

1st Progress Report
January 19th 2007

ADMINISTRATIVE ISSUES

A contract for the provision of a grant between the European Investment Bank (EIB) and the Universidad Politécnica de Madrid (UPM) was signed:

Date of signing for the UPM: November 21st, 2006.
Date of signing for the EIB: November 28th, 2006.

Augusto Bazán was hired as an economist researcher expert in public policy and game theory on December 1st 2006. He will contribute to the two research projects.

The EIB disbursed the first instalment of €10,000 for administrative expenses. The UPM received it on December 26th 2006.

The UPM submitted to the EIB a first set of expenses corresponding to an amount of €10,103.91. Supporting documents were sent to the EIB on December 21st 2006 by air mail.

RESEARCH SUBJECTS

A) First Topic: Evaluation of demand risk mitigation in PPP projects

Research approach:

Today, one of the prime challenges of PPP projects is to set up an adequate and fair traffic risk allocation strategy. We will focus our research in analyzing the efficiency of different traffic risk mitigation approaches. To that end, we want to study the relationship between traffic risk mitigation and renegotiation. Moreover, we want to evaluate the influence that the implementation of a traffic risk mitigation mechanism may have on the strategic behaviour of the bidders.

We intend to tackle this issue by elaborating a new model founded on game theory to analyze the incentives of the different bidders. We would like to establish a set of guidelines that may help governments define the most adequate traffic risk mitigation mechanism depending on the characteristics of the PPP project they are involved in.

Research Progress:

We have already reviewed the most relevant literature regarding traffic risk-mitigation mechanisms in PPPs and game theory applied to incentives and regulation. We have already started defining a methodology to approach the game theory model.

Data needs:

Information about traffic-risk mitigation mechanisms implemented in PPPs in Europe and its influence on renegotiation would be very interesting for this research project. We consider that the databases of the EIB could be extremely helpful for us.

B) Second Topic: Empirical evaluation of the influence of procurement mechanism in the performance of PPPs during the launch of the contract

Research approach:

The subject will be approached with a game theory model to analyze the bidders' options when they apply for PPP tenders under different procurement mechanisms. We aim to study the opportunistic bidding depending upon the procurement mechanism used.

We will also check different subjects like transaction costs, project amount, and time schedule in different procurement mechanisms, and if they have any correlation with the success of the project.

Research Progress:

We are checking relevant bibliography about procurement systems. In addition, we are comparing different methods employed in the European Union and in other countries.

Data needs:

Information about the different procurement mechanisms in transport infrastructure projects in European and others countries.

REQUEST TO THE EUROPEAN INVESTMENT BANK

Getting access to the EIB project database of PPP projects in transport infrastructure may be very important for the ultimate results of these research projects. For this reason, we would like to propose to the EIB that a researcher from the UPM could spend some time at the EIB headquarters exploring the information that the EIB has in its databases, particularly in the field of traffic-risk mitigation mechanisms and procurement of PPPs.