

Three new modular bridges provide access to construction of the Trans Adriatic Pipeline (TAP)

Bridging Case Study



Trans Adriatic Pipeline, Albania



Customers: Gener 2 Sh.p.K and Sicilsaldo S.p.A. | **Solution:** Compact 200™

The Challenge

The Trans Adriatic Pipeline (TAP) is a 878km pipeline project which transports up to 10 billion m³ of natural gas each year from Greece, via Albania and the Adriatic Sea, to Italy and further on to Western Europe. It is an important section of a larger project which brings gas from Azerbaijan to Europe. A joint venture between Gener 2 Sh.p.K and Sicilsaldo S.p.A. was contracted for a programme of works, including the construction and rehabilitation of 100 km of access roads and over 50 bridges in Albania along the pipeline's route. Part of this work involved replacing three ageing timber-deck Bailey Bridges which were now in poor condition. These bridges had to be replaced to provide road access for construction traffic working on the TAP. The original bridges had been in situ for more than sixty years and it is testament to the original Bailey Bridge design that the client wanted to replace them with a similar model.

The customer employed a local engineering consultant, whose first design recommendation for the replacement bridges was based on an old manual for the 'Super Bailey' panel bridge, dating back to the 1970s. After discussions with Mabey Bridge, they saw the benefits of changing the design scheme to its modern and natural successor – the Compact 200™. Mabey Bridge recommended the Compact 200™ bridge because it is based on the original Bailey model; the modern version being lighter and stronger.

The Solution

Mabey Bridge designed three single span bridge specifications including a 10 bay DSHR2H++ with a span of 30.48m, a 6 bay DSH with a span of 18.288m and a 5/10 bay SSH/SSHRH++ with a span of 46.302m.

Throughout the project Mabey Bridge Site Advisor, John Hinderer was present to oversee and support the installation and he worked with the team to solve a number of challenges that arose. Most notably, the original launch schemes were modified due to complexities on site. In one instance, the use of a tail bay was introduced to accommodate abutment widths and in another, the restricted launch plane meant that the first part of the launch had to be done manually. However, the modularity and ease of installation of the Compact 200™ bridges meant that the changes had minimal impact on the build time – the assembly of the first bridge, in fact, taking only four days.

The Results

The three Compact 200™ bridges now provide road access for construction traffic for ongoing working on the TAP and also provide greater connectivity for the local community. The TAP pipeline is a major global project which enhances energy security and diversifies gas supplies for several European markets. It is supported by numerous European institutions and is seen as a 'Project of Common Interest'.



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