



High Speed Rail Portugal: Using the PPP model to fast-track success

5th December 2024

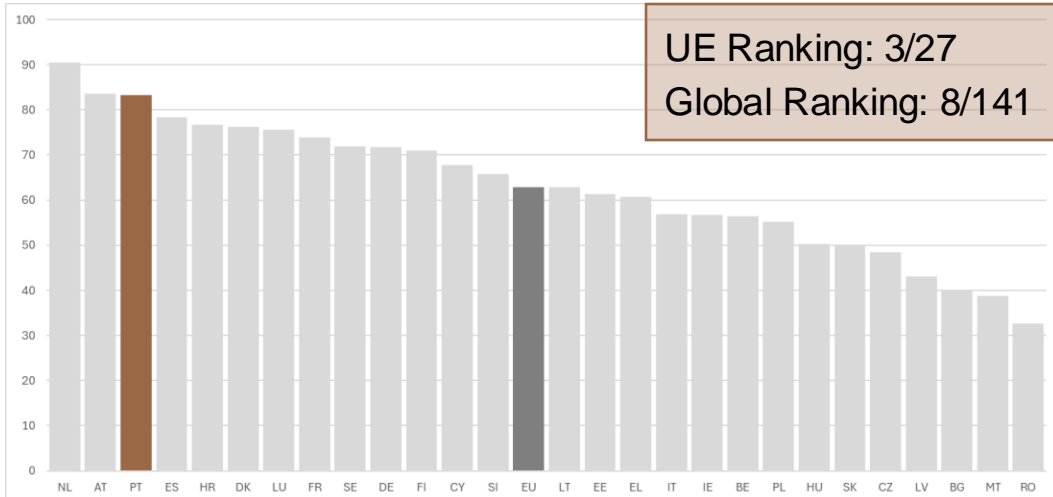
OUR TRANSPORT NETWORKS

TODAY'S INFRASTRUCTURE

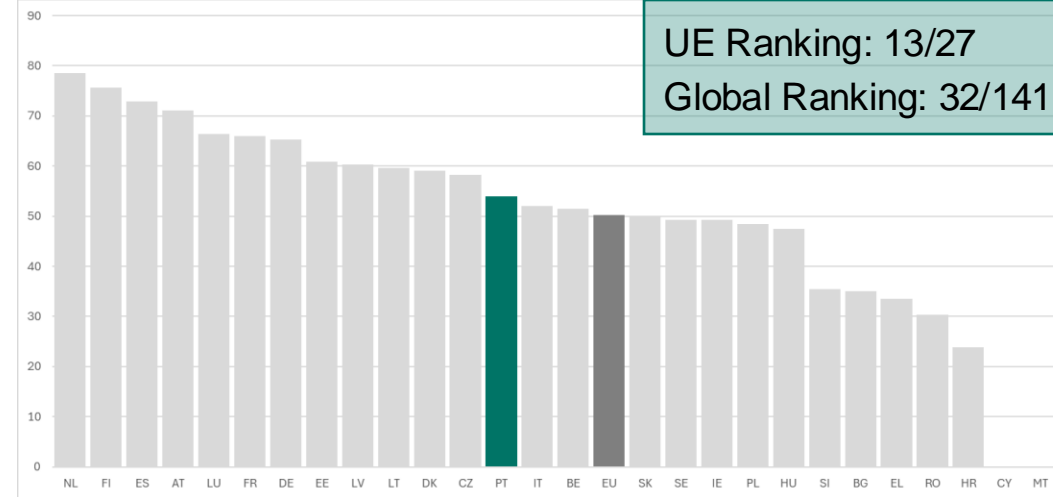
At a European level Portugal has the **3rd best road network ...** but we rank **13th** in terms of the quality of our **railway infrastructure**



Quality of roads



Quality of railways



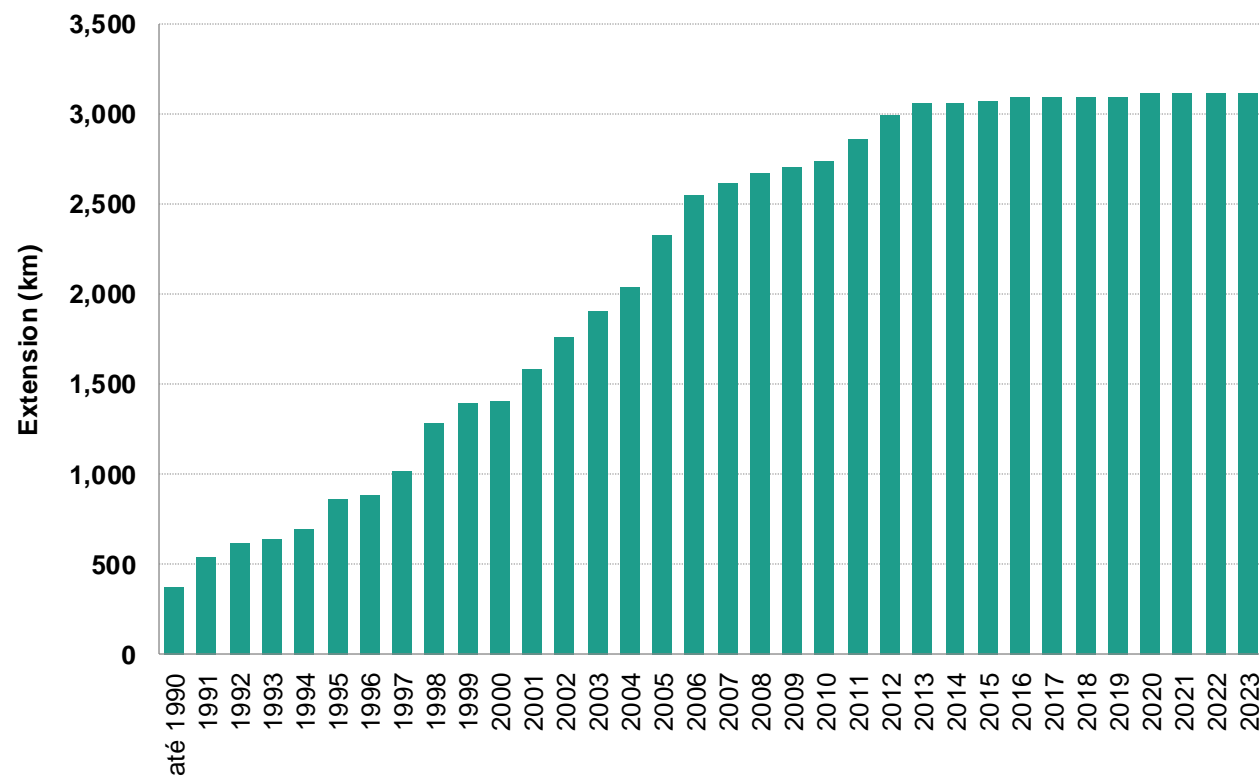
OUR TRANSPORT NETWORKS

TODAY'S INFRASTRUCTURE



- The development of the Portuguese highway network started in the early 90's
- Between 1995 and 2010 the government awarded 21 PPP contracts for the development of c. 2 500 km of highways
- There were several lessons learned from this programme... including positives and negatives!

Portuguese Highway Network





RAIL PASSENGERS NETWORK

TEN-T RAIL PASSENGERS TRAFFIC

GRADUALLY DEVELOPED IN THREE STEPS

Until 2030 →

Until 2040 →

Until 2050 →

CORE NETWORK

EXTENDED CORE NETWORK

COMPREHENSIVE NETWORK



Sustainable and Smart Mobility Strategy envisages that traffic on high-speed passenger rail should double by 2030 and triple by 2050

	Core	Extended Core	Comprehensive
Conventional			
Conventional / New construction			
≥ 200 km/h			
≥ 200 km/h / New construction			
Planned			



HIGH SPEED RAIL PROJECT

PLANNED CORRIDORS

HIGH SPEED LINE PORTO-LISBON

Development:
2025 – 2032

Direct journey time:
1h15m

HIGH SPEED LINE PORTO-VIGO

Development:
2028 – 2032

Direct journey time:
0h50m

HIGH SPEED LINE LISBON-MADRID

Development:
2030 – 2034

Direct journey time:
1h00m (border)



KEY PROJECT FEATURES

HSL PORTO-LISBON

New double track line for high speed



- Phased development
- Installed with 1667 mm gauge track
- Estimated investment: 7.5 bn €

Journey times

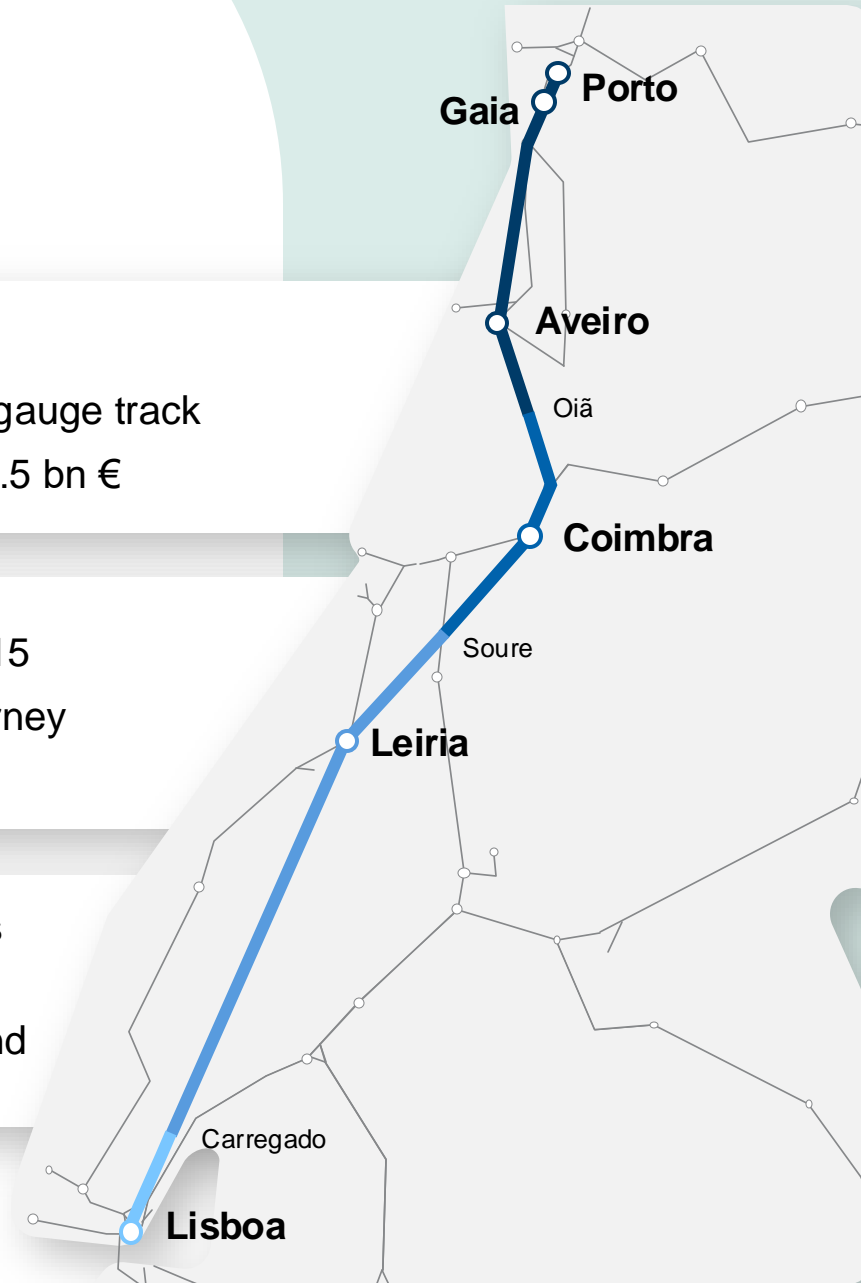


- Direct Porto-Lisbon: 1h15
- Overall reduction of journey times along the corridor

Stations



- Existing central stations adapted to HS
- New stations in Gaia and Leiria



● PHASE 1 2025/2030

PPP1
PORTO –
OIÃ

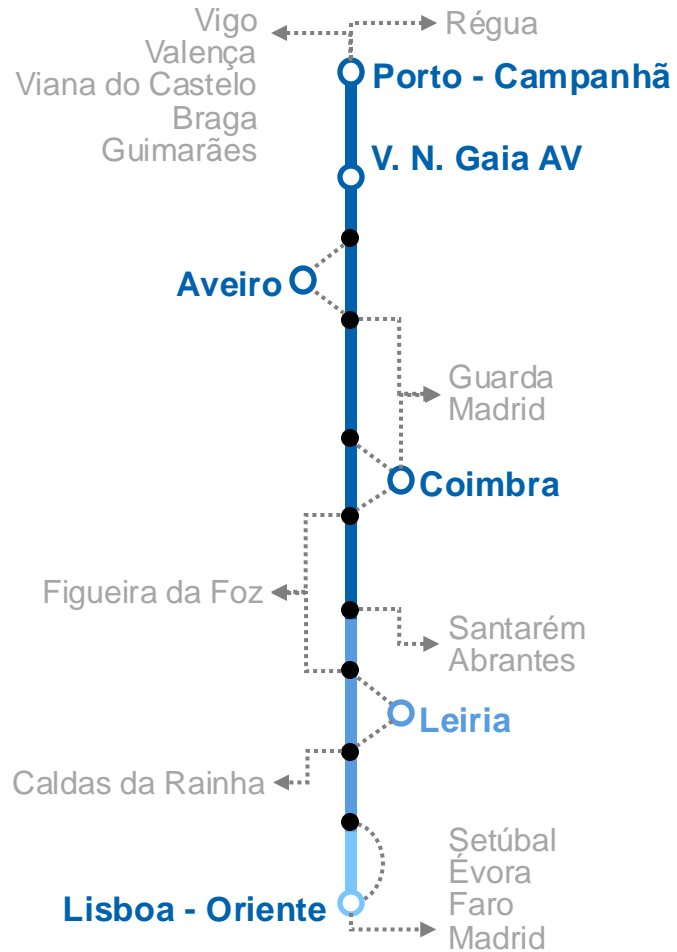
PPP2
OIÃ –
SOURE

● PHASE 2 2027/2032

PPP3
SOURE –
CARREGADO

● PHASE 3 > 2032

INTEGRATION WITH EXISTING NETWORK

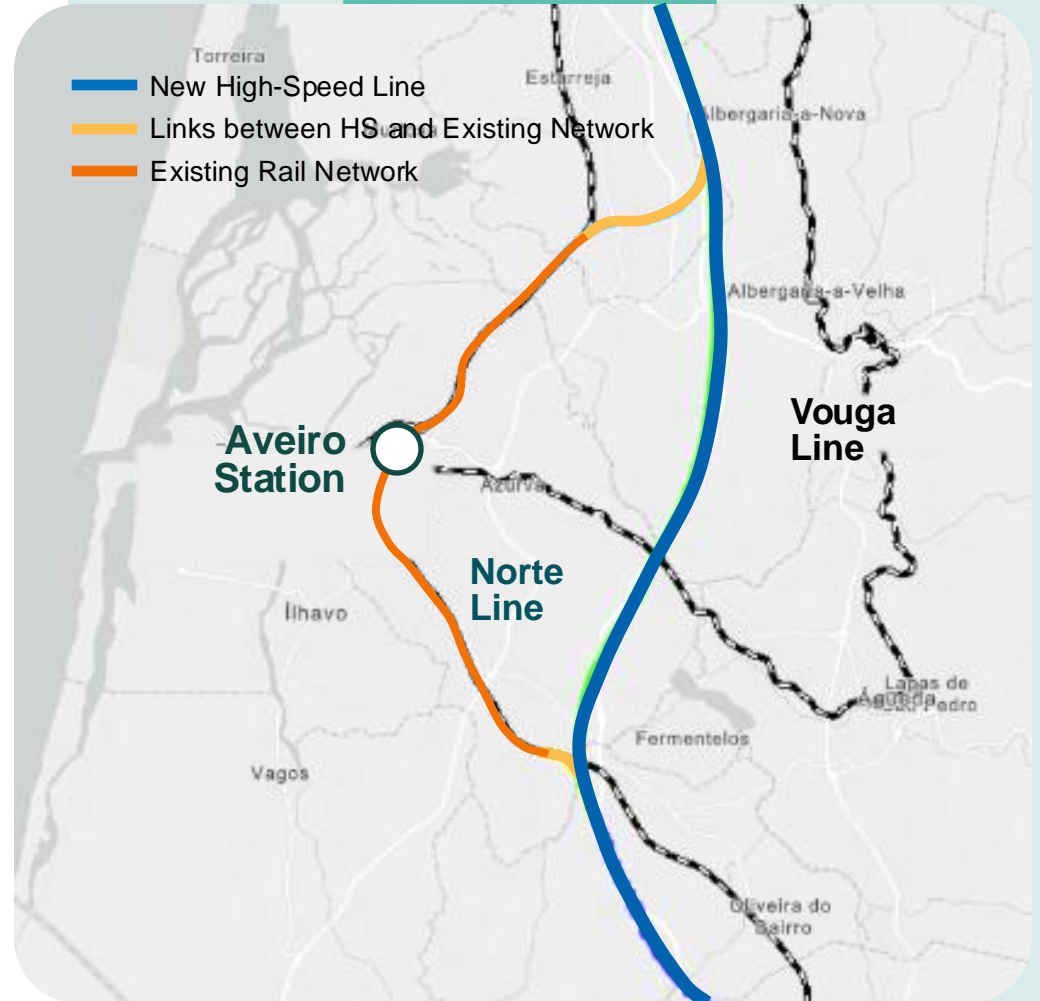


PHASE 1

PHASE 2

PHASE 3

- Connection points to existing lines
- High speed stations
- Existing lines



Exemple: Aveiro station

DEMAND FORECASTS

PORTO-LISBON

SERVICES SCENARIO

60

Services on HSL

17/9

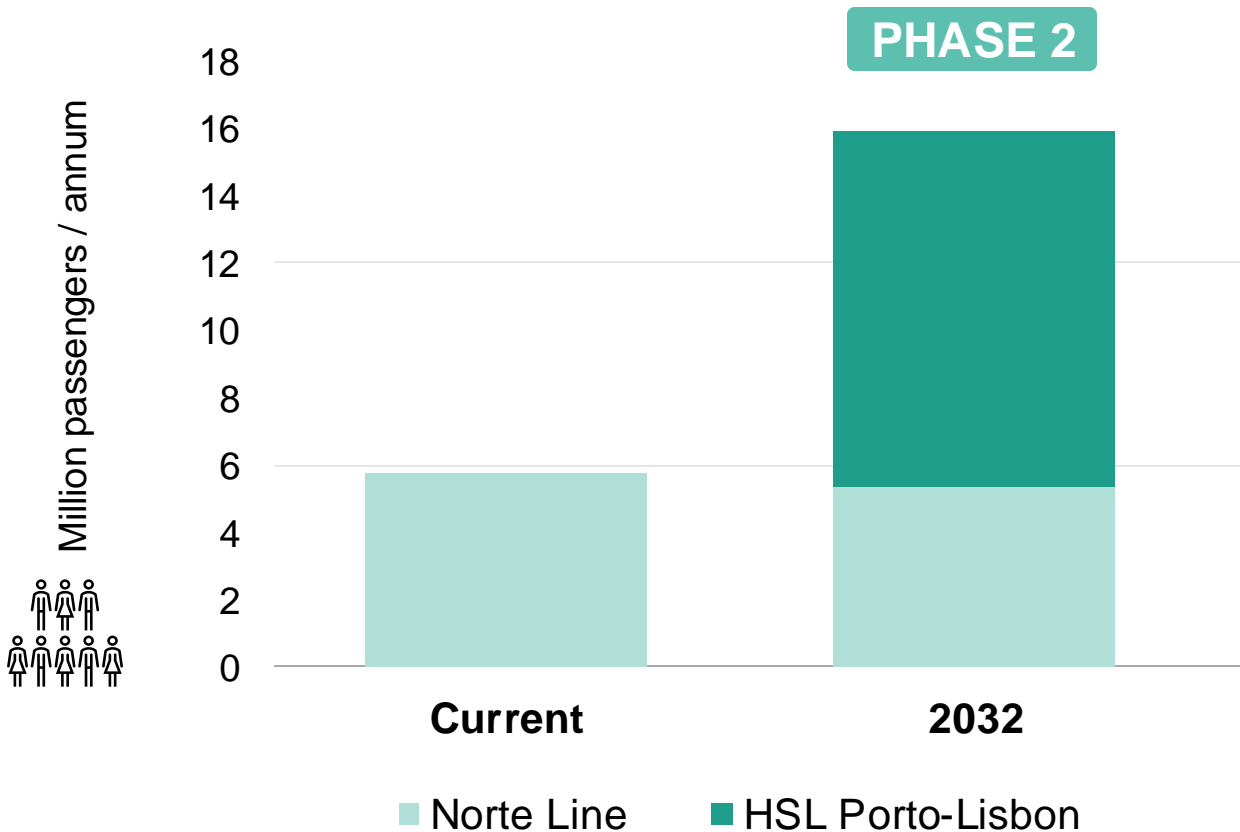
HS Services Direct/ Stopping

34

Hybrid Services HSL - Existing Rail Network

17

IC Services Existing Rail Network



COST-BENEFIT ANALYSIS

PORTO-LISBON



Socio-economic indicators

NPVe



4 000 M€

ERRe



9,6%

BCR



1,9



● PHASE 1
2025/2030

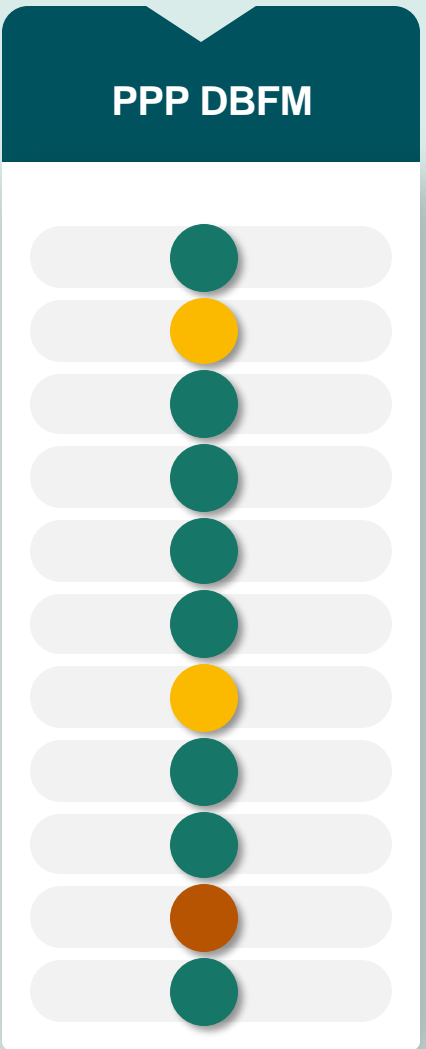
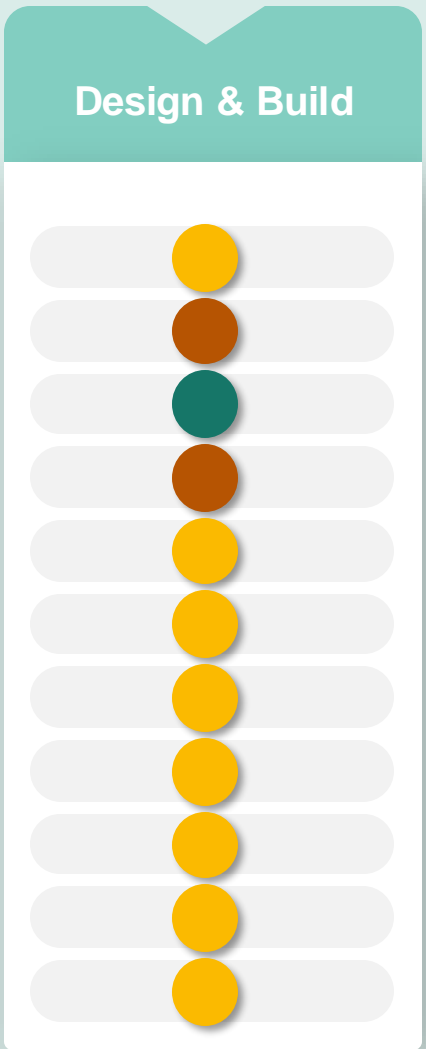
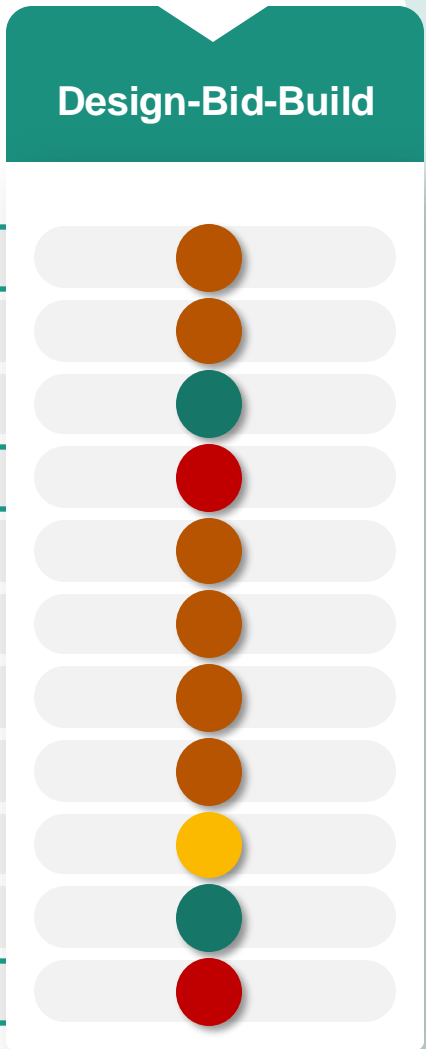
● PHASE 2
2027/2032

● PHASE 3
> 2032

ANALYSIS OF CONSTRUCTION CONTRACTS

→ ASSESSMENT CRITERIA

- Reduce project life cycle costs
- Reduce the impact on public finances
- Promote competition and economic development
- Optimisation of internal resources
- Adjusted allocation of resources
- Linkage between different project phases
- Viable project plan implementation
- Improve asset performance and maintenance
- Incentivise innovative solutions
- Coordination with other rail services (construction phase)
- Adjusted allocation of project risks



PROPOSED CONTRACTING MODELS



Substructure / Superstructure

3 Design, Build, Finance & Maintain (DBFM) contracts



Supplementary Projects

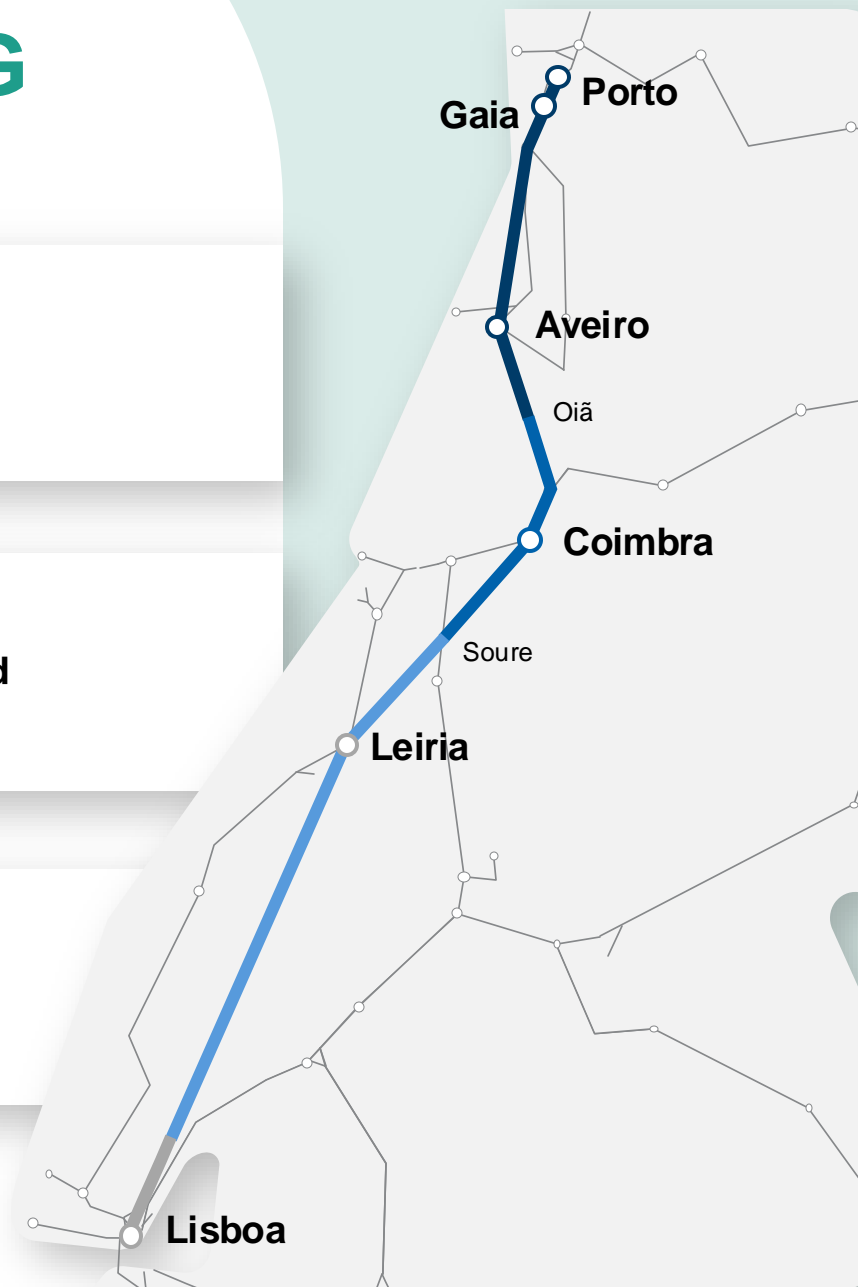
Alverca-Azambuja, Oriente Station, etc.

Design – Bid – Build



Signalling & Telecommunications

Design, Build & Maintain (DBM) contract



● PHASE 1
2025/2030

● PHASE 2
2027/2032

● PHASE 3
> 2032

PPP CONTRACTS

KEY FEATURES

Contract term
30 years

Development
5 years

&

Availability
25 years

Investment (Capex)
~ 2 250 M€
(per contract)

Contract scope
Rail substructure and superstructure, electrical substations, passenger stations, connections between HS and conventional network

Status

PPP1: Awarded

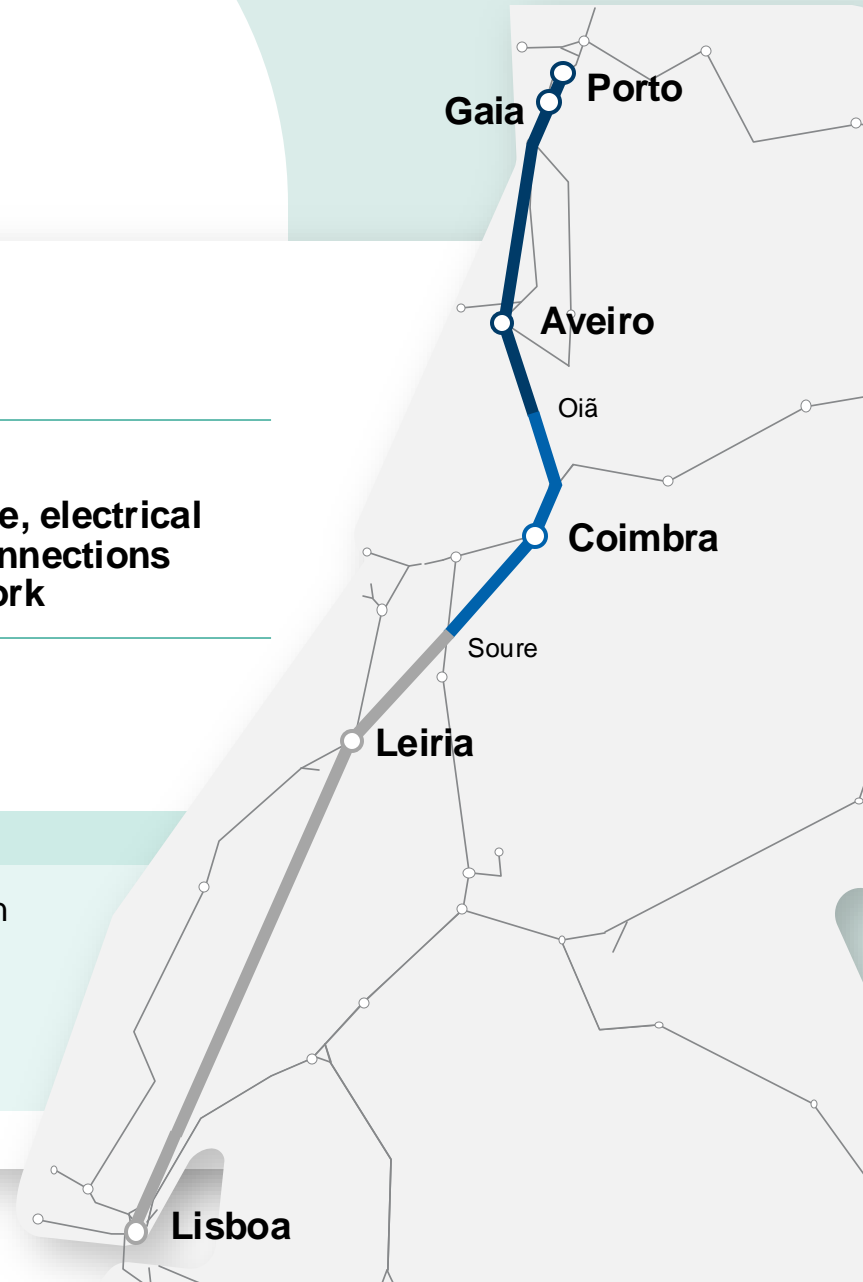
PPP2: Tender ongoing

Risk Allocation

Private partner: Design, construction, maintenance, land acquisition and environmental

Public partner: Political, planning and demand

Shared: Financing, archaeological, availability and safety



● **PHASE 1**
2025/2030

PPP1
PORTO –
OIÃ

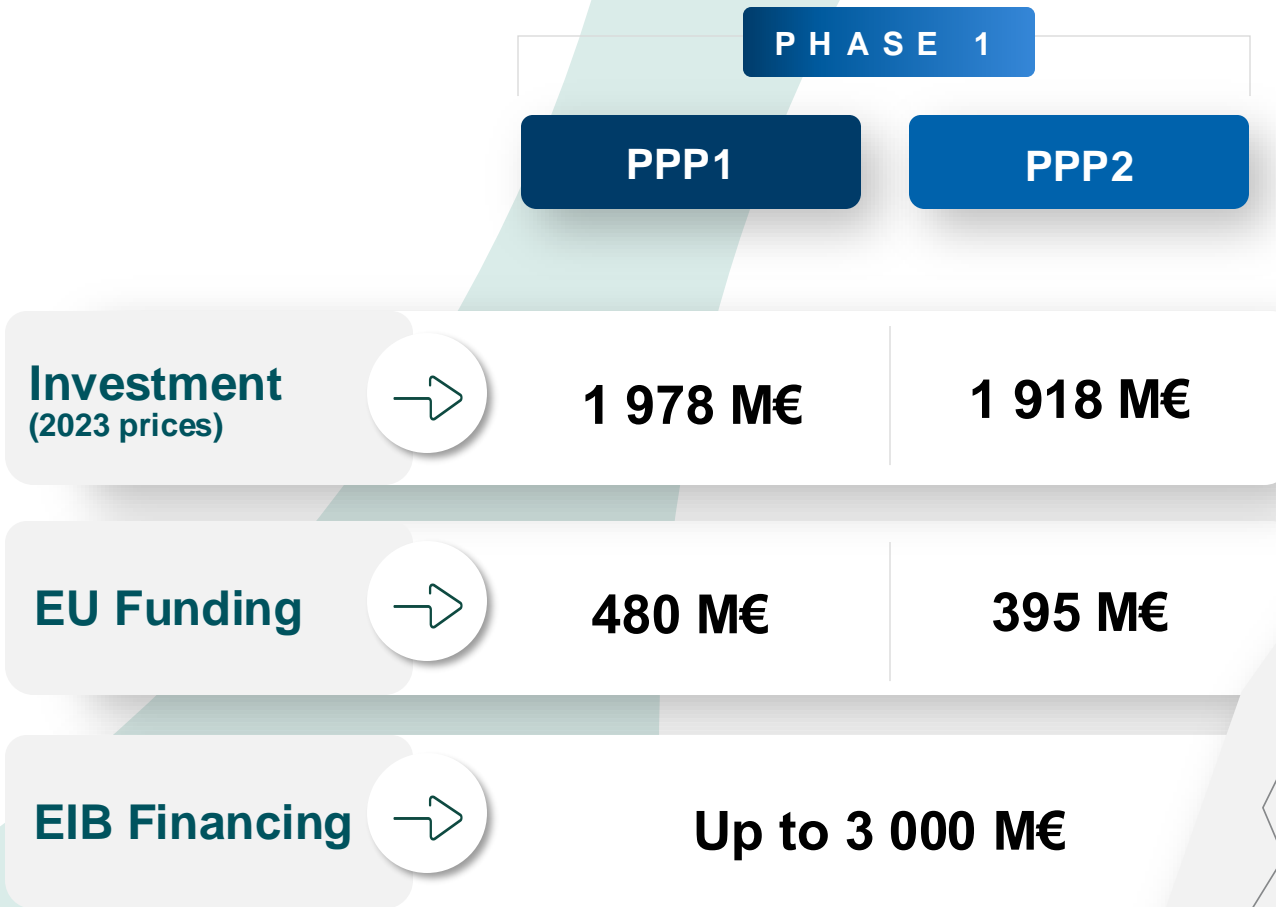
PPP2
OIÃ –
SOURE

● **PHASE 2**
2027/2032

PPP3
SOURE –
CARREGADO

● **PHASE 3**
> 2032

INVESTMENT AND FINANCING



● **PHASE 1**
2025/2030

PPP1
PORTO –
OIÃ

PPP2
OIÃ –
SOURE


● **PHASE 2**
2027/2032

PPP3
SOURE –
CARREGADO


● **PHASE 3**
> 2032

PHASE 1


EU FUNDING




To ensure “project maturity” the bids were launched, in case of PPP1, before the application to CEF2 was submitted and, in case of PPP2, before the results were announced by CINEA



In the tender documents, bidders were told to assume that the European Funds from CEF2 were going to be fully available. This was to avoid unnecessary additional (private) financing costs to be considered in the bids



In case the CEF2 application was not successful, the Portuguese Government would, cover the payments to the Concessionaire. Note: the Government could always decide to cancel the tender/contract



The tender documents reflect, as much as possible, the terms and conditions of the CEF2 Grant Agreement (which is a standard contract), e.g. timescales, payment mechanism, auditing, etc.

FINANCING STRUCTURE

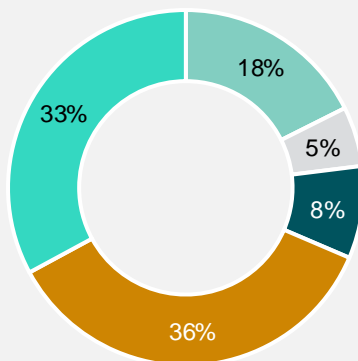
PPP1

Concession Period 30 years

Investment Period 5 years

Shareholder's IRR 9,0%

- EU Funding
- Government Payments
- Equity
- Senior Debt
- EIB

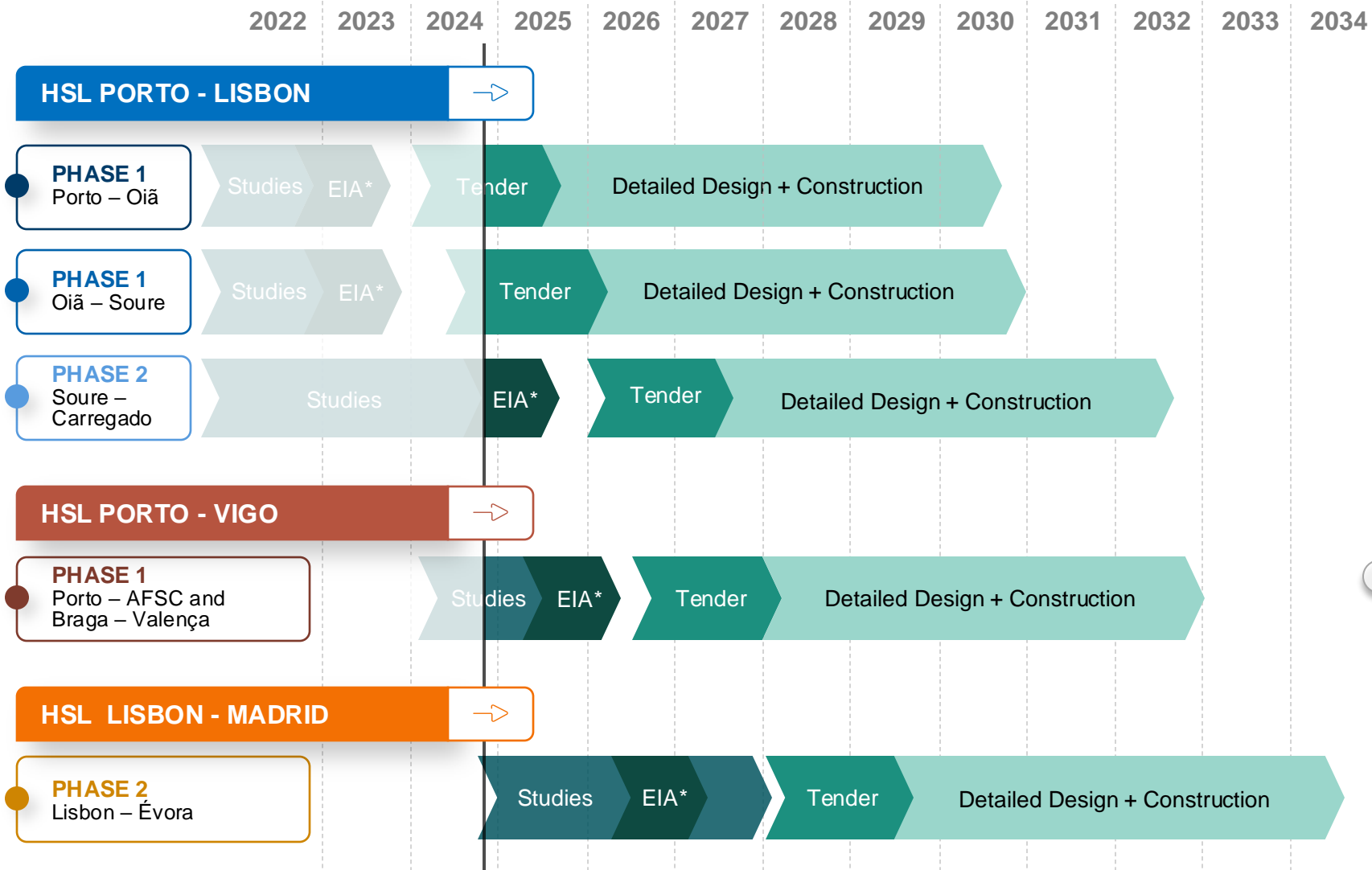


Debt to Equity 90/10

M€ (nominal/current prices)	PPP1
Investment (Capex)	2 400
Opex	400

EU Funding	480
Government Payments	150
Equity	150
EIB	900
Senior Debt	1 000

GLOBAL PROJECT SCHEDULE





Infraestruturas
de Portugal