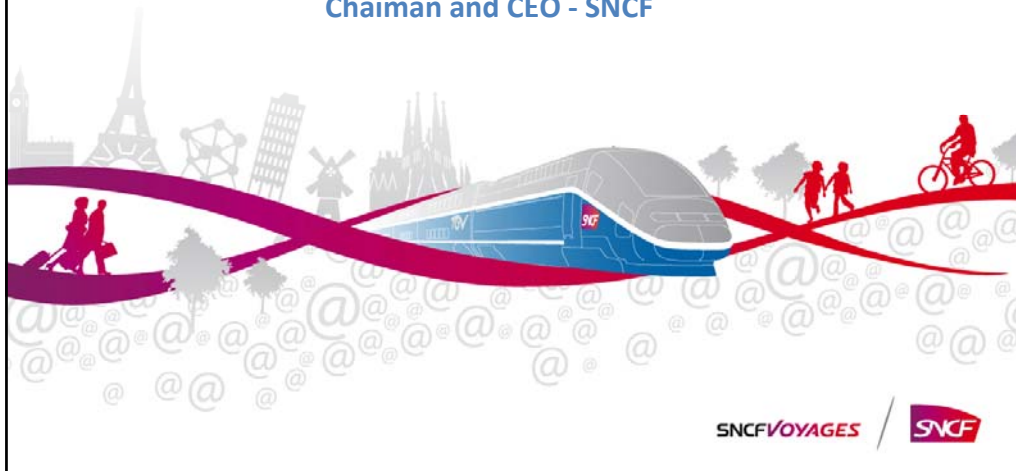


17 – III - 2010

## « BUILDING ON EXPERIENCE »

Improving the High Speed Proposition

**Guillaume Pepy**  
Chairman and CEO - SNCF



### Contents :

- 1 | Present status of High Speed rail in France ...
- 2 | Expanding the High Speed Network: making the right choices !
- 3 | Addressing future capacity shortages and cross borders.
- 4 | Integrating high speed lines in the conventional network.



## Contents

- 1 | **Present status of High Speed rail in France**
- 2 | Expanding the High Speed Network: making the right choices
- 3 | Addressing future capacity shortages and cross borders
- 4 | Integrating high speed lines and conventional network

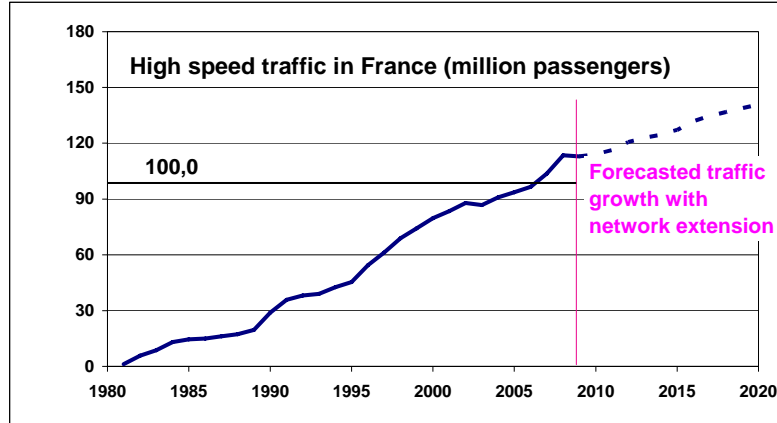


2010 : 1,850 km  
of High Speed lines  
(> 185 mph)

In Spain : 1,614 km of HSL



## Contents



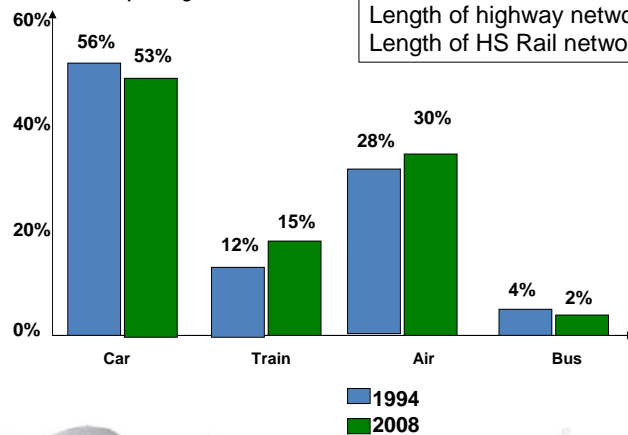
5/31

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## Long distance (> 80 km) modal shares

Modal shares in passengers-km



	1994	2008
Length of highway network (km)	8,500	11,500
Length of HS Rail network (km)	1,100	1,850



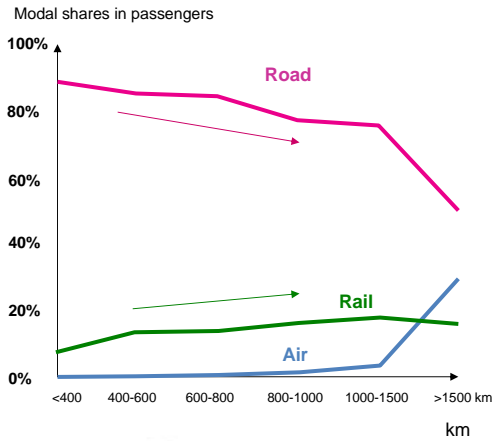
6/31

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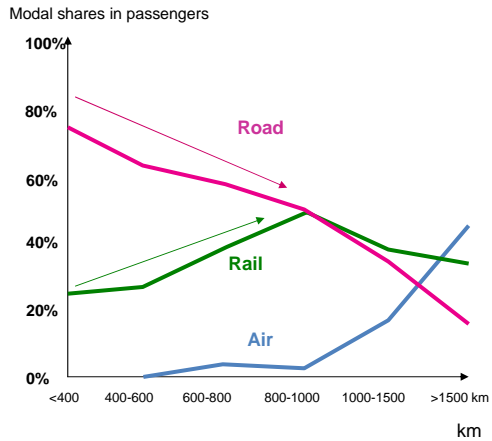


## Modal shares

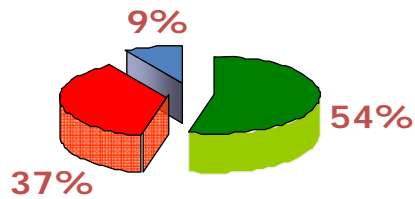
Trips for personal purpose



Trips for business purpose



On all OD pairs to and from Paris TGV plays a major role



Including Paris – Lyon,  
Paris – Bordeaux,  
Paris - Strasbourg



## Contents

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9/31

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## Planned Network Extension

1,850 km in operations

4 new infrastructures under construction or just completed :

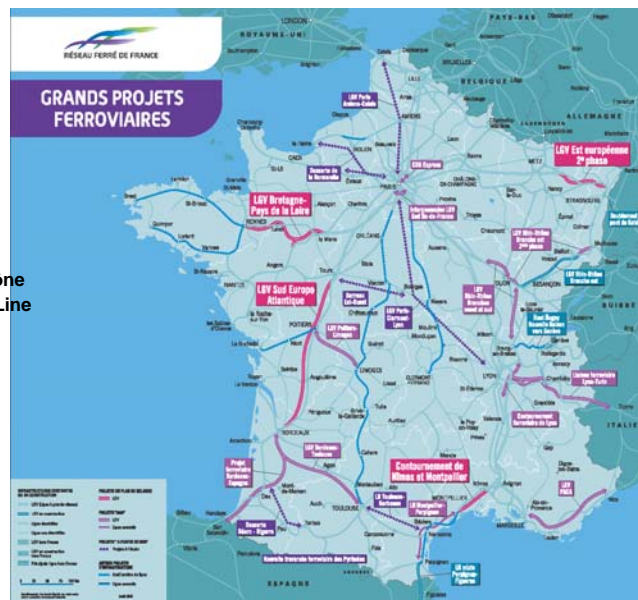
- The Perpignan – Figueras link
- The Haut Bugey line
- The Eastern Branch of Rhin-Rhône
- The second part of the Eastern Line

3 projects in the offing :

- Le Mans – Rennes
- Tours – Bordeaux
- Nîmes and Montpellier By pass

2,000 km of new HS lines expected by 2020

2,500 km of new HS lines planned after 2020



10/31

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## Projects opportunities

<u>Criteria</u>	<u>Underlying matters</u>	<u>Opportunities</u>
- Financial profitability	-Compromise between passengers and taxpayers	-New markets/better attractivity on existing markets
- Socio-economic profitability	- Selection of projects of various natures	- Costs reduction/ and or saved time
Carbon footprint	- Carbon balance	- Traffic transfer from air + better accessibility to stations
- Territory management	- Accessibility & network construction	- Serving new regions or cities & creating new links
- National growth and employment	- Additional demand or Project substitution	- CAPEX and OPEX
-Operations	-Interoperability, bottlenecks	-Saturated areas and cross borders

11/31

## New markets / better attractivity on existing markets

### Optimal range of travel times

From 1 hour to 4 hours by train:  
elasticity to travel time  
is maximum:

**UK is shaped for HSR**

12/31

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## Costs reduction/and or saved time

### Optimal speed

Travel time is one of the major cost drivers

The optimum speed depends on the corridor



13/31

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## Transfer from air traffic

### Air Traffic in France and in its vicinity in 2009

The bulk of the remaining air traffic is located South of France.

Projects aiming as maximizing the traffic shift from air should be dedicated to this corridor.



14/31

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## Serving new regions or cities & creating new links

### Regions without TGV

Since 2007,  
only two regions, Auvergne located  
in the very middle of the country and  
Corse, do not have any TGV service  
at all.



15/31

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## CAPEX and OPEX

### Employment

Investment favors employment, but...  
productivity and service push towards  
a transfer of the labor part of OPEX  
onto the client



16/31

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## Saturated areas and cross borders

Network saturated areas  
and Cross borders



17/31

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## Contents

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18/31

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## Capacity shortages

Two main projects aim at addressing capacity shortages expected by 2020

A second route from Paris to Lyon:  
POCL= Paris – Orléans - Clermont – Lyon

&

“Greater Paris”



19/31

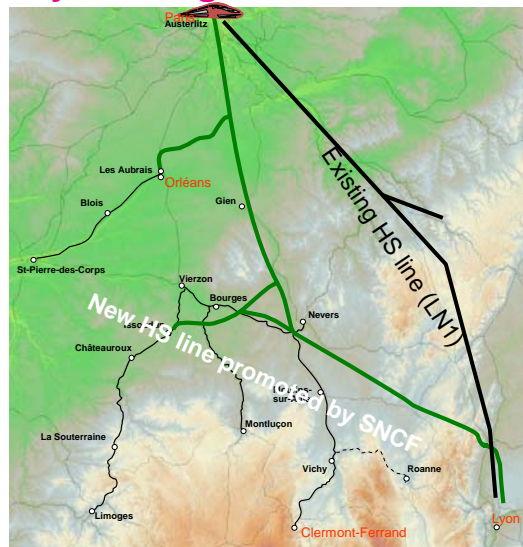
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## Capacity shortages

A second route from Paris to Lyon:  
POCL(2025) =  
Paris – Orléans-Clermont – Lyon

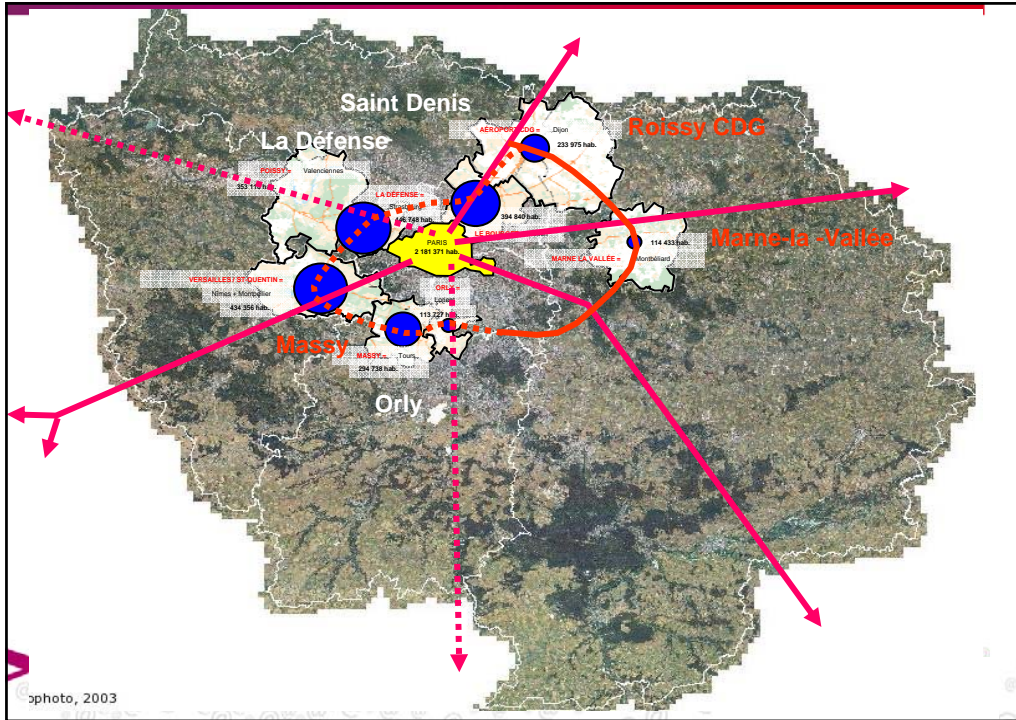
This project is a blend of efficacy  
and territory management for  
regional, national, international  
traffic.



20/31

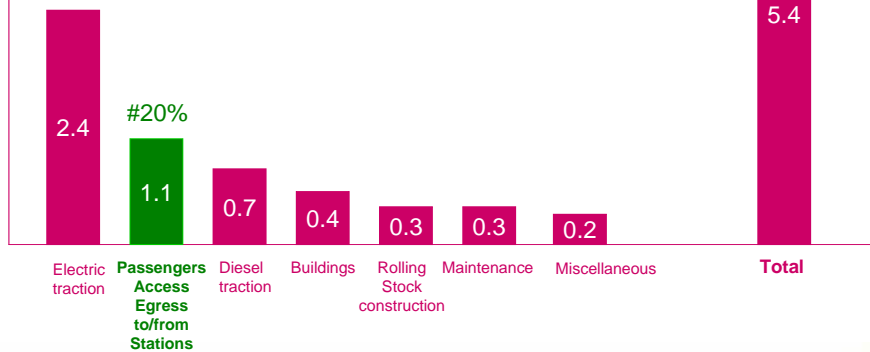
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## SNCF Total CO2 emission per year (million tons)

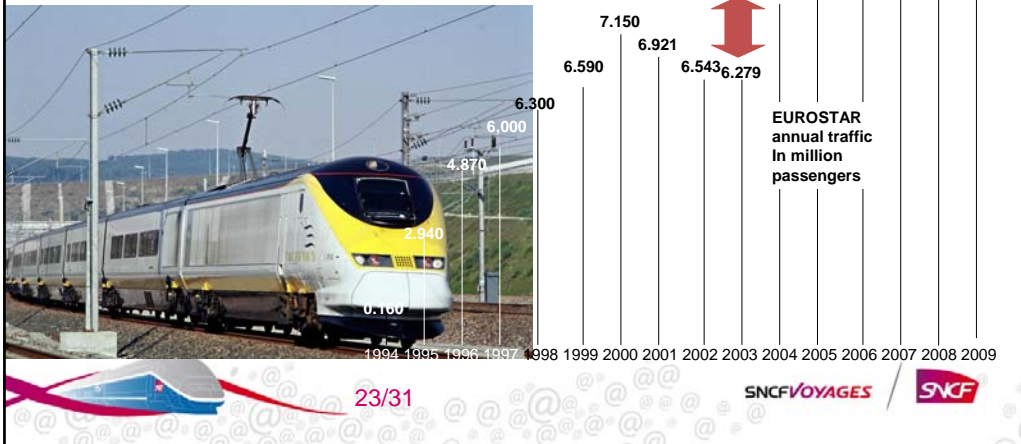
Of course, most of our CO2 emissions come from train traction and SNCF largely benefits from nuclear power electric current except in peak hours.



## HSL creates a quantum jump in terms of traffic:

the  model

Market share : about 83 % (OD Paris-Londres)

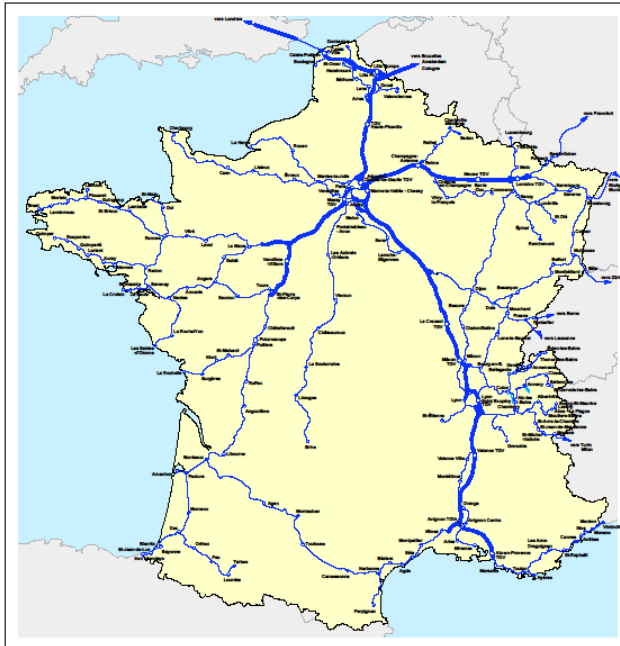


## Contents

- 1 | Present status of High Speed rail in France
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- 3 | Taking action now to address future capacity shortages and cross borders
- 4 | Integration of high speed in the conventional network

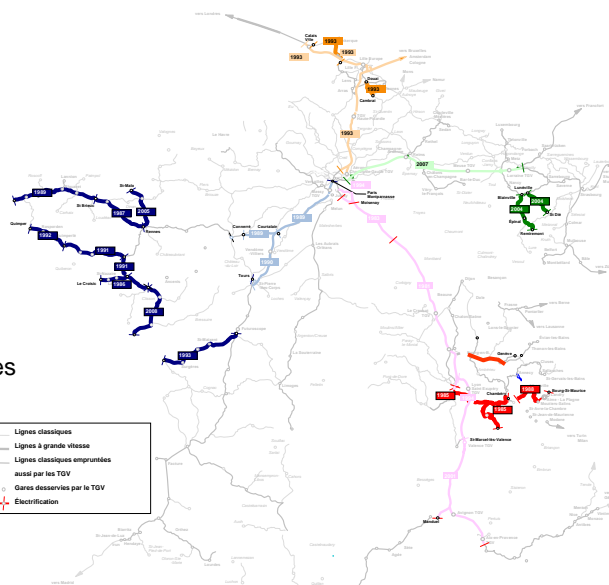
The length of the network run by TGV is 4 times longer than the length of the High Speed Lines

251 stations served by TGV

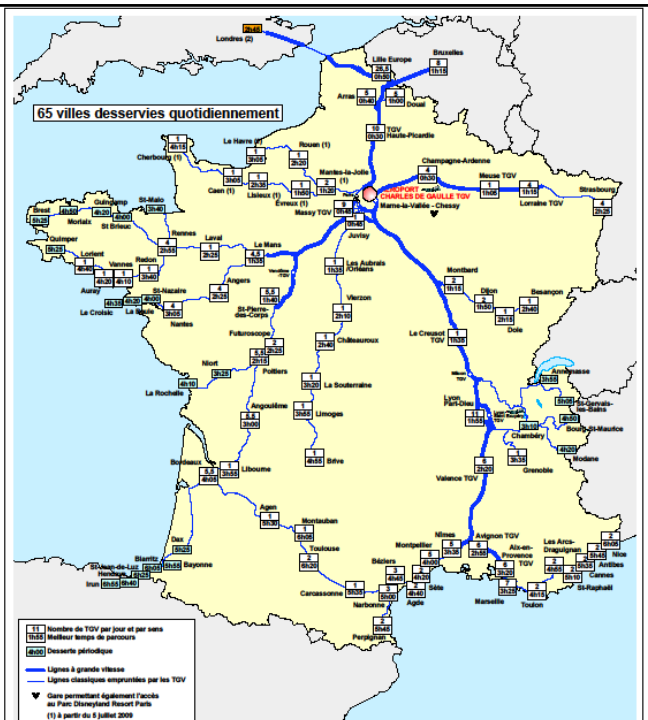


High Speed Rail has favored the upgrading of many conventional lines

- Lignes classiques
- Lignes à grande vitesse
- Lignes classiques empruntées aussi par les TGV
- Gares desservies par le TGV
- ⚡ Electrification



**Roissy CDG Airport  
is daily linked  
to 65 cities by TGV  
and 500 services / day  
CDG – other cities**



Some 25% of TGV travellers  
have a regional or a TRANSILIEN trip  
before or after  
a TGV trip

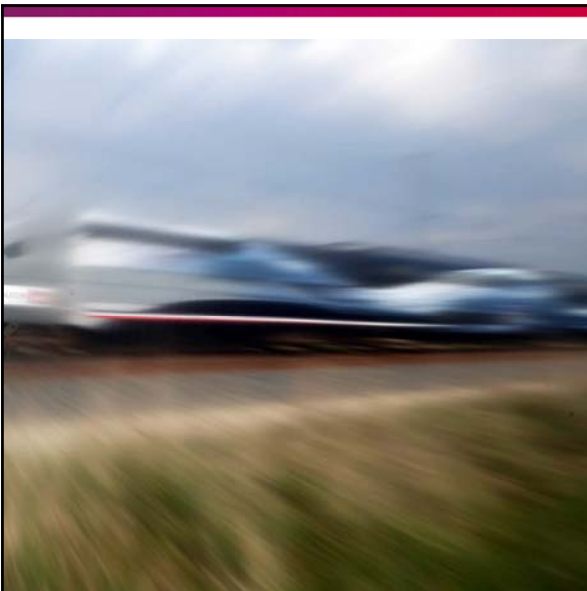


## Honor the past and Imagine the future



29/31

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## Be ambitious



30/31

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**Thank you for your attention.**

