

Progress Report
June 22nd 2007

BACKGROUND

Clause 2.03 of the contract for the provision of a grant under the EIB University Research Sponsorship Programme requires that, by the end of June 2007, the Beneficiary submits a report in English or French on the progress of the Programme up to the relevant month inclusive.

This progress report includes the main steps carried out since the contract was signed. The report is divided into four sections: administrative issues, research tracking, research progress, and an up to date budget expenditure report.

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

Six members of the UPM faculty will take part in the contract: Jose M. Vassallo, Antonio Sánchez Soliño, Rafael Izquierdo, Óscar Martínez, Antonio López Corral and Samuel Carpintero.

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

RESEARCH TRACKING

A preliminary meeting between the EIB staff and the UPM took place in Luxembourg on the 20th September 2006. In this preliminary meeting, it was decided that, during the first year, the UPM would work in two research subjects:

1. *Evaluation of demand risk mitigation mechanisms in PPP projects.* This subject will be led by Jose Manuel Vassallo.

2. *Empirical evaluation of the influence of procurement mechanisms in the performance of PPPs during the launch of the contract.* This subject will be led by Antonio Sanchez Soliño.

On the 20th March, 2007 a second meeting was held in Luxembourg in order to show to the EIB staff the research progress conducted up to date. Jose Manuel Vassallo and Antonio Sanchez Soliño made a presentation of the subjects they were working on. They focused their presentations in showing the present state of knowledge and describing the research methodology. A first draft of each one of the research projects was delivered to the EIB staff. Overall, the EIB staff agreed with the methodology presented to conduct the two research projects. However, the EIB staff made the following suggestions:

- To extend the state of the art corresponding to the second subject.
- To explore the possibility of hiring a second researcher.

In their turn, the UPM researchers asked the EIB for the possibility of exploring the EIB project database in order to reinforce the empirical support of the research. The EIB staff committed to give an answer to the researchers as soon as possible.

On the 30th May, 2007, Jose M. Vassallo sent an e-mail to Hugh Goldsmit in order to provide him with a more complete state of present knowledge regarding topic 2: "transaction cost in PPP transport infrastructure projects". In the same e-mail, Jose M. Vassallo attached a paper which was recently written by the researchers about the use of Subordinated Public Participation Loans in Spain (SPPLs).

Since the EIB had not given an answer by this date about the possibility of UPM researchers exploring the project database, Jose M. Vassallo encouraged Hugh Goldsmit to give a definitive response. Moreover, Jose M. Vassallo also attached a list of data that the researchers would like to explore in the EIB database for subject 1 and subject 2. Soon afterwards, Hugh Goldsmit confirmed that a researcher from the UPM is allowed to spend one week at the EIB obtaining information from the EIB project database. To that end, Augusto Bazan will be travelling to the EIB the week of the 25th of June.

RESEARCH PROGRESS

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. This research focuses on analyzing the efficiency of different traffic risk mitigation approaches. To that end, the relationship between traffic risk mitigation and renegotiation are to be studied. The main aim of this research is to evaluate the influence that the implementation of a traffic risk mitigation mechanism may have on the strategic behaviour of bidders in order to define the

most adequate traffic risk mitigation mechanism depending on the characteristics of each PPP project.

Research Progress:

The most relevant literature regarding traffic risk-mitigation mechanisms in PPPs and game theory applied to incentives and regulation has already been collected and analysed.

After the literature review, a methodology has been defined to tackle the research objectives. The methodology includes three steps. The first step consists of defining the strategic behaviour of the stakeholders involved in a PPP contract. The second step consists of establishing a model based on the theory of incentives to explain the behaviour of the stakeholders regarding traffic risk mitigation mechanisms. The third step consists of contrasting the theoretical analysis with the empirical results.

The first step is already completed. The second step is under development. And the third step depends on available information. Up to now, we have found some information about traffic risk and procurement in five concessions in Spain, which we are already analyzing.

Deliverables:

The most recent draft corresponding to this subject is included in Annex A.

We attached also a paper written by Jose M. Vassallo and Antonio S. Soliño about SPPLs in Spain. This paper is included in Annex B.

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

Research approach:

There is an increasing preoccupation nowadays with high transaction costs in PPP contracts. Public authorities watch how alleged savings when using PPPs (which, on the other hand, are not always clear), are counterbalanced with these transaction costs. Our team, at the Universidad Politécnica de Madrid, has found some initial evidence on the relationship between transaction costs and public procurement procedures in PPPs. The analysis of this relationship is the main objective of this research.

Research Progress:

The first task in this research has been a literature review on related economic theory and on empirical studies on this matter. The theoretic framework for our approach has been the transaction costs and incomplete contract theory. The relevant literature on this “corpus” of knowledge has been collected and analysed, and also the few available empirical studies on PPPs transaction costs. This task has already been completed.

The second task, which is on track at this moment, is the definition and characterization of different public procurement procedures. For that end, we will base our research on the European Directives on public procurement.

The third, and central task in our research, is the collection of data on transaction costs in transport infrastructure PPP projects. Our aim is to consult the EIB database and, at the same time, to carry a survey on PPP projects, by asking both public authorities and private firms. This task is currently under development.

The following and final task will be to contrast the hypothesis of the existence of a significant relationship between transaction costs in transport infrastructure PPPs and the procurement mechanism used to launch the project.

Deliverables:

The most recent draft corresponding to this subject is included in Annex C.

BUDGET EXPENDITURE

The following Table shows the summary of expenses incurred from the beginning of the contract to the date of this progress report.

Expenses	Amount
Personnel	20,836.00
Travel	7,951.65
Books	895.16
Other expenses	1,607.60
Total	31,290.41

A more detailed breakdown of these items is shown in Annex D.

The EIB forwarded the first instalment of €10,000 for administrative expenses. The UPM received it on December 26th 2006. After that, the UPM submitted to the EIB two sets of expenses corresponding to an amount of €10,103.91 and €17,385.62 respectively. Since then, the UPM has incurred an additional amount of €3,800.88 which has not yet been submitted to the EIB.

The following Table shows a summary of the instalments reimbursed to the UPM from the beginning of the project.

Instalment	Amount
<u>First</u> December 26th 2006	10,000.00
<u>Second</u> March 14th 2007 Reference: Instalment N° 2	10,103.91
<u>Third</u> May 16th 2007 Reference: Instalment N° 3	17,385.62
Total	37,489.53