Millau Viaduct (1)

Introduction

The Millau Viaduct (French: Viaduc de Millau, IPA: [vja.dyk də mi.jo]) is a multispan cable-stayed bridge completed in 2004 across the gorge valley of the Tarn near (west of) Millau in the Aveyron department in the Occitanie Region, in Southern France. The design team was led by engineer Michel Virlogeux and English architect Norman Foster.[2][3][4] As of September 2020, it is the tallest bridge in the world, having a structural height of 336.4 metres (1,104 ft).[1]

The Millau Viaduct is part of the A75[4]–A71 autoroute axis from Paris to Béziers and Montpellier. The cost of construction was approximately € 394 million ($424 million).[2] It was built over three years, formally inaugurated on 14 December 2004,[1][2] and opened to traffic two days later on 16 December.[5] The bridge has been consistently ranked as one of the greatest engineering achievements of modern times, and received the 2006 Outstanding Structure Award from the International Association for Bridge and Structural Engineering.[6][7][8][9]

History

In the 1980s, high levels of road traffic near Millau in the Tarn valley were causing congestion, especially in the summer due to holiday traffic on the route from Paris to Spain. A method of bypassing Millau had long been considered, not only to ease the flow and reduce journey times for long-distance traffic, but also to improve the quality of access to Millau for its local businesses and residents. One of the solutions considered was the construction of a road bridge to span river and gorge valley.[10] The first plans for a bridge were discussed in 1987 by CETE, and by October 1991 the decision was made to build a high crossing of the Tarn by a structure of around 2,500 metres (8,200 ft) in length. During 1993–1994, the government consulted with seven architects and eight structural engineers. During 1995–1996, a second definition study was made by five associated architect groups and structural engineers. In January 1995, the government issued a declaration of public interest to solicit design approaches for a competition.[11]

In July 1996 the jury decided in favour of a cable-stayed design with multiple spans, as proposed by the SODETEG consortium led by Michel Virlogeux, Norman Foster and Arcadis.[12][13] The decision to proceed by grant of contract was made in May 1998; then in June 2000, the contest for the construction contract was launched, open to four consortia. In March 2001, Eiffage established the subsidiary Compagnie Eiffage du Viaduc de Millau (CEVM), and was declared winner of the contest and awarded the prime contract in August.[14][1]

Location

The Millau Viaduct is on the territory of the communes of Millau and Creissels, France, in the département of Aveyron. Before the bridge was constructed, traffic had to descend into the Tarn valley and pass along the route nationale N9 near the town of Millau, causing much traffic congestion at the beginning and end of the July and August holiday season. The bridge now traverses the Tarn valley above its lowest point, linking two limestone plateaus, the Causse du Larzac and the Causse Rouge [fr], and is inside the perimeter of the Grands Causses regional natural park.[citation needed]

The Millau Viaduct forms the last link of the existing A75 autoroute[4] (known as "la Méridienne"), from Clermont-Ferrand to Béziers. The A75, with the A10 and A71, provides a continuous high-speed route south from Paris through Clermont-Ferrand to the Languedoc region, thence to Spain, considerably reducing the cost and time of vehicle traffic travelling along this route. Many tourists heading to southern France and Spain follow this route because it is direct and without tolls for the 340 kilometres (210 mi) between Clermont-Ferrand and Béziers, except for the bridge.[citation needed]

The Eiffage group, which constructed the Viaduct also operates it, under a government contract, which allows the company to collect tolls for up to 75 years.[2][4] As of 2018, the toll bridge costs €8.30 for light automobiles (€10.40 during the peak season of 15 June to 15 September).[25]