



Official Global Rail Carrier

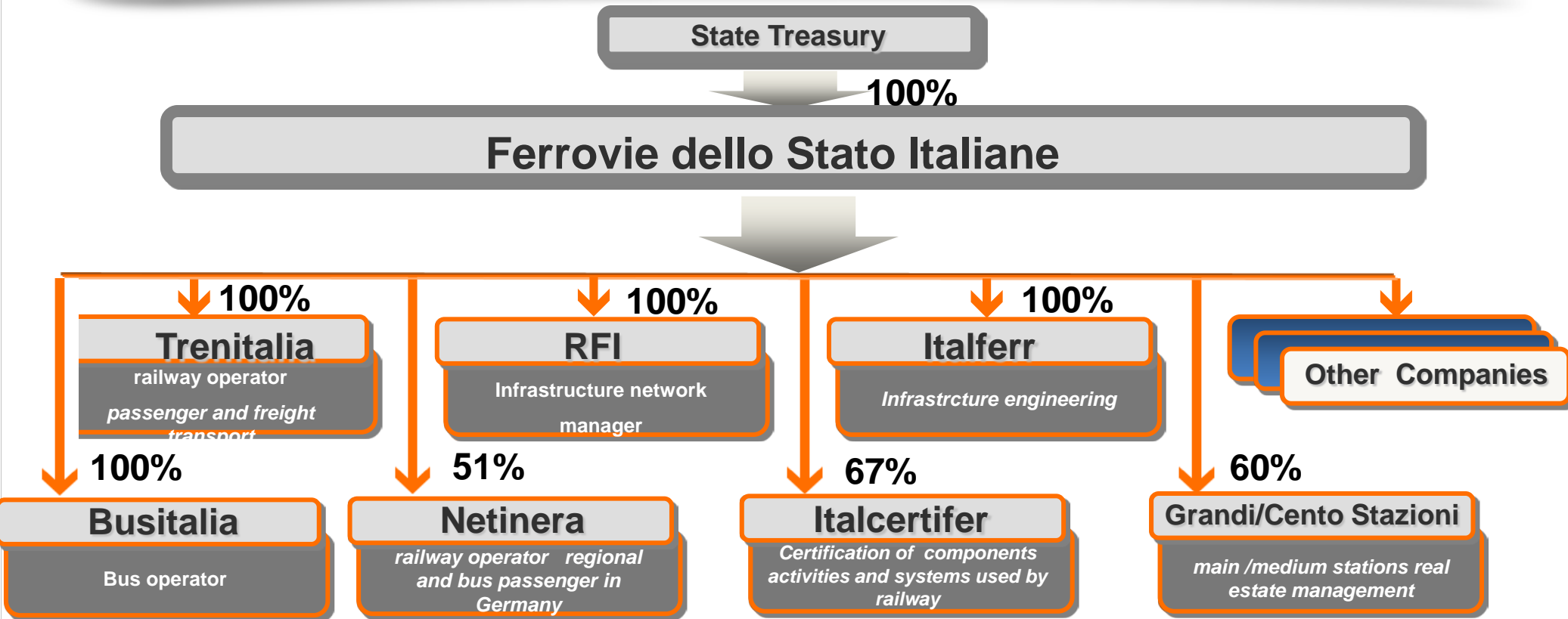


MILANO 2015

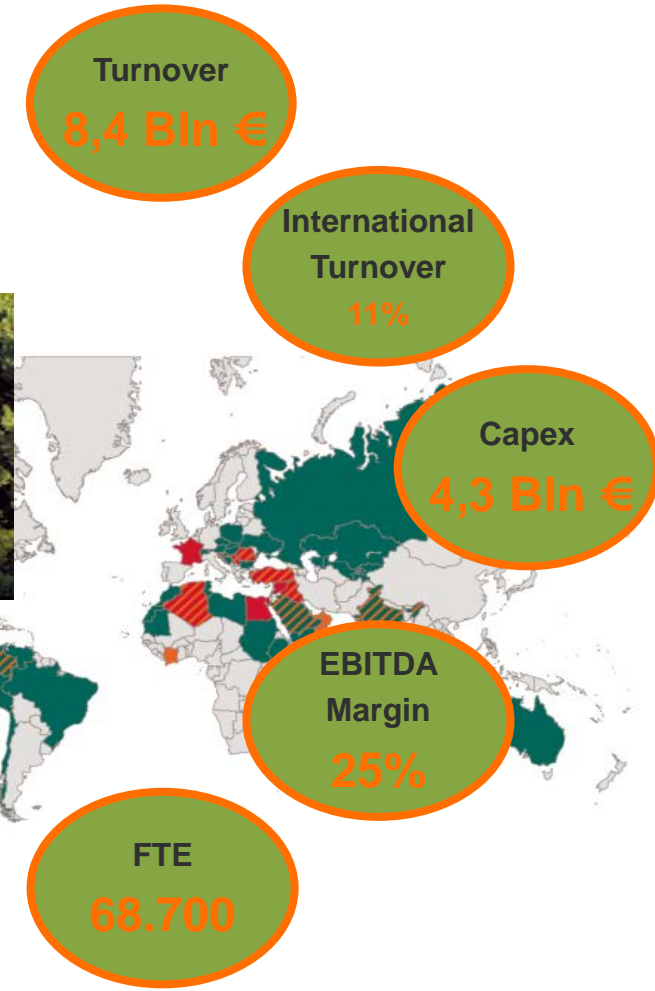
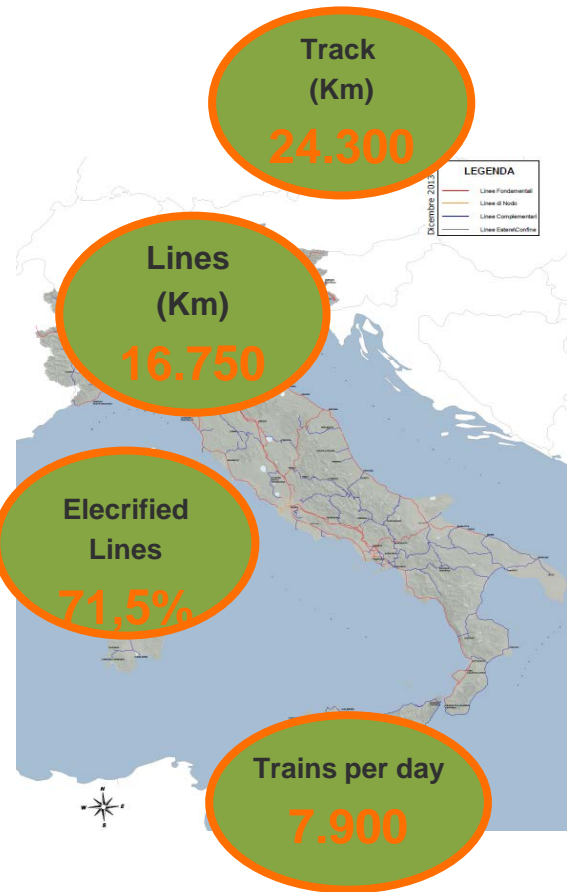
Forum Ferroviario Italia-Balcani

The Italian projects and the extension
and technological upgrading of the rail
networks in the Balkans

Trieste, 17 September 2015



FS Italiane Highlights



Long haul **270**
 PSC long haul **184**
 Regional **7000**
 Freight **530**

The European context

TEN – T Core Network



The European regional strategy

- ❑ "Macro-Region is an area including territory from a number of different countries or regions associated with one or more common features or challenges" (DG Regional Policy).
- ❑ Interconnections between Member States and infrastructure are one of the **pillars** of this cooperation. It's also promoted the choice of sustainable modes of transport.

Pillar 1

Blue Growth - Blue technologies

Pillar 2

Connecting the region - Intermodal connections to the hinterland

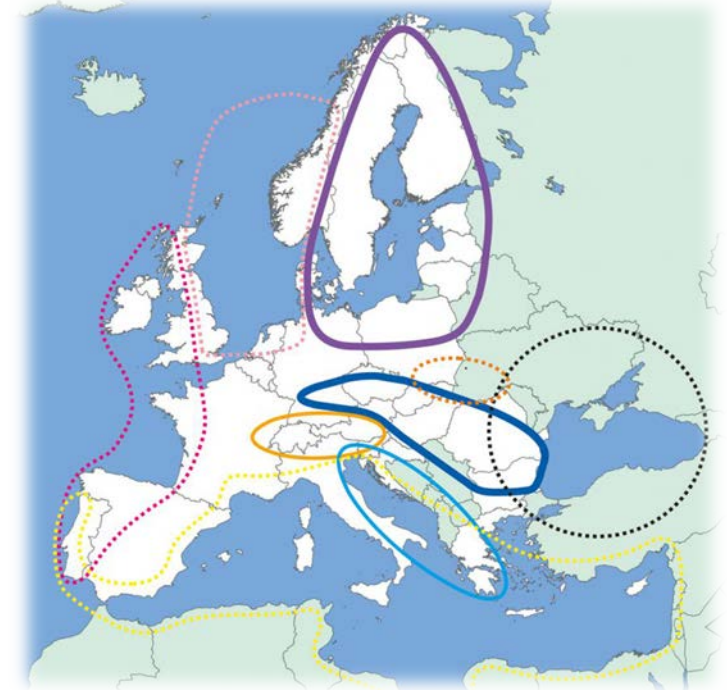
Pillar 3

Environmental quality, transnational terrestrial habitats and biodiversity

Pillar 4

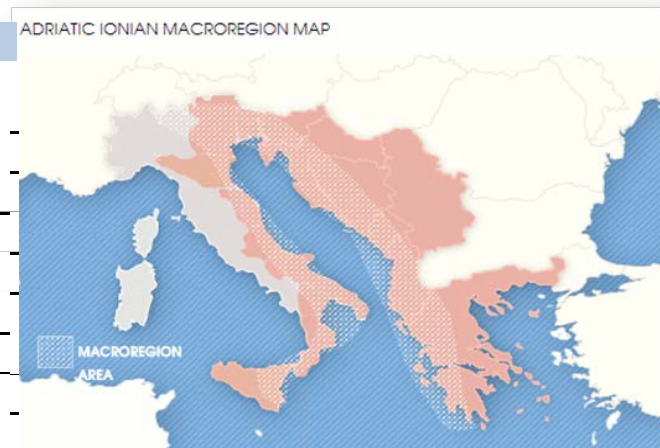
Sustainable tourism -Sustainable and responsible tourism management

The regulatory framework for **European Structural and Investment Funds (ESIF)** for 2014-2020 and the **Instrument for Pre-accession Assistance (IPA)** for non-EU countries provide significant financial resources and a wide range of tools and technical options. The macro-regional approach has already been included: **NEXT** is the project led by the **Marche Region** and 10 other area partners to facilitate access to EU funds.



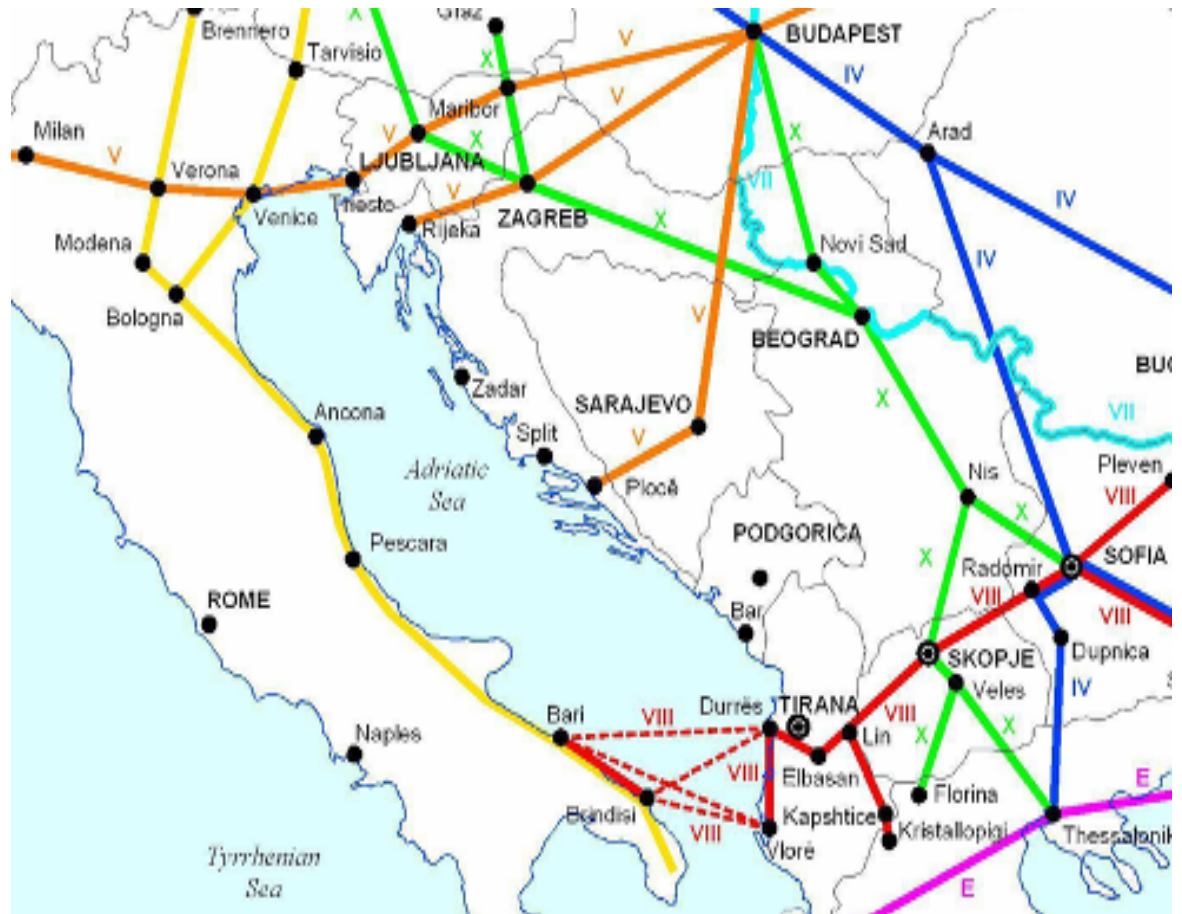
- The Adriatic-Ionian macro-region is conceived as an innovative form of interregional and transnational cooperation in order to strengthen processes of development and the acceleration of the European integration of the Balkan countries. It involves territories of EU member states: **Italy, Slovenia, Greece and Croatia** and also potential candidate countries as **Albania, Bosnia- Herzegovina, Montenegro and Serbia**.
- This area, geographically crucial, has a high developing potential due to its needs in terms of infrastructure and services.
- The macro-region is a large territory with nearly 60 million people and more than 600 million Euro of GDP

	Superficie	Popolazione	PIL pro capite (euro)	Quote PIL (%)		
				Agricoltura	Industria	Servizi
Croazia	55.974	4.489.409	10.144	6%	28%	66%
Bosnia	51.817	4.316.414	3.048	10%	26%	64%
Albania	27.398	3.639.453	2.724	22%	20%	58%
Serbia	77.474	7.379.339	4.137	13%	23%	64%
Montenegro	13.452	672.180	5.199	13%	24%	63%
Grecia	130.647	10.737.428	21.106	3%	21%	76%
Slovenia	20.151	2.005.592	17.390	3%	30%	67%
Italia*	143.416	25.480.991	22.327	2,6%	25%	72%
Totale (media)	520.329	58.720.806	10.759	9%	25%	66%



* Friuli V.G., Veneto, Emilia R., Marche, Abruzzo, Molise, Puglia, Basilicata, Calabria, Sicilia

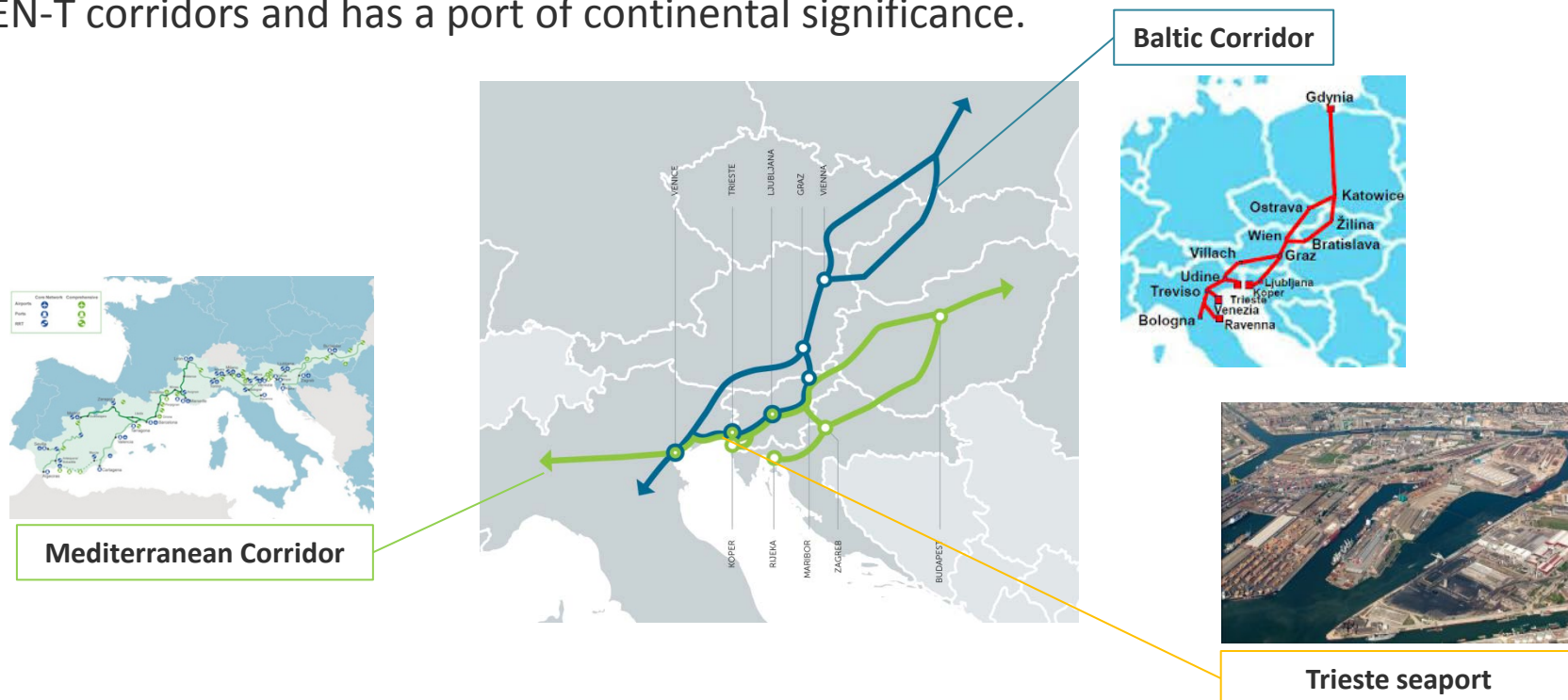
□ Interconnections between national networks and European TEN-T Corridors are a driver for freight transportation and commercial development.



Impacts of the European network on the Adriatic-Ionian development: the Italian contribution

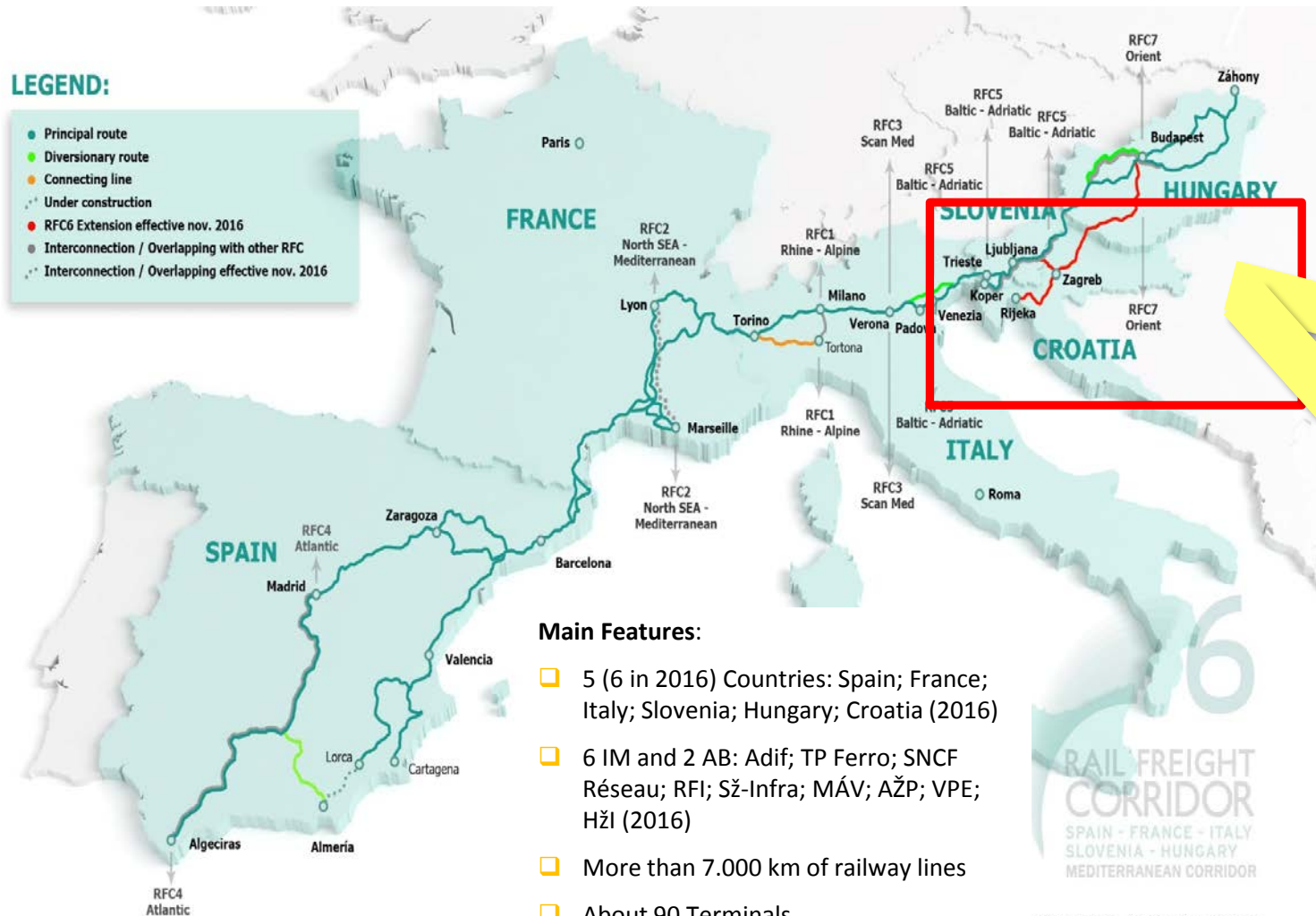
The Friuli Venezia Giulia region as a crucial point in the area

The Friuli Venezia Giulia, thanks to its geographical position and historical tradition, has a natural vocation for the sorting of goods and people. Is the center of an important intersection between two TEN-T corridors and has a port of continental significance.



The Friuli Venezia Giulia local government is focused to facilitate in every way these projects and to promote good cross-border relations

The Mediterranean rail freight corridor (former Rail Freight corridor 6)

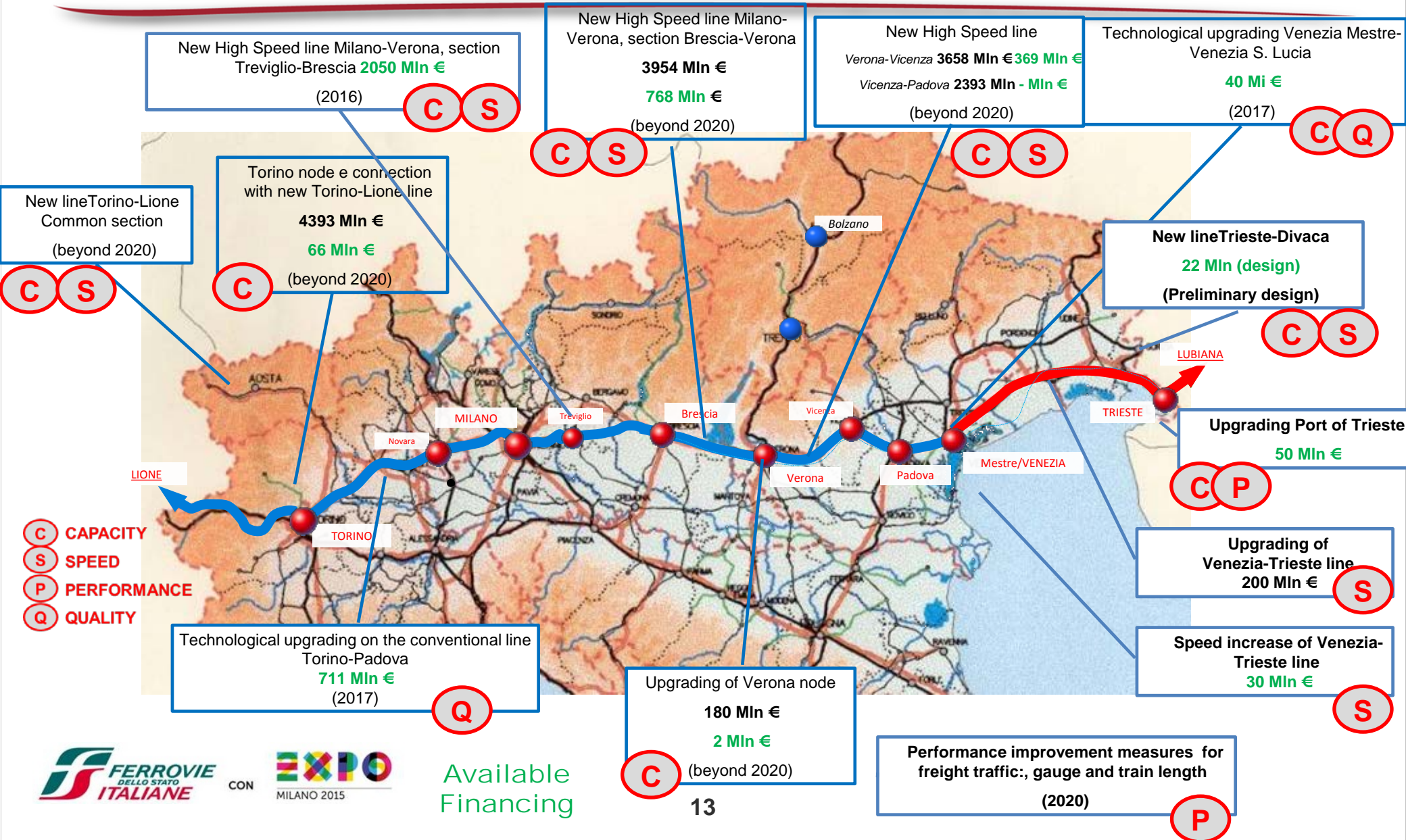


Strengthening of the Mediterranean freight corridor in 2016

By November 2016 the Corridor will be extended to Croatia with the inclusion of HZI

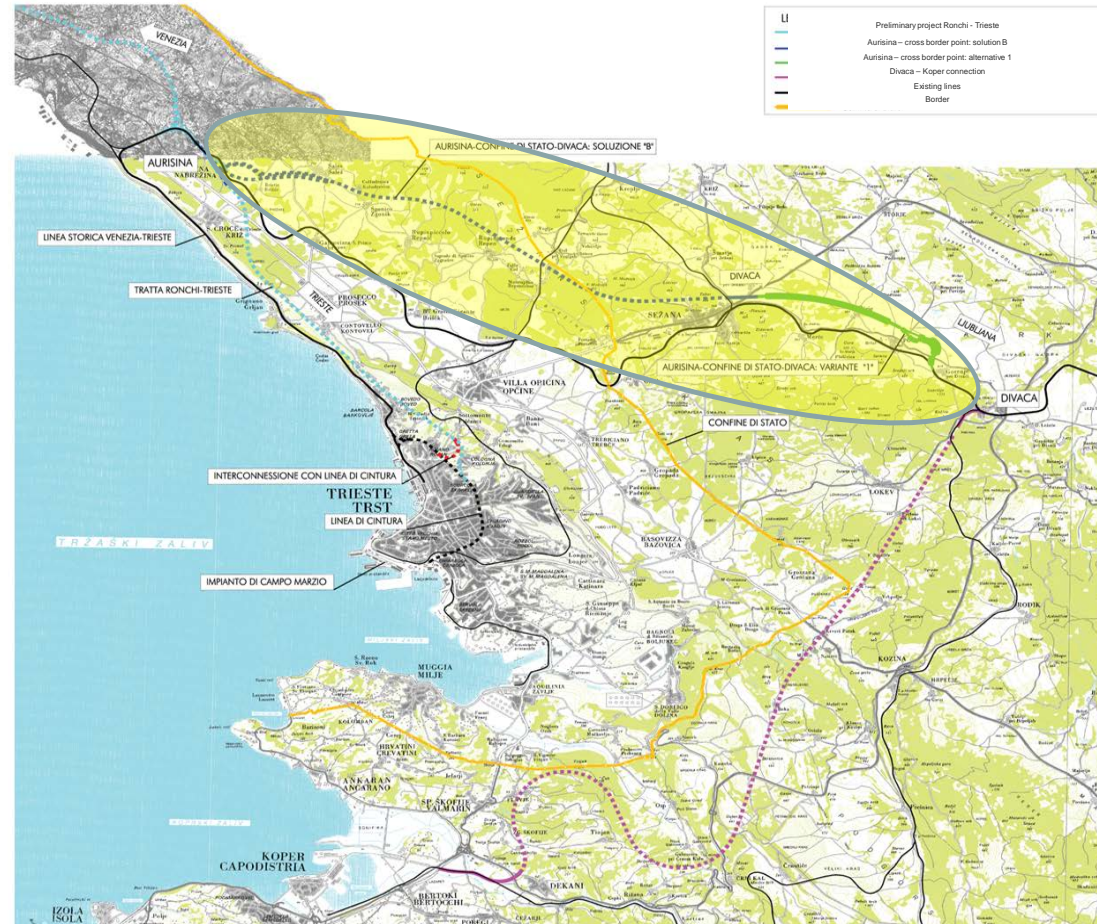


RFI's investment planning on the Mediterranean corridor

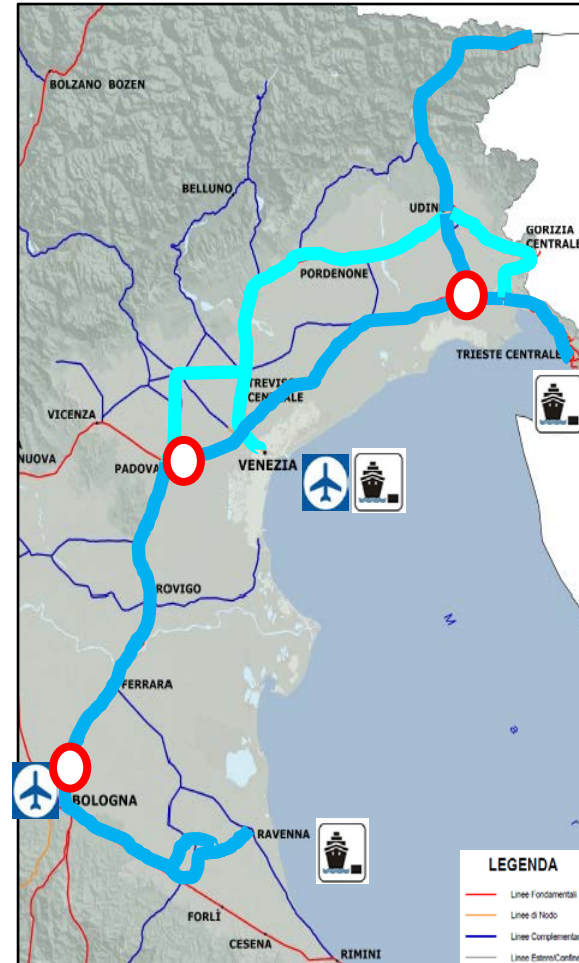
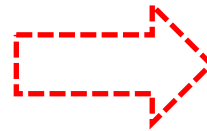


New connection Trieste - Divaca

- ❑ The project aims at the extension of the line Venice-Trieste on the east up to Divaca, with further extension up to Ljubljana planned for the future.
- ❑ The layout, designed to minimize the impact on the landscape, was approved in June 2011 by the Intergovernmental Committee established by Italy and Slovenia.
- ❑ The relationship between Italy and Slovenia was defined by an intergovernmental agreement signed in October 2010. In 2013 the technical subjects (RFI - for Italy and DRI for Slovenia) have signed an agreement of mutual interest (EEIG).
- ❑ Currently, preliminary designing phase, including the feasibility check for the connection with the existing line and the technical and technological equipment at the border, is in progress.
- ❑ The total estimated investment amounts to 1,040 M€, co-financed by the European Union.



Baltic-Adriatic Core Network Corridor routing



- Core airport
- Core port
- Core rail-road terminal

- Core line
- Comprehensive line belonging to the corridor

Baltic-Adriatic Corridor: main projects Italian side



Udine node strengthening
 50 Mln €
 Launch 2015 (1st phase) **(C)**

Conclusion of upgrading Palmanova – Udine line
 170 Mln €
 5 Mln € (design) **(C)**

Technological upgrading Bologna-Padova line
 55 Mln € (1° Phase)
 Launch 1st phase (2017) **(Q)**

HS Bologna node: connection to Venezia
 36 Mln €
 Launch 2017 **(C)**

PC80 compliance - rail connections Ravenna seaport
 In design phase **(P)**

Speed increase Venezia-Trieste line
 30 Mln €
 Launch 2018 **(S)**

Infrastructural strengthening Venezia-Trieste line
 200 Mln € **(S)**

New line Trieste-Divaca
 22 Mln (desig) **(C) (S)**

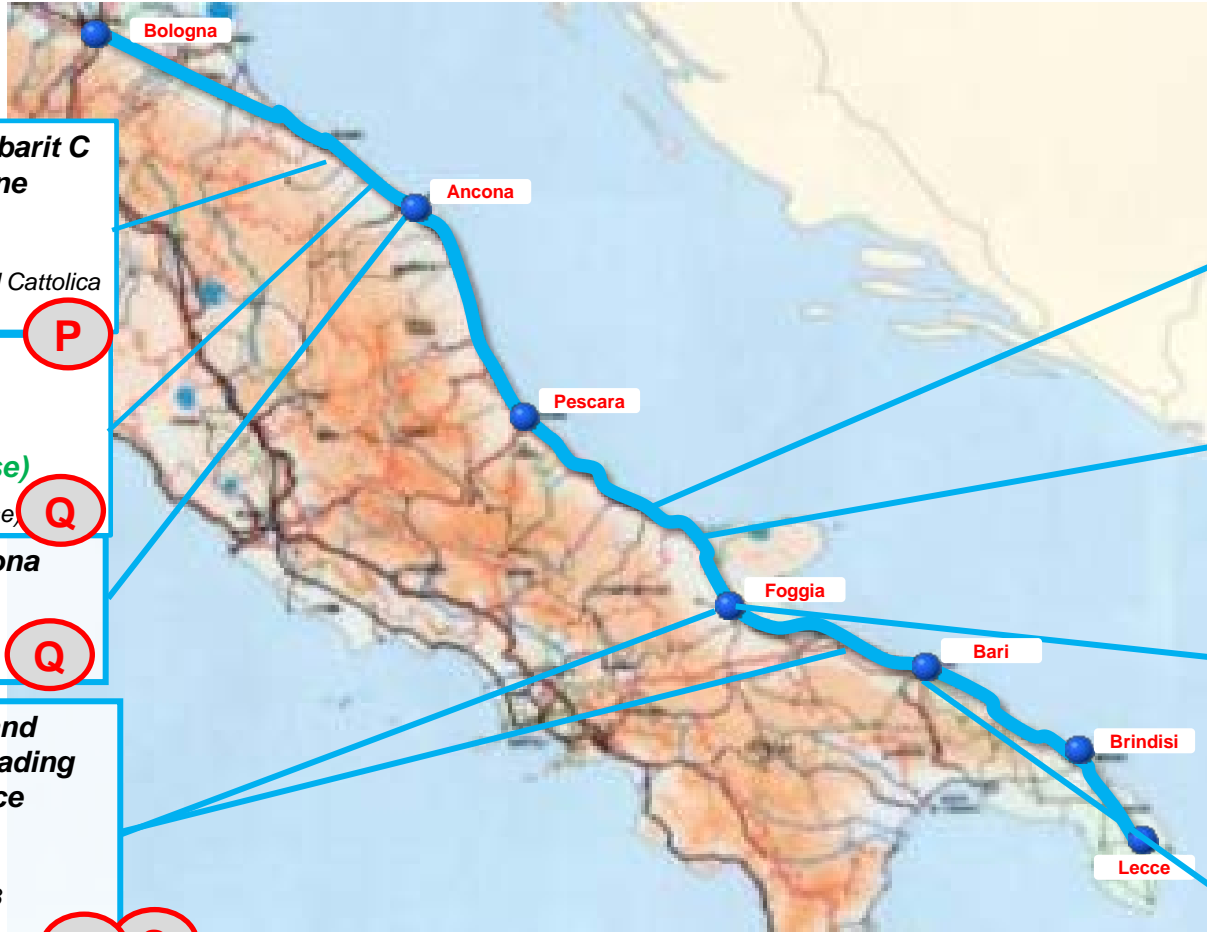
Rail system strengthening Porto di Trieste
 50 Mln € **(C) (P)**

Venezia node
 40 Mln € (Technological Upgrade)
 (technological upgrading, railway connection to Marco Polo airport)
 Launch 2017 (1st phase upgrading Mestre-S.Lucia) **(Q)**

Performance improvement measures for freight traffic: gauge and train length
 Launch 2020 **(P)**

- (C)** CAPACITY
- (S)** SPEED
- (P)** PERFORMANCE
- (Q)** QUALITY

Adriatic line: main projects



Shape adjustment gabarit C tunnel Adriatic line
83 Mln €
 Tunnel Castellano and tunnel Cattolica (2016):

(P)

Falconara node
240 Mln €
174 Mln € (1st phase)
 Launch 2019 (1st phase)

(Q)

PRG and ACC Ancona
65 Mln €
 Launch 2016

(Q)

Speed increase and Technological Upgrading Napoli-Bari-Lecce
30 Mln €
 Launch 2015-2018 (functional phases)

(C) (S)

Speed increase Adriatic line
350 Mln €
 Launch 2018 (functional phases)

(S)

Performance Upgrading freight
 (train length 650/750 m and PC80 Ancona-Bari-Taranto)
 Launch 2020

(P)

Upgrading Ortona north section
 Launch 2018 (functional phases)

(C) (P)

Upgrading Termoli-Lesina
549 Mln €
106 Mln € (1st phase Ripalta -Lesina)
 Launch 2021

(C) (S)

PRG and ACC Foggia
55 Mln €
 Launch 2018

(Q)

Bari node
 (doubling of the access Bari-Taranto line, new station Lamasinata, variation Bari South)
646 Mln €
 Launch 2015 (ACC Bari P.N.)
 Launch 2020 next phases

(C) (Q)

(C) CAPACITY
 (S) SPEED
 (P) PERFORMANCE
 (Q) QUALITY



CON



Available Financing

Ionian line: main projects

- C** CAPACITY
- S** SPEED
- P** PERFORMANCE
- Q** QUALITY

Upgrade Taranto seaport connections
 26 Mln
 Launch 2017 **P**

Doubling Bari-Taranto line
 479 Mln € (Whole Project) **C**
 Launch 2016 (Bari S.Andrea – Bitetto)

Technological upgrade Bari-Taranto
 18 Mln € **Q**
 Launch 2014

Upgrade Metaponto-Sibari-connection S.Antonello
 415 Mln € **P**
 155 Mln € (1° phase)
 Launch 2015-2017 (functional phases)

Infrastructural upgrade Messina-Catania
 28 Mln € **Q**
 Launch 2015

Technological upgrade and speed increase Messina-Catania-Siracusa
 56 Mln € **Q S**
 Launch 2013-2017 (functional phases)

Doubling Giampileri-Fiumefreddo and upgrade Catania node
 2896 Mln € **C**
 26 Mln € (Design)

Doubling Catania Station –Ognina
 120 Mln € **C**
 Launch 2016



Speed increase Salerno-Reggio Calabria line and branch lines
 40 Mln € **S**
 Launch 2018 (functional phases)

Infrastructural and technological upgrade Battipaglia-Reggio Calabria
 230 Mln € **S**
 Launch 2011-2016 (functional phases)

Speed increase Bicocca-Augusta
 81 Mln € **S**
 Launch 2018 (functional phases)



Available Financing

Principali investimenti sul Corridoio Reno-Alpi

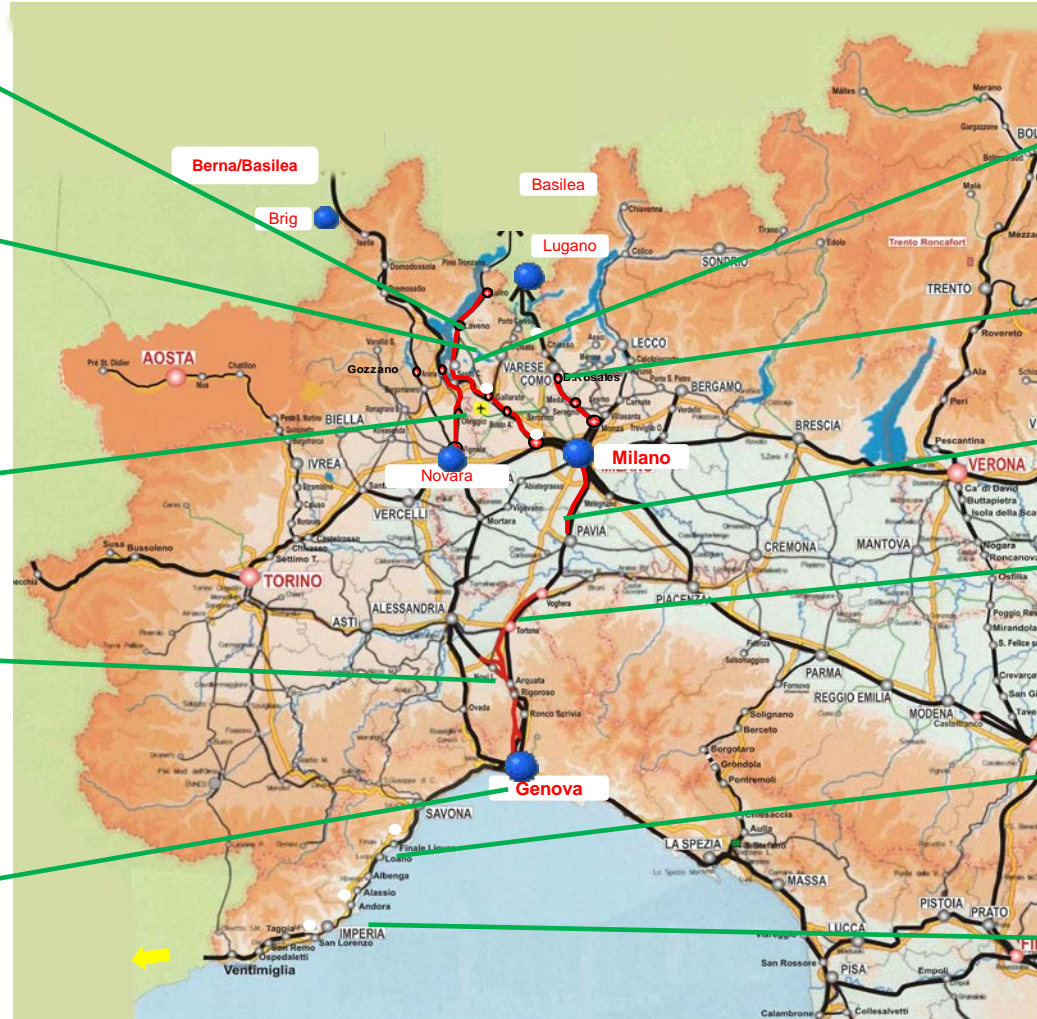
Nuova Linea
Arcisate – Stabio

Upgrading prestazionale merci
(moduli, sagoma) e attrezzaggio
ERTMS linee Luino,
Domodossola e Chiasso

Potenziamento linea Gallarate-
Rho (Progettazione)

Linea Milano - Genova – Terzo
valico dei Giovi

Nodo di Genova: potenziamento
infrastrutturale Voltri-Brignole



Raddoppio Vignale-Oleggio-
Arona (progettazione)

Potenziamento tecnologico e
infrastrutturale Chiasso-Monza

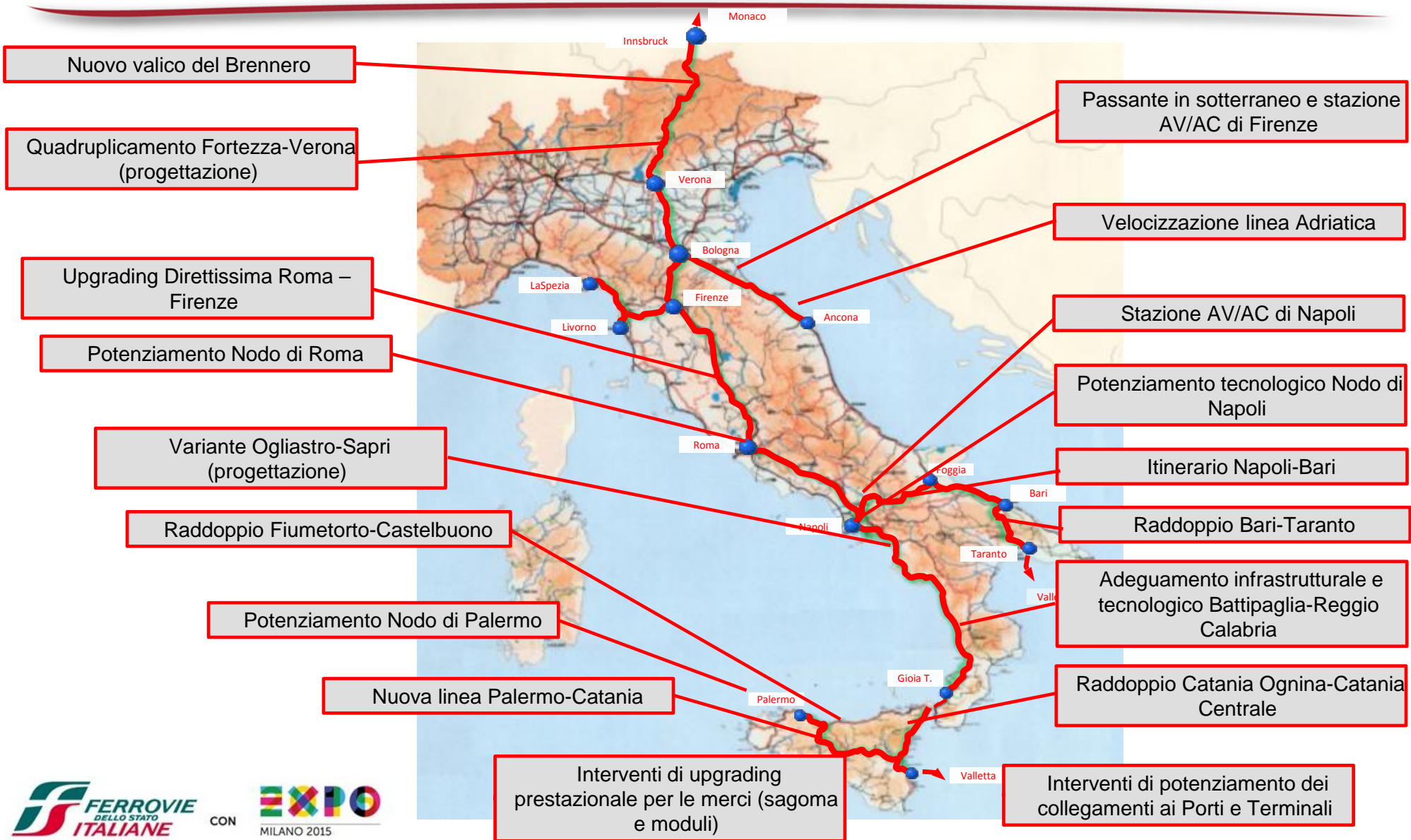
Quadruplicamento Milano
(Rogoredo)-Pavia
(progettazione)

Quadruplicamento linea
Tortona-Voghera
(progettazione)

Raddoppio Genova -
Ventimiglia: tratta Andora -
Finale Ligure

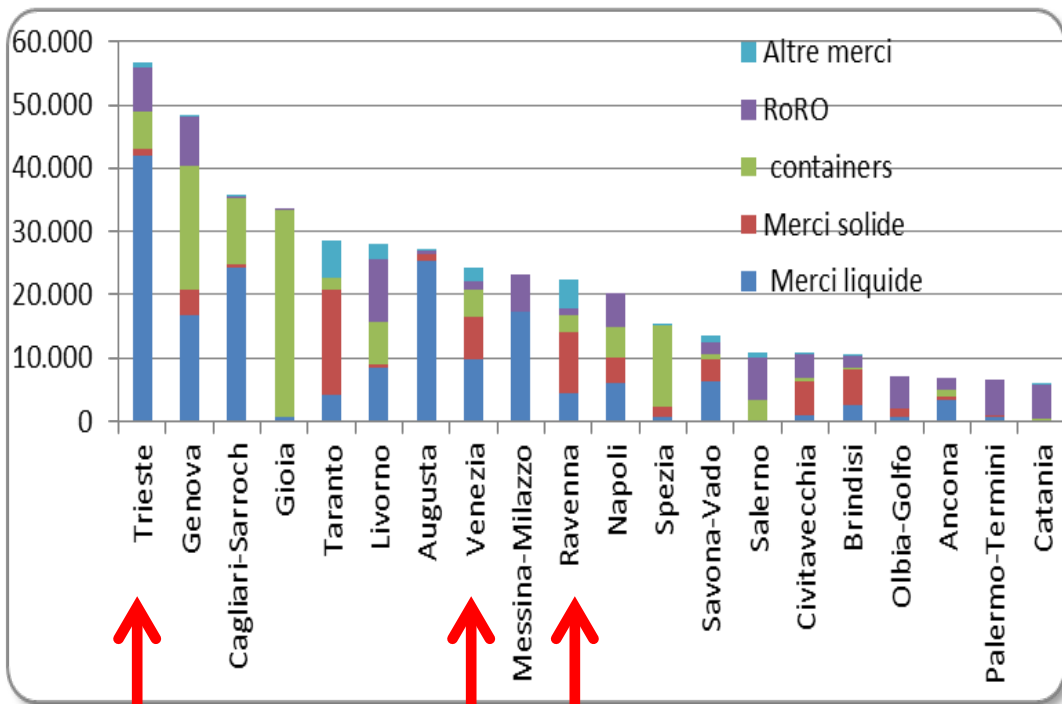
Linea Genova –Ventimiglia:
raddoppio tratta Andora – San
Lorenzo a Mare

Principali investimenti sul Corridoio Scandinavia-Mediterraneo



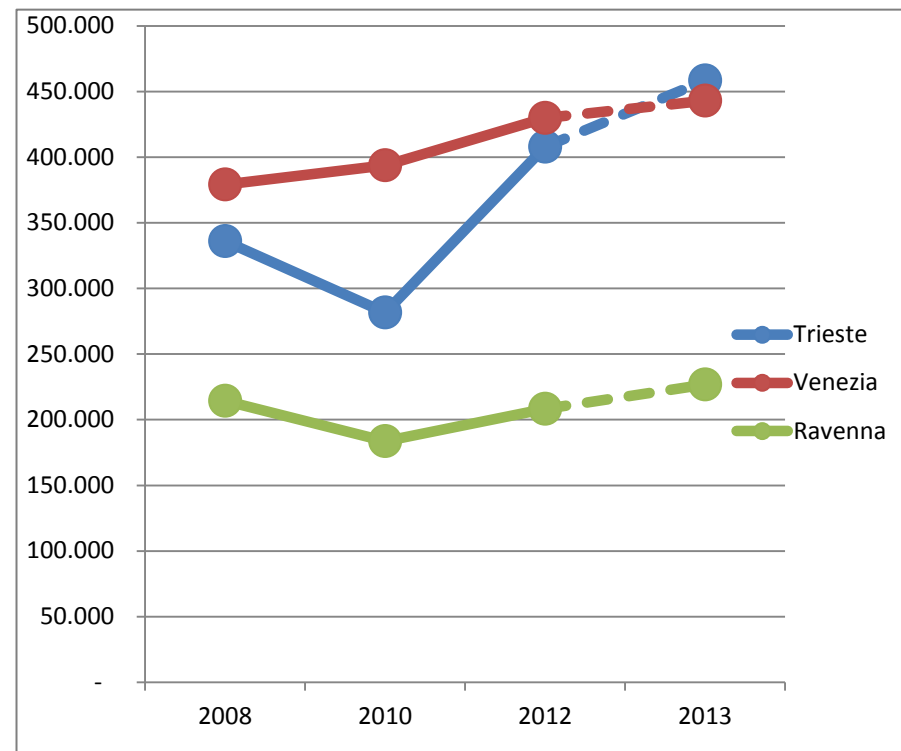
Traffics in Italian core ports referring to the area

Total Freight in the main Italian ports (.000 tonn)



Core ports belonging to the Baltic-Adriatic corridor

Freight in ports belonging to Baltic-Adriatic corridor (TEUs)



FS Italiane projects in the Balkan area

Serbia and Montenegro

Contract awarded to **Italferr** for a rehabilitation study and plan for the Belgrade-Bar freight line. Contract awarded to **Italferr** for planning the national transport system in Serbia, design of Zezelj Bridge in Novisad, and pre-qualification for Belgrade Light Rail. **Italferr** has established a new controlled company in Serbia for Infrastructure Engineering Services.

Serbia

Italcertifer agreement with local institutes for testing & certification of an Axle counters equipment

Bosnia Herzegovina

Contract awarded to **Italferr** for review of rail regulations

Croatia

Contract to **Italferr** for Feasibility study on Corridor X

Albania

Italferr is developing the feasibility study for the new passenger terminal of Tirana.

Grece & Bulgaria

Italcertifer is certifying the Titorea-Domokos line (106 km) and ended the certification of the Plovdiv-Burgas line (about 125 km)

Romania

Contract to **Italferr** for providing technical assistance for feasibility studies and design of 430 km of lines on TEN IV Corridor
Rom-Rail subsidiary of Pol-Rail: freight forwarder

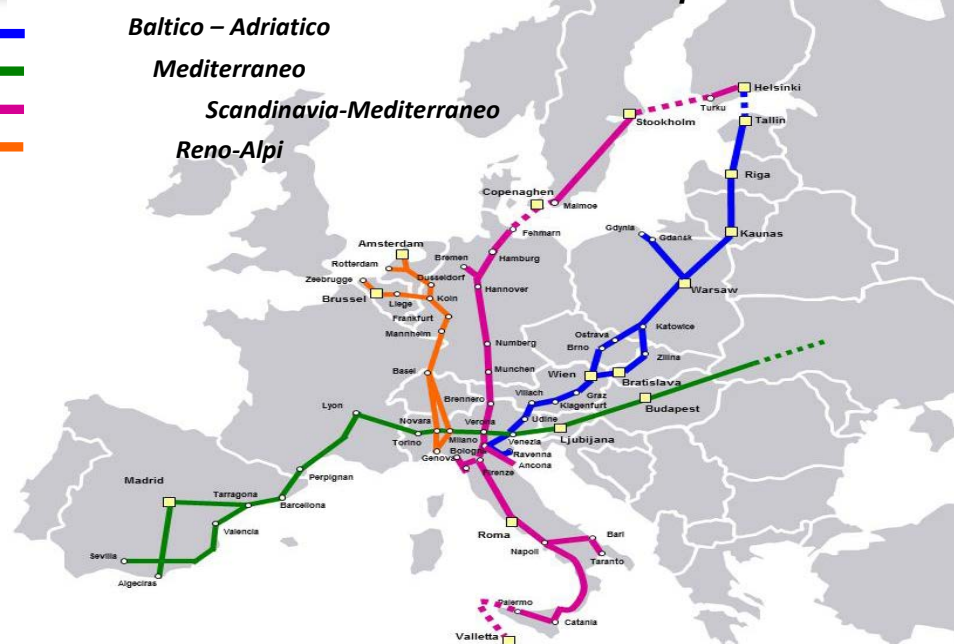
Le linee strategiche europee e gli obiettivi della programmazione a lungo termine per lo sviluppo del settore ferroviario

I trasporti in Europa sono caratterizzati dalla **totalità dipendenza dal petrolio** (96%), da importanti **gap infrastrutturali**, da problemi di congestionamento e di frazionamento delle reti.

Il **Libro Bianco dei trasporti** adottato dalla Commissione Europea nel 2011 traccia il percorso per la realizzazione di uno spazio comune europeo competitivo e sostenibile tramite il perseguimento di una serie di obiettivi:



Core Networks Corridors di interesse per l'Italia



Obiettivi 2030

- **30% dei trasporti merci oltre i 300 km effettuato con treno** o lungo vie navigabili
- **triplicazione dell'attuale rete ferroviaria AV europea**
- - 50% autovetture alimentate con carburanti tradizionali nei trasporti urbani

Obiettivi 2050

- **50% dei trasporti merci oltre i 300 km effettuato con treno** o lungo vie navigabili
- **completamento della rete ferroviaria AV europea**
- **prevalenza del trasporto passeggeri ferroviario sulla media percorrenza**
- **collegamento di tutti i principali aeroporti europei alla rete ferroviaria**

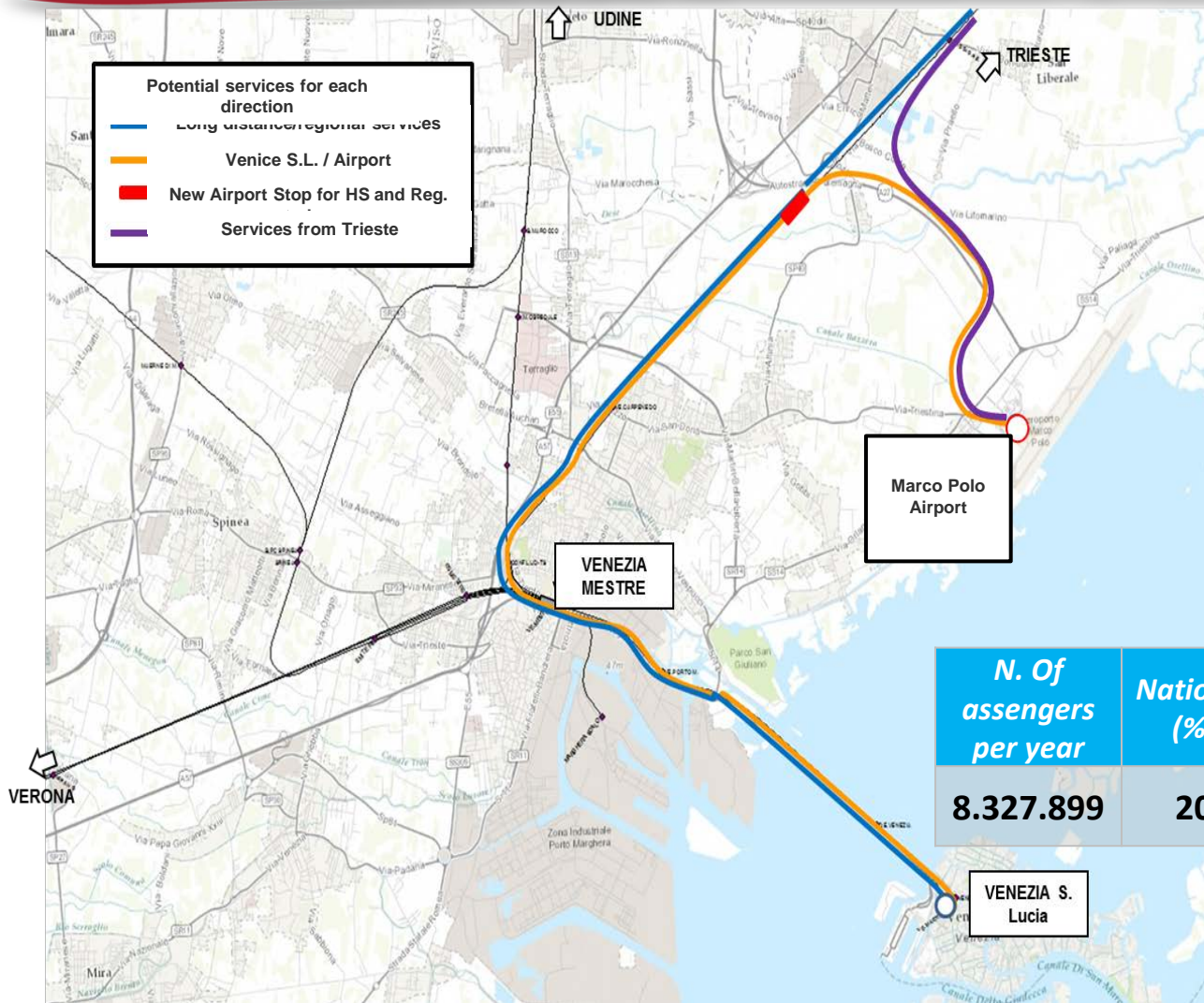
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Thank you for your attention



Back up

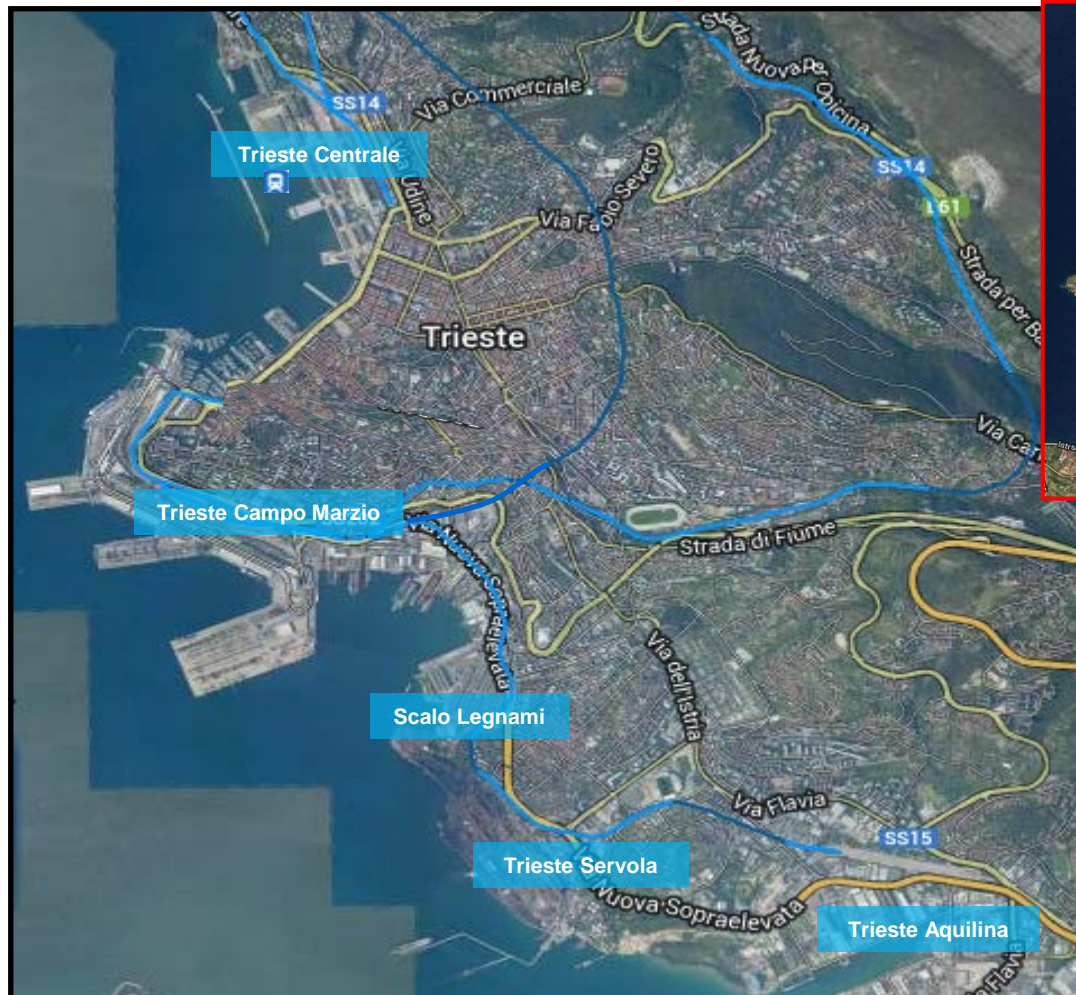
Rail link to the core airport of Venezia in Baltic-Adriatic Corridor



The last 26° of August the Italian Ministry has signed an agreement with Ferrovie dello Stato SpA where it has been provided that by the year 2014 the company should start, through its subsidiary RFI, the preliminary studies to strengthen railway infrastructures in Venezia Tessera.

N. Of assengers per year	National (%)	International (%)	Low-cost (%)	Full-cost (%)
8.327.899	20	80	28	72

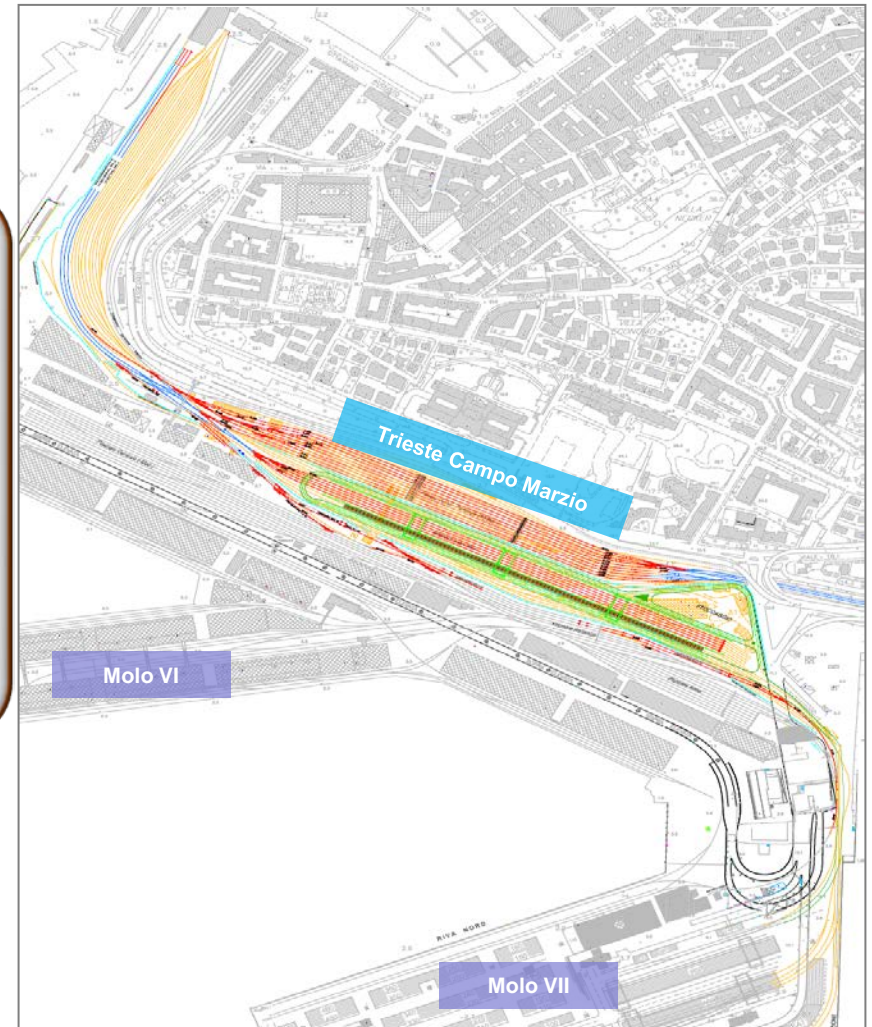
Port of Trieste: layout and rail connection



Rail investments in port of Trieste - Campo Marzio station

MAIN FEATURES OF THE PROJECT:

- Upgrade of Arrival and Departures tracks in order to admit train of 650m length;
- Realization of a New Intermodal Terminal with 5 tracks long 650m, in FS area;
- Construction of an additional “gate” for simultaneous access of shunting on two independent tracks;
- Links to Docks V, VI end VII



Relevant projects to complete TEN-T core network – 2020

Description of the Project	Capacity	Performance	Quality	Port, Airport, Terminal
Upgrading the Node of Udine	✓		✓	✓
Speed increase on Venezia-Trieste line		✓	✓	
Completion of the bypass of Venezia node (linea dei bivi 1 ^a phase)	✓	✓		
Upgrading of maximum train length up to 750m on the whole corridor		✓		
Upgrading of loading gauge up to P/C 80 on the access lines to the Port of Ravenna		✓		
Technological Upgrading in the area of Veneto and Friuli Region and set up of ERTMS phase 1	✓		✓	
Technological Upgrading Padova-Bologna	✓		✓	
Interventions for quality increase within railway stations			✓	
Development of railway infrastructures within the port of Trieste				✓
Railway link to the airport of Venezia Tessera				✓
Closure of critical road intersections		✓	✓	

