SNCF Réseau control over operation and maintenance services provided by Private Partners

Konference železniční dopravní cesta 2024

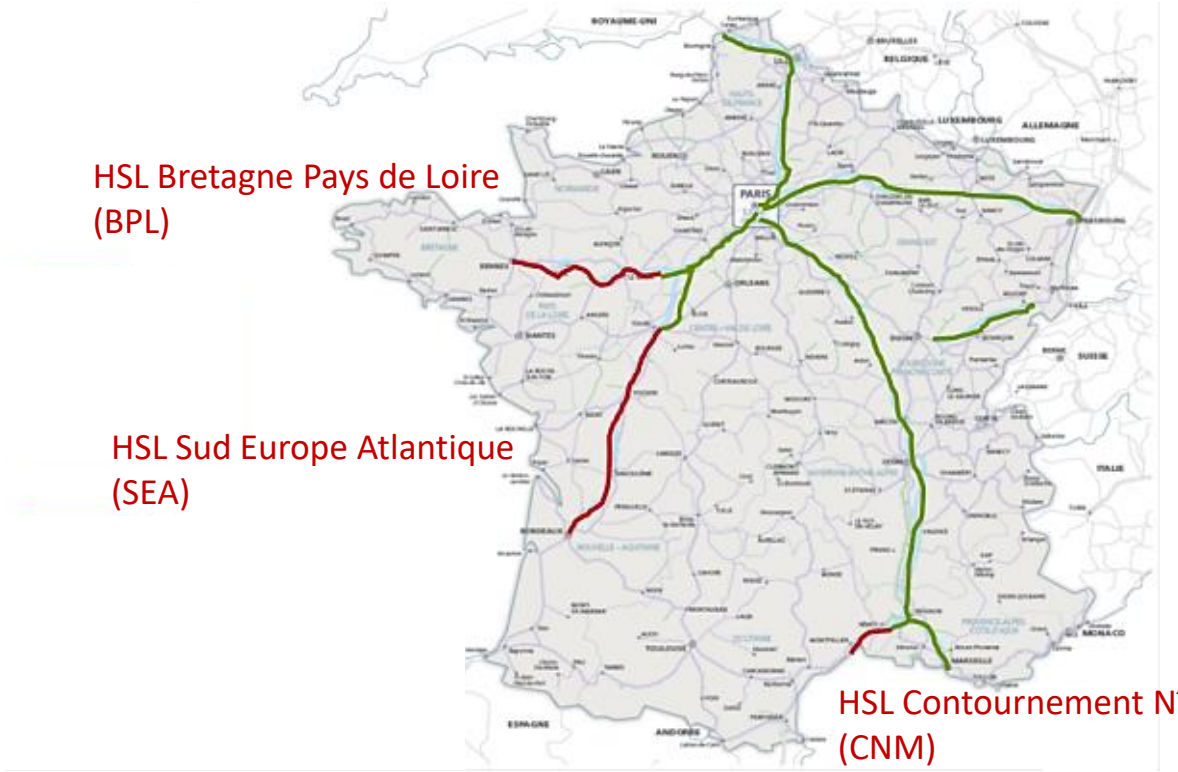
21 november 2024

Summary

01

SNCF RESEAU
PPP & CONCESSION PROJECTS

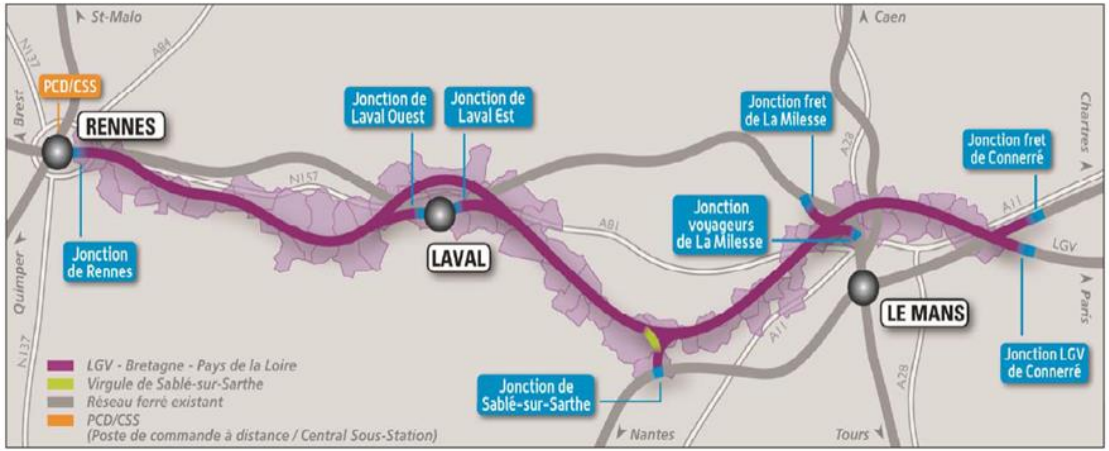
SNCF Réseau PPP & Concession Projects



HSR Sud Europe Atlantique (SEA)

- 302 km
- Commissioned in July 2017
- 2h05 from Paris to Bordeaux instead of 3h
- Concession contract signed with LISEA signed in June 2011
- Track Access Charges paid to LISEA
- Duration 50 years

HSR Bretagne Pays de Loire (BPL)

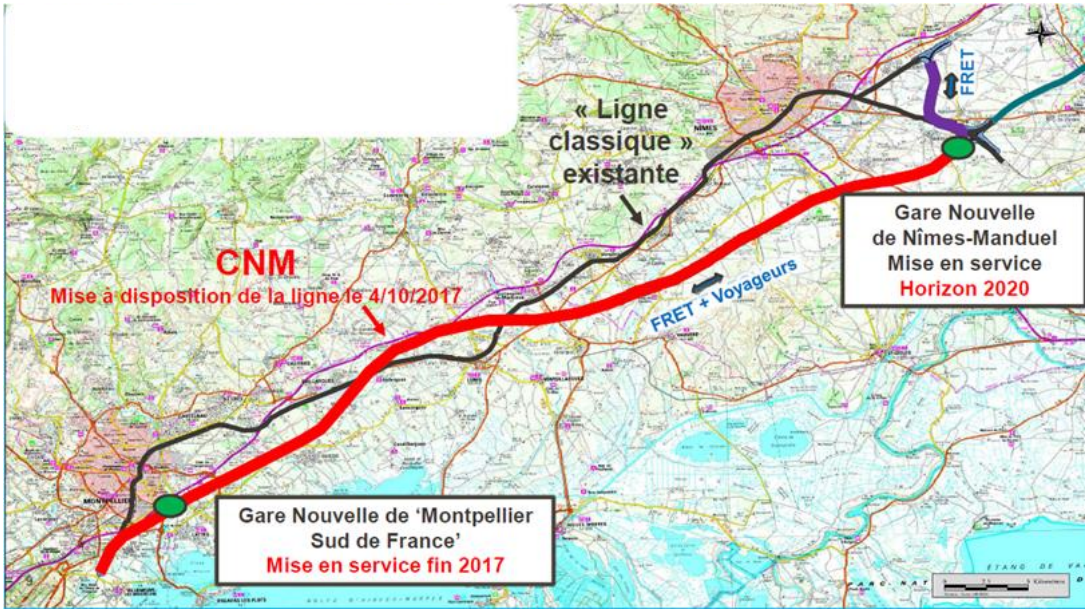


- 182 km
- Commissioned in July 2017
- 1h30 from Paris to Rennes instead of 2h
- PPP contract signed with ERE in July 2011 for 25 years

Contournement Nîmes Montpellier (CNM)

HSR & Fret line

- 80 km
- Commissioned in December 2017
- 3h from Paris to Montpellier instead of 3h30
- PPP contract signed with Oc'Via in June 2012 for 25 years



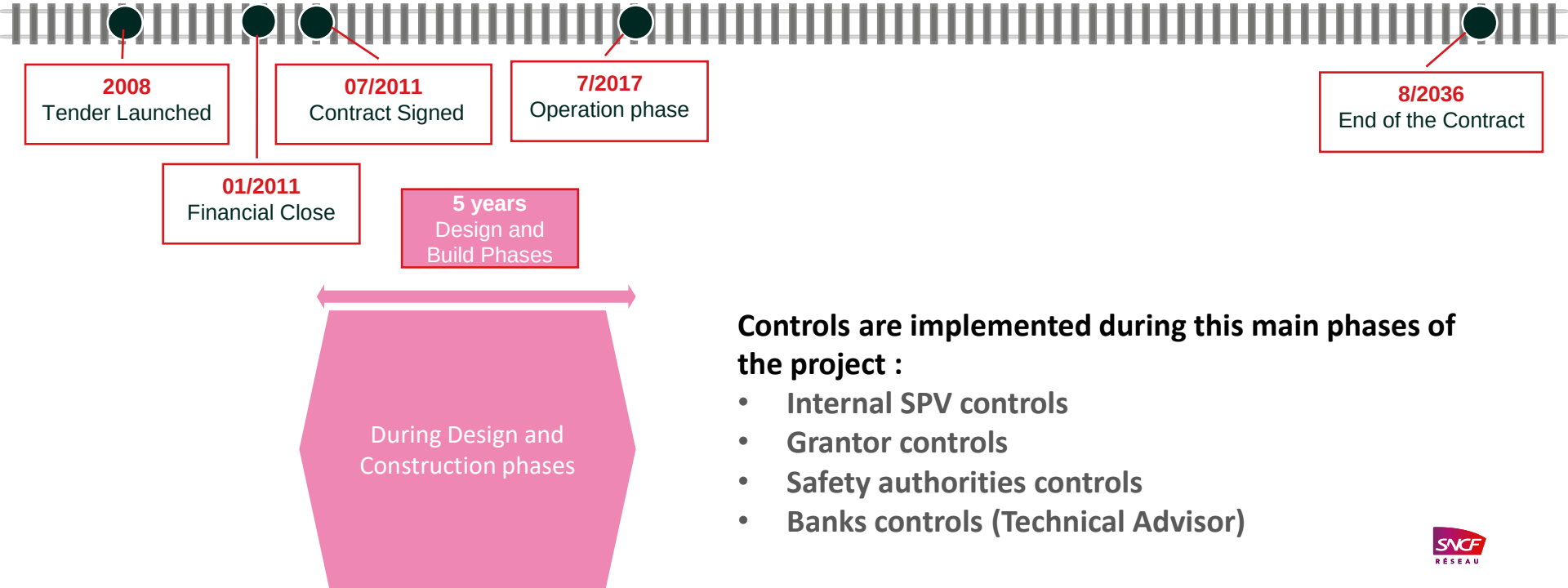
CONCESSION / PPP OPERATIONS DETAILS

Projets	Contract	Duration	Design Build Finance Maintenance	Invest	Tarification, slots fees	Operation
Sud Europe Atlantique	Concession	50 y	LISEA	7,2 Mds€	LISEA	LISEA, which subcontracts to SNCF Réseau
Bretagne Pays de Loire	Partnership	25 y	ERE	3,4 Mds€	SNCF Réseau	SNCF Réseau
Contournement Nîmes Montpellier	Partnership	25 y	Oc'Via	2,0 Mds€	SNCF Réseau	SNCF Réseau
				Total **12,6 Mds€**		

02 Monitoring organisation

MONITORING AND CONTROL ARE NEEDED AT THE BEGINNING OF THE PROJECT

Focus on HSL Bretagne-Pays de la Loire (BPL)

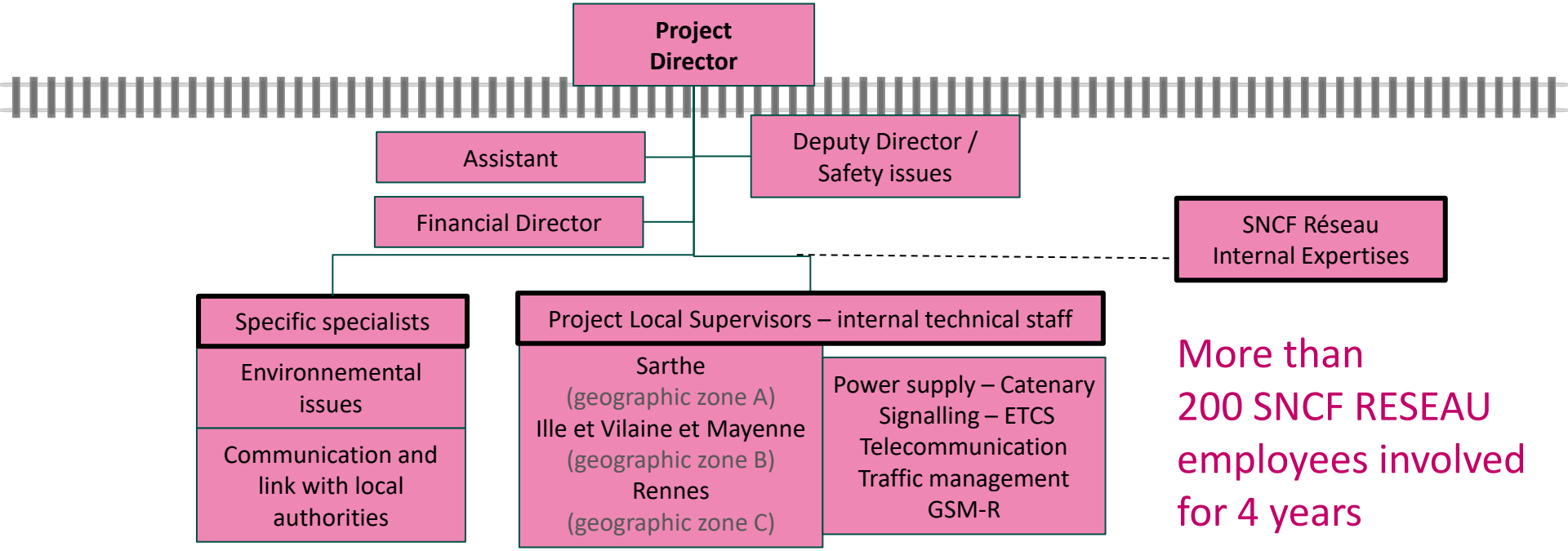


Controls are implemented during this main phases of the project :

- Internal SPV controls
- Grantor controls
- Safety authorities controls
- Banks controls (Technical Advisor)

ORGANISATION SCHEME DURING DESIGN AND BUILD

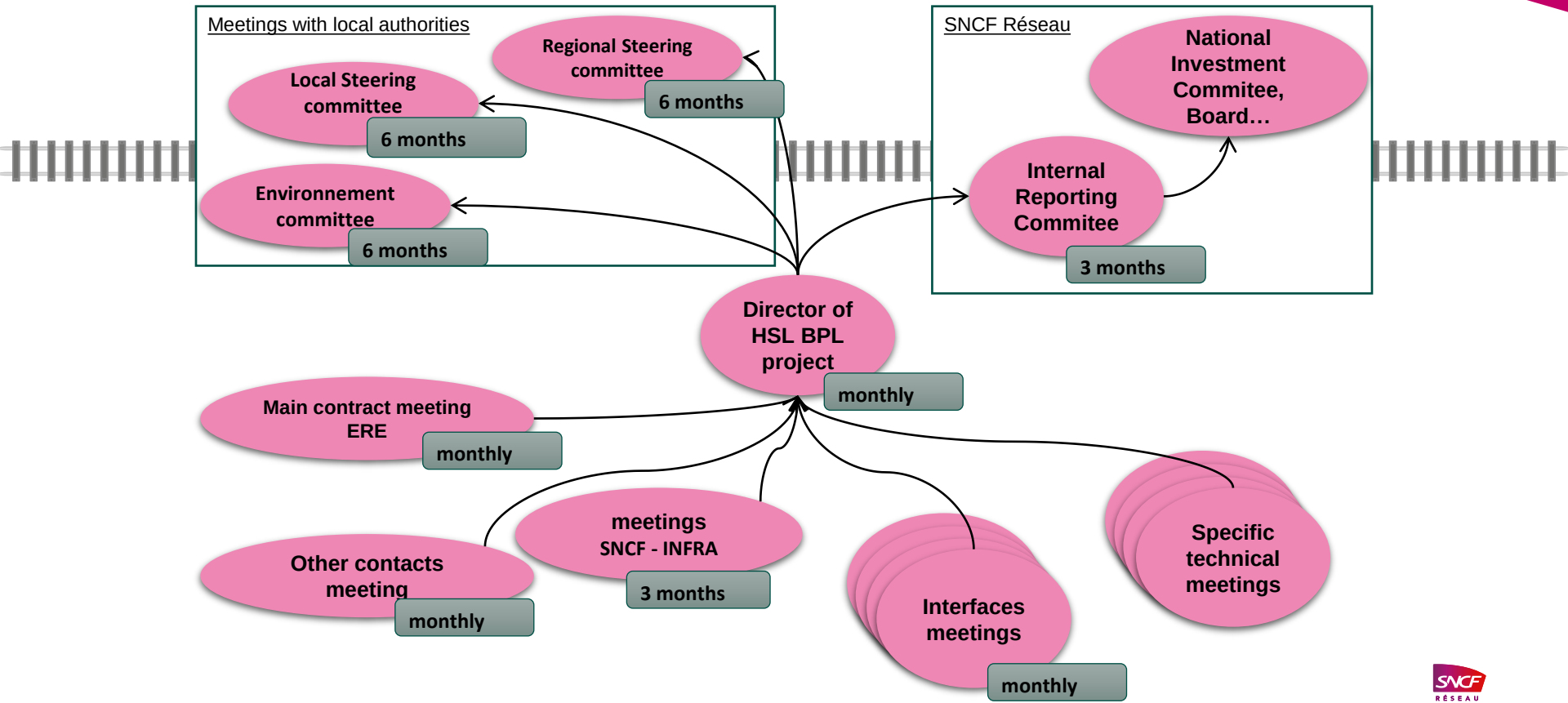
Focus on HSL Bretagne-Pays de la Loire (BPL)



More than 200 SNCF RESEAU employees involved for 4 years

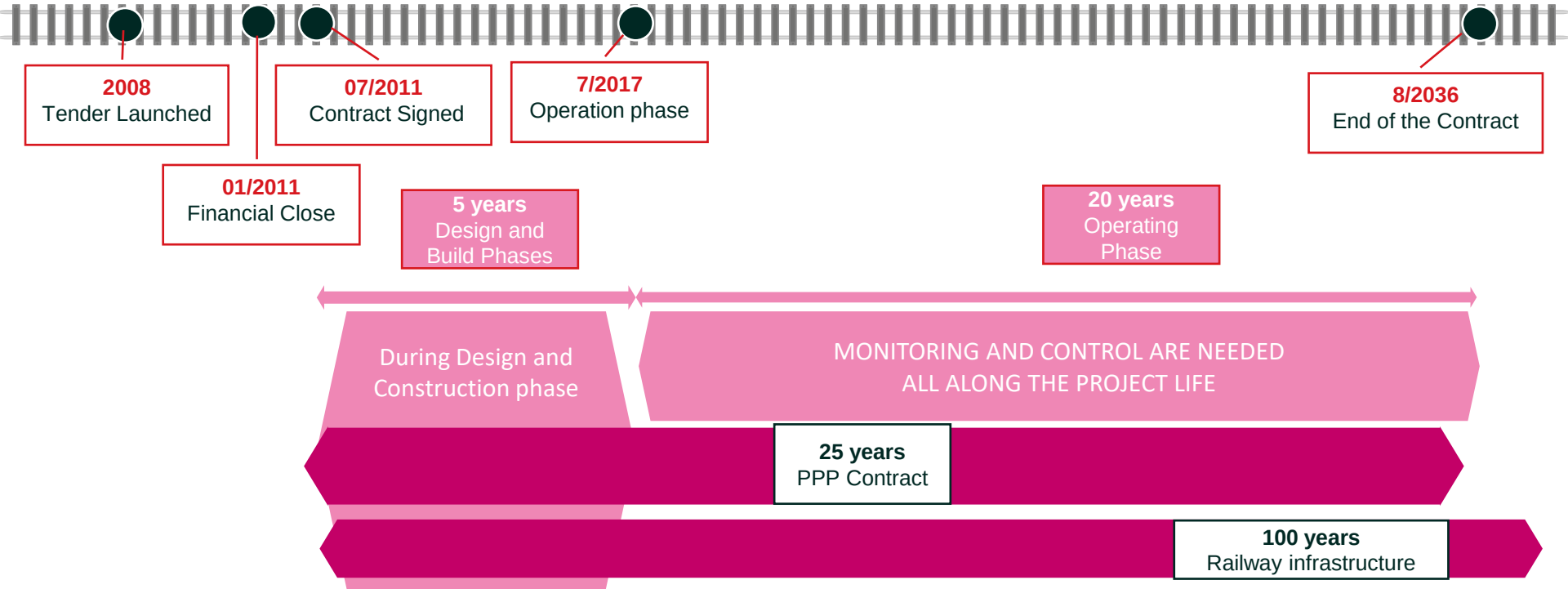
14 full time employees for BPL Project

DESIGN AND BUILD PHASES MEETINGS

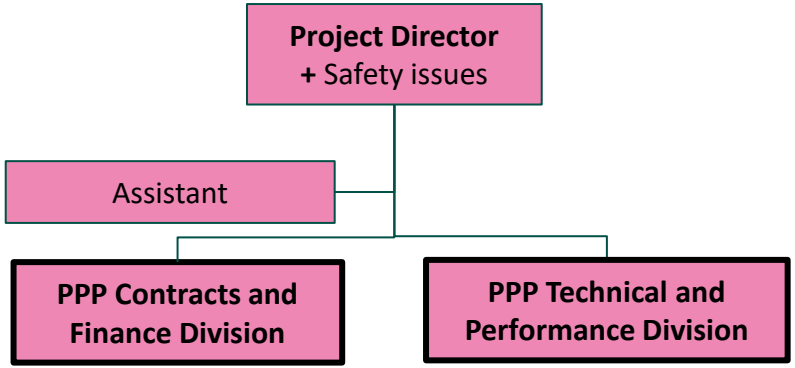


MONITORING AND CONTROL ARE NEEDED ALSO ALL ALONG THE PROJECT LIFE

Focus on HSL Bretagne-Pays de la Loire (BPL)



SNCF RESEAU ORGANISATION IN OPERATIONAL PHASE



10 full time employees
for 3 contracts 13 Mds€

A Specific team implemented on a long-term base

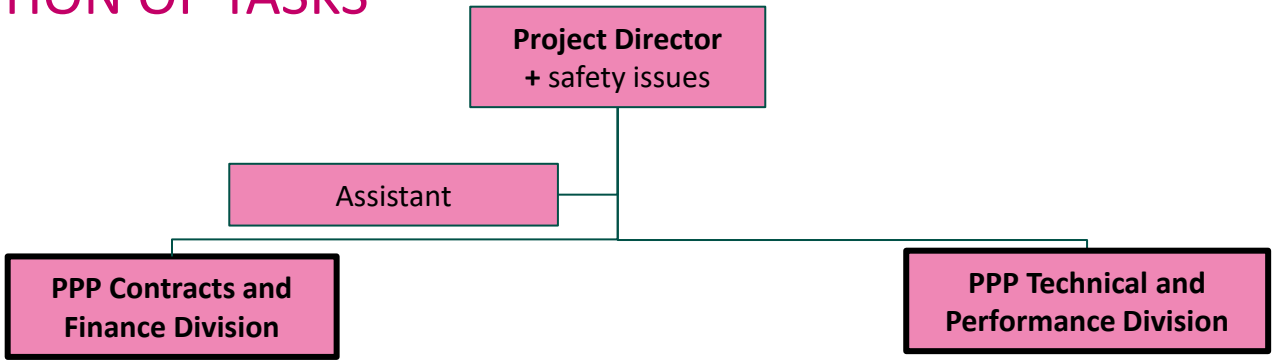
With efficiency in contract management

Quarterly monitoring committees

Management of PPP contracts in particular safety, operational, legal, financial, technical and performance, environment dimensions

General coordination of interfaces between the different SNCF Réseau entities

REPARTITION OF TASKS



In Charge of :
Application of the contract,
Financial monitoring of the contract…

Control of the reporting

Calculation of rents (levels, index and penalties, …)

Impact of tax changes and refinancings

Mastery of archives

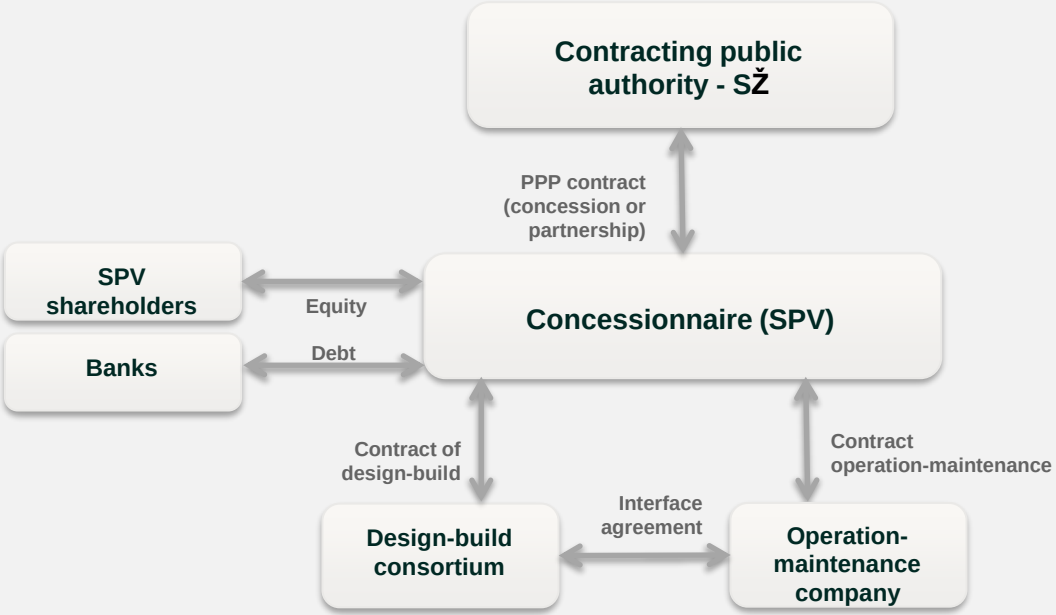
In Charge of :
Arbitration process between
maintenance need / line operation need

Collecting traffic information &
Collection and analysis of performance criteria…

Works at interfaces, Control of works,

Transfer of land & Links with local Complaints

RISK ANALYSIS IS NEEDED TO DEFINE A BETTER ORGANISATION



03 KPI

BREAKDOWN OF PPP RENTS

Annual rent =

MC = Maintenance Cost x Level of traffic x Indexation

+

RC = Renewal Costs x Indexation

-

Penalties = Based on KPI

Level of traffic is for +-10% of the Maintenance Costs
Penalties are capped in % of the rent

KPI AND RENTS

- Define measurable KPIs
  - Level of traffic
  - Regularity
  - Availablity
  - Reliability
  - Comfort

- Define the reference values !

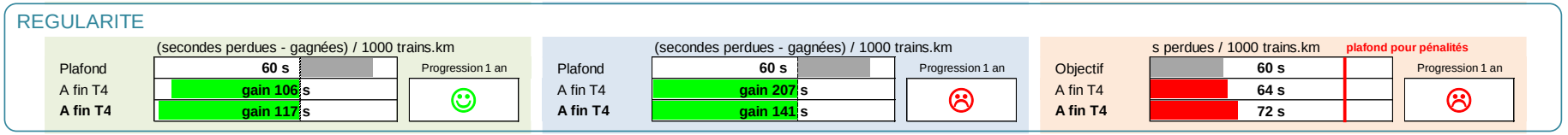
The reference values need to be easy to define !
If not … change it !

Level of Traffic

- Define the way to deal with gaps between traffic measured by grantor and by SPV…
- Define the traffic to take into account during periods of data unavailability, strike, extrem weather conditions…

Level of traffic impact +-10% of the Maintenance Costs

Example for regularity:



- $Tr_{(mn)}$ = Sum of minutes of delay per 1000 km
- Example over 1 year:
  - Nb minutes late: 200 min,
  - Number of trips: 3000,
  - Length of a journey: 300 km,
  - Tr = 200 / ((3000x300)/1000) = 0.22 min

Objective < 1 min / year

If the objective is not reached => Penalties

Example for availability

DISPONIBILITE

	Temps de relève moyen du mainteneur	Tendance 1 an
Plafond	120 min	
A fin T4	105 min	
A fin T4	**115 min**	☹

	Temps de relève moyen du mainteneur	Tendance 1 an
Plafond	120 min	
A fin T4	72 min	
A fin T4	**66 min**	☺

	Temps de relève moyen du mainteneur	Tendance 1 an
Plafond	120 min	
A fin T4	97 min	
A fin T4	**119 min**	☹

- Total time spent for Maintenane purpose

If more than defined in the contract => Penalties

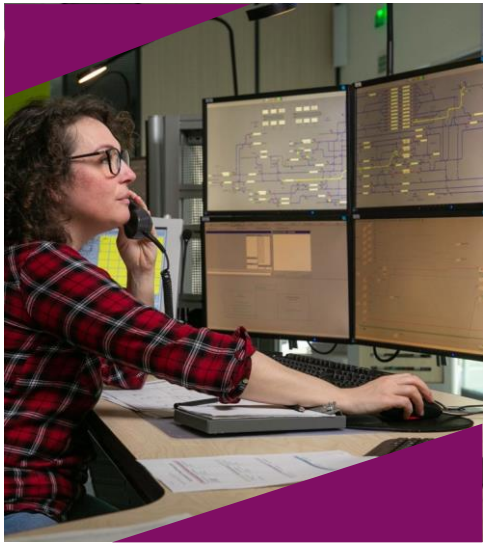
Example for reliability

FIABILITE

Incidents > 200min		Incidents /100 km voie simple	Tendance 1 an
3	Plafond / an	15,0	☺
0	A fin T4	8,7	
1	**A fin T4**	6,9	

Incidents /100 km voie simple		Tendance 1 an
Plafond	15,0	☹
A fin T4	5,2	
A fin T4	12,2	

Incidents /100 km voie simple		Tendance 1 an
Plafond	16,0	☹
A fin T4	19,0	
A fin T4	29,8	



- Total of incident / 100 km of railway

Objective < 15 u / 100 km / year

If the objective is not reached => Penalties

Example for comfort indicators check :

CONFORT

NL			NL état	
T, 1 an	0,62	Plafond	10,0%	T, 1 an
☺	0,52	A fin T4	5,4%	☹
	0,54	**A fin T4**	6,0%	

NL			NL état	
T, 1 an	0,70	Plafond	15,0%	T, 1 an
☺	0,55	A fin T4	5,6%	☺
	0,56	**A fin T4**	5,3%	

NL			NL état	
T, 1 an	1,05	Plafond	15,0%	T, 1 an
☺	0,42	A fin T4	3,3%	☺
	0,36	**A fin T4**	1,8%	

- Control measures are carried out partly by SNCF Réseau vehicles

Or

- Measurements taken by machines validated by SNCF Réseau

IRIS 320

MAUZIN

If the objective is not reached => Penalties

PENALTIES ARE CAPPED IN PPP CONTRACTS IN FRANCE

Annual rent =

MC = Maintenance Cost x Level of traffic x Indexation

+

RC = Renewal Costs x Indexation

-

Penalties = Based on KPIs

Level of traffic impact +-10% of the Maintenance Costs

Penalties are capped in % of the rent

04 CONCLUSIONS

SAFETY IS ALWAYS OUR PRIORITY

Safety culture has to be transmitted from the beginning to partners

Construction company are not operators/maintainers… safety culture is not the same !

Plan controls/audits from the design and studies phases

Be present for the pre-operational phases of drafting the operation documentation (safety plan, particularly on the interfaces)

Implement audit and improvement plans

SAFETY INDICATORS NEED TO BE FOLLOWED

TOUS SNCF AMBITION RÉSEAU — SÉCURITÉ ET SÛRETÉ

Exploitation des Lignes Nouvelles en PPP
Excellence Sécurité : résultats

SNCF RÉSEAU

SÉCURITÉ EXPLOITATION FERROVIAIRE - SEF

Cf Annexe I Directive (UE) 2016/798	T1	T2	T3	T4	Total	Rappel
Accidents significatifs	0 / 0 / 0	0 / 0 / 0			0 / 0 / 0	1 / 0 / 1
Victimes d'accidents significatifs	0 / 0 / 0	0 / 0 / 0			0 / 0 / 0	0 / 0 / 0
Suicides ou tentatives de suicide	0 / 1 / 0	1 / 0 / 0			1 / 1 / 0	0 / 0 / 0
Evénements précurseurs	0 / 0 / 1	2 / 0 / 3			2 / 0 / 4	2 / 0 / 0

SECURITE ET SANTE DU TRAVAIL - SST

	T1	T2	T3	T4	Total	Rappel
Accidents avec arrêt de travail	0 / 1 / 1	0 / 0 / 1			0 / 1 / 2	4 / 3 / 2
Jours d'arrêt	0 / 15 / 59	0 / 0 / 30			0 / 15 / 89	324 / 21 / 18
Accidents sans arrêt de travail	3 / NC / 0	3 / NC / 0			6 / NC / 0	8 / NC / 3
Presque accident	4 / NC / 40	6 / NC / 65			10 / NC / 105	16 / NC / 19
Accidents de trajet	0 / NC / 0	0 / NC / 0			0 / NC / 0	1 / NC / 1

SNCF RÉSEAU

FEEDBACK AND VIGILANCE : CONTRACTS MANAGERS REQUIRED

SAFETY

- Approval process
- Interface management

NON-PERFORMANCE OF THE LINE

- Penalties… but not only… need to work together to improve the performance

CONTRACT CHANGES

- Process of evolution of the contract …
- … because in 25/50 years there are always some changes !

INSURANCE COMPANY and THIRD PARTY

- Insurance covers the residual risk not covered by the parties
- For example, difficulties in anticipating changes in the insurance market

ARBITRATION vs LITIGATION

"To include long-term contracts managers is a key factor of success…"

DĚKUJI
THANK YOU
MERCI