

**Nextstation 2013 Conference**  
**Moscow – Kazanskiy Station**

Biography of Mr Gentile:

Maurizio Gentile was born in Sulmona (l'Aquila) on 1955, graduated in 1981 in Civil Engineering at the University "La Sapienza" of Rome. From 1981 to 1982 he served at the ICEC Engineering Companies in Rome. Since November 1982 he was hired with the position of Inspector at the Ferrovie dello Stato in Florence.

In 1991 he became Head of the Civil Works of Florence

Since 1995 he assumed the responsibility of the Office of Civil Works in Bologna and Florence.

In 1999 he became Head of the Directorate Compartment infrastructure of Bologna

Since 2007 he has been called into Headquarters to act as Director of Maintenance Management of RFI, now named Production Direction of RFI.

NEXT STATION – MOSCOW 2013  
THE STATION TO CONNECT PARTS OF THE CITY  
Maurizio Gentile - RFI Italy

The advent of the railways has radically changed the land transport becoming the engine of progress which has changed the world in a few years: the move at speeds unthinkable before, a load capacity of people and goods multiplied by orders of magnitude, trade of knowledge and culture, industrial development, new urbanization.

The railway lines were built in record time, and penetrated into the territory skirting cities and towns creating new points of connection: railway stations, often built in open countryside or in the suburbs, a few times in big cities penetrating up to get as close as possible to town centers.

But even so different in size and location, immediately inherited the role of "posed" stage-coach: places of service and meetings, linking people and places, but with the huge difference in the amount of people and things that could get in touch.

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The stations were the engine of urban changes. Around the stations were born the first industrial and, with them, the houses to accommodate new workers who were moving in the territory to intercept new employment opportunities.

With the intensification of travel and speed of exchange between different cultures in the same national territory, he started the process of unification substantial which is the basis of identity before individual states and Europe today.

The station becomes a place of arrival and departure, place of aggregation and development.

There was a greater specialization of spaces and paths of travelers.

Walking through the great hall of departures, of which there are services to the gallery of the passengers, in direct continuity with the space of the city.

The volume of the station is composed of a building front that leads into the train tunnel dominated by a big metal cover. Two side Compact contain offices and minor services.

The main stations in European capitals demanded further expansion, with such proportions as to require a redistribution organization. It outlined a new model that will remain dominant until the end of the 20s.

The advent of more autonomous modes of transport (cars) and faster (planes) in the years of economic development has pushed back the railroad to a less primary role, sometimes truly residual.

These systems have in turn influenced the development of societies and cities: orienting itself to such means, that favor or long trips or short trips, people have begun to focus on bigger and bigger cities, linked by air services and in which we moved mainly by car.

At this run-up to the concentration showed no particular problems, but the steady growth has begun to highlight the fragility of the system adopted: for urban traffic congestion traverse speed often below 5 km/h (not to speak of air pollution), for air difficulty of access to the service for safety reasons, air terminals armored and far from urban centers without the possibility of approaching (for obvious problems of freedom of the surrounding space as well as noise).

The answer to these problems could only come from a land mass transportation system that already existed: the railway.

But it's not that epic at the beginning, but a new technique and services, able to move quickly between now existing metropolis increasing numbers of people, such as in and around the metropolis people who live there.

The advent of high-speed lines gave a very substantial response to the first requirement: travel 600 km in less than three hours, starting from city center to city center, makes the trip absolutely comparable with the plane, with respect to benefit it: the high-speed train can have intermediate stops, linking the city in less than an hour distant from each other between one hundred and two hundred kilometers.

This is a unique opportunity, because it will curb the phenomenon of Domestication. Being able to reach major cities to medium-sized cities, which in turn easily reachable by small surrounding towns, with a total travel of up to an hour and a half there is no need to transfer to the place of their own interests: it is not the distance element that makes us make this choice, but the rapidity of the movement and ease of use of the vehicle. All are available to invest two hours a day to get to and, without changing their habits and choosing to live in less crowded.

We can imagine the big cities connected by high-speed lines, on which every 200 km to find a point of interconnection with the territory, around which to imagine a circle of 50-100 km radius that intercepts other smaller towns linked to this point lines for regional transportation.

Today the new station reflects the needs of a train service that has diversified and divided into networks of different functional level.

Domestic routes and local networks become part of an integrated system that is a hierarchy based on new territorial functions : on the one hand the development of High Speed for the national and international connections , the other with a progressive urbanization of the rail network to reorganize the system of mobility and strengthen the system of mass transportation in metropolitan areas and in regions of high urban densification .

It ' changed the relationship between the city and the train : if the traveler arrived at the station originally from the city and the first contact with the world was established by the urban front rail station now reaches the terminal through a network of urban connections that lead directly into the ' eliminating the perception of the building . The new stations are galleries of high-speed urban areas characterized by permeable and fluid paths . In these new areas of the journey the idea of flow takes precedence over the permanent station . The station becomes the focus of the relationship between urban cities and high-speed becomes an expression of symptoms and urban transformations .

An example is the Tiburtina station in Rome : the wall of the station bridge is designed as a gallery that simultaneously performs the function of the train station and great urban boulevard .

The stations , according to the guiding principles of the recent experiences of architectural competitions , were inspired by the conjugation of the design of the landscape : the station must develop a new relationship with the landscape and become a new catalyst of urban development.

The draft Torino Porta Susa is the pivot of a broader program of transformation of the functional and physical geography of Turin. In the specific case the station is conceived as a covered gallery and location of a new urbanity : the city into the station . The interior space of the station has the conformation of a system of paths connecting ( covered roads , mechanized stairs , elevators) between outside and inside .

The station becomes the gateway to the city for a new user station consists mainly of city users and regrouped to integrate into the surrounding tissue by facilitating the interchange with other modes of individual and collective transport and other forms of mobility , including the pedestrian . On the one hand must be guaranteed the interconnection between different railway networks that lead to an organization according to vertical paths that connect the different levels , on the other the need to encourage the modal interchange and penetrations , looking for the maximum permeability to the context surrounding urban

The station is linked to a real functional organization of the city that you can see on the redistributed land settlement destinations and weights as well as the urban and environmental regeneration of large parts of the territory next to the nodes and reverberation even in the most distant parts thus strengthening the relationship between the urban landscape and the station and between socio-economic fabric and ' container ' in connotation multifunctional the train is the means of transport which has the greatest environmental and social sustainability than by car and plane. In the realization of the Italian lines AV / AC , the Ferrovie dello Stato Group aims to ensure low levels of environmental impact of the works and their proper insertion into the territory.

The train takes on a new role of urban centrality and requires a design that combines in a single organism a series of urban relationships and specific functions that meet modern principles such as efficiency and sustainability.

Designing and managing the railway stations according to the principles of continuous improvement of the efficiency contributes to a modal shift towards more sustainable transport system for the protection of the environment and quality of life of the community. The commitment is the adoption of control measures and improvement of environmental quality ranging from prevention to intervention of any polluting elements , until the adoption of sustainable energy systems achieved through proper management of resources and the adoption of their design principles of bio-architecture

MANAGEMENT OF RESOURCES AND ' need to define a new way of designing and constructing the buildings of the station that takes into account :

Renewable energy sources (solar thermal and photovoltaic) tend to complement and sometimes replace the traditional ones giving the building an added value and making a contribution to environmental protection.

The introduction of LED technology for lighting bus shelters, subways and large industrial areas.

The exploitation of water resources can be rationalized by using rainwater for non-potable uses of the station.

BIOARCHITECTURE Take care to design and create spaces in harmony with the environment making manufactured in compliance with the ecosystem through :

The use of natural materials , recycled and recyclable materials and with zero impact on the environment.

The choice of building materials for which you know the origin , choosing those extracted and produced in the same area ecoregion according to the principle of short chain.

The realization of built environments from the perspective of being seen as a physical or mental condition which contributes to the individual's health and socio-economic stability .