Three New French TGV Stations

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TGV Méditerranée Stations— Responding to Transportation Needs

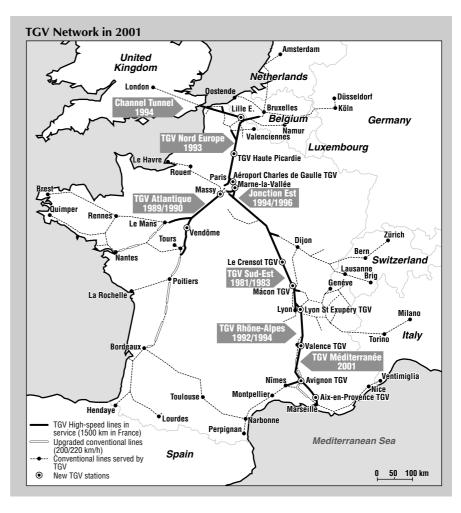
French National Railways' (SNCF) opened its new TGV Méditerranée on 7 June to offer better connections from the southern regions of Valence, Avignon and Marseille to Paris/Ile de France, Lille, northern Europe and western France. The new TGV also offers new and faster links with Dijon, Geneva, the French Riviera, Languedoc Roussillon and other destinations. A major part of the new line is the new stations at Valence, Avignon and Aixen-Provence, which play an important role in offering passengers more flexible transfer options. This article gives a brief summary of each new station.

Summary of Valence, Avignon and Aix-en-Provence regions

The Valence TGV station is 10 km from Valence and is located within a triangle formed by Valence, Romans and Tain l'Hermitage. The regional population is more than 500,000 and growing steadily. The 30 TGV trains that stop each day at the station serve the five French departments of Drôme, Ardèche, Vaucluse, Isère and Alpes du Sud, of which Drôme is undoubtedly the most important.

The Avignon TGV station is located between Avignon and Durance and serves a region extending from Bollène and Vaison in the north to Salon, Arles and Istres in the south with a growing population of some 1 million today. Greater Avignon at the heart of the region has nearly 500,000 inhabitants within a 20-km radius. About 40 TGV trains stop at the station each day.

The Aix-en-Provence TGV station is situated in an important population basin of about 350,000 people that includes the urban area of Aix-en-Provence and the rural districts of Marignane, Vitrelles



and Rognac, all of which are located east of Lake Etang de Berre. However, the actual population catchment of 500,000 people extends as far as Martigues to the west, Aubagne to the east, and Manosque, Digne and Petruis to the south of the Alps of Haute-Provence. The main economic activity of the region includes services, high-tech industries (Aix-en-Province), and the large industrial complexes of the Etang de Berre area. Twenty-eight TGV trains stop at the station each day.

Mediterranean-style TGV Stations

The three stations at Valence, Avignon

and Aix-en-Provence are paradoxical in nature. They are both open and closed, within a city but part of a wider region, and designed for train services while linking with other transportation modes. Each station has the impression of being a place where passengers arrive, only to depart rapidly. But although each station seems hurried, passengers also seem to have plenty of time. In researching the new stations, the Station Design Office of SNCF summarized these paradoxes as, 'Stations so similar, but so different.'

They are so similar because they are easily recognized as part of the new TGV line and bear the stamp of the SNCF and its services, which are designed to be uniform throughout France. They are so







(SNCF AP-AREP, P. Charpiot)

different because each station meets the specific requirements of its site in terms of both functional layout and positional integration. Each station was designed to take into account unique issues specific to its locality.

Since all three stations are located in the Rhone valley and have much the same defining climate and landscape, it seemed only fitting that the station designs should highlight the landscape. In the same way that the identity of the TGV Atlantic stations is emphasized by themes of ocean, naval architecture and marine structures, the Mediterranean TGV provided an opportunity to forcibly express the station architecture at Valence, Avignon, and Aix-en-Provence by focusing on a Mediterranean identity. Michel Desivgne, the landscape designer was involved in the project design right from the start. His aim was to ensure that the various elements of each station site (station buildings, drop-off and pick-up points, bus station, parking lots, access roads, etc.) were laid out in a geometric and regular fashion. Similarly, he used large rectangles of Virginia magnolia trees (Liriodendron tulipifera) or nettle trees (Celtris australis) to suggest the large plantations of the region, adding to the Mediterranean identity.

On the other hand, given that TGV trains pass through and stop in very different contexts, the architectural solutions to problems of space and function entailed defining the space in very different ways.

These differences involve a variety of structures revolving around similar elements, and contribute to defining another Mediterranean identity—structures within the Mediterranean context. Consequently, certain constituent elements of the projects, such as structural details and furnishings, have

been modified. Materials that are rarely used in station construction, including wood, stone and copper, have been introduced to add warmth and recall tradition. The materials relate especially to the land, as if providing a link with the local soil, creating a dialogue with the high-tech complexity of the metallic



Avignon Station's descending pointed archway has the dual function of a station hall and a platform.

(SNCF AP-AREP, P. Charpiot)



The slightly curved Avignon Station emerges between the River Durance and the city. (SNCF AP-AREP, P. Charpiot)



Aix-en-Provence Station forms a crossroads with a highway, creating a perfect connection between road and rail. (SNCF AP-AREP, P. Charpiot)

supports and roof structures extending to the sky.

Valence Station

The TGV train arrives through a cutting 7 m below the orchards of the Drôme Plain on the north-south TGV track that crosses the existing Valence-Grenoble regional track and National Highway 532. The station infrastructure is some 1-km long and 200-m wide and lined by two long avenues of trees reminiscent of trees along the Isère River. The station building is an important crossroads standing at a transportation hub served by the TGV, regional trains, buses and cars. Passengers arriving by train and going up the wooden floor of the large sloping hall come face-to-face with the awe-inspiring Vercors mountains. Framed by the intricate station details, this panorama is a clear reminder of one's arrival in the Drôme.

Avignon Station

The TGV train follows the River Durance on an east–west line and enters the station 6 m above ground level. A 400-m long intermediate platform associated with the station platforms stands out in a landscape accentuated by rows of magnolia trees parallel to the station building. This layout is reminiscent of the large plantations of the region. The nearby rows of cypress trees create a

magnificent backdrop for the site. The landscape design is indisputably that of the Avignon countryside. To protect the departing passengers from seasonal winds, the station building runs the full length of the train. The descending pointed archway is the perfect profile for fulfilling the dual function of station hall and platform protection. The north wall, which protects passengers from the wind, is a large glazed surface supported by an intricate metal structure. The pierced opaque south wall provides protection from the sun while punctuating the floor with spots of brilliant light.

Aix-en-Provence Station

The track follows the eastern extremity of the Arbois Plateau, running north—south approximately at ground level. The track and station form a crossroads with Departmental Highway 9, creating a perfect connection between road and rail. The 400-m long platforms are lined by two rows of nettle trees running the length of the Mirabeau at Aix-en-

Provence courses. Arriving passengers are greeted by the magnificent panorama of Mount St. Victoire and the Etoile Massif. The station's vast curved roof interacts with the outline of the mountain which, thanks to Cézanne, has come to symbolize the Aix region and the birthplace of contemporary painting. The roof is supported by a fine fork-shaped metalwork that is in turn supported by solid round wooden pillars.

Each of the three stations blends with the landscape while providing stunning views of the surrounding countryside—two concepts that have provided strong inspiration for the architecture that has determined the different ways in which the same materials, structural details and furnishings are used to define each station's Mediterranean identity.



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Mr Maillard is in charge of station design at the SNCF Urban Development Department where he is an expert in the function and spatial organization of large stations. He worked on the Montparnasse Station design project and has been responsible for development studies on large Paris stations. He attended the Paris Special School of Architecture where he obtained a DESA Architecture Degree in 1965.