

Project management case study, millau viaduct assignment

[Business](#), [Management](#)



Original Project Objectives: After Ten years of research and four years of implementation the Millau Viaduct finally broke records and was widely regarded as an exemplary Project. Construction began on 10th October 2001 and was intended to take three years to complete construction but weather conditions put work on the bridge behind schedule. A revised schedule aimed for the bridge to be opened in January 2005. Once revised it was completed many weeks ahead of schedule and inaugurated by President Chirac on 14 December 2004.

It then opened for traffic on 16 December 2004. The original contract was a 39-month contract to design in detail and build the \$285 million[1] Bridge with the cost of construction being entirely funded by the concessionaire. The length of time allowed to Eiffage to recoup the cost of Construction, 75 years, confirms fears that recouping the cost of the bridge from toll payments will be a slow process. [2] Such a long time to recoup these costs will mean that the Project is a very risky one and a strong emphasis must be made on quality to justify the costs. 3]There were two possible structural approaches for the Bridge: to celebrate the act of crossing the river or to articulate the challenges of spanning the 2. 46 kilometres from one plateau to the other in the most economical manner. The French Government agreed upon the latter, spanning the 2. 46 kilometres, as the river was very narrow in this region so it had a small geographic impact despite its historical presence. The original design, by architect Foster & Partners, and consultants Sogelerg, EEG and Serf, was for a concrete cable-stayed bridge with seven towers rising to 235m and with 350m long spans.

Eiffage put forward a steel alternative which involves the deck being launched from the side of the valley. Of the three major factors (time, cost and quality) in this Project. It would be reasonable to assume that Quality was the over-riding factor. A project of this scale where no similar projects were done in the past would make it very difficult to compare how much time and money will be needed to make it a success. The only the thing the French Government could be sure of was the quality.

Should the bridge collapse there could be large risk of loss of life, an issue that would be put under intense scrutiny. Another reason to emphasise quality would be the large payback period for the Bridge, which must be a benefit even after 75 years. The Project Manager's approach, The Ministry of Public Works offered the construction and operation of the viaduct as a grant of contract and an international call for tenders was issued in 1999. Four consortia responded to this call. Compagnie Eiffage du Viaduc de Millau (CEVM), led by Eiffage ??? a consortium led by the Spanish company Dragados, with Skanska (Sweden), and Bec (France) ??? Societe du Viaduc de Millau, including the French companies ASF, Egis, GTM, Bouygues Travaux Publics, SGE, CDC Projets, Tofinso and the Italian company Autostrade ??? a consortium led by Generale Routiere, with Via GTI (France) and Cintra, Nesco, Acciona et Ferrovial Agroman (Spain). The consortium led by Compagnie Eiffage du Viaduc de Millau, working with the architect Sir Norman Foster, was successful in obtaining the tender.

This contract was very lucrative as the design work and research had already been done by the Government to an advanced stage. Another advantage of

this contract was that the negotiations over it were much easier, reducing public expense and speeding up construction, while minimising such design work as remained for the contractor. The contract strategy itself was a Private Finance Initiative (PFI); this is where the Private Sector will invest its own Capital in on the strength of a contract with the government to provide agreed services.

So there is no loss to the French Tax Payer. The Eiffage group now operates the viaduct as a toll bridge, with the toll, as of November 2007, was set at ??? 5. 40 for light automobiles (??? 7. 00 during the peak months of July and August). For this Project, the decision to go with a PFI was wise as this Bridge will not benefit the French Population enough to make it worth paying, only a proportion of French and other Europeans will benefit from it. Other benefits this initiative has is that it is not prone to prioritization problems that are associated with other contract strategies.

Fixed Price Lump Sum contracts leave the Project Manager at risk of loosing out should an unforeseen problem occur. Cost reimbursable contracts leave the sponsor at risk of spiraling costs from possible Project Manager's liberal spending. In this case it will be in the interests of Eiffage to find an optimum solution as they will benefit from their own investment for the next 75 years. The Government misses out on revenue in that time however it also avoids impacting on Tax Payers. Form of Organisation.

In March 2001 Eiffage, upon winning the Contract for this Project, established a subsidiary called Compagnie Eiffage du Viaduc de Millau (CEVM). CEVM

headed a Consortium where The Architectural Design was left with Foster and Partners who built on SETRA's design concept. The Structural Engineering was carried out by EEG Somecsol and Greisch. The task of Fabricating the Stay Cables was given to Freyssinet and support was provided by PERI formwork and Scaffolding. The Consortium also employed sub-contractors Munch pylons, SATS, Secometal S. A. pylons[4].

With such a large and unique Project, the organisational structure of Eiffage was big and complicated. Such a large consortium can lead to the same kind of problems alternative contract strategies have, especially with the Sub-contractors. However, despite being delayed due to weather conditions, the Consortium delivered ahead of a realistic schedule. The task of managing this Consortium was made easier in a sense because of how high profile it was. Most of the Consortium was French and the Project would have reflected strongly on the image of France and the Consortium itself.

This would have been enough to motivate all parties to get the job done properly. Despite being so complicated, this consortium had no overlaps in the tasks each member was required to complete. Each member was an expert in their particular area and all that would have been left for the overall Project Manager to do is ensure the right resources and time was allotted to them. Project Manager Type and style. Since this was such a large project; the overall project manager, Marc Buonomo, acted more like programme manager than a project manager.

This is because the Millau Viaduct can be considered as a series of projects which were managed by the constituent companies of Eiffage. This method was clearly very successful especially as it was a hugely ambitious project, on a scale not seen in France for many years and to achieve this was nothing short of astonishing. [pic] [pic] [pic] Pictures from <http://www.fosterandpartners.com/Projects/1158/Default.aspx> [1]

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[bridgeweb.com/news/fullstory.php/aid/199/Millau_Viaduct_contract_awarded_to_Eiffage_JV.html](http://www.bridgeweb.com/news/fullstory.php/aid/199/Millau_Viaduct_contract_awarded_to_Eiffage_JV.html) - accessed on 03/03/2008 [3] [4]`n? “???? I? [5]? ?????? ahi? hN?

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