

Second Danube Crossing, Vidin – Calafat, Bulgaria/Romania



F&N form part of an International Engineering and Management Consultant set up to provide services to the Project Implementation and Management Unit of the Ministry of Transport, Bulgaria.

Other members of the consortium are Scott Wilson (Lead Consultant), and Iberinsa.

The purpose of the project is to undertake the necessary preparations in advance of appointing a Design-Build Contractor to construct a new crossing of the Danube. The crossing forms part of Corridor IV a North-South Trans European Corridor linking northern Europe (Berlin) with south east Europe (Thessaloniki and Istanbul). The crossing will be a major structure of approximately 2km length carrying both road and rail. The structure is to be both aesthetically pleasing whilst providing the most efficient and cost effective solution possible.

Services provided include:

- The production of a variety of concept bridge designs for the crossing.
- Determination of the optimum cross sectional arrangement including the number of road lanes, rail tracks and pedestrian paths provided initially and to meet future forecast growth.
- Consideration of phased construction options.
- Production of cost estimates for the project.
- Production of reports and contract documentation including: cost report, technical report, design criteria, concept design report, employer's requirements, specifications, prequalification and tender dossiers for the Design-Build Contractor and Independent Checking and Site Supervision Engineers, and terms of reference for the Checking and Site Supervision Engineers.

The construction of the crossing faces a number of demanding constraints including poor ground conditions, large spans to permit unhindered marine navigation, harsh climatic parameters, and limited domestic experience of long span crossings.