# United Nations Economic Commission for Europe

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Convention on Environmental Impact Assessment (EIA) in a Transboundary Context

## **Case study fact sheets**

# Bridge over the Danube River between Vidin (Bulgaria) and Calafat (Romania)

The Vidin-Calafat Bridge over the Danube River will provide an important link in the transport infrastructure of both Bulgaria and Romania, and will form part of the southern branch of the pan-European transport Corridor number IV. It will provide for both road and rail links. The project proponent is the Bulgarian Ministry of Transport and Communications, but Bulgaria and Romania will jointly operate and maintain the bridge.



Construction of the 2-km link is expected to begin in 2005 and to be completed in 2008, at a total cost of € 230 million. The project is being co-financed by the European Union's 'Instrument for Structural Policies for Pre-Accession' programme, the European Investment Bank<sub>A</sub>the<sub>6</sub>Agence

Française de Développement and the German KfW banking group (totalling up to  $\in$  165 million), together with the Government of Bulgaria.

## **Institutional Arrangements**

In June 2000, the two countries signed an agreement on the project's technical, financial, legal and organizational aspects. The agreement was ratified by the Parliaments of both countries and entered into force in April 2001. The bilateral agreement specified that an environmental impact assessment (EIA) should be carried out jointly, taking into account Bulgarian, Romanian and European Union legislation. Both countries were Parties to the Espoo Convention on EIA in a Transboundary Context.

The agreement established a Joint Committee to oversee the project, chaired by the two countries' deputy transport ministers and including representatives of their environment ministries. Nine working groups also were established at the expert level. One of them – the environmental Joint Working Group (JWG) No. 2 – dealt with environmental matters and coordinated environmental procedures. The JWG met on many occasions to resolve procedural difficulties. In addition, Project Implementation and Management Units (PIMUs) were established within each of the two countries' competent authorities – the Romanian Ministry of Transport Construction and Tourism and the Bulgarian Ministry of Transport and Communications.

The location of the bridge was selected through a route selection study – examining environmental, social and economic aspects – carried out in the 1990s. A study completed in July 2001 determined the optimal location of the bridge.

## EIA Procedure

Bulgaria has a one-step EIA procedure at the beginning of the project design process, whereas Romania has EIA in the framework of the permitting process (i.e. before obtaining the construction permit). To resolve this difference, and to provide a stronger overall EIA, the transboundary EIA took place in two stages:

- a preliminary EIA according to Bulgarian legislation, and
- a final EIA according to Romanian legislation.



View from the Romanian side towards Bulgaria: the Danube Navigational Channel and the Nameless Island.

#### 2/17/2018



View from the Bulgarian side to the future location of the bridge.

Experts from an international consulting company led the EIA team, which also included local consultants from Bulgaria and Romania. The local experts were licensed or registered as is required by Bulgarian and Romanian legislation. No formal notification procedure under the Convention was considered necessary and nor was screening undertaken – a joint EIA had been decided upon in the bilateral agreement. The joint EIA team prepared the EIA documentation and the PIMUs provided full translation into Bulgarian, Romanian and English (20 copies of each), with the PIMUs covering these costs. The preliminary EIA was completed in August 2001.

The competent authorities in Bulgaria and Romania notified their own public right at the start of the EIA process, using the methods listed in the table. The Bulgarian authorities and EIA experts consulted the public during the preparation of the preliminary EIA and on the preliminary and final EIA report. The Romanian competent authorities also notified the public about the possibility to consult the final EIA report, and the project proposal, and about the public hearing that took place in December 2004.

Notification methods	Bulgaria	Romania
Local newspapers	yes	yes
National newspapers	yes	yes
Local radio	yes	
Television	yes	
Post to local NGOs	yes	
Post to national NGOs	yes	
Post to concerned national, district and local authorities	yes	yes
Displayed on webpages of environmental authorities and developers		yes

The preliminary EIA documentation was distributed to the competent authorities in Bulgaria (in Bulgarian and in English) and Romania (in Romanian and in English) and to the Vidin municipality, Bulgaria (in Bulgarian). The documentation was also available for one month to all interested members of the public, representatives of NGOs and other interested parties. The JWG had established a time limit for receiving written comments from the public and other concerned parties in both countries.

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Danube shoreline, Romania



Danube shoreline in summer, Bulgaria – view to the bridge axis

Based on the preliminary EIA report, and in accordance with Bulgarian and Romanian legislation, the competent environmental authorities and local authorities from both countries also organized public hearings, with the public concerned and with non-governmental organizations (NGOs), in Calafat and Vidin in January 2002. The competent authority in each country provided minutes from the meetings with comments made during the public hearing. The PIMU translated the comments into English and forwarded them to the competent authority in the other country. In total, only ten comments were received from the Romanian public and seven from the Bulgarian. The Calafat and Vidin municipalities covered the costs of organizing the public hearings, and of the necessary interpretation. The participants in the public hearings covered their own costs. During this public participation procedure, there were no objections from the public or from the NGOs, only comments on mitigation measures to reduce environmental impacts and other improvements.



Ferryboat harbour on the Calafat side

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Based on the preliminary EIA report, and taking into account the results from the public hearings, the Bulgarian Ministry of Environment and Water issued its EIA decision in February 2002. The decision stipulated specific conditions, being measures for preventing or limiting significant adverse impacts on the environment. The implementation of these measures will ensure that the requirements of the legislation are observed. The project proponent did not contest the conditions. The Romanian competent environmental authority issued its opinion on the preliminary EIA Report, which was sent to the Bulgarian competent authority. The information on the EIA decision was published in a Bulgarian national newspaper, and copies were given to the project proponent, to the local municipality and to the concerned authorities. The decision was translated into English and sent to the Romania competent authority through the PIMU.

# **Final EIA Report**

The final EIA was completed in October 2004. The final EIA report provided more information about the proposed project's effects on the Romanian side than did the preliminary EIA report. The final report was drawn up in English, Romanian and Bulgarian, and it was the subject of the public hearing in December 2004. The public hearing was held in Calafat, Romania. Besides the Romanian and Bulgarian authorities and the EIA experts who drew up the final EIA Report, there were present the public concerned and representatives of one national NGO. The questions and answers and the comments on the project and the EIA report were recorded in the minutes of the hearing. The discussions showed the willingness of the Romanian public and authorities to support the project, taking into account the opportunities for the development of the region, expected to arise from the proposed bridge.

Bulgarian legislation does not require further public participation based on the final EIA report. Nevertheless, the report was made available to the public in Bulgaria, and the proponent was prepared to record comments. However, no written comments were received. The Bulgarian Ministry of Environment and Water undertook to prepare a written opinion on the final EIA report. Romanian legislation provides for a single EIA procedure (with a single EIA report), called an "environmental agreement", which starts at the moment of the feasibility study and ends with the Issue of the final decision, before the project is started.

The alternatives presented for the construction of the bridge:



# **Option A1- ( Concrete Bridge)**

Superstructure spans over the Danube river – In situ cantilevered construction. Approach viaduct superstructure – Built in situ on formwork or in cantilever, either supported from the ground, or supported on trusses attached to permanent and/or temporary plers.



## Option E - ( Cable Stayed Bridge) - Main tower

Cable stayed spans – steel sections would be lifted from the river. The concrete deck could be either cast in situ, prefabricated and placed in panels with in situ joints, or cast with the steel part prior to lifting. Construction would be by balanced cantilever from the main tower. Non cable-stayed superstructure spans and approach viaduct spans - Built in situ on formwork, either

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supported from the ground, or supported on trusses attached to permanent and/or temporary piers.



## Option G ( Composite Bridge)

Truss superstructure spans – The steel trusses and other steel elements would be prefabricated in sections. These could then be either lifted into place using marine and land cranes, or launched from either the Bulgarian or Romanian Banks. Temporary steelwork and/or temporary plers are likely to be necessary for the launched approach. The upper and lower concrete decks would be cast in situ.

Prepared by Vania Grigorova of the Bulgarian Ministry of Environment and Water and Daniela Pineta of the Romanian Ministry of Waters and Environmental Protection, with the support of the Espoo Convention's Secretariat. December 2004