



**FIG SYDNEY 2010**  
XXIV FIG International Congress 2010  
*Facing the Challenges - Building the Capacity*  
Sydney Convention & Exhibition Centre  
11-16 April 2010

**Railway Connections and High Speed Transports**

**Social and Environmental Impact**





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Nowadays, people, resources, goods, and news are travelling around the whole planet at a speed that we couldn't have imagined before.

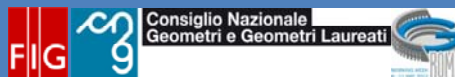


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Economic processes, industrial interests, and labourers' movements are now having a global diffusion, while state boundaries are fading away.



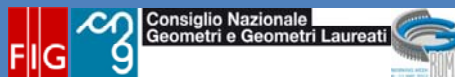
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As a consequence of the fast changes and the economic value of these relationships, towns and regions are obviously trying to acquire their own status and to be the leaders of these transformations.



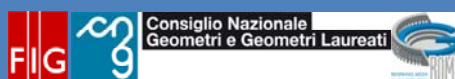
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In order to draw prominent attention, the first thing to be considered is the geographical position of specific areas connected to economic and social flows.



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From 10 years ago a European Project has started whose final goals are to improve and speed communications and transport ways.  
Such a system is called TEN-T  
“Trans-European Transport Network”.



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The project involves the whole Europe at the estimated cost of more than 600 milliards of Euro.



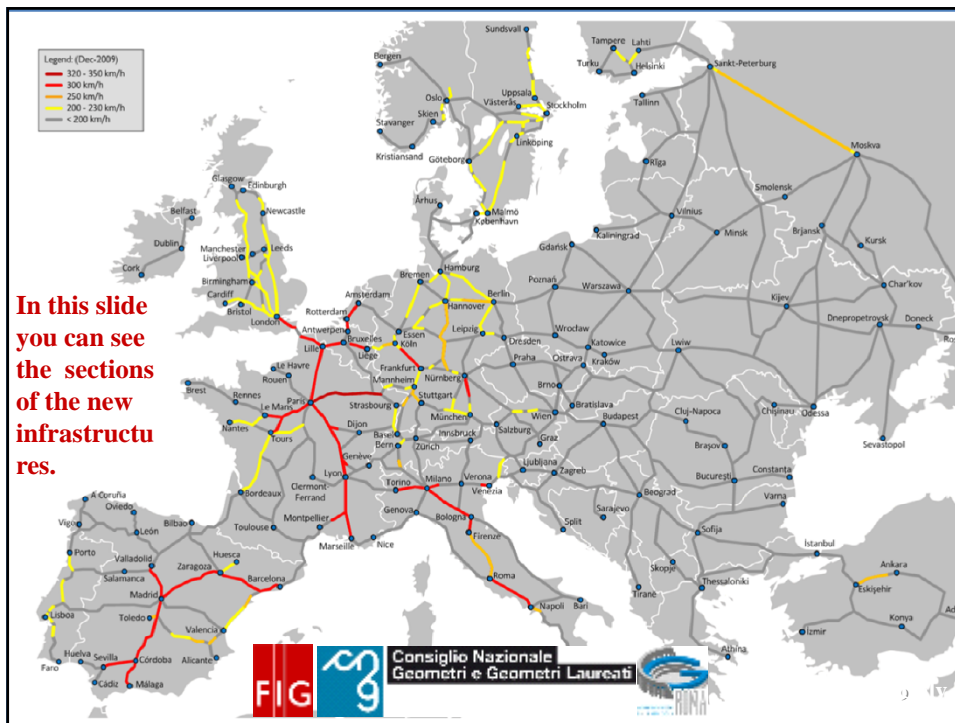
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Such a transport network would allowed in the future:

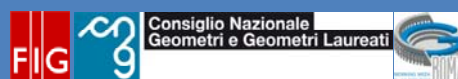
- the possibility for a lot of citizens to reach their towns, reducing traffic-jams and simplifying the mutual access to different towns, both in Europe and outside of it;
- the “coverage” of the whole European territory, such as to make it easy to access to it, to connect all the islands and the suburban areas to different regions in the UE;
- without any frontier, the chance to a free movement of people and goods, in security.



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The realisation of such big and innovative works, extended even outside the European boundaries, may involve important changes in the urban structure, in the environment, and, together with it in the whole habitat.

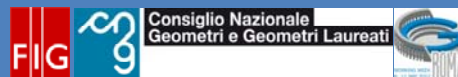


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It's important to consider the social impact, both at the regional and the local level.

Great Works modify migration fluxes, transportation costs, real-estate and building values in a lot of towns.

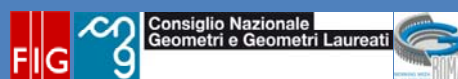


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Whatever might be its extension, the realisation of a railway system always causes:

- environmental, landscape change;
- social and economical modification;
- improvements in the ecological system;
- increasing value of the real-estate in the area.



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## Environmental, landscape change:

- a change in the landscape;
- the division of the land in two parts;
- a compromised hidro-geological balance within the territory.



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## Socio-economic impact

Many stations, although modern, were built during the past two centuries. The mere existence of stations within a town means potential resources. In order to show that, let's consider the daily traffic of passengers in a station.



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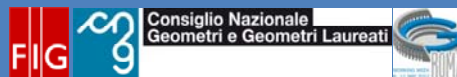
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The following slides summarize the data about passengers in some Italian and European towns:

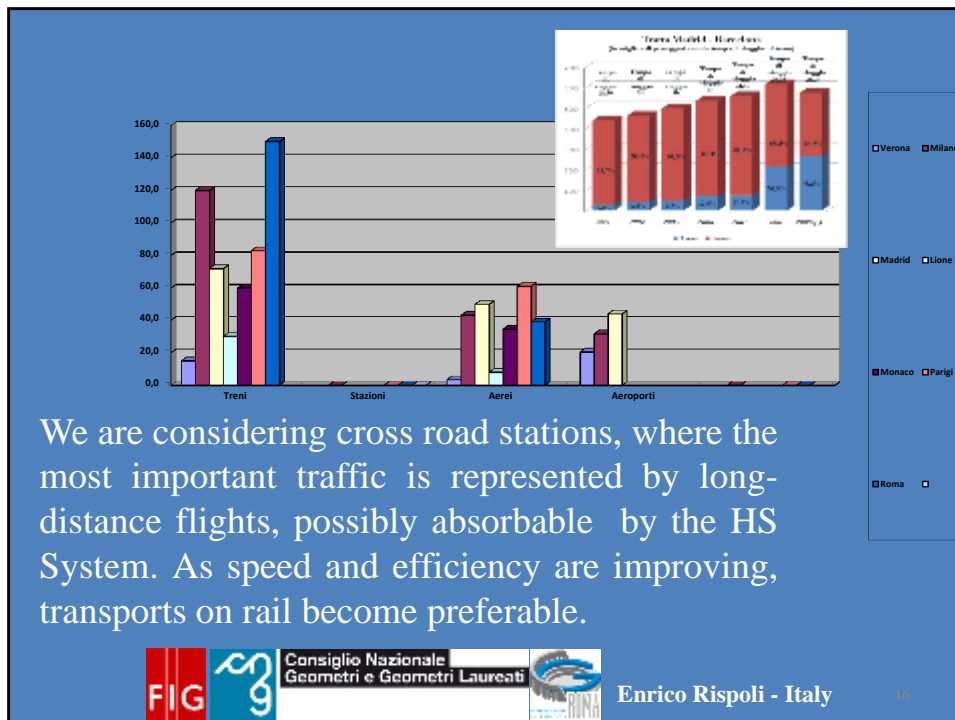
Town	Number of passengers			
	TRAINS	STATIONS	FLIGHTS	AIRPORTS
VERONA	15,0		3,5	
MILAN	120,0	Central	43,0	Linate
MADRID	72,0		50,0	
LION	30,0		8,0	
MONACO	60,0		34,5	
PARIS	83,0	Gare Lyon	61,0	C. de Gaulle
ROMA	150,0	Termini	39,0	Fiumicino

The numbers refers to the millions of passengers every year



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We are considering cross road stations, where the most important traffic is represented by long-distance flights, possibly absorbable by the HS System. As speed and efficiency are improving, transports on rail become preferable.

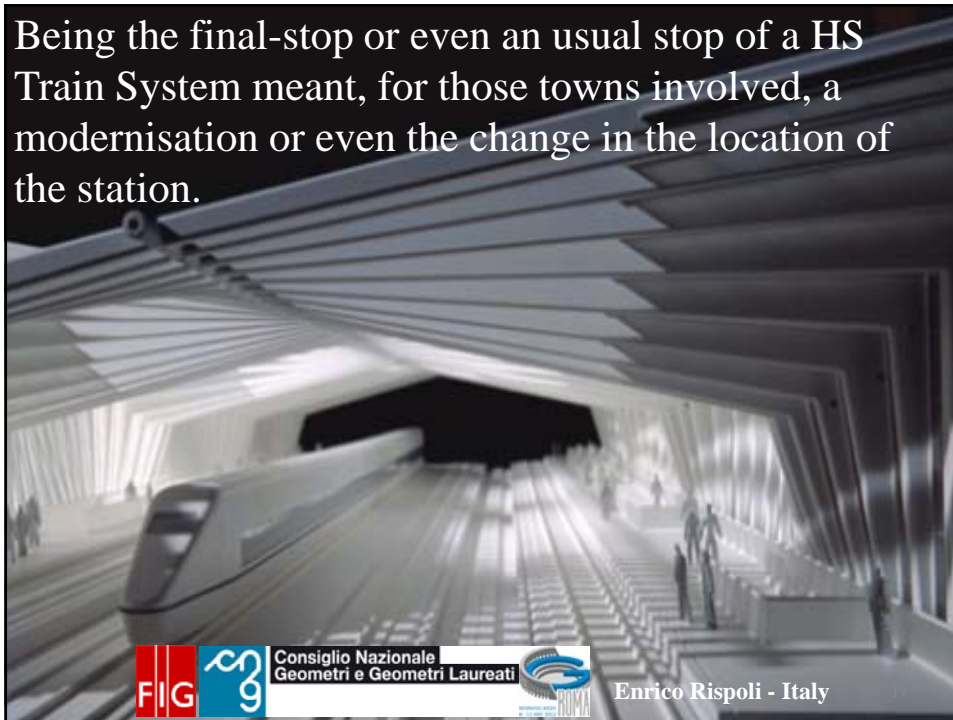


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Being the final-stop or even an usual stop of a HS Train System meant, for those towns involved, a modernisation or even the change in the location of the station.



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Stations such as the Gare de Lyon in Paris, the station of Madrid and the Central Station in Milan had been totally renovated, although maintaining their historical and architectural value.

Gare de Lyon



Station of Madrid



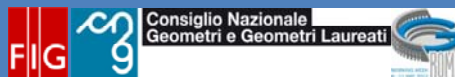
Station of Milan



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In other towns it was necessary to create a new project for a station.



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Florence Station for example,  
It was chosen to place it under the existing one

Protests for the environmental consequence on this choice followed numerous. Nevertheless, this solution allowed to keep in place the pre-existing core of the structure, just in the middle of one of the most beautiful towns of the world



It's just a way, as we said, to guarantee the socio-economic balance of the region.  
A territory that, in such a way, can obtain great advantages



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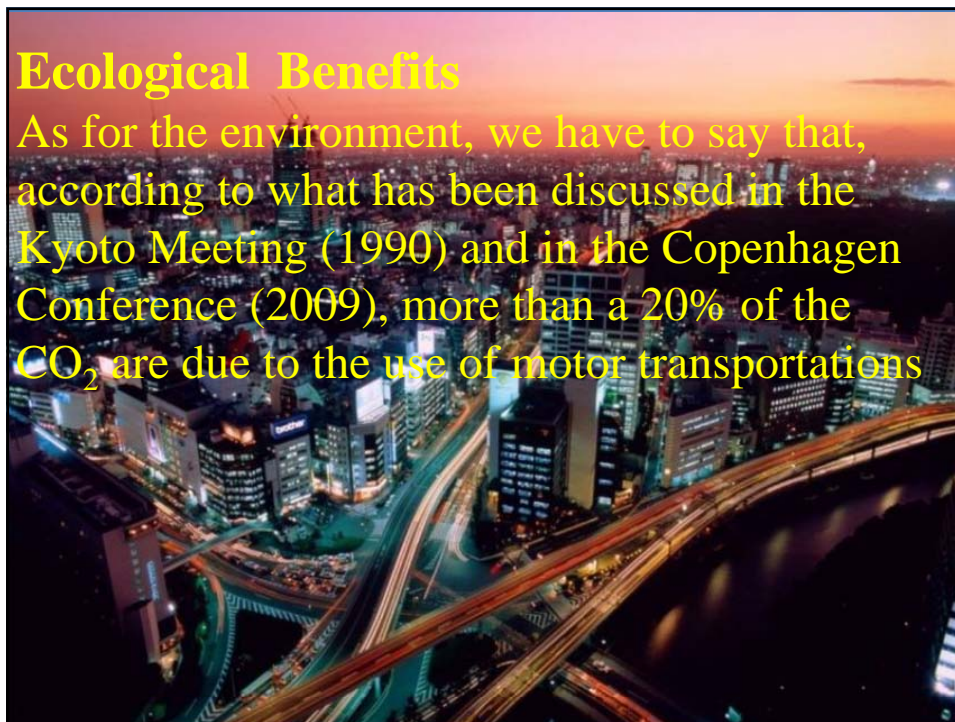
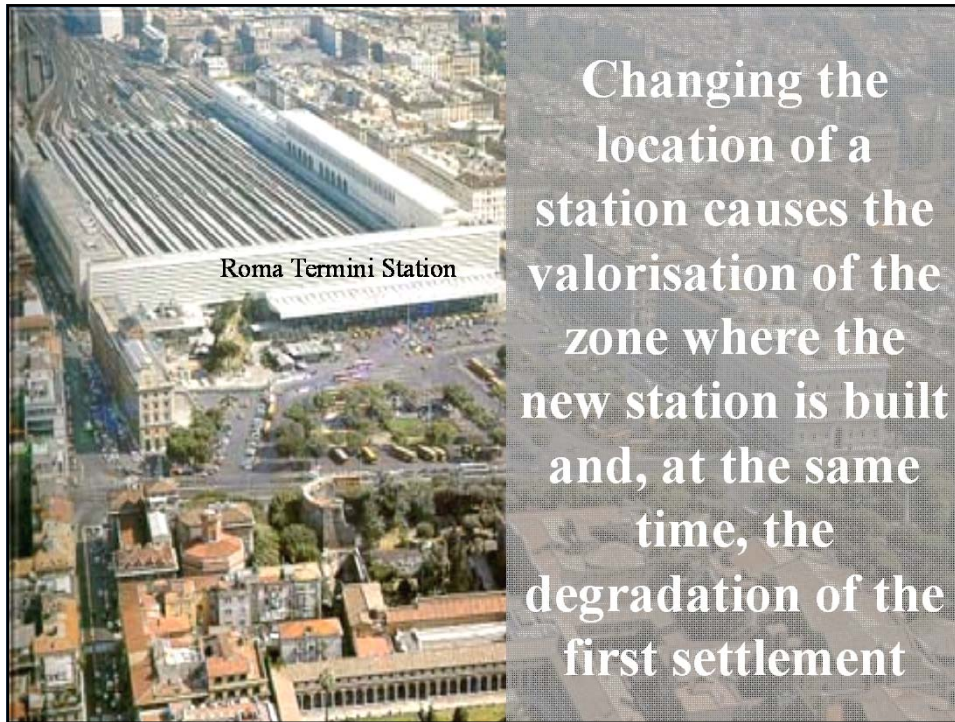
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On the contrary, the HS Station of Rome had been moved from the historical location in Roma Termini to the new Tiburtina Station, with enormous disadvantages for the local economy



New investments are needed, as the demands for good and services is increasing. Regions involved in this process are automatically re-qualified and valorised.





Moreover, a new connecting line, built according to the more advanced technologies,

- could allow us to keep it separate transports and urban environment;
- reducing the need to cross an inhabited area;
- zeroing the danger at the crossroads;
- making available the lines traditionally used by the regular traffic
- ameliorating the regional and urban transport system.

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### **Increasing value of the real-estates**

Investments, new buildings, empty spaces, opportunities become new chances of economic, financial and business development.

The change causes an opportunity for the residents' welfare.





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# Thank You For your attention

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