FERROVIE DELLO STATO ITALIANE

Official Global Rail Carrier

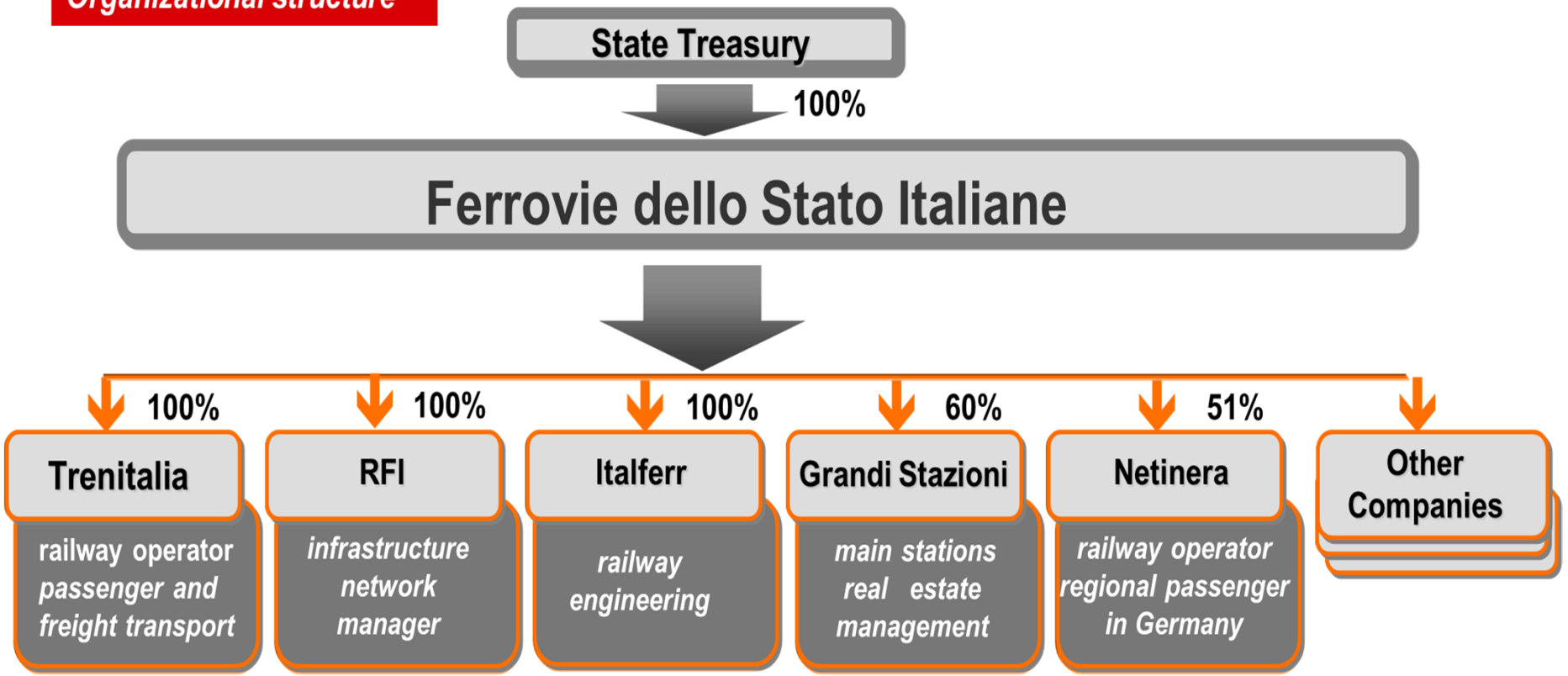
EXPO MILANO 2015

The Italian High Speed Rail system

20 November 2014

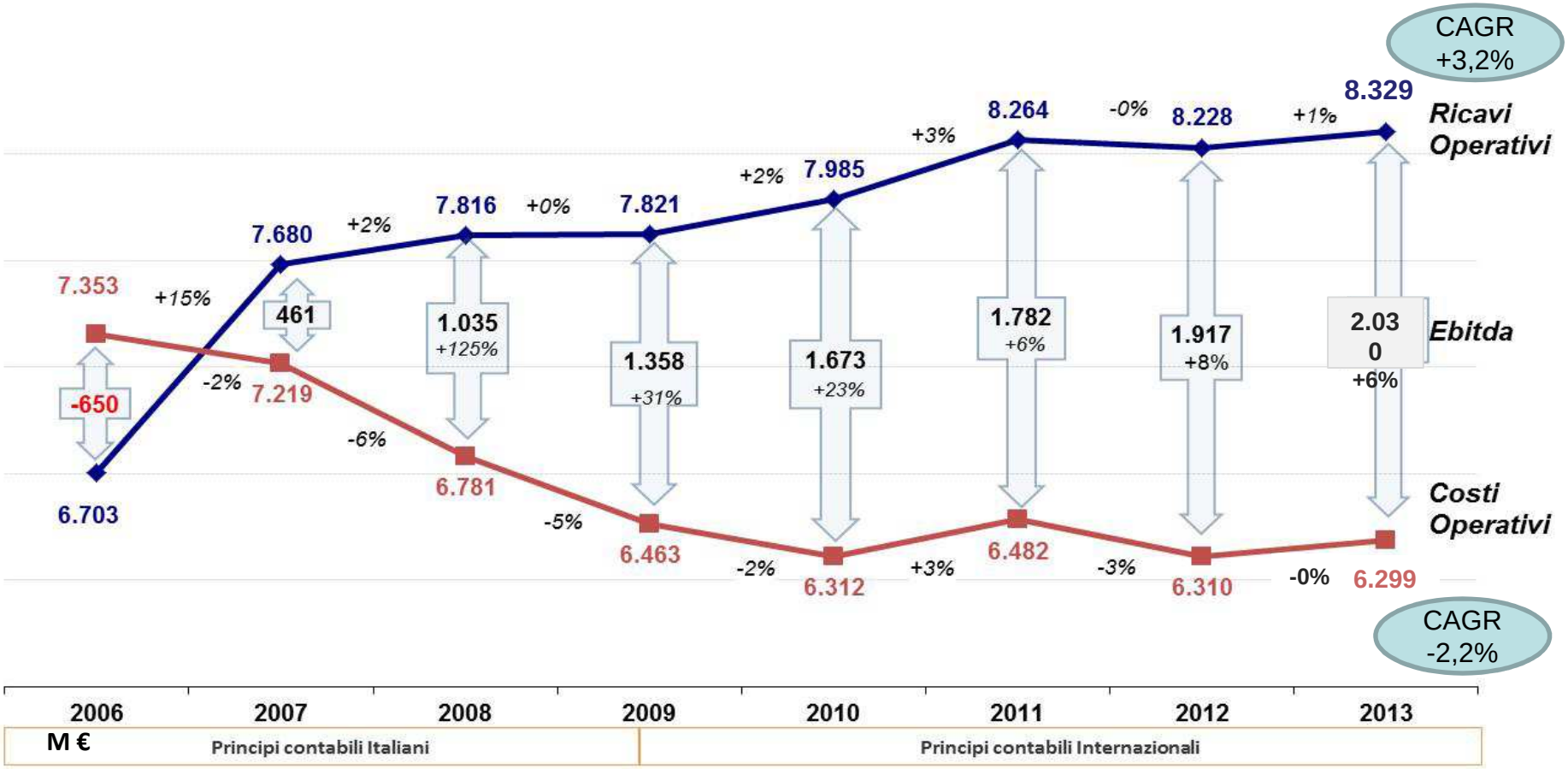
Ferrovie dello Stato Italiane Group

Organizational structure



FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

EBITDA dynamics



FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

The Italian regulatory framework

The EU Rail single market

Still to be achieved

		Freight	International Passenger	Domestic Passenger	Open Access on High Speed	Regional/PSO Passenger
	Legislative Framework	Open	Open	Closed ->4RP?	Closed ->4RP?	No compulsory tendering ->4RP?
	Effective Competition	Yes	Limited (operation mainly under agreement or cooperation)	Few Countries: UK, SE, DE, IT, AT, CZ	IT	Both tenders and direct award
	Legislative Framework	Open Since 2000	Open Since 2000	Open Since 2000	Open Since2000	Both tenders and direct award
	Effective Competition	Yes Since 2001	Yes Since 2009: DB/OeBB and SNCF	Yes Limited to HS and premium markets	Yes Since 2012: NTV (SNCF 20% industrial partner)	Limited Low PSO compensations and low regulated fares

- ✓ Lack of uniform regulation (interoperability, access to infrastructure)
- ✓ Domestic passenger and PSO to be liberalized

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

Competition in the Italian market

- Competition is limited to the most profitable markets
  - ✓ Freight: competitors only operate on international corridors and in the northern areas of the country
  - ✓ International passengers: two cases DB/OeBB and SNCF, the only cases with Thello in France of international competition.
  - ✓ Domestic passengers: competition particularly on HS service (since the completion of the infrastructure between Rome and Milan). It's the only case in the world of open access HS competition.
  - ✓ Cherry picking is not regulated/prevented
  - ✓ Companies operating on profitable market do not have to pay any premium to public authorities to finance PSO

The effects of competition in Italy

- The FS Italiane Group has been pressed to **ask for a Level Playing Field:**
  - ✓ Fair relation with Public Sector (no more under-compensations, no more delayed payments, etc)
  - ✓ Same conditions vs competitors (i.e. working conditions, public procurement, etc)

- and to **improve its performance**:
  - ✓ New services (4 level of services, new lounges , new ticketing system, … , new customer care)
  - ✓ Process innovation and efficiency measures (IT in Control Command CS, revenue per train*KM, revenue per pax, PSO compensation and contracts, correct asset allocation, etc)
  - ✓ Increased investments (fleet refurbishment, new fleet ETR-1000, …)
  - ✓ Thanks to the “holding system”, competition pressure transferred also to Infrastructure Manager

Italy’s metro link

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

High Speed Rail: our success

Mobility

- Development on trans-European corridors and density areas;
- Journey time reduction;
- New trains and stations
- new exclusive services;
- Commercial speed and transport production increase;
- Capacity increase

New Technologies

- ERTMS level 2;
- Maximum standard of safety guaranteed
- GSM-R system
- On board sub-systems

HS Benefits

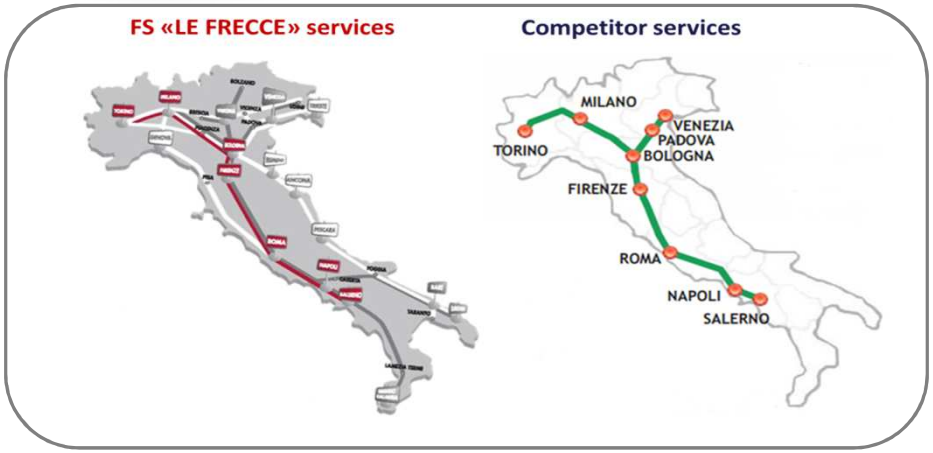
- Rail modal split increase;
- Metropolitan urban centers decongestion;
- Reducing air pollution and CO2 emissions;
- Specialized lines (free up space with resulting benefits for local passenger and cargo transport).

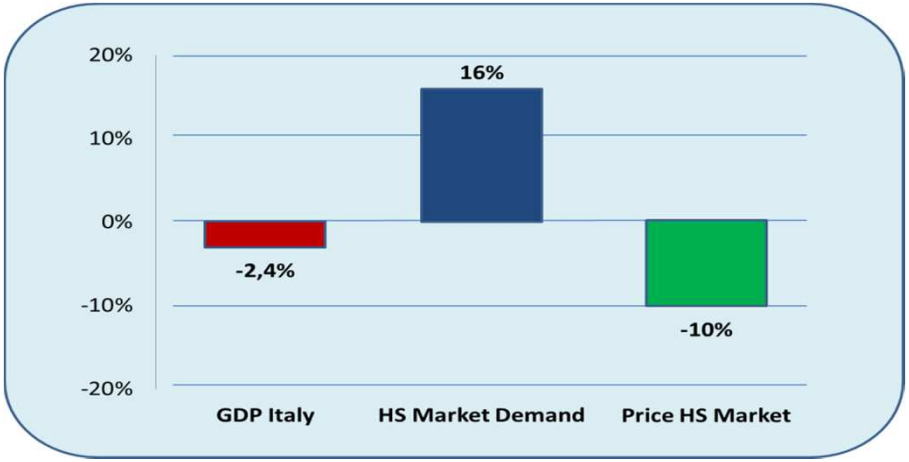
Our modern railway system is the greatest development opportunity for Italy from 1970, increasing competition level in the international/EU market.

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

When a Country goes beyond the UE legislation

The effects of rail passenger liberalisation in Italy





- ✓ More transport offer and demand (despite the economic crisis)
- ✓ Lower prices
- ✓ Technological innovation
- ✓ New services

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

The new Frecciarossa 1000

50 trains** completely interoperable in **8 European Countries
commercial speed: 360 km/h and maximum speed: 400 km/h
acceleration at start ≥ 0,7 m/ s²
Low energy consumption and low environment impact
Rome-Milan journey time from 2h55 to 2h20

The High Speed / High Capacity system

HS/HC NETWORK

2006	**600 km**
2012	**1000 km**

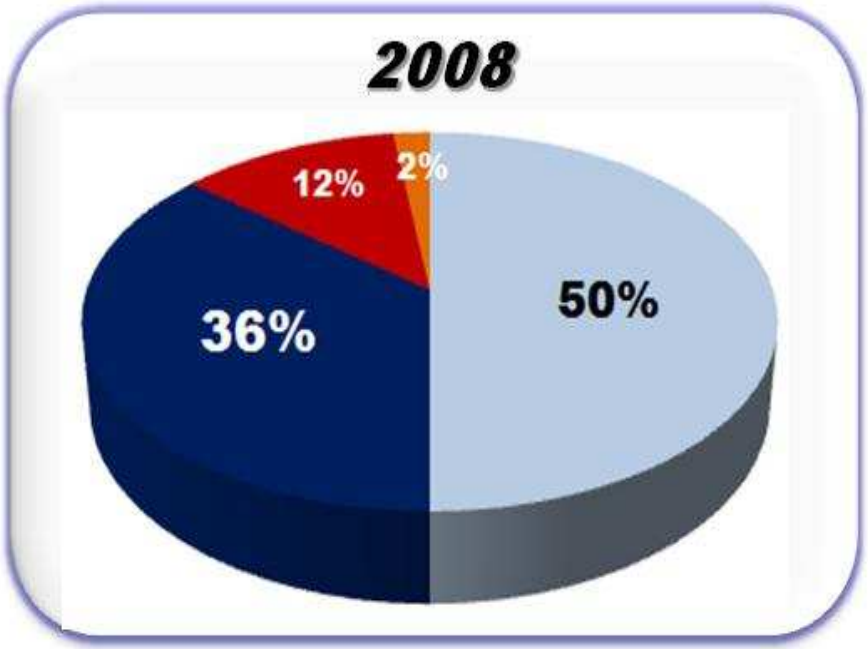
Travel time

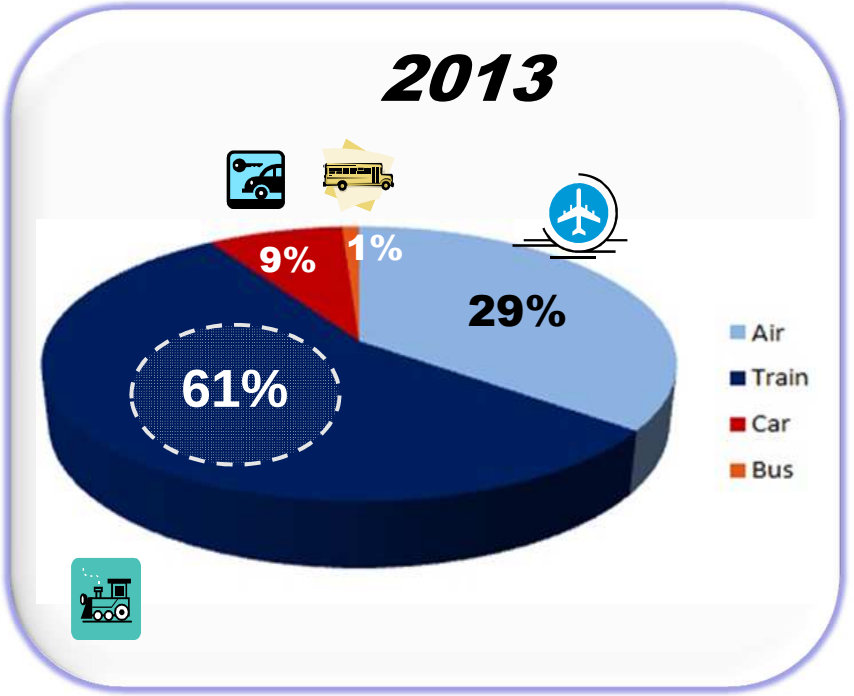
Line	TO-MI	MI-BO	BO-FI	RM-NA	RM-MI
No HS	1: 30’	2: 07’	1: 02’	1: 45’	6: 53’
With HS	47’ May 2014	1: 01’ May 2014	35’ May 2014	1: 10’ May 2014	2: 50’ *non stop* May 2014

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

HS Services The modal split revolution

Modal split Milan – Rome



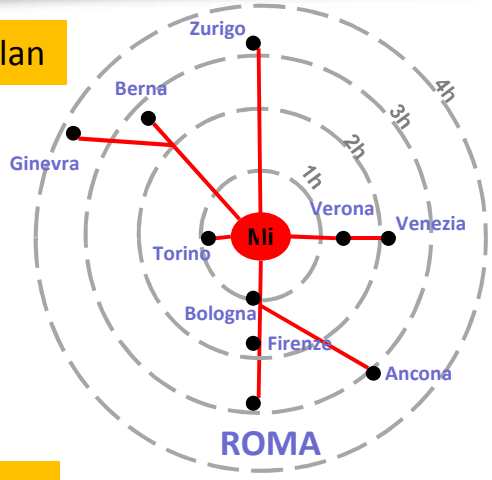


FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

Italy's metro link

High speed line and connections

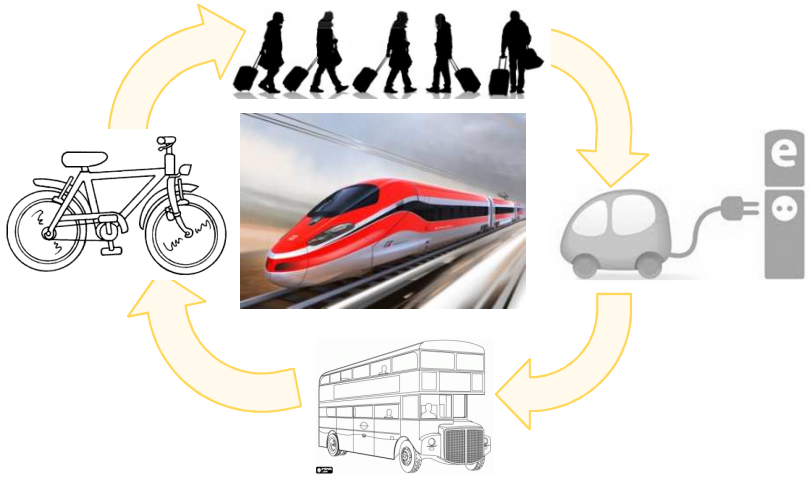
From Milan



From Rome

Effects of a high speed network

- Since 2009, the high speed rail network has established a new standard of people mobility with a lot of implications on the society
- Cities become like quarters of a single, large metropolitan area
- The network polarizes about **65%** of business and mobility demand in the country
- Most of travellers **(61%)** choose train to go to/from Rome and Milan because they are more comfortable, more accessible and faster



Train is
more inter-connectable
more sustainable
more direct
than
every other mode of transport

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

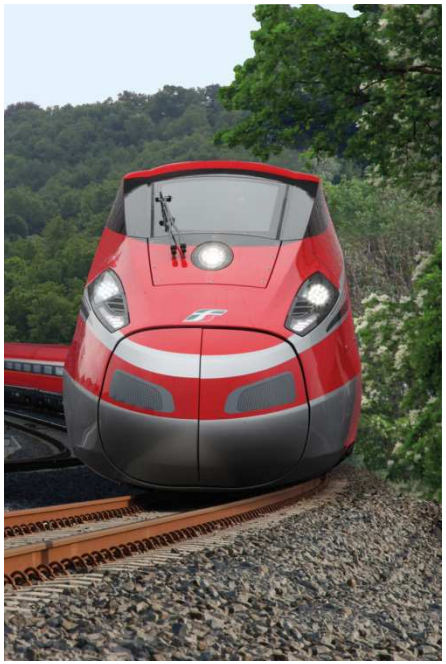
Technologies and innovation

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

The new Frecciarossa 1000 train

- ***ETR 1000 made by AnsaldoBreda and Bombardier***

length: 202 m
8 coaches
seats: 469 + two spaces for PRM
can carry up to 600 passengers



- ***Technological innovation***

commercial speed: 360 km/h running on high speed network
maximum speed: 400 km/h
acceleration at start ≥ 0,7 m/ s²

- ***Interoperability***

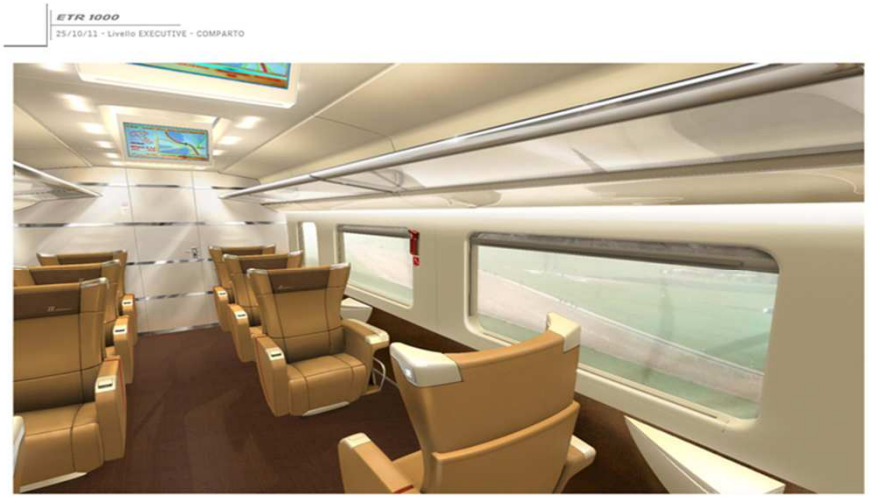
completely interoperable (multi-system trainset to operate in Austria, Belgium, France, Germany, the Netherlands, Spain and Switzerland)

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015

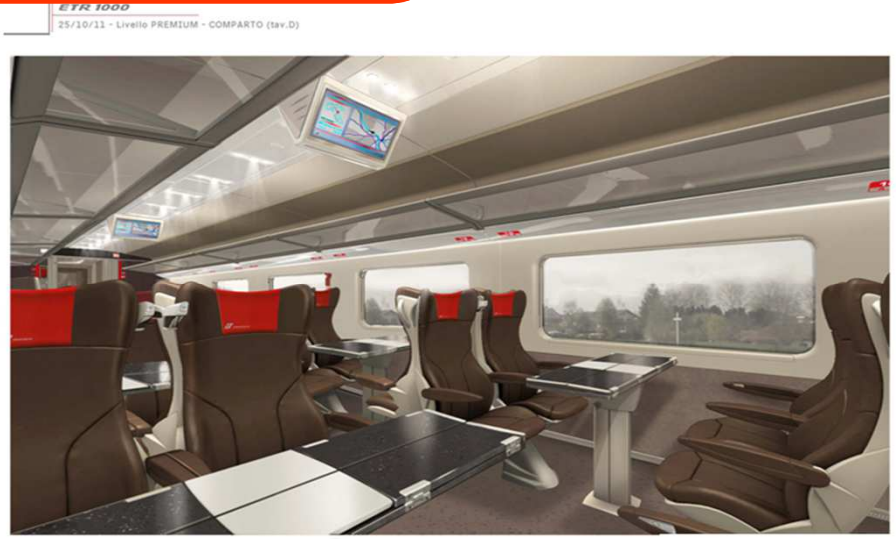
The new Frecciarossa 1000

***Frecciarossa 1000* will begin operation in 2015**

Roma – Milano
journey time: 2h50 → 2h20



Sustainability
low energy consumption
low environmental noise impact < 91 (dB[A])



Comfort and quality
High standard level in interior design and equipment
Wi-fi connection, web new technologies and multimedial on board

FERROVIE DELLO STATO ITALIANE CON EXPO MILANO 2015


Thank you
Direzione Centrale Media - Gruppo FS