

CROSS-BORDER PASSENGER RAIL SERVICES: IMPLEMENTATION OF HIGH-SPEED RAIL SERVICES BETWEEN THE REGIONS OF CATALUNYA AND OCCITANIE

June 2023

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FGC: Who are we?

- We are a **railway company** based in **Barcelona** owned by the Catalan Government.
- Besides **operating and managing railway infrastructure**, we also operate **mountain resorts**.
- Some of our figures:
 - +290 km of railway lines
 - +100 stations
 - +90 million passengers/year
 - +2,125 employees
 - 6 mountain resorts
 - 2 rack railways
 - 4 funiculars

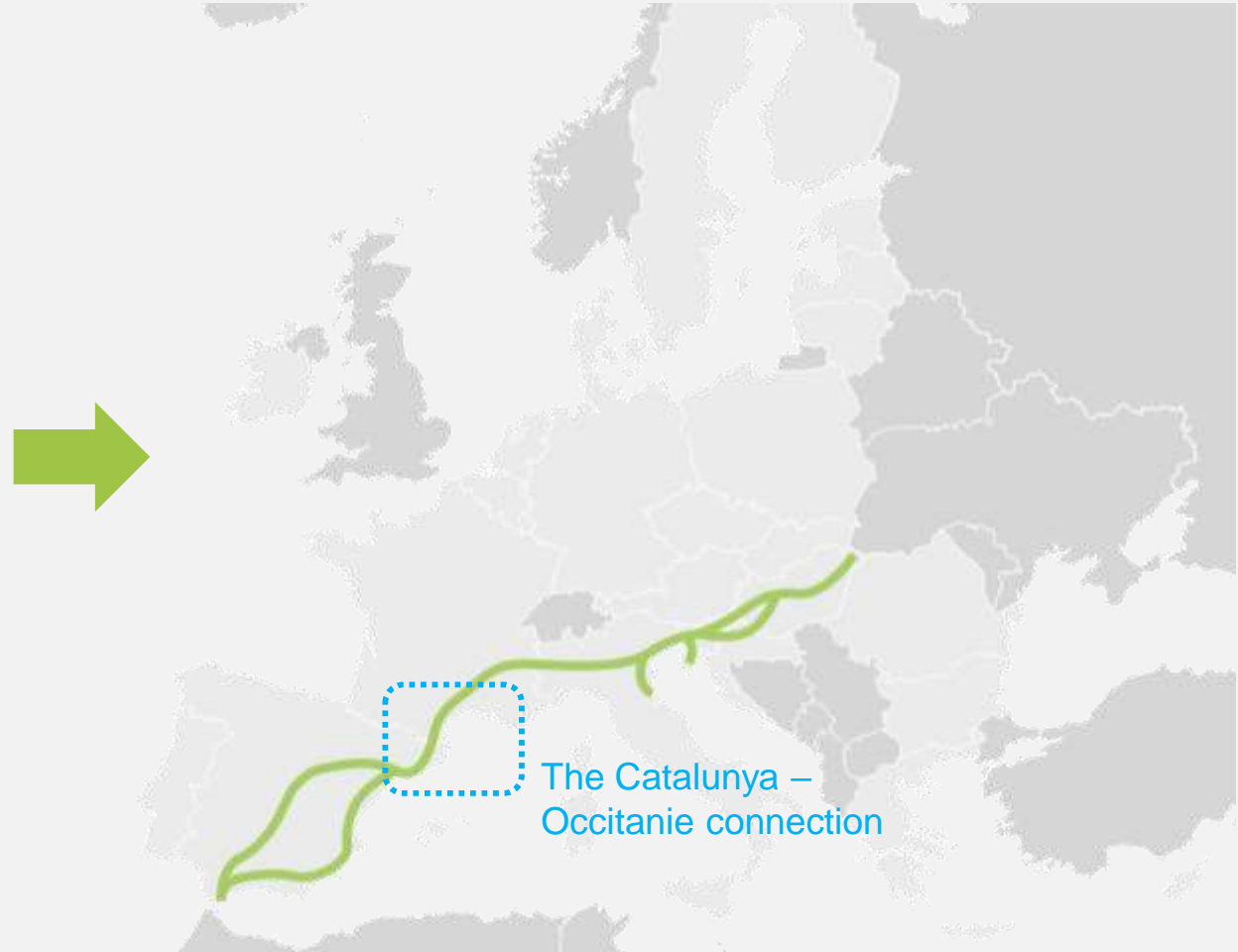


Mediterranean Corridor, a regional approach

Trans-European Transport Network (TEN-T)



Mediterranean Corridor



Cross-border regional rail services Catalunya - Occitanie

THE NEED FOR REGIONAL SERVICES



Relevant potential demand



Insufficient and unattractive offer



A favorable scenario for the rail sector development in Spain



FGC is committed to Catalunya's development

SERVICE DEFINITION

FGC aims to offer a cross-border regional alternative which better suits the existing mobility needs and becomes favorable for the rail sector development.



Daily internal and international work journeys (allowing 7-8 hours at destination)



High service quality regarding comfort, trip duration and punctuality



Touristic demand attracted by new and improved origin-destination relations



Competitive fee



FGC's analysis: the business case

Given the strategic interest and market opportunity, FGC has carried an in-depth analysis to establish the viability of such cross-border services.



The potential and interest of such services has been confirmed

Nevertheless, there are hurdles to overcome that are critical for the viability and sustainability of these rail offer, particularly linked to the cross-border operation and infrastructure development.

An initial stage foresees 4 round trips in each corridor offering convenient timetables

BASE CASE BUSINESS STUDY

1st stage

Several scenarios have been considered, linking each one with its potential to capture demand and with its operations requirements.

A limited scenario with just 4 trains is technically feasible and would achieve a demand of up to 1,7 M passengers per year.

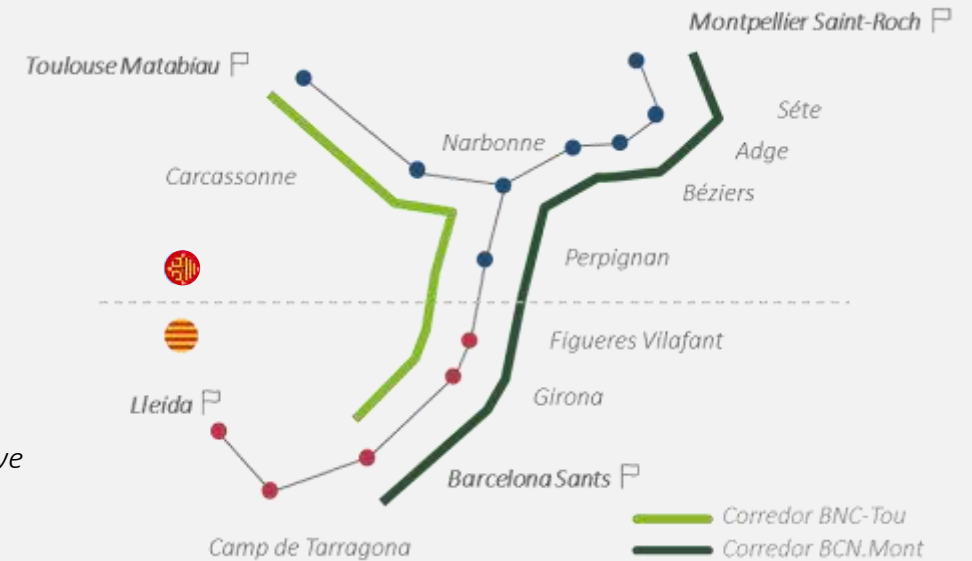
4+4
Services per corridor

16
daily services

250
km/hour

4
Trains (+1 reservation)

More attractive
offer



Barcelona bottleneck

Current situation in Barcelona hinders the development of through services. With the opening of the Barcelona-Sagrera station, more services could be developed but a by-pass of Barcelona could be a game-changer for the corridor.

Cross-border requirements

ROLLING STOCK

| Adif | LFP | SNCF |
|-----------------------------------|--------------------|-----------|
| ERTMS/ETCS level 1 and 2 and ASFA | ERTMS/ETCS level 1 | KVB |
| 300 km/h | 300 km/h | 160 km/h |
| 25 kv AC | 25 kv AC | 1,5 kv DC |

Rolling Stock with double **tension** and be **3 different signalling systems**

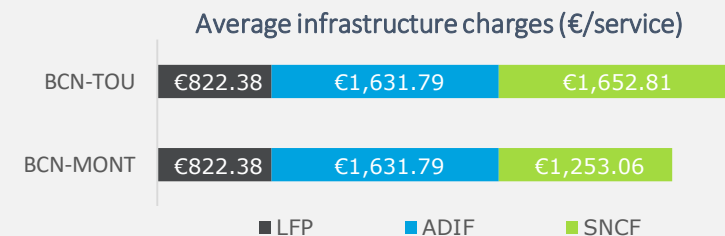
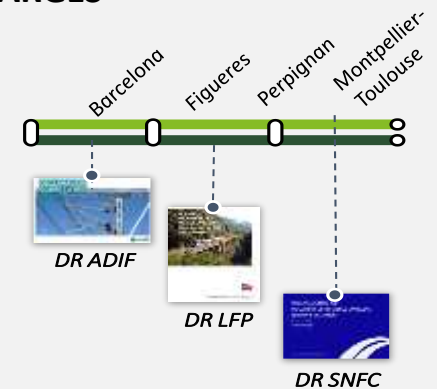
TRAIN DRIVERS

| | License/diploma | | Certification | |
|----------------------------------|-----------------|------|---------------|------|
| Drivers with the Spanish licence | FRA | 725h | ESP | 240h |
| | | | FRA | 240h |
| Drivers with the French diploma | ESP | 725h | ESP | 240h |
| | | | FRA | 240h |

Durada aproximada de la formació

Interoperability in the two countries requires drivers to receive **more training** and to **speak the official languages**, thus increasing costs and difficulty to recruit the suitable profiles.

INFRASTRUCTURE CHARGES



Infrastructure charges represent 62,5% of the estimated operational costs.

The project competitiveness requires to **exploring options for its adjustment.**

Other operators have also identified the potential demand and are planning to cover it with non-sustainable transport alternatives

Vueling has announced a new air route between Barcelona and Toulouse.

The airline offered this flight until 2020, when it was canceled due to the pandemic outbreak. The route will start services again the on the 1st of July 2023 offering three weekly flights.



https://metropoliabierta.lespanol.com/vivir-en-barcelona/aeroporto-barcelona-tendra-nuevos-vuelos-este-destino-este-verano_72945_102.html

Tweet

Aeroinfo Barcelona-El Prat
@AeroinfoBCN

⚠️ @vueling anuncia una nueva ruta entre Barcelona y Toulouse.

- A partir del 1 de julio de 2023.
- 3 vuelos semanales (-2--5-7).
- Operará con mix de Airbus A319/A320 de 144/180 plazas.
- Nuevo destino para Barcelona-El Prat.

📷 wapo84

Toulouse - Mairie et Métropole y 4 más

3:36 p. m. · 9 may. 2023 · 29,1 mil Reproducciones

https://twitter.com/aeroinfobcn/status/1655929785632079872?s=48&t=haN237ntOENav0zTj_08ww

Final remarks

- The Mediterranean Corridor is a strategic corridor both for passenger and freight services as it has a huge potential for the long-distance routes, **but also for regional services.**
- Regional services will expand the social and economic benefits of the Mediterranean corridor beyond its main hubs generating a **multiplying effect on the transition to a greener mobility model.**
- The international rail offer is developing focused on freight and the long-distance trips, but **unattended cross-border regional demand** should also be considered.
- **Cross-border regional services are particularly sensitive to the interoperability challenges that hinder both their launch and their long-term sustainability.** (ranging from technical to administrative & legal issues). **The issue of infrastructure charges** needs specific action as regional cross-border services should be treated differently than long-distance services.

There is demand and strategic interest for cross-border regional services between Catalunya and Région Occitanie in order to boost the regional competitiveness and sustainability.

Selected as one of the 10 EU pilot services to boost cross-border rail

Thank you!

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