UIC HIGHSPEED Morocco 2023

HIGH-SPEED RAIL : THE RIGHT SPEED FOR OUR PLANET

Under the High Patronage of his Majesty King Mohammed VI

Session4.1, Room Karam4
Commercial / Intramodal competition

Moderator : Mr.Philippe Lorand
Senior Advisor High-Speed Rail, UIC, France

ONCF UIC

Session4.1
Commercial / Intramodal competition
Speaker Lists;

1	2	3	4	5
				
Mr.Sergio Barcena	Mr.Andrea Giuricin	Mr.Iñigo Aguas Ardaiz	Mr.Juan Montero	Mr.Javier López Ordieres
Spain	Italy	France	Spain	Spain

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Marrakech, 7-10 MARCH 2023

Digital Railway: Effective Asset Management

Sergio BARCENA
Director Operations Planning and Mantenance, Ouigo, Spain
Session1-4.1 Commercial / Intramodal competition

ONCF UIC

A safe and affordable High-Speed Service at your fingertips

High speed / High capacity
High quality fleet

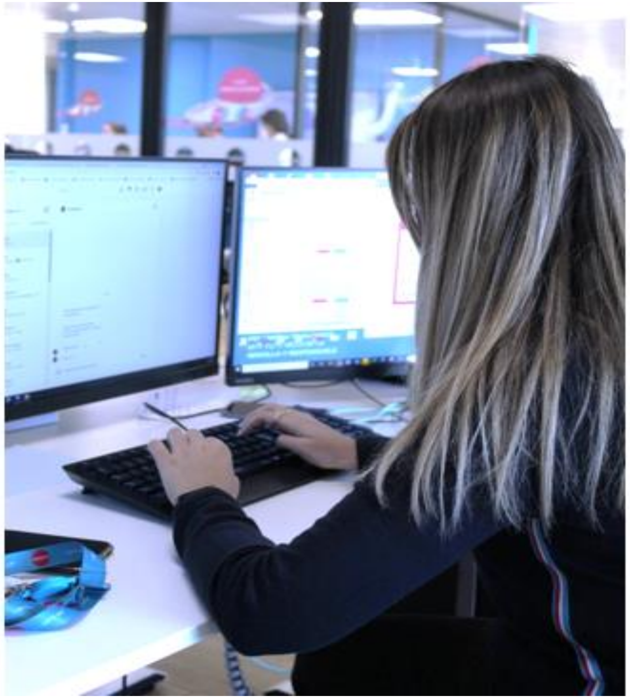
3.000.000 passengers

+95% punctuality

Changed the passenger profile

The sustainable choice!

OUIGO Knowledge Organisation



KEY POINTS

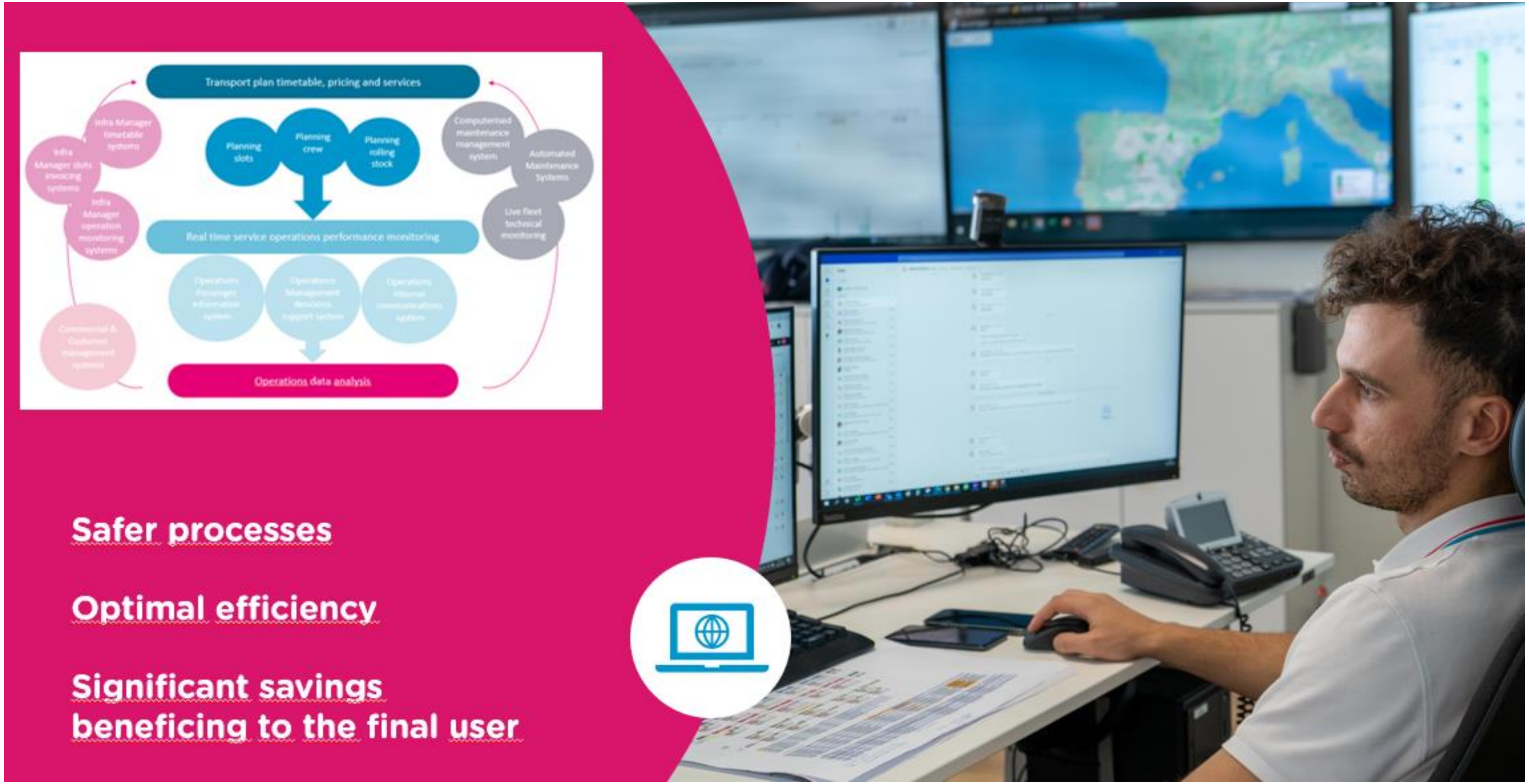
Technical knowledge

Skills

Motivation

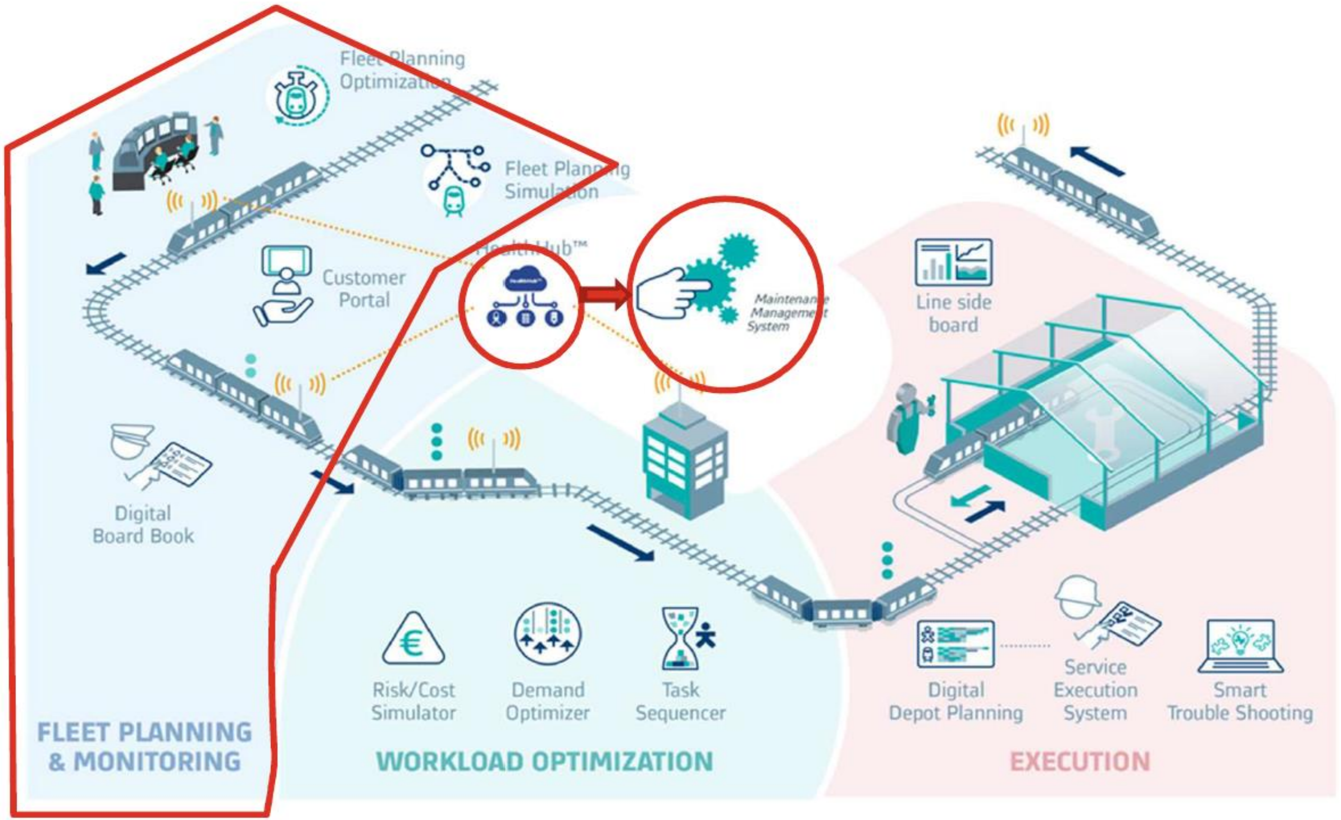
Respect

SIMPLE PROCESSES / NATIVE DIGITAL



Effective partnership

Synergy between operations and maintenance

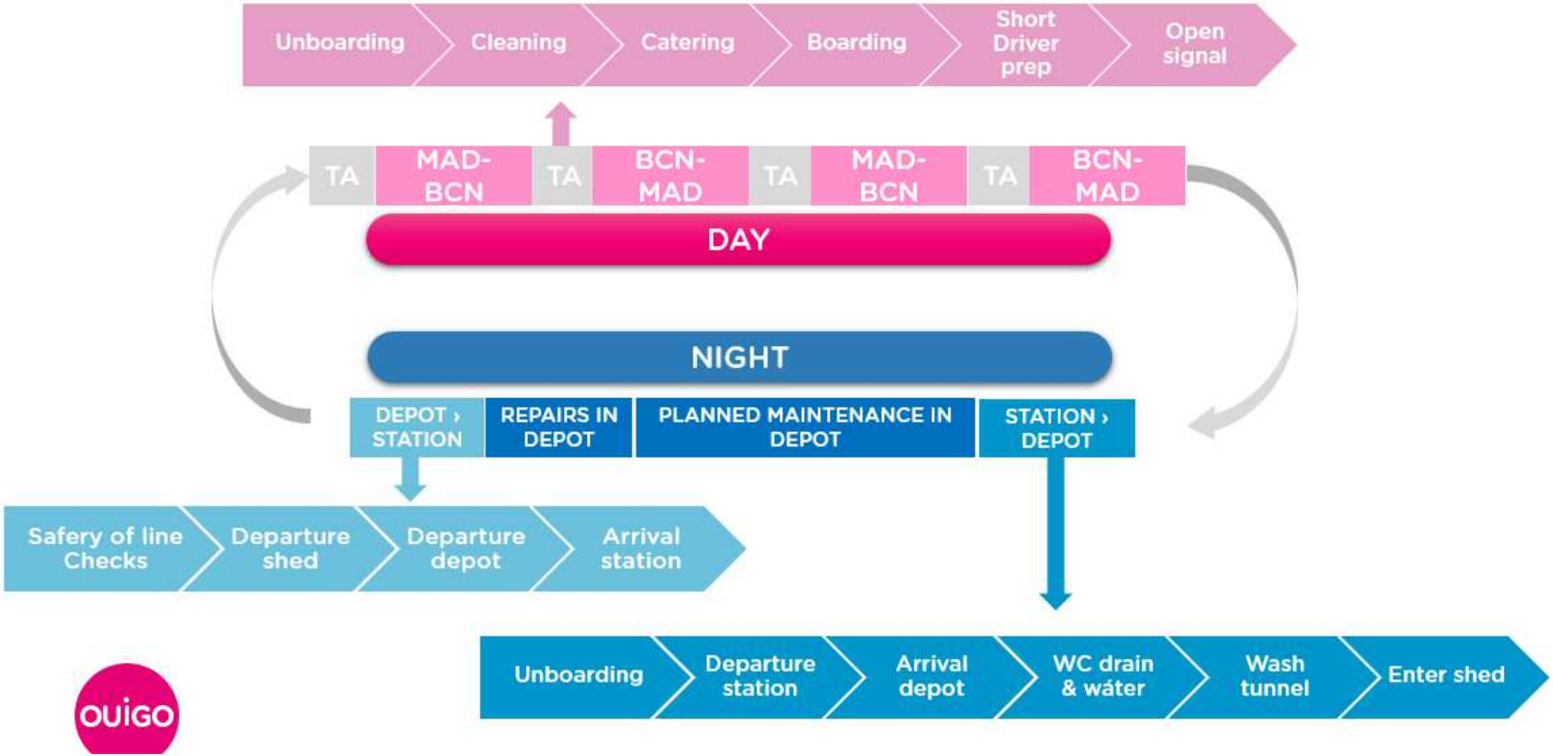


Technical data supports quality of service

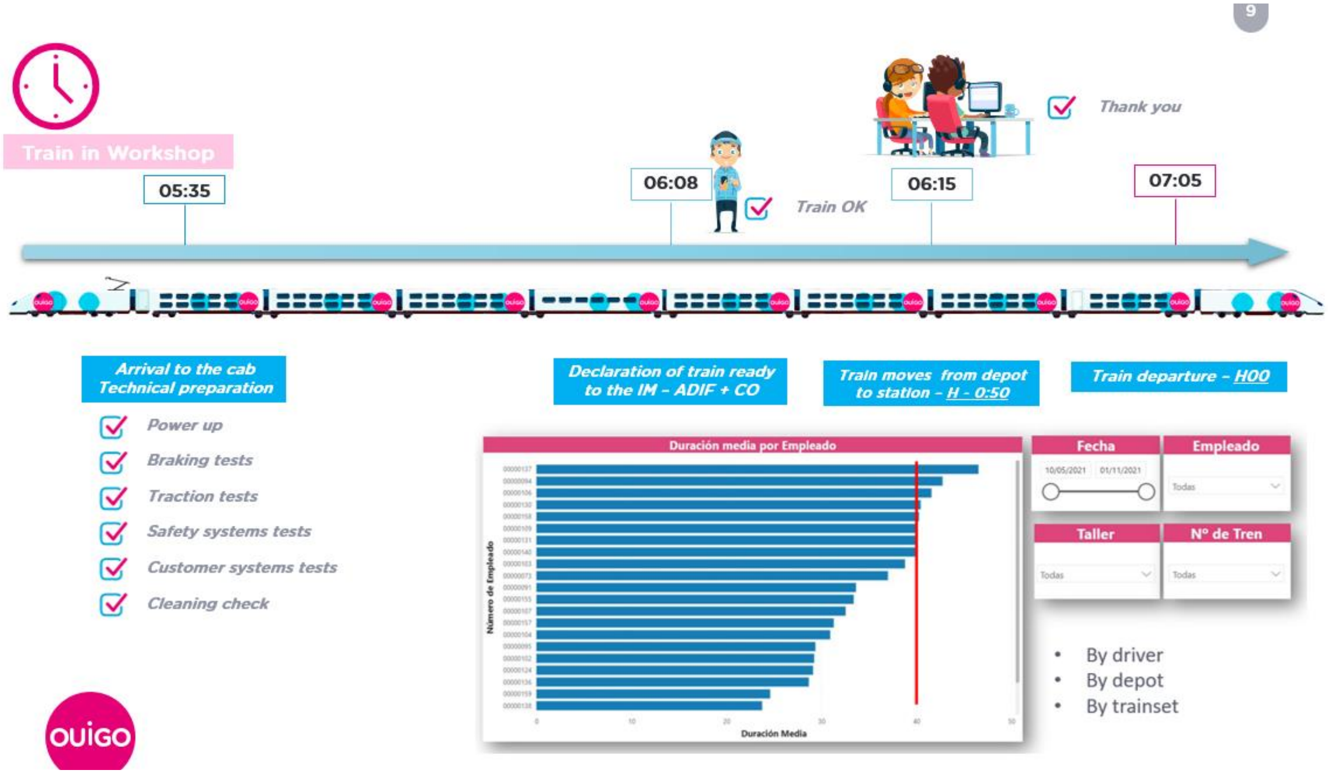
REMOTE CONDITIONS MONITORING

AUTOMATED MAINTENANCE

Operational data supports resources efficiency

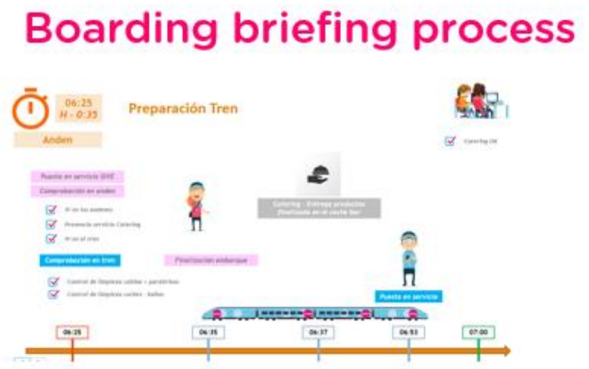


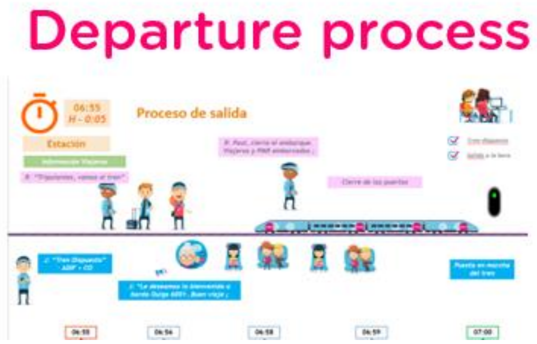
Train preparation in the depot



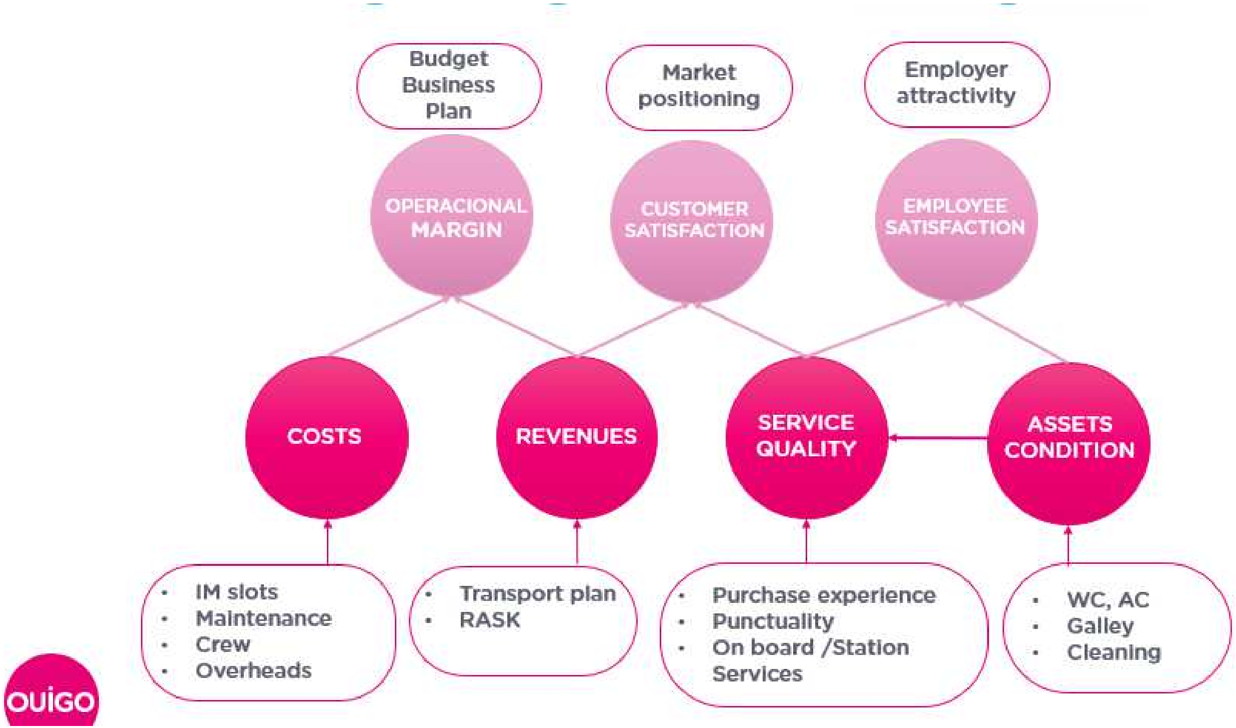
- By driver
- By depot
- By trainset

Every activity





Business Steering through Business Intelligence



KEY TAKEAWAYS

- Key business challenge is to maximize fleet safe use in revenue service
- Fleet health is a virtuous circle: availability > reliability > availability
- Operational data-based performance is driven by excellence in processes, systems, with key people and partners
- Address together key innovation challenges in the industry

THANK YOU !!!

OUIGO

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ITALY, SOUTH KOREA, SPAIN AND FRANCE: EVIDENCE FROM HSR LIBERALIZATION

Adj.Prof. Andrea Giuricin
CESISP – at University Milan Bicocca
Senior Transport Consultant at The World Bank and United Nations
Adj. Prof. MSUC and University Southern California,
Board member – Global Business Travel Association, Italy
Frm.Visiting Professor at China Academy Railway Sciences, Beijing, China
CEO - TRA Consulting

Parallel session 1 – 4.1 Commercial / Intramodal competition

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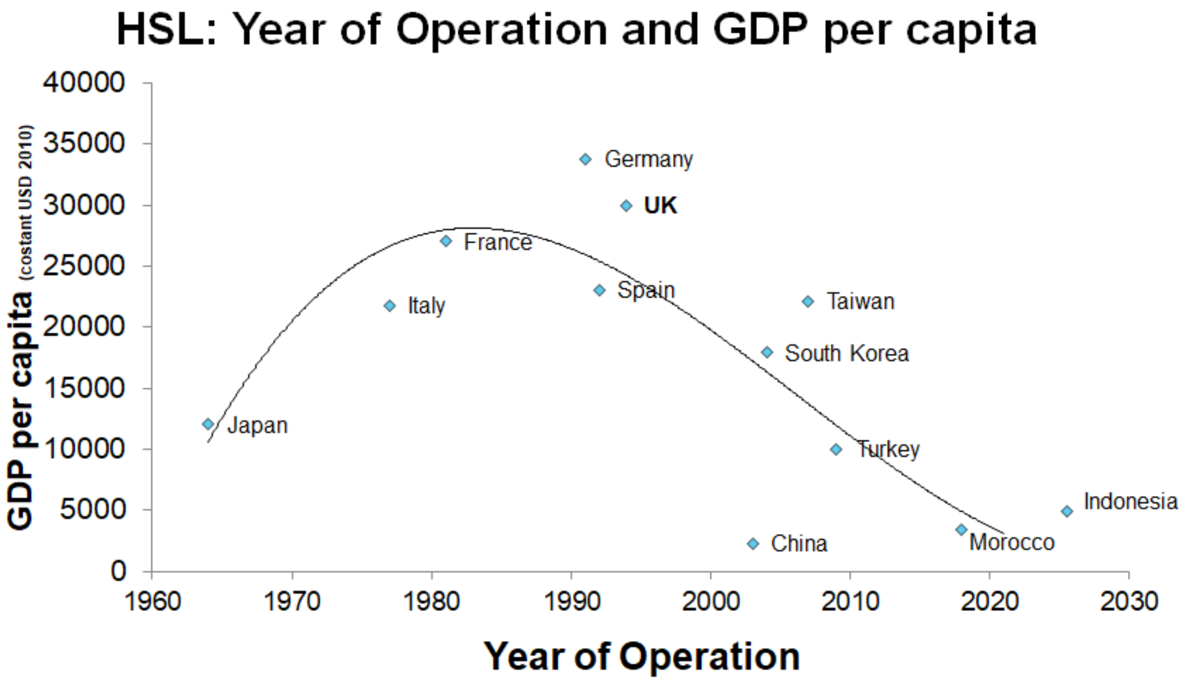
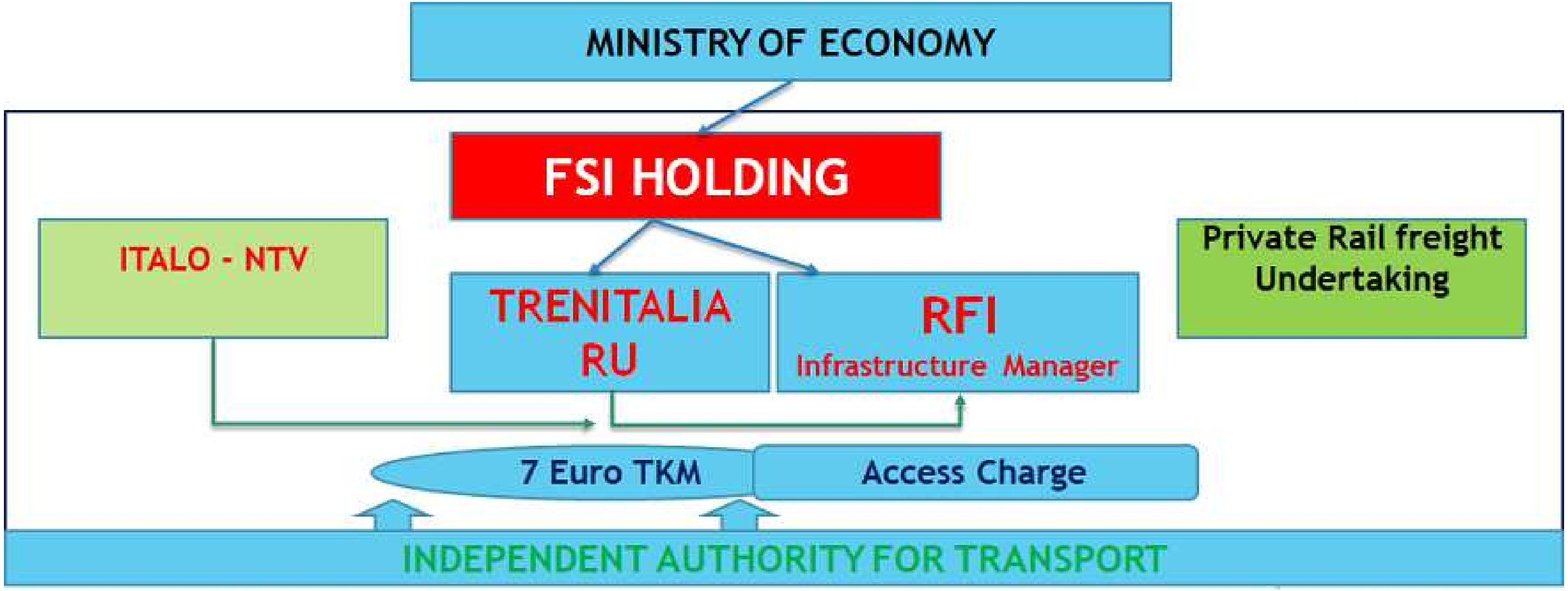
HSR DEVELOPMENT



Source: UIC Data and World Bank

ITALIAN BUSINESS MODEL - HSR

There is the incumbent, a State Owned Entreprise, Ferrovie dello Stato (FSI) that control the Infrastructure Manager (RFI) and the Railway Undertaking (Trenitalia).



HSR DEVELOPMENT

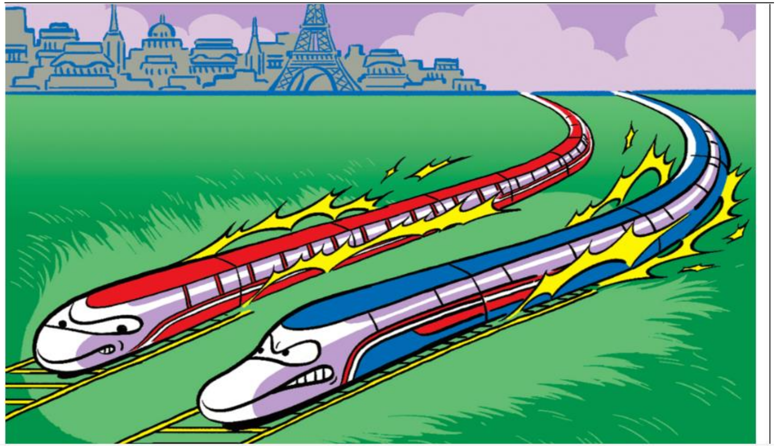
Search

Bloomberg Businessweek

The Discount Airline Model Is Coming for Europe's Railways

- Ryanair and EasyJet transformed low-cost continental travel. Get ready for no-frills trains.

By Carol Matlack



Get Ready to Ditch Your Business Class Flight

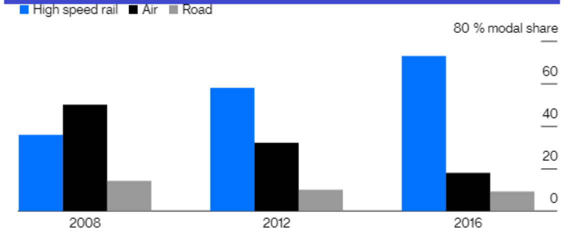
Europe's rail operators have ambitious plans to exploit the flight-shame phenomenon. They still need to make trains consistently convenient.

By Chris Bryant
29 ottobre 2019, 08:00 CET

Look at Italy, where upstart Italo-Nuovo Trasporto Viaggiatori SpA has joined the incumbent Trenitalia SpA in offering train services. In just four years the two companies doubled their share of traffic on the Rome to Milan route at the expense of the airlines, while ticket prices fell by about 30%.

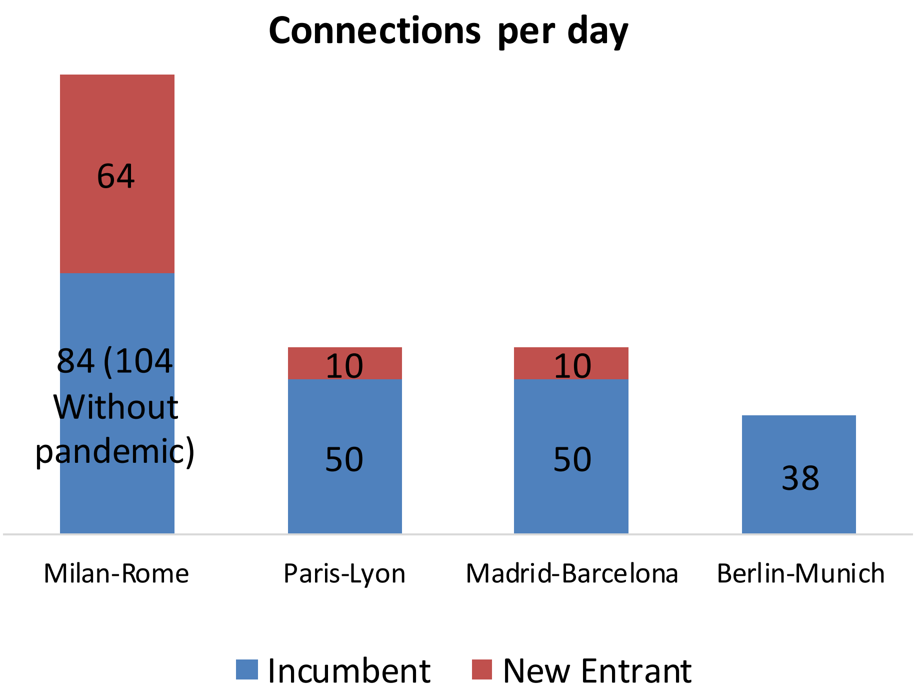
Bloomberg Opinion

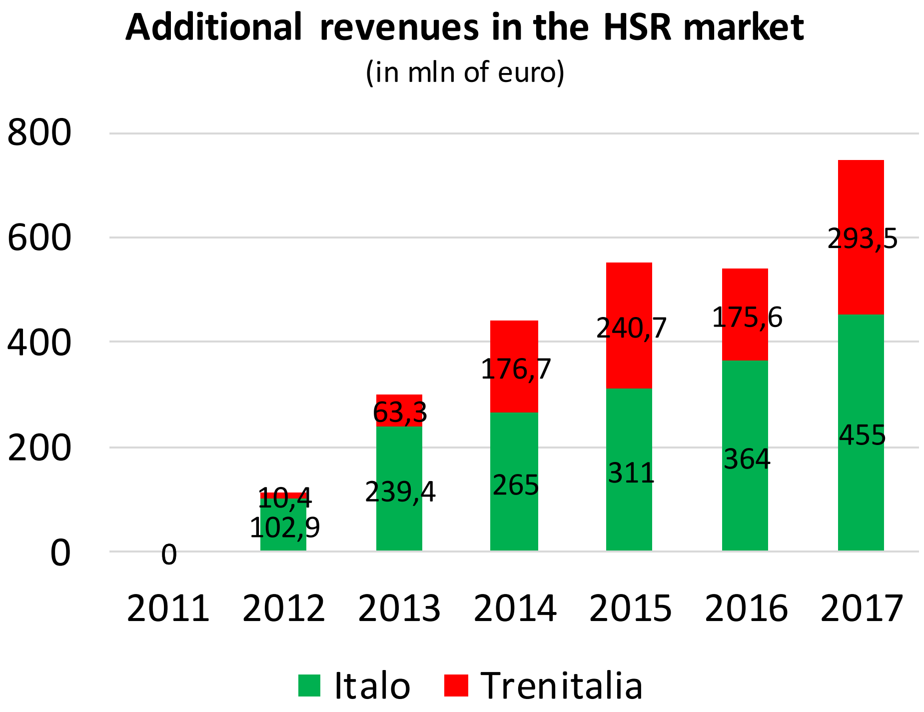
Italian Revolution
The train has become the dominant way to travel between Rome and Milan



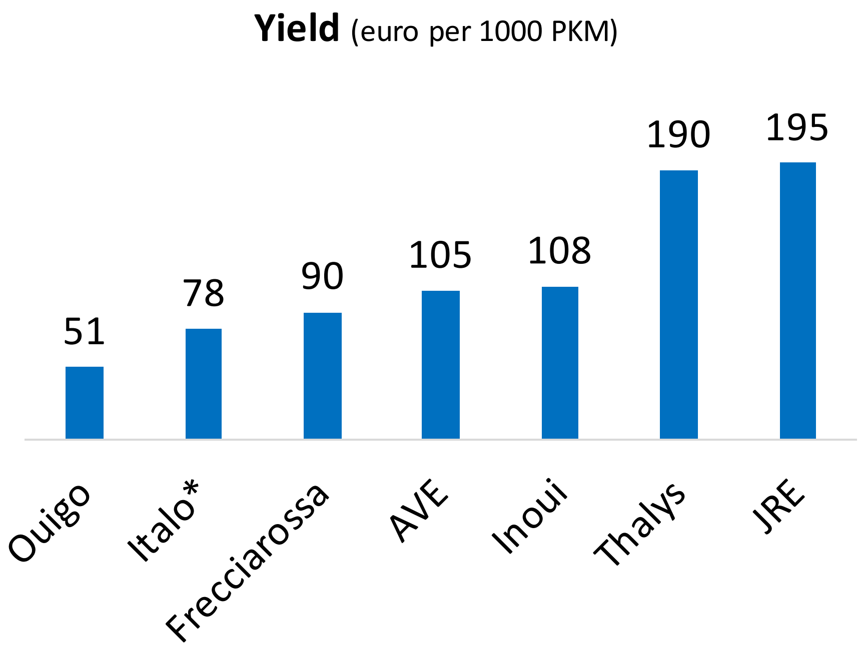
Source: Andrea Giuricin paper

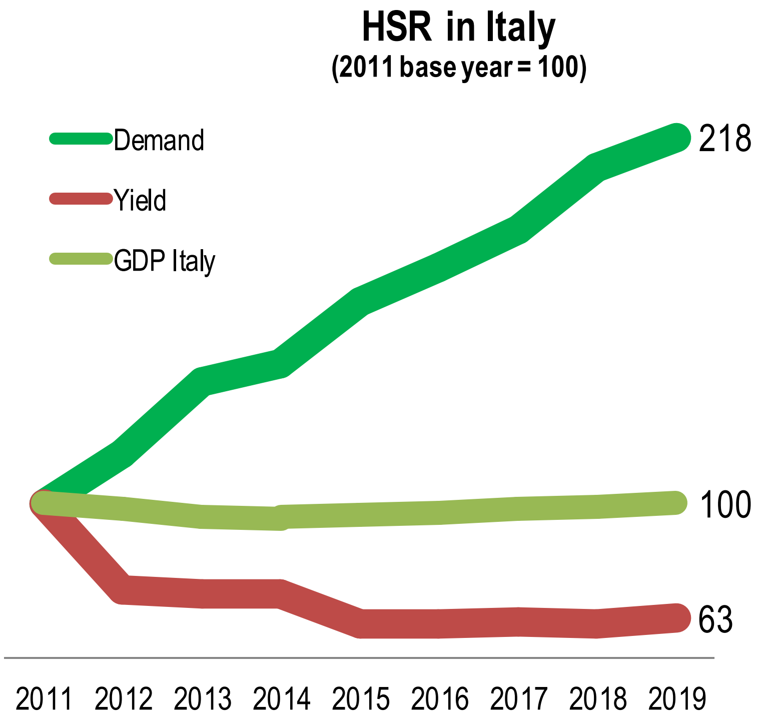
FREQUENCY AND REVENUES



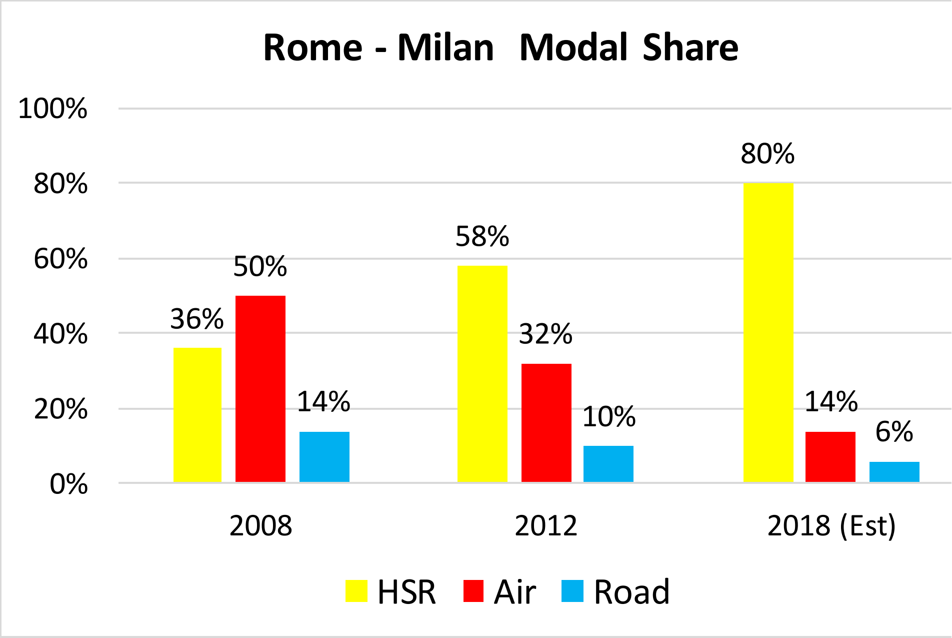


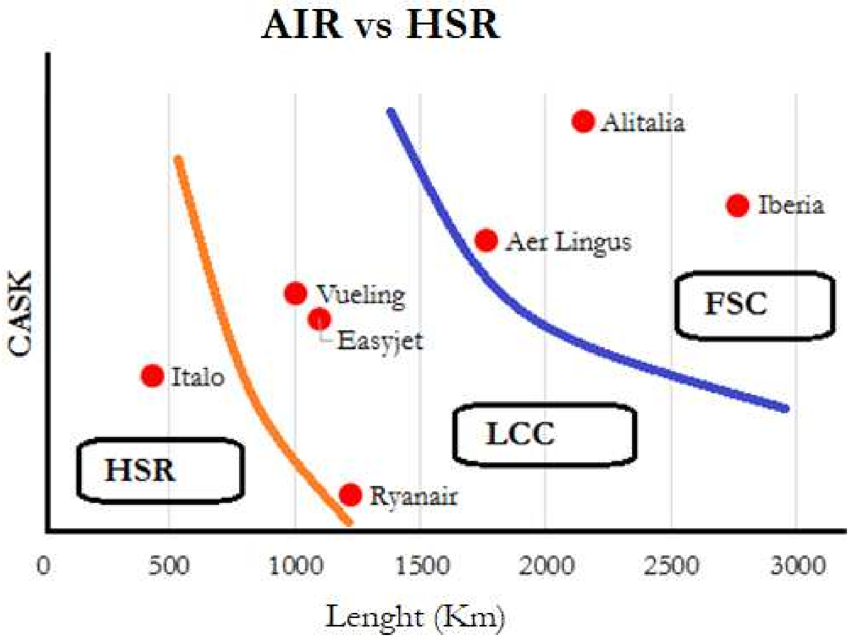
YIELD AND DEMAND





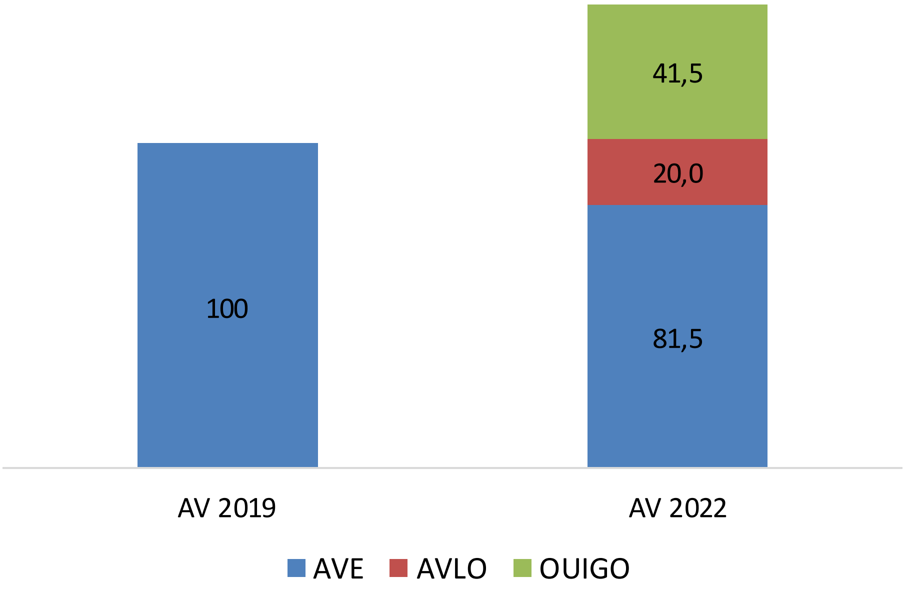
MODAL SHIFT AND COST EFFICIENCY



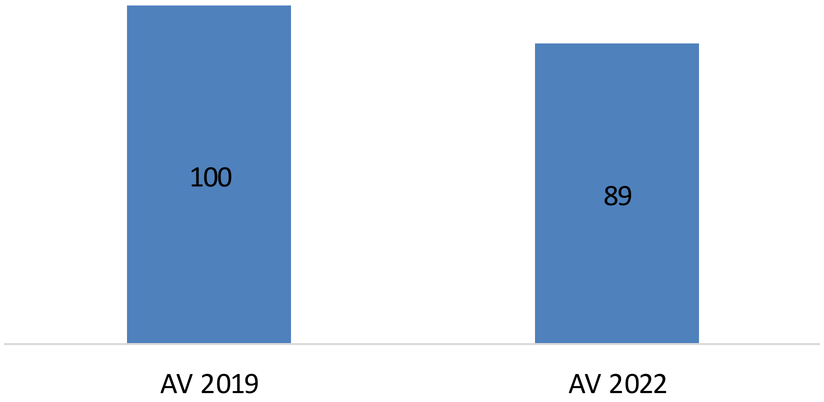


EXPERIENCE OF COMPETITION: SPAIN

HSR Madrid-Barcelona 3rd Quarter



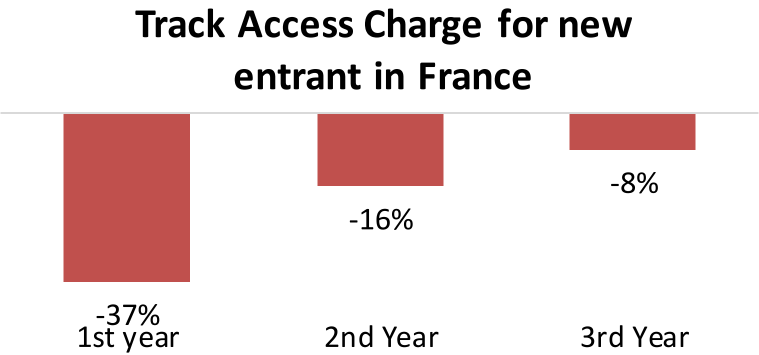
HSR Madrid-Sevilla 3rd Quarter



COMPETITION IN SOUTH KOREA AND FRANCE

- SRT started the operation in December 2016
- SRT has two main lines (Seoul to Busan, Seoul to Mokpo), with an open access competition in the mayority part of the infrastructure

- Maintenance from Korail (the incumbent)
- 32 Sets of train (22 leased by Korail)
- New station in Seoul (Suseo)
- **MOU with NTV**



Reduction of the track access charge is a key element to increase the competition.

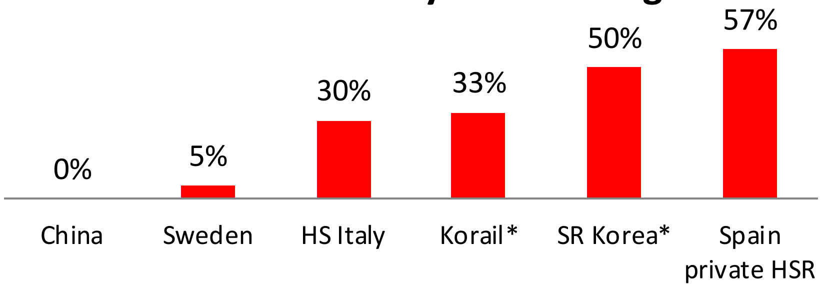
Asymmetric regulation for new entrants is an element to be considered (introduced in France for Trenitalia France – optional at the third year).

Trenitalia France had 1 million passengers in the first year of competition.

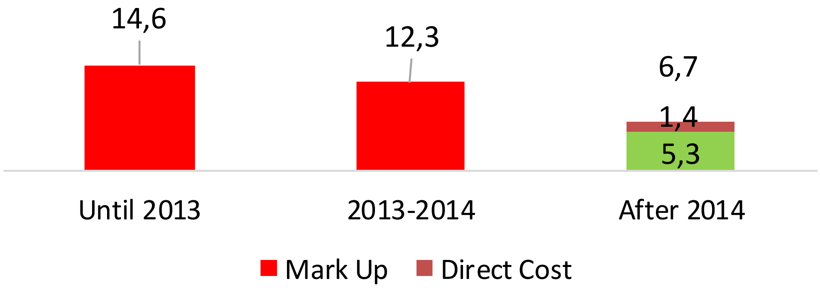
Load factor of 70%.

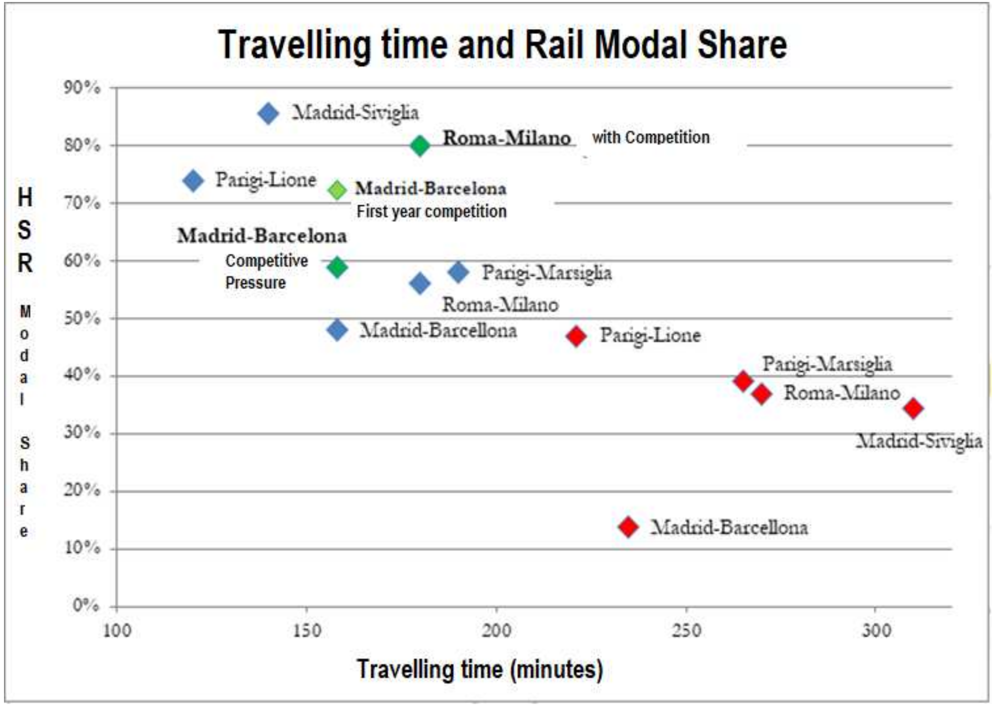
MODAL SHIFT AND TRACK ACCESS CHARGE

Access Charge cost in HSR on total cost of a railway undertaking



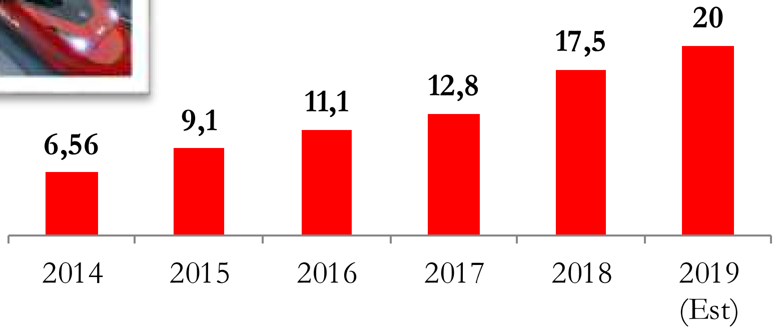
Reduction Access Charge (euro per train KM)



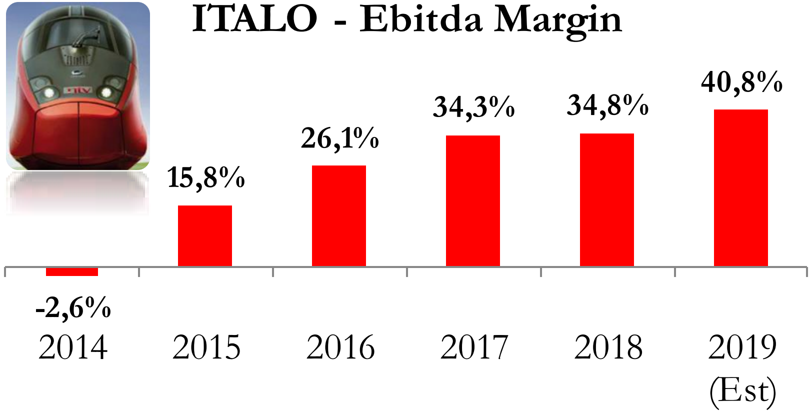


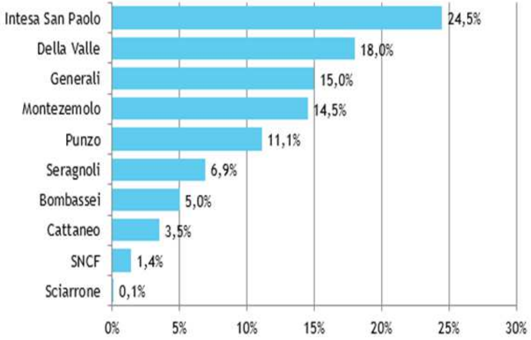
HSR PRIVATE OPERATOR

ITALO - Passengers



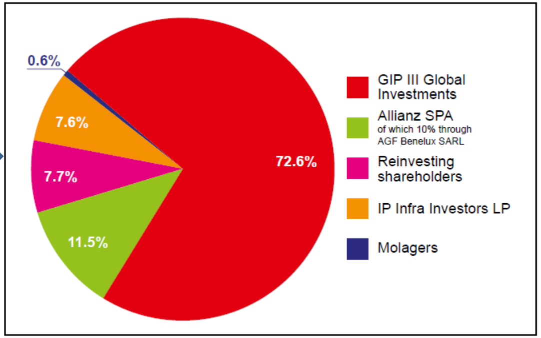
ITALO - Ebitda Margin





GIP → Global Infrastructure Partner 100% in Feb 2018 → 2.5 BLN of EURO

2019



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Are independent EU regulatory bodies made out of the same material?

A comparison study between the ART (France) and CNMC (Spain)

Iñigo AGUAS ARDAIZ
PhD in railway transport, ENPC, France
Session1-4.1 Commercial / Intramodal competition

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HISTORY AND RULES OF REGULATORY BODIES IN EU

Directive 2001/14/EC, Article 30. → Directive 2012/34/EU (recast), Articles 55, 56 & 57

Independence, 3 types:

- Ministry-dependent
- Government dependent
- Parliamentary accountable

Important reasons of independent regulators:

- Credibility
- Political uncertainty
- Number of veto players

Association of all European regulators:

IRG-rail
Independent
Regulators' Group - Rail

HISTORY OF REGULATORY BODIES IN FRANCE

ARAF Autorité de régulation des activités ferroviaires — *December 2009*

arafer autorité de régulation des activités ferroviaires et routières — *October 2015*

Autorité de Régulation des Transports — Liberté • Égalité • Fraternité République Française — *October 2019*

The regulatory power is constant despite changes (caused by external reasons).

Most important functions:

- Control of infrastructure & essential facilities access charges.
- Confidentially information of IM & RU.
- Resolve all conflicts between different actors: IM, RU, security agency, transport authorities, etc.
- Control all legal texts about railway sector.
- Intervention in any kind of change of IM president.
- Control of accounts separation of IM and incumbent RU.
- Control the international cabotage traffic.

HISTORY OF REGULATORY BODIES IN SPAIN

CRF MINISTERIO DE FOMENTO → CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA

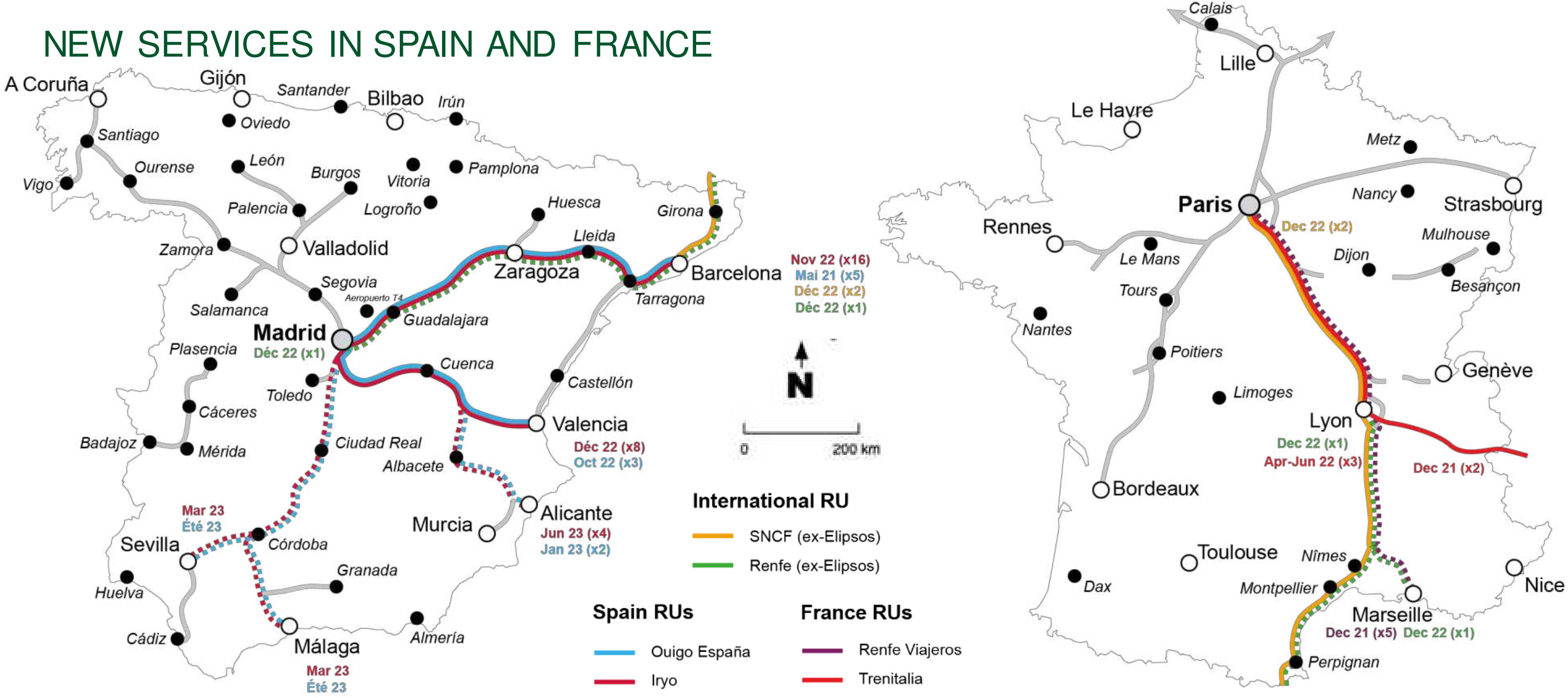
Mars 2005 → *October 2013*

Change from a Ministry dependant organisation to an independent authority.

Most important functions:

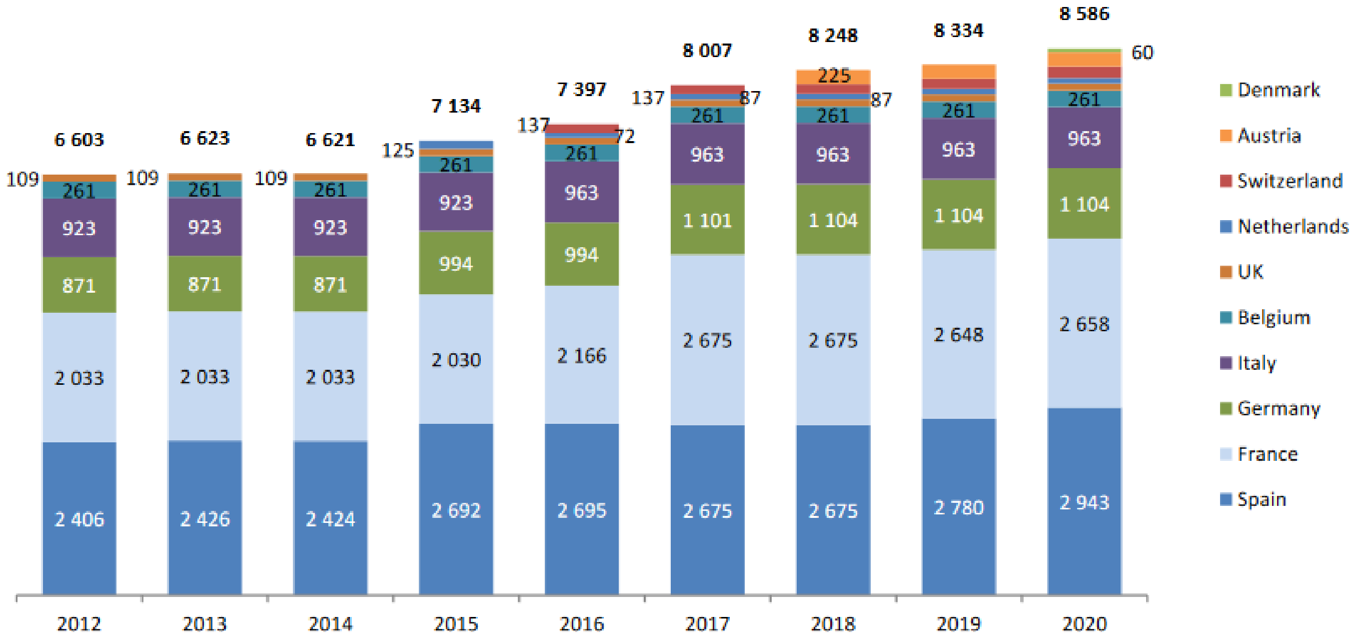
- Control of infrastructure & essential facilities access charges.
- Confidentially information of IM & RU.
- Resolve all conflicts between different actors : IM, RU, security agency, transports authorities, etc.
- Control of accounts separation of IM and incumbent RU.
- Authorize news traffics (economic test for PSO).

NEW SERVICES IN SPAIN AND FRANCE



HIGH-SPEED ROUTE LENGTH FROM 2012 TO 2020

(in km per country)



DECISSIONS AND ACCORDS BY BOTHS RB

	2022	2021	2020	2019
ART	26	26	29	47
CNMC	11	12	15	20

TO SUM UP

- Railway market needs independent regulators for a good development in a open scenario.

- Spanish and French regulator bodies are independent and try to use its legal power.

- In both cases, actions of the RB have started a dynamic of change even if they have maybe not the same power strenght.

THANK YOU

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COMPETITION IN HIGH-SPEED SERVICES IN SPAIN: Active Infrastructure Management for a competitive market

Juan Montero, UNED & FSR
Rodolfo Ramos, Alfonso X & ICCA

Session1-4.1 Commercial / Intramodal competition

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SPAIN HAS IMPLEMENTED A UNIQUE LIBERALIZATION MODEL

- **Competition IN the market**: three competitors in most part of the high-speed network.

- **Active infrastructure management** to optimise capacity in tracks, stations… (services +60%).

- **Competitive allocation of track capacity in 3 Framework contracts,** as more candidates (six) than capacity (congestion).

- Competition started in May 2021: **first results**.

The High-Speed Network in Spain

Source: Geotren

CHALLENGES

- The **largest network** in Europe, and 2nd in the world in terms of kilometers, but **low usage intensity**:
  - Kilometers of high-speed lines and usage intensity (2019)

Country	HSL (km)	Passenger-kms (millions)	Million passengers/km per HSL km
Japan	3,041	99,300	32,6
Italy*	921	21,100	22.9
Germany	1,571	33,200	21.1
France	2,735	56,700	20.7
China	38,283	774,700	20.2
Spain	3,487	16,100	4.6

- Source: UIC 2021

- And still, **congestion** in main passenger stations in Madrid (Atocha), and Barcelona (Sants). Alternative stations in construction (Chamartin & Sagrera).

REFORM TO INCREASE PASSENGERS

- **Active infrastructure management**: ADFI AV leads the reform.

- ADIF AV **optimised the time-table** in three main corridors (MAD-BCN, EAST and SOUTH):
  - ADIF defined services: stations, indicative time for departure, speed, waiting time in destination.
  - 60% more daily services than before.

- ADIF AV distributed track capacity into **three asymmetric packages**, including capacity in all three corridors, in the form of **Framework Agreements** for 10 years:
  - Package A: 70% of capacity (incumbent model).
  - Package B: 30% of capacity (head-on competitor).
  - Package C: 10% of capacity (low-cost model).

COMPETITIVE ALLOCATION OF CAPACITY

- Six railway undertakings filed capacity requests for Framework Agreements.
- No capacity available for all 6, so competitive process triggered.
- Allocation criterion: most intensive use of the infrastructure:

	No. of paths requested	% of the total no. of available paths in the package
PACKAGE A		
Renfe	632,305	86%
Globalvia	43,088	6%
PACKAGE B		
Ilsa-Trenitalia (Iryo)	245,513	70%
Eco Rail	228,451	65%
SNCF (Ouigo)	189,978	54%
Motion Rail (Talgo)	150,595	43%
Globalvia	43,088	12%
PACKAGE C		
SNCF (Ouigo)	109,590	100%
Eco Rail	98,100	89%
Motion Rail (Talgo)	94,495	86%

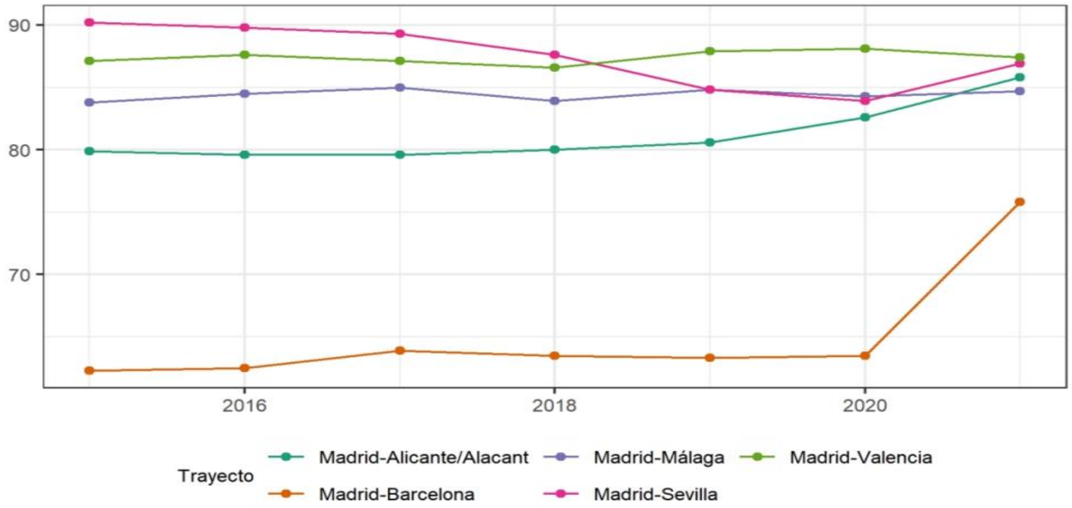
COMPETITION ALREADY STARTED…

- **Three competitors already in operation**:
  - **Renfe** launched low-cost Brand (AVLO).
  - **Ouigo** SNCF) started operations in MAD-BCN in May 2021 and MAD-VLC in Oct 22.
  - **Iryo** (ILSA-Trainitalia) started operations (MAD to BCN & VLC) in late 2022.
- Ouigo & Iryo have not fully deployed their operations (COVID).
- They all use **rolling stock** owned by them or shareholders (no ROSCO).
- No disputes around **service facilities** or **drivers**.

IMPACT 1: RAIL GROWTHS AGAINST AVIATION

- **Sharp increase in intermodal share** as newcomers enter the MAD-BCN route.

Train/plane intermodal share of main rail journeys.

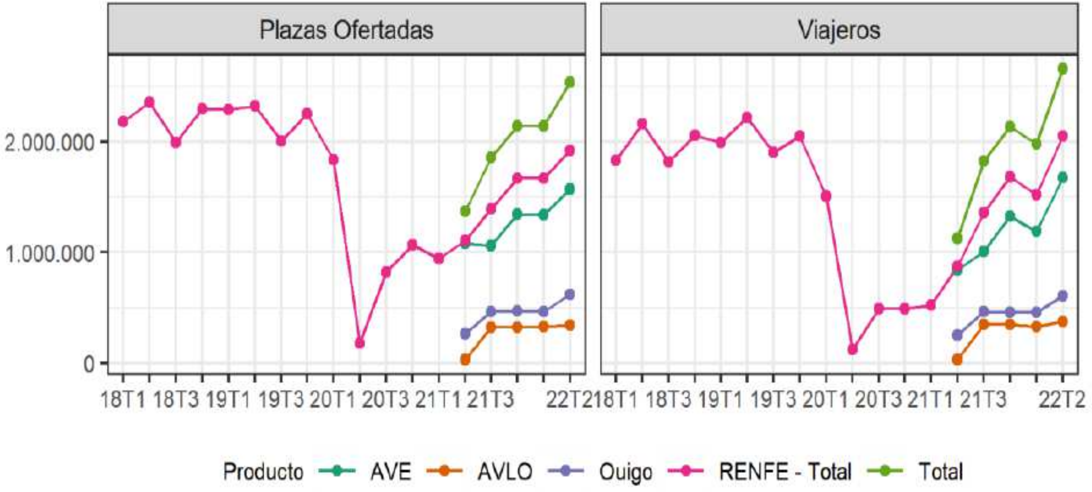


Source CNMC (2022), Informe Anual del Sector ferroviario 2021, p. 60.

IMPACT 2: INCREASE IN PASSENGERS

❖ **COVID recovery faster in routes with competition**

Quarterly interannual evolution 18Q1 to 22Q2 Madrid-Barcelona corridor.



Source CNMC (2022), Informe Trimestral 2022 3T.

❖ **Newcomers rapidly grow in passengers & market share** Ouigo 29% in MAD-BCN.

IMPACT 3: PRICES

- Early to make full analysis.
- Aggressive yield management by all competitors, also incumbent.
- Reference: 43% reduction in MAD-BCN prices in late 2022 (Trainline).
- While prices increase 14% in routes with no competition.

WIN-WIN SITUATION?

- High-Speed passengers win more services (55% increase), and lower prices (40% reduction).
- ADIF AV wins higher revenue in track access charges (€2 Billion over 10 years).
- Newcomers win access to market, but profitability a challenge in low density routes.
- Incumbent wins or loses?:
    - Increases overall number of passengers? Not clear.
    - Increase overall revenue: probably not.
    - Difficulty to cross-subsidize other public services.

THANK YOU

UIC/Florence School of Regulation (2022). *UIC study on the regulatory framework*, October 2022.

Juan Montero: UNED (Madrid) & Florence School of Regulation
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Rodolfo Ramos: Universidad Alfonso X & ICCA.
rodolfo.ramos@gmail.com

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LIBERALIZATION: ADIF IN THE PROCESS OF LIBERALIZATION OF PASSENGER SERVICES

Javier López Ordieres
High Speed Railway Traffic Manager. ADIF. Spain
Session1-4.1 Commercial / Intramodal competition

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Introduction to Spanish High Speed Railway Traffic

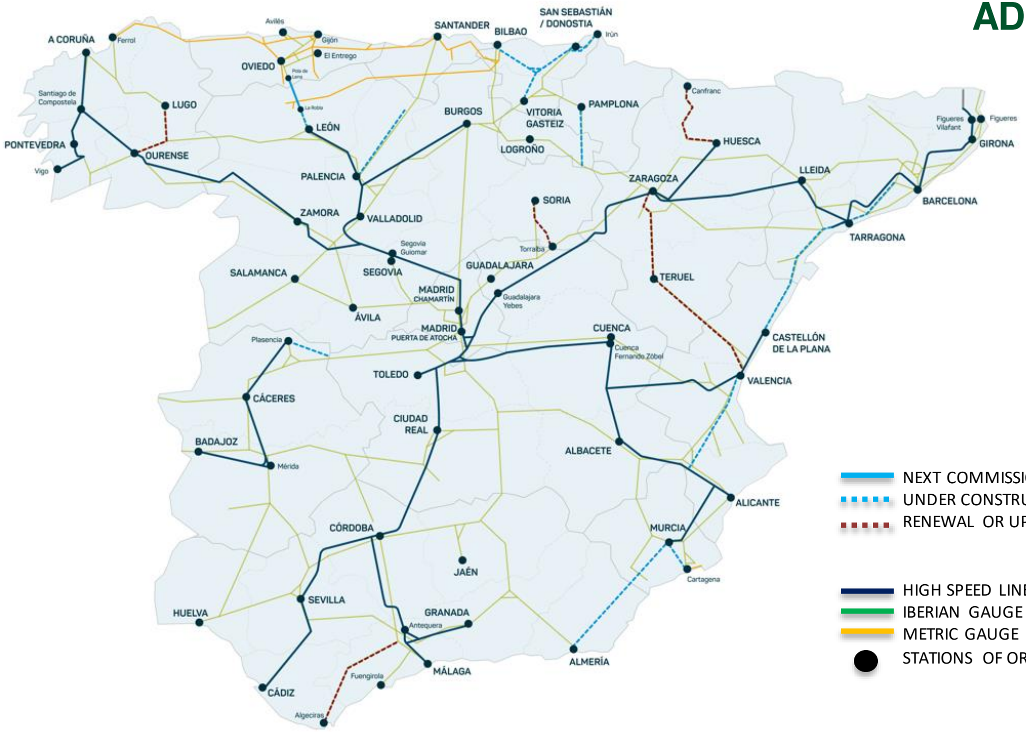
Liberalization model

Capacity and Traffic criteria

Traffic evolution

INTRODUCTION TO SPANISH HIGH SPEED RAILWAY TRAFFIC

ADIF NETWORK

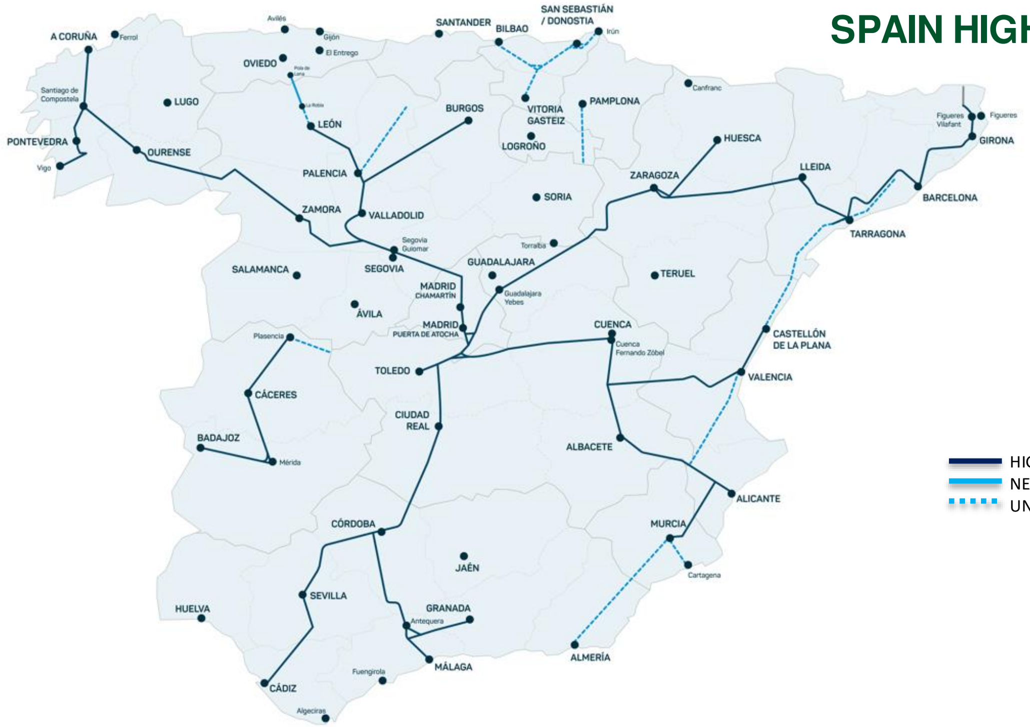


NEXT COMMISSIONING
UNDER CONSTRUCTION
RENEWAL OR UPGRADING

HIGH SPEED LINE
IBERIAN GAUGE
METRIC GAUGE
STATIONS OF ORIGIN OR END OF LINE AND PROVINCIAL CAPITALS

INTRODUCTION TO SPANISH HIGH SPEED RAILWAY TRAFFIC

SPAIN HIGH-SPEED NETWORK



HIGH SPEED LINE
NEXT COMMISSIONING
UNDER CONSTRUCTION

LIBERALIZATION MODEL - PROCESS

FOURTH RAILWAY PACKAGE

- Transparency and non-discrimination. Proactivity.
- Objective: To improve the service offered to citizens:
  - Sustainability.
  - Connectivity.
  - Safety.
- CNMC and DGMOVE European Commission | endorsement

Application for framework capacity → Network Statement Framework Capacity Offer → Allocation and signing framework agreements (5 - 15 years) → Service schedule request / every year / Coordination of service timetable

LIBERALIZATION MODEL - PACKAGES

TRANSPARENCY
CAPACITY FRAMEWORK OFFERED
DIRECTION AND DAY

Packages	Madrid-Barcelona	Madrid-East	Madrid-South	TOTAL
A	32	32	40	**104**
B	16	16	16	**48**
C	5	5	5	**15**
TOTAL OFFER	**53**	**53**	**61**	**167**
2019	34	32	34	100
Increase % Offered/2019	50%	65%	75%	65%

LIBERALIZATION MODEL - PACKAGES

ALLOCATEDS FRAMEWORK CAPACITY

PACKAGES	ALLOCATED COMPANIES	PRODUCTS
A	renfe	renfe AVE, renfe avlo
B	ILSA	iryo
C	OUIGO, OUIGO España	OUIGO

STAKE HOLDERS

renfe

TRENITALIA
GLOBALVIA
AIR NOSTRUM LINEAS AEREAS
SNCF

CRITERIA

CAPACITY

adif

- Fulfil all requests for train paths
- When not possible: alternative proposal
- When not possible: prioritisation criteria
- Capacity allocation: line and congested stations

TRAFFIC

adif

- Change of operating mode at stations
- Change of Madrid Atocha and Chamartín head stations
- Expansion of stations and workshops
- Increased testing for material commissioning

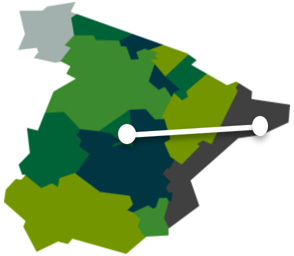
TRAFFIC EVOLUTION: INCREASE ON MADRID – BARCELONA HSL

February 2008

May 2021

June 2021

November 2022



Madrid – Barcelona – Figueras HSL	
Years	**Trains**
2019	26.968
2022	39.118
Increase (%)	**+ 45 %**

TRAFFIC EVOLUTION: INCREASE ON MADRID – EAST CORRIDOR

VALENCIA

Madrid – Valencia Madrid – Alicante	
Date	**Trains**
December 2019	**1.414**
December 2022	**2.276**
Increase (%)	**+ 60,96 %**

ALICANTE

TRAFFIC EVOLUTION: ESTIMATION ON MADRID – SOUTH CORRIDOR

April 1992 — **SEVILLA**

December 2007 — **MÁLAGA**

2023

March 2023

2024

Madrid – Sevilla and Madrid – Málaga	
Years	Trains
2019	27.554
Estimation in 2023	32.000
Estimated increase (%)	**+ 16,13 %**

THANK YOU

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