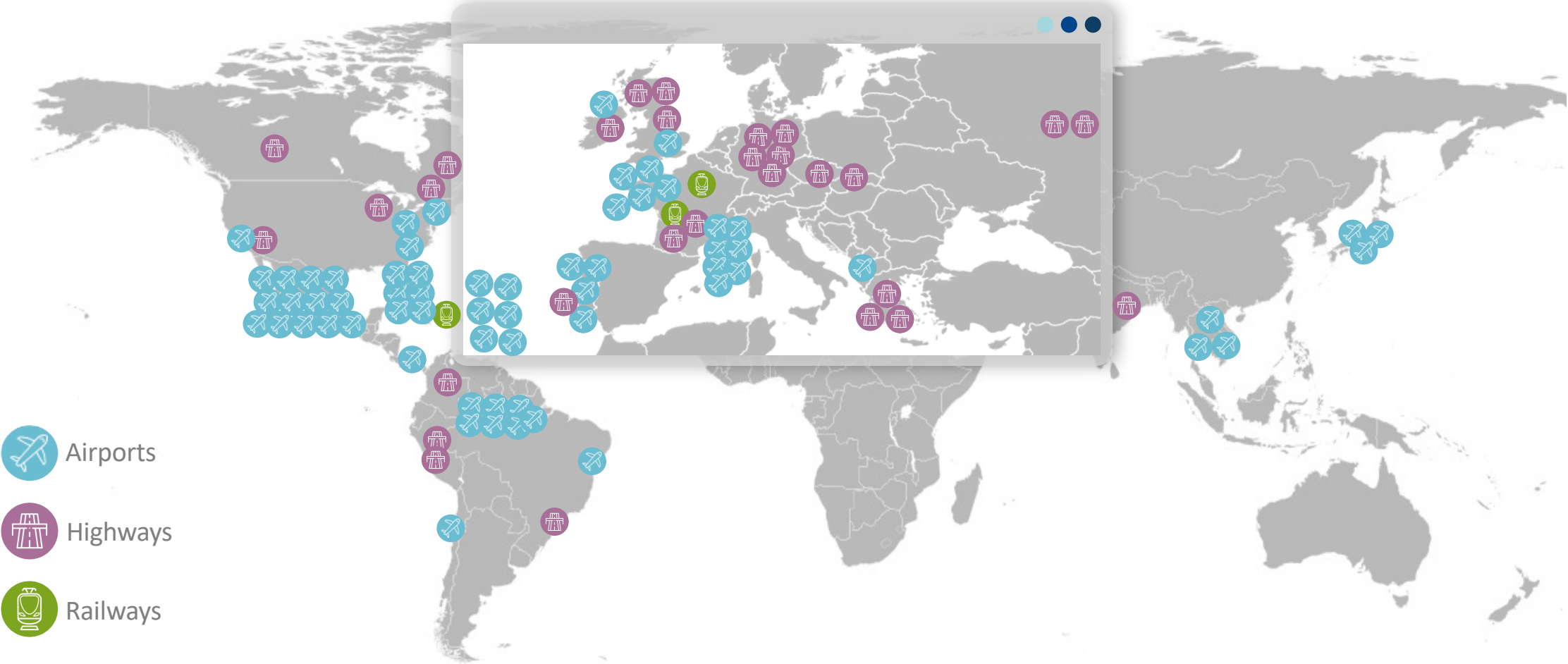
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References



€ 327 M
Turnover

VINCI Concessions international footprint

Introduction



 Airports

 Highways

 Railways

Key information

HSL Sud Europe Atlantique (SEA)

The largest recent high speed railway concession in Europe

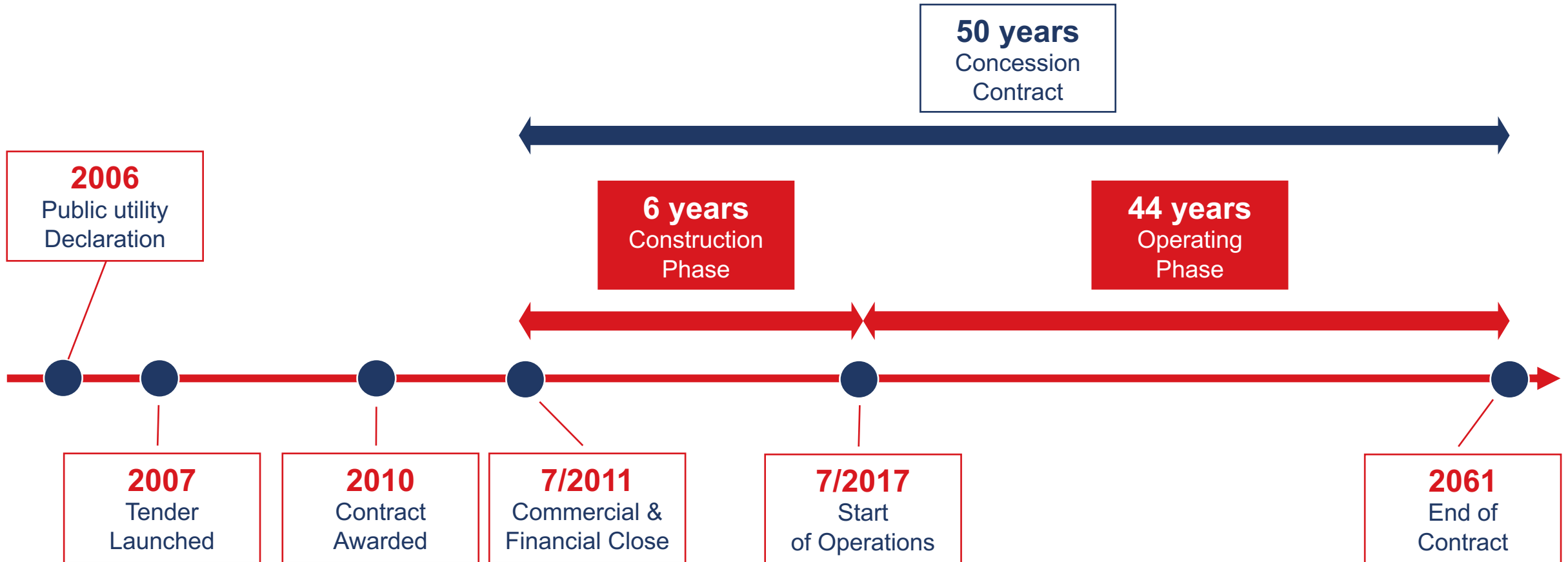
Traffic	24 M Passengers expected in 2025 (17 M before SEA)
Lenght	340 km in total 302 km (high-speed lines) 38 km (conventional lines)
Max. speed	320 km/h for TGV trains
CAPEX	6,4 bn. EUR
Travel time Paris-Bordeaux	2 hours 4 minutes (3 hours before SEA)

High speed Rail Tours-Bordeaux provided significant **positive economical impact** along the connected areas

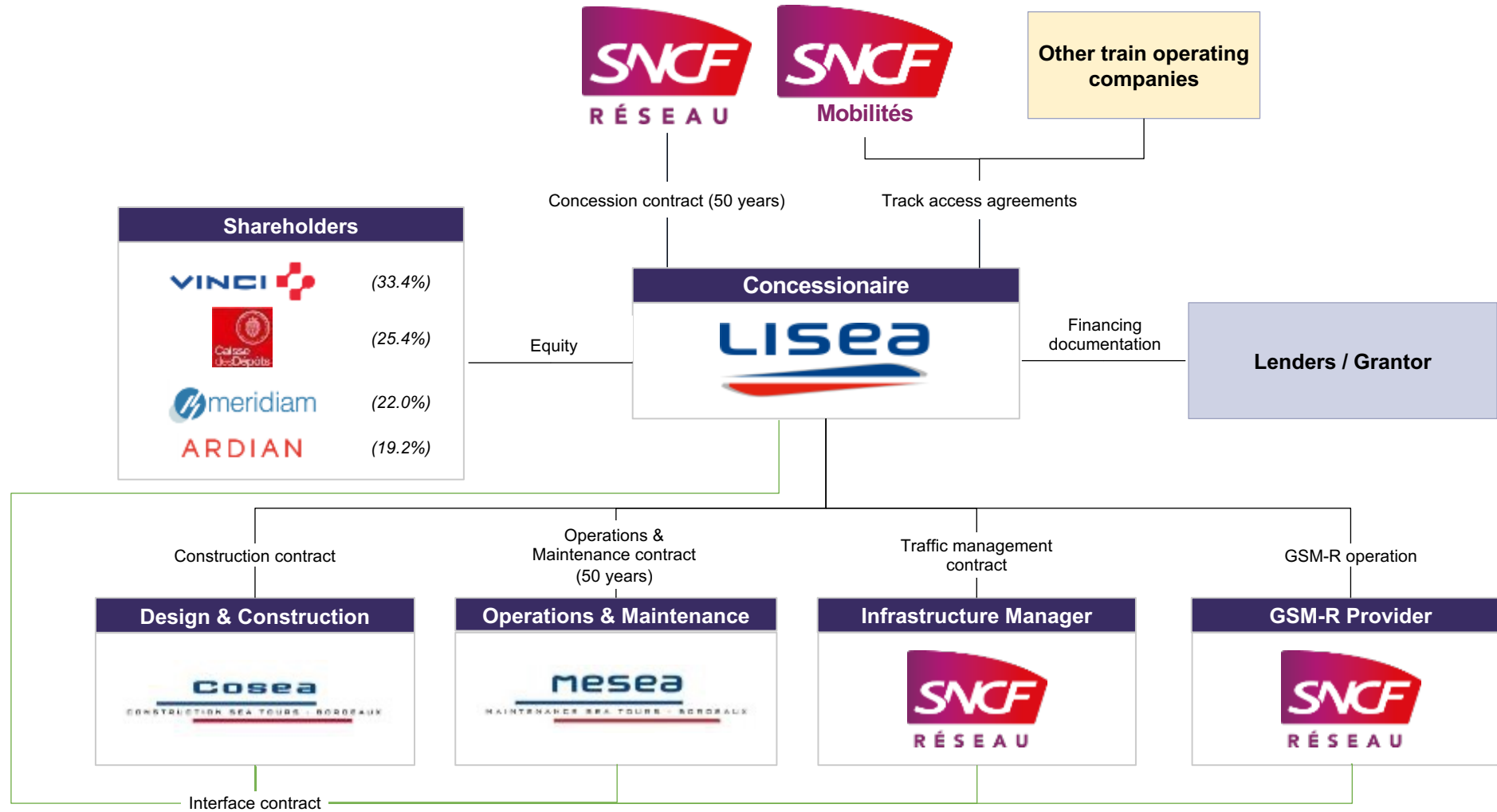


Timeline

HSL Sud Europe Atlantique (SEA)



A solid consortium and well-established contractual framework



Notes

- 1 COSEA is led by VINCI Group
- 2 MESEA made up of VINCI Concessions (70%) and Systra (30%)

Scope

HSL Sud Europe Atlantique (SEA)

LISEA responsibilities

- Development of relationships with stakeholders
- Determination and collection of track access charges
- Funding
- Asset maintenance and renewal
- Obligation to monitor socio-economical benefits and environmental behaviours
- Management of compensatory measures
- Railway safety : obtain and maintain the Infrastructure manager safety authorization

SNCF Réseau responsibilities

- Capacity allocation through a sub-contract agreement
- Access agreement for GSM-R
- Rail traffic and management control through a sub-contract agreement
- Crisis management lead
- Land acquisition
- Entry into service

One of the largest infrastructure project in Europe

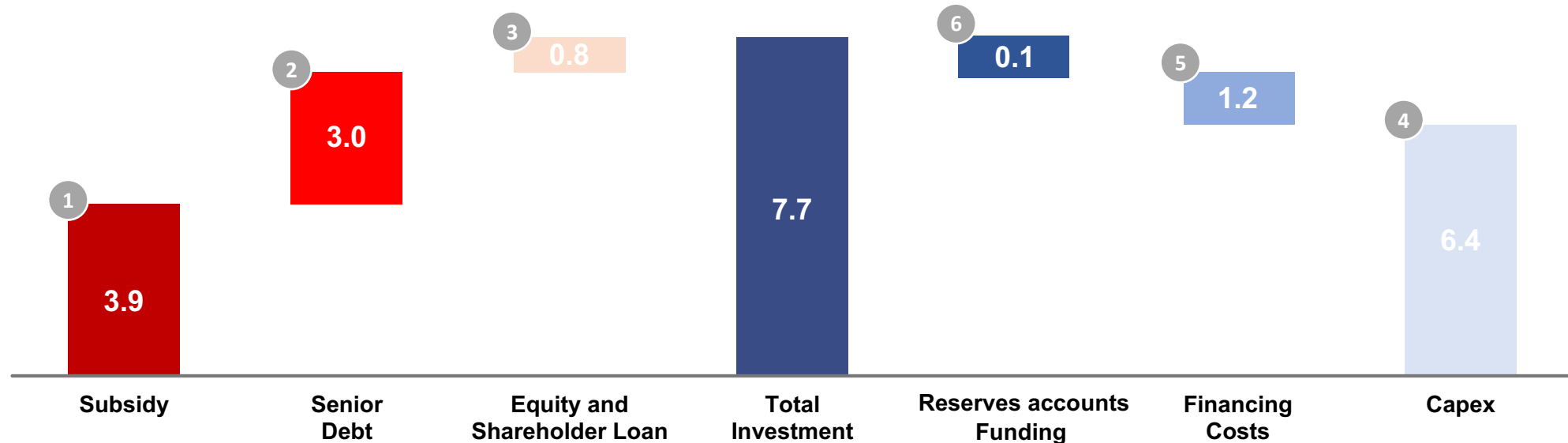
HSL Sud Europe Atlantique (SEA)

The project's total investments amount to c.€7.7bn. The financing for the project comes from the following sources:

- 1 Subsidies in the form of grants provided by the French local authorities and SNCF Réseau;
- 2 Senior debt structured through debt facilities issued by the European Investment Bank and the Direction des Fonds d'Épargne (DFE), as well as commercial banks together with French State & SNCF Réseau guarantees
- 3 Shareholder contribution, in the form of a shareholder loan and common equity

These sources of funds were used for:

- 4 Construction capex
- 5 Financing costs related to senior debt, swaps and guarantees
- 6 Initial funding of reserves accounts



Payment mechanism

HSL Sud Europe Atlantique (SEA)

- Revenues are received through **Track Access Charges (TAC) for the use of the Line from train operators**. The Concessionaire can suffer availability and performance deductions.
- The **TAC** consists of two different parts:
 - **A lump sum charge** relating to the access right and the actual utilization by a train of an elementary section of the Line.
 - **A variable charge** based on the infrastructure capacity reservation right payable **per train slot**.
- In addition, LISEA is compensated by the operators for **the cost of traction energy**.



COSEA - Construction challenges

HSL Sud Europe Atlantique (SEA)

1

One of the largest infrastructure project in Europe



302+38 km of double track railways

500 civil engineering structures including 24 viaducts



100,000 tons of steel frame

800,000m³ of concrete



8,500 people involved in the construction at its peak



2

A well-conducted construction phase



A performing construction completed in **6 years, 1 month ahead of schedule**

3

Technical civil works



Construction of a **1km bridge** across the **Dordogne river**

4

Implementation of environmental measures









3,500 hectares of compensatory measures **to limit impacts on the environment**

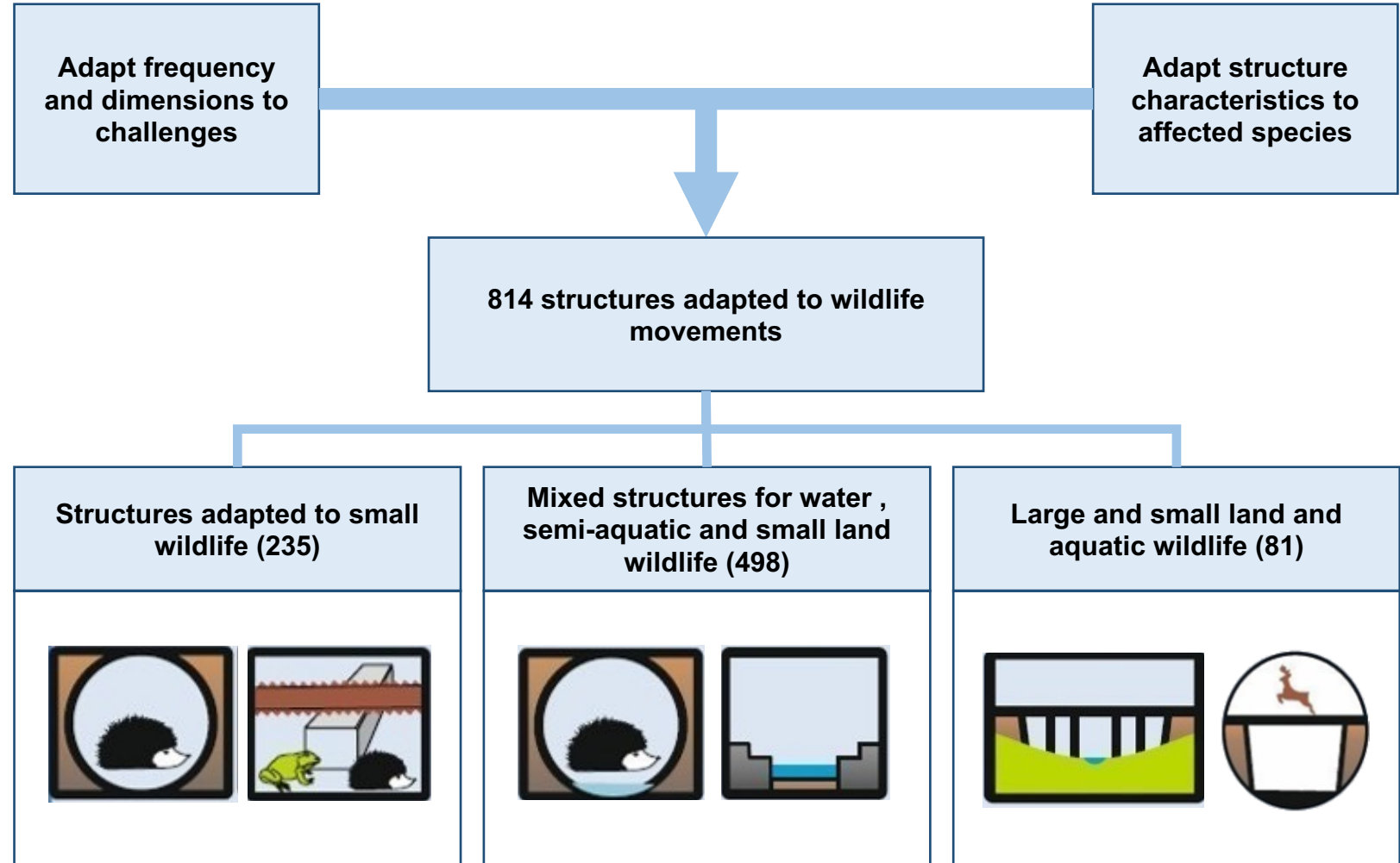


Early environmental awareness during project design

HSL Sud Europe Atlantique (SEA)

Selected environmental highlights

-  **223 species protected** wildlife & vegetation
- 814 structures** for wildlife movement 
-  **80 documented rivers**
- 14 sites "Natura 2000"** affected 
-  **c. 3,500 ha of compensatory surfaces** classified as protected areas
- 1,450 ha of compensatory reforestation** 



Significant ESG achievements with impact on local communities

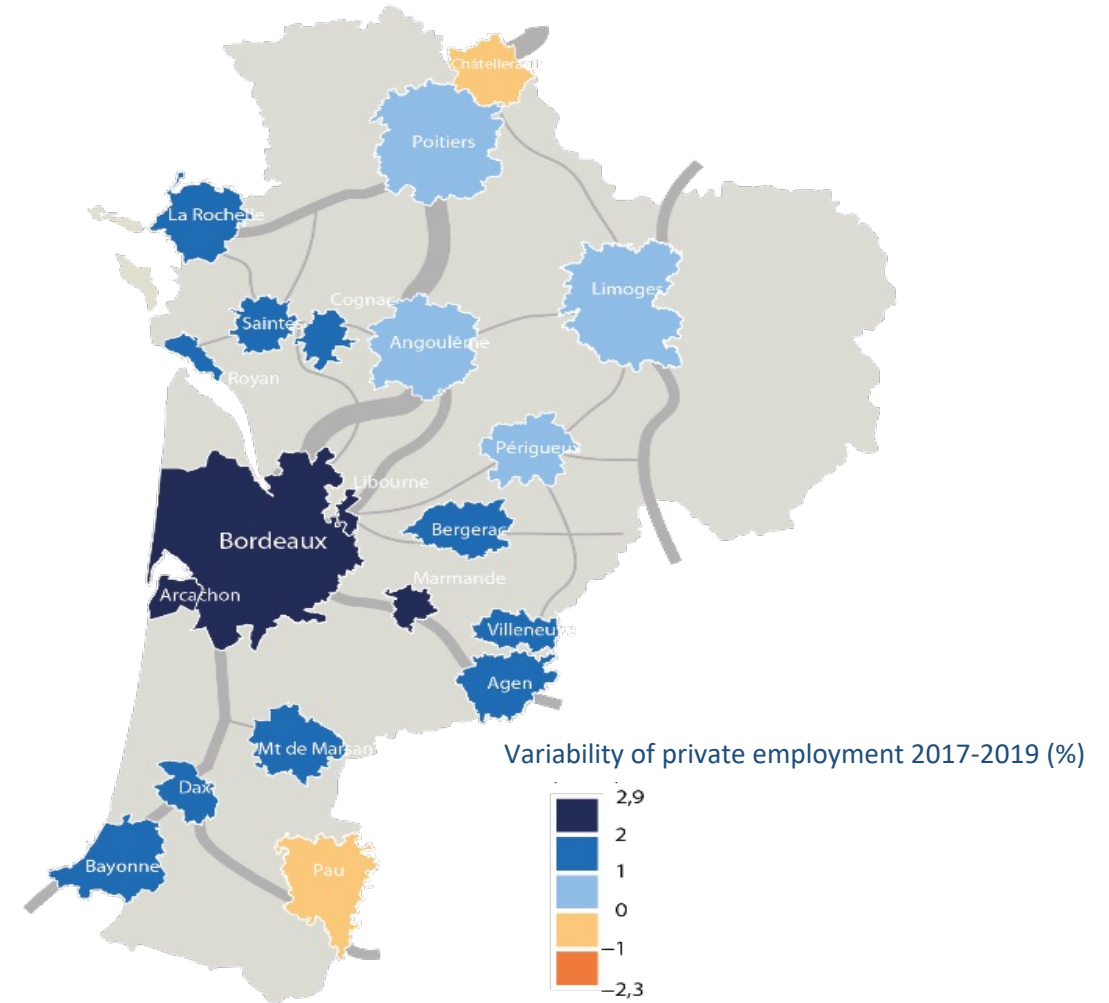
HSL Sud Europe Atlantique (SEA)



- **Socio-economic monitoring committee** (private and public) in order to assess the **impact** of the HSL project **on the local economic development** (mobility, tourism...)
- A **recorded increase** of employment by 2,9%/year in Bordeaux area from 2017



- A **positive impact** on the companies located in the territories involved in terms of access to new markets, brand image, purchase and diversification of activities
- An **increase of 1,5%** of the touristic capacity annually along the line and **+14%/year** in Bordeaux area



MESEA - Maintenance challenges

HSL Sud Europe Atlantique (SEA)

MESEA's maintenance team snapshot key figures

200 staff members split into 4 different functions:

- maintenance of track & OHL & surroundings,
- maintenance of the whole of HSL switches with swing nose crossings
- maintenance of signalling & communication systems
- maintenance of power supply installations



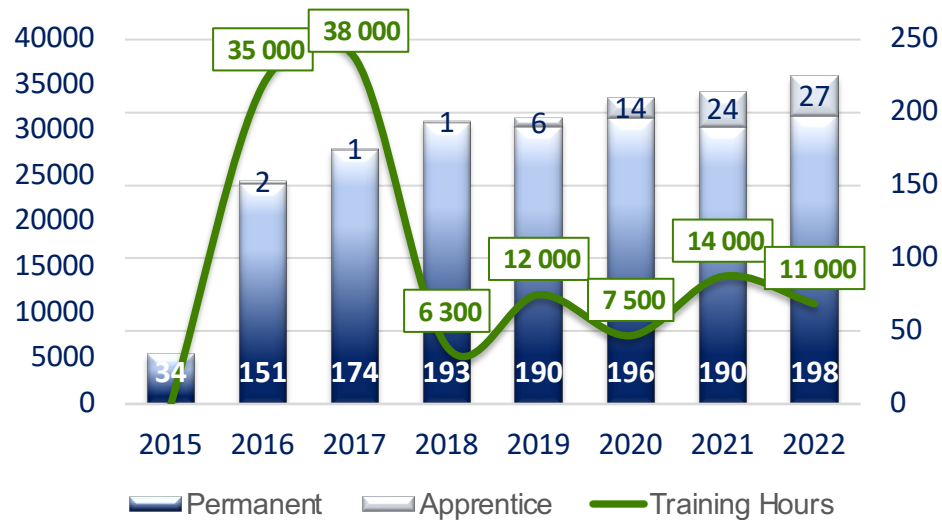
4 maintenance bases along 340km of tracks

On duty 24/7 with daily measurement



150 rail switches

40 signalling rooms



Innovation as a vector of MESEA's performance

HSL Sud Europe Atlantique (SEA)

MESEA SPECIFIC MATERIALS



- **Road-rail vehicles** : used for track and catenary maintenance by derailing as close as possible to the work sites, thus limiting track congestion during maintenance operations



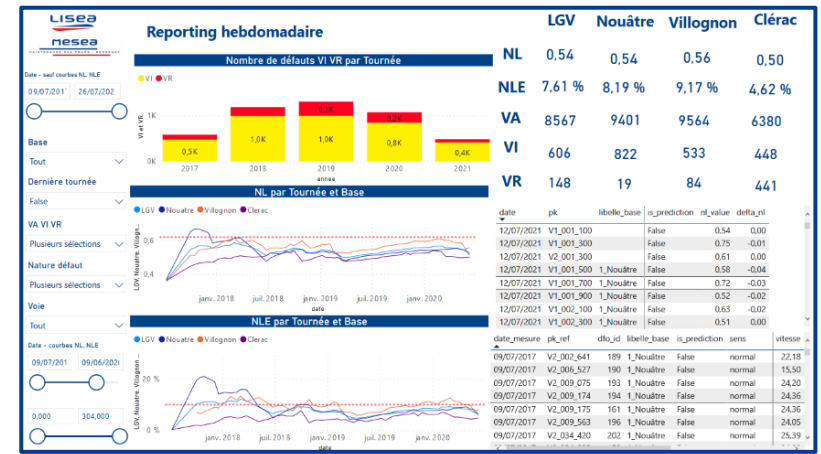
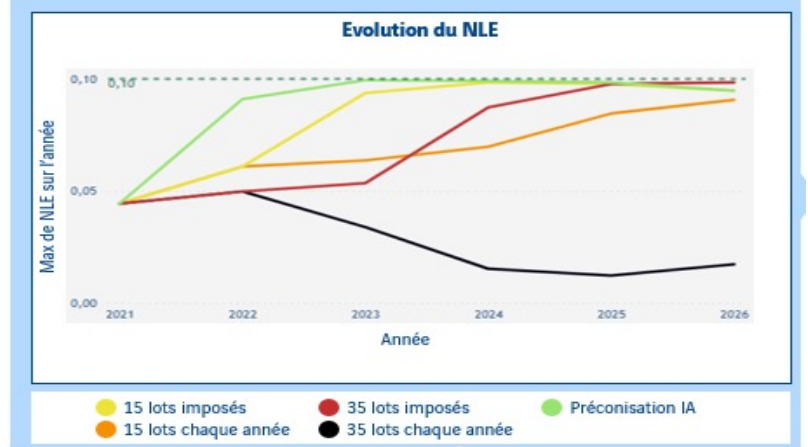
- **BROOM wagon** : daily safety checks are optimized thanks to this vehicle that also record the parameters and characteristics of the line's installations



- **Intelo** : it circulates between the catenary posts : it thus allows inspection without interrupting rail traffic. Thanks to an articulated arm 15 meters long, he can photograph the work from all angles.

SEA CLOUD - GEOVOIE

- LISEA and MESEA have developed this application that used **artificial intelligence** for predictive maintenance. The **SEA Cloud** data platform can predict changes in track geometry with **98% reliability** on a **18 months period**



MESEA Start Up timeline

September 15, 2008

LISEA submits an initial offer to RFF

June 30, 2011

Award of the LGV SEA concession contract to LISEA

2012

Civil engineering works commencement

Summer 2016

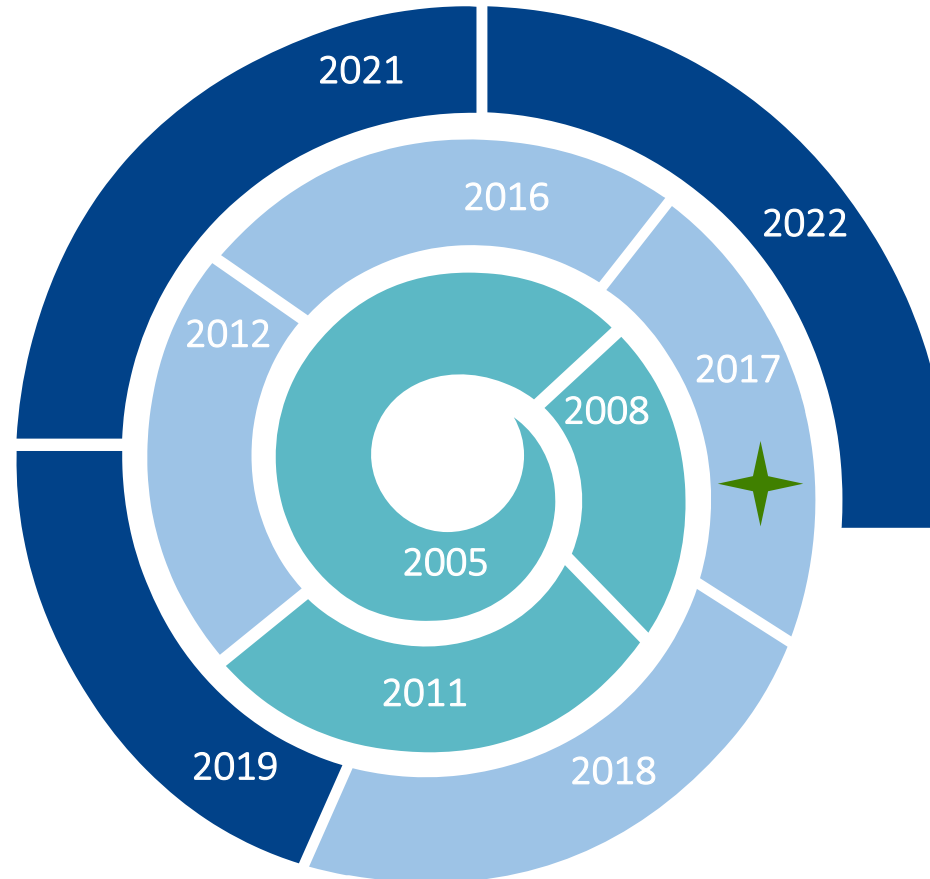
First test runs of a TGV at 160 kph between Nouâtre - Maillé and Villognon. Gradual increase in speed until 320 kph in August.

February 28, 2017

Inauguration in Villognon

March 31, 2017

Safety Agreement delivery by EPSF



July 2, 2017

First commercial train

January 2019

Training agreement and start of MESEA Academy

December 21, 2021

Triple Crown
ISO 45001, 14001 and 9001

March 2022

Renewal of Safety Agreement by EPSF

Contact details

Name	Marc Milosevic
Position	Director of Business Development
Firm	VINCI Railways
E-mail	marc.milosevic@vinci-concessions.com
Website	www.vinci-concessions.com www.lisea.fr

Thank you your attention.

More information > www.ceskainfrastruktura.cz



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Key parameters of the KPI regime

Indicators	Definitions	Annual thresholds
Regularity	≤ 1 min per 1,000 train-km	1
Availability	Mean time to repair to return to a normal state	120 min
Reliability (F1)	Number of major incidents	3
Reliability (F2)	Annual number of incidents per 100km of single track	15
Passenger comfort (NL)	Longitudinal levelling of the railway	0.62
Passenger comfort (NLE)	Longitudinal levelling rate higher than 0.9	10%

Concession agreement overview

Purpose

- The Concessionaire (LISEA) is entrusted with the financing, design, construction, maintenance (including renewal) and operation of the Line¹ and is remunerated through tolls paid by the Users of the HSL

Duration

- Concession contract has been **signed by LISEA and SNCF Réseau on June 16th, 2011** (approved by decree n°2011-761 dated 28 June 2011)
- Duration: **50-year period up to 30th June 2061**

Legal Protection

- The French concession framework includes **widely developed and long and well established mechanisms provided under case law.**
- The Concession Agreement may **expire earlier under customary termination events** provided under the Concession Agreement

Infrastructure & Equipment

- Most of the infrastructures and equipment are **to be handed over to the SNCF Réseau at the end of the Concession Agreement.** They are considered as “biens de retour” (i.e. those elements which are necessary to the operation of the service) and thus **owned by the Grantor from the date of completion of works**
- As such, **no security may be granted by LISEA** over the “biens de retour”, as well as on the land owned by SNCF Réseau which is a standard feature of concession contracts