

The Contract Management in Public-Private Partnership

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Abstract

This thesis aims to discuss a contract management model of a real project in Public Private Partnership (PPP) for a light railway (LRT), in this case Metro Sul do Tejo (MST). The management model proposes measures and recommendations for PPP contract management. These proposals have been based on the analysis of several Portuguese contracts, as well as on the study of good practice guidelines in contract management in Anglo-Saxon countries with extensive experience in this area.

The research is divided in three parts. The first part comprises the study of national laws on public transport, analysis of several other contracts on metros in Portugal, study of reports from the Accounts Court and documentation related to the case study. The second part involved the research of contract management bibliography in Portugal and abroad. For the third and last part, the MST contract was analysed and a model for the contract management is proposed, as well as recommendations for the stakeholders in the PPP.

Keywords: Contract, Contract management, Light Railway, MST, PPP, Public Transportation.

1. Introduction

Nowadays, the introduction of an LRT system is a common practice in many urban areas in the world. This mode of transport is recognized as a sustainable transport solution and recommended from the environmental point of view. This system is associated with high production goals of transport in order to take advantage of its characteristics of speed and capacity, while monetizing and justifying the high investment. Since the investments create a high debt for the sector, it becomes appealing to use resources of public contract based on PPP.

As a consequence of that situation, it is urgent to evaluate the quality of the performance and set the measures of contract management on PPP, ensuring efficiency and support the least charges for the public sector.

The international good practices literature review is focused in countries with large experience in contract management. Therefore it presents the principles aspect for appropriate contract management in PPP and it presents measures that can allow improvements to the study case, Metro Sul do Tejo.

2. Organization of metro system in Portugal

2.1. National legislation applicable to the transport sector

The structure of the transport system in Portugal is legislated through Law of the Land Transport System (LBTT), Law n. ° 10/90 of 17 March. The LBTT is a transportation system that comprises terrestrial infrastructure and productive factors that affect travel by land of people and goods, in Portuguese territory or have it end or part of the route and is governed by this law, its ordinances and development regulations.

This law envisages the need to create a metropolitan transportation commission, namely, a Metropolitan Transport Authority (AMT) with specific rights and obligations. Currently, the Law is under review and the AMT does not exercise its functions as it was intended. In comparison with other European countries the first ATM appeared in 1959 in Paris, while in Portugal, the first AMT's (Lisbon and Porto) appeared nearly forty years later.

2.2. The transport sector institutional structure in Portugal

The institutional organization is composed by various entities (Cruz, 2006):

- a. **Government:** is responsible for decisions on financing the transportation system in Portugal (financing of road infrastructure and rail metro light rail, metro and conventional rail) along with the municipalities covered;
- b. **IMTT**¹: is responsible for the regulation, supervision and coordination functions of planning and land transport; supervises and regulates the activities;
- c. **Metropolitan Areas and Regions:** Assume the regulation and coordination of different modes of transport within the boundaries of metropolitan areas (Lisbon and Oporto);
- d. **Municipalities** is responsible for the regulation of urban transport and local through concessions for the exploration of urban and municipal road systems, as well as the definition of school courses and municipal projects of road networks: is responsible for financing the road infrastructure of your domain.

2.3. Financing metro systems

The metro system, given its size and infrastructure requires high investments, which may include three categories: infrastructure, rolling stock and operation of the system by providing public services according to the study by Cruz (2006).

Government usually associates the investments of the infrastructure, but in some cases, it may be partially or fully supported by municipalities and metropolitan authorities. As the case of Milan subway, where the state in addition participate in community co financing, covers the entire investment of infrastructure. Regarding the rolling stock is the responsibility of the transport operator through its own capital and borrowed funds. Funding for the operation of the system depends on the type of public service that has, and depends on the policies of subsidizing the operation of the system in each country. For example in Barcelona, ATM subsidizes 100% of the operating system in order to cover the operating deficits each year. On the one hand, this policy has advantages because it avoids the indebtedness of transport operators, but on the other hand, does not stimulate the efficiency of operators (Santos, 2008).

One way is to encourage efficiency, estimating the deficit operator, covering only this value should be stated in the contract. In this case, the operator has onerous costs, these will be borne exclusively by the operator. According to the study by Santos (2008), this is often the case with contracting services in PPP contracts (e.g., metro concession of London, by LU).

¹ IMTT - Institute for Mobility and Land Transport

In Portugal, several PT operators receive annual compensation from the Government, in the name of public service obligations, but in a lower proportion than the estimated cost of these obligations. The underlying model of public transport services financing is determined by the respective ministry, without revealing the underneath criteria to transport companies. In future public service obligations should be, according to the EU transport sector strategic guidelines, subject of contracts between the state and the transport operators (Santos, 2008).

3. Contract Management

3.1. Public-Private Partnerships (PPP)

According to the European Commission Green Paper (2004), a Partnership - Public - Private Partnership (PPP) can be defined as "a form of cooperation between the public and private sectors for the financing, construction, renovation, maintenance and management of an infrastructure or a public service". In Portugal, the structure of a PPP is characterized by having two parties: the Government, as public sector² and the private party³. The private party has the know-how and experience in the sector and the various functions, which may perform the stages of financing, construction, management, renovation and maintenance of infrastructure.

The large experience and knowledge of the private sector to encourage innovation and efficiency of infrastructure resulting from lower investment costs, expected timing of the completion and improvement of management processes and a best result of VFM in public service delivery in the PPP model.

The choice of a PPP, not only concern about the value for money⁴ (VFM), is important in this contracting model that has many advantages (Marques, 2008), which emphasize:

- 1) The risk sharing and transfer of responsibilities to the partner with greater capacity to manage them;
- 2) The greater flexibility of funding providing a greater number of infrastructures built;
- 3) A lower overall cost of the project compared to the traditional model.

One of the negative aspects in the implementation of PPP, in Portugal, are public partners have staff with low qualification in projects, which are mostly very complex. Even making use of expert advisers, this occurs in time not following the entire life cycle of the project (Marques and Silva, 2008).

In more recent decades in Portugal, the state began to direct operator to regulator and supervisory. In the early '90s, the PPP spread rapidly in large projects of roads, hospitals, schools, prisons, transport, sanitation facilities, etc. Among them is the case of Metro Sul do Tejo (MST).

² The public party includes the Government public entities, funds and autonomous services, businesses and public entities established by them with a view to meeting common interests

³ The private party is made, usually by a group of companies form a consortium that contributes to an open procedure. In case win this contest the name given to the consortium becomes the concessionaire company.

⁴ VFM is defined as an ideal combination of whole life cycle costs and quality (or fitness) of a good or service to meet the requirement of the user. Entire life cycle is used to refer to the life of the product or service. The VFM is not the choice of goods and services based on the lowest cost proposal.

3.2. Contract management

The contract management is a process that allows both parties to the contract fulfil their obligations in order to meet the objectives required in the contract. Also, is the combination of roles and responsibilities, involving the construction of a good working relationship between the public and private party. The management contract continues throughout the life of a project and involving the proactive management to anticipate future needs and react to situations as they arise (OGC, 2002), also including all necessary procedures at posteriori adjustment to the contract, in another words, the processes of renegotiation (Cruz and Marques, 2012).

The central aim of contract management is to obtain the services under the contract and thereby maximize VFM. That means optimizing the efficiency, effectiveness and economy of service or relationship described in the contract, balancing costs against risks and actively manage the relationship public party - Concessionaire Company. The management contract may also involve pointing to ongoing improvement in performance over the life of the contract (ANAO, 2012).

Due to the long life of each project is important that there is effective management of the contract, once signed, will allow the monitoring and tracking of partnership in various stages included in the project. For each phase of the life cycle of the contract, there are a number of activities that must be carried out within the public and private entity in order to verify the effectiveness of the management contract.

3.3. Key elements for effective management of contracts

This topic presents policies for effective management of contracts, according to the designs of several international organizations experienced in this field that should assist the Government in its different steps. These policies incorporate: 1) the collection and analysis of information, 2) the manual management of the contract, 3) monitoring and evaluation of performance, 4) the relationship between public and private entities; 5) governance, probity and compliance, 6) information management, 7) management of contractual changes; 8) contingency plans.

These elements are the ones allowed that there is an effective management of contracts, which risks are managed in time and that fundamental goal of a PPP is reached, producing the VFM.

4. MST

The LRT arises as a result of a concession between the Government and MST, as the concessionaire company, with a period of thirty years. The company develops its activity under concession, design, construction, equipment supply and rolling stock, financing, operation, maintenance and upkeep of the entire network of light rail from the south bank of the Tagus, under the Concession Agreement signed on July 30, 2002 with the Government. The concession model of the MST is established in traffic bands for financial feasibility of the project, where the Government assumes much of the central risk in this concession.

This event implies that, in years when the passenger traffic is below the lower limit of the band of referral traffic, the Government will have to pay compensation to the concessionaire company. In this situation, the private party assumes the risk of construction, and also should assume the full risk of passenger traffic associated with the operation of the service, which did not happen in this contract. This happening leads to no incentive efficiency for on the part of the contract private party. That is not a model that wants to a contract under a PPP.

This fact a poor estimate of demand, as can be seen in the chart below, which illustrates the traffic forecasts back to 2011 real traffic.

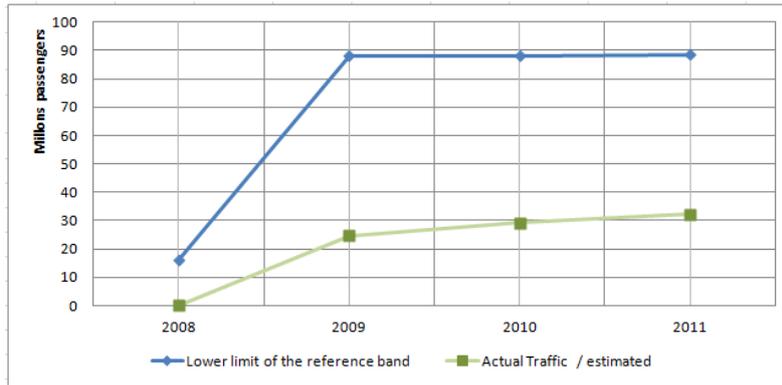


Figure 1 Graph 1 traffic provision until 2011 verso real traffic.

5. Model proposal

Here we propose a model with six elements considered essential for the contract management of the MST. As mentioned above, by collecting a prior data set, it was possible to determine these key elements, in particular by analysing various best practice guides, included in international reports of government agencies with extensive experience in contract management. Therefore, the contract management model is organized into six parts, namely: the collection and analysis of information, the contract management manual; monitoring and performance reporting; governance, change management and contractual contingency plan, as illustrated in Figure 1.



Figure 2 Contract management model for MST.

6. Discussion

In the contract that was established for the concession of the MST, the sharing of risk between the grantor and the concessionaire is not clear. The assumption of the traffic bands risk is carried by the State, which is a risk that could be assumed by the utility, since it has at least partially control over the number of passengers and mechanisms to increase their attraction. According to the concept of risk sharing of a PPP, the private company "has the know-how and experience in the sector and the various functions with the ability to better manage the risks." The data for estimating demand should have been determined at the launch of the competition or be on the side of the State. By being supplied by the private party it creates a risk that may have been the main reason for the inefficiency of the concession.

This contract does not have the tools or any documents to aid the contracts management, such as the MGC, which define the tasks to be performed by each entity / person involved and defines the responsibilities of each party, ie, stakeholder and the consequences of their failures. Thus, the MGC, or similar document, allows us to anticipate and mitigate potential risks and manage them in the best way in order to maximize results.

The fact that there are no provided contingency plans creates serious problems for the state and the private party in disasters situations or serious events. The contract only states that the public party assumes much of the responsibility in cases of ransom Award, greater force (natural disaster) and termination. A good example is what happened with the discovery of archaeological remains and changes imposed by the public party to the track layout. The delays caused by these changes led to the renegotiation of the contract resulting in high costs to the public party.

The monitoring clauses of the MST contract specify the indicators to the level of traffic and operation of the concession: passenger traffic, quality of supply, supply capacity to evaluate the performance of the concessionaire, consumption and energy costs (total and per line), asset number, and personnel costs. There are also indicators and management ratios, which are related to economic and financial indicators: operating costs, financial, operating income, financial income, etc. Also presented are safety indicators and customer satisfaction. In the same monitoring clauses of the MST contract there are no indicators at the level of the framework, such as: the area of influence of the network, potential passengers, population density, average distance between stations. There is also no expectation to create processes for the report and presentation of different indicators or means and resources of the state to perform this function.

Under the contract, the monitoring indicators must have a minimum of six months periodicity and the private party has the obligation to collect these data, whenever requested by the public party and IMTT. The latter should examine indicators to monitor the concession, however, has not done in a timely and appropriate manner. As it turns out there is a manual inspection (TC, 2011).

Through reports from the MST, we notice the existence of the dispersion of functions between public bodies (GMST and IMTT), perhaps a result of the extinction of public authorities responsible for the enforcement of the economic and financial obligations from the public party.

All these are problems worsen dramatically by the lack of mechanisms for relational managing between the parties for the resolution of such conflicts and problems. Although there are penalties provided in the Contract, these should be applied only in a very extreme situation and as is known in Portugal, by the difficulties of our rule of law and justice in terms of efficiency and effectiveness, even if applied they are hardly executed, therefore, this instrument does not work.

At contract management level there is an imbalance in risk sharing between the State and the private party. As mentioned previously, the State bears much of the risk inherent in the

concession. This is evidenced in the fact that the financial reports only mention contractual fines applied to the state and not to the private party.

It is clear in the contract the state's inability to evaluate complex contracts, a task that requires personnel with high technical expertise that the state lacks (TC 2011).

All these facts form a general picture that illustrates a clear mismatch in the governance of the contract and therefore of the contract management.

7. Conclusions

7.1. Conclusive synopsis

After reviewing all documentation relating to the MST and after conversation and discussion with several of the intervenient parts, it can be concluded that while this project was initially very promising, it later proved unsustainable due to various reasons, stressing however, the overestimation of demand. This is a case that deserves critical reflection at a great impact on their benefits and harms of a project under the PPP.

The renegotiation of the concession contract resulted in an extension of the deadline for initiation of services and an agreement on financial recovery. This renegotiation presents no evidence of contractual changes that promote effective contract management in the future; in practical terms it only generates higher costs for the state.

In this context, the design of light rail surface shows no evidence of being economically viable. The licensee acknowledges that the economic viability of the project, with the current tariff and under contractually defined terms, is not possible without the support of the State, since the tariffs are "social", which does not support the operating and financial costs of the project. Besides these aspects, the low values of passenger traffic compared to LMBTR translate into a concession that depends on the states IC, which cannot create incentives to improve the efficiency of the dealership. This fact led the MST to not go beyond its first phase of construction, leaving to open discussion the extension to their Caparica parish together with Seixal and Barreiro counties. Also unclear was the extent of expected revenues and approach to search values. In the current economic and financial situation of the country, the completion of the remaining phases is not expected in the short and medium term.

With regard to contract management and including supervision and monitoring of the partnership, there is a dispersion of functions and responsibilities on the part of public bodies such as IMTT, the GMST and REFER, which resulted in difficulties in adopting solutions that safeguard the public interest, both in the renegotiation as the asymmetry of information between the public and private partners. The situation can be minimized by the application of a model of appropriate contract management and a more assertive distribution of functions for MST, even though it should have been set in the tender phase.

The active participation of an effective regulator is very important, to enable the understanding, analysis and calculus of the needs of large transport infrastructure investments to certain areas of the country, which again was not the case.

To control the sector indebtedness and ensure improved quality of service is necessary to promote actions to improve the effectiveness and efficiency of the management of the PPP contract. These measures include, primarily, contractual changes that promote the efficiency of the operator and the State by providing mechanisms to manage the contract effectively. The solutions suggested by the contract management model will help, in the medium and long term, to prevent the continued escalating costs of operating lease and make light rail more efficient.

It should be noted that the data collection for this study was limited by the difficulty of public entities to provide such data. This fact also shows that the obligation of transparency to the citizens is not being met in the best way.

The current model of management contracts MST is very precarious, does not follow any best practices or uses important management tools (plans and manuals) and therefore compromises their objectives as well as the generation of VfM.

Overall, there is a lack of strategy to mitigate or eliminate risks, actual and potential, and the losses / benefits associated with them. Incidentally, this same lack of strategy is in itself a great risk that must be managed (Grimsey and Lewis, 2002). To control the sector indebtedness and ensure improved quality of service is necessary to promote actions to improve the effectiveness and efficiency of the management of the PPP contract. These measures include, primarily, contractual changes that promote the efficiency of the operator and the State by providing mechanisms to manage the contract effectively. The solutions suggested by the contract management model will help, in the medium and long term, to prevent the continued escalating costs of operating lease and make light rail more efficient.

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7.2. Recommendations

Taking into consideration the main observations and conclusions discussed in this study, recommendations are formulated, first for maintenance and / or renegotiation of the contract and then for each party to the contract.

In the hiring of a PPP regime it is imperative to analyse the convenience and opportunity, as well as the use of PPP in priority projects or where they may originate efficiencies gains and increase efficiency in the allocation of risks.

Regarding risks, it is important to have a clear and objective definition of risk sharing between the licensor and the licensee, so there is a perceptive determination of functions and responsibilities of each entity in order to respond to the State.

Governance should assign penalties for non-compliance, ensuring that they are met and the premiums when good results are achieved in efficiency, so that there are incentives.

The existence of ethics and conduct among all stakeholders must be insured, so that decision making includes the best compromise between the interests of all stakeholders.

Throughout the project, foreign aid consultants with experience in contract management should be secured through.

For MST:

The collection and analysis of more rigorous information from demand studies and economic viability of the project.

The construction of a contract management manual worrying about the mechanisms of the relationship between the public and private parties, the implementation of the methods that define the interface between them and the proper functioning of the routine administrative

functions. The manual is an essentially practical tool, which should be relevant not only for day-to-day, but also the long-term contract management of the project.

With regard to monitoring, the MST should make a clear description of the parameters and indicators for contract management and performance review of the private party.

In the contract, in addition to identifying potential contingency events, the MST should develop contingency plans and define the responsibility, to avoid situations of "what do we do?" in case of a greater force event.

According to TC (2011) dispersion of contractual obligations by various documents should be properly consolidated into one final document in order to facilitate the monitoring of concession.

In order to avoid dependence on the state via the IC, MST must be able to capture higher levels of revenue through alternative means of revenue traffic, such as through the marketing of space stations, or campaign advertising on vehicles, or through merchandising metro for tourists (as in London). The MST can benefit from more funding, for example coming from taxes on businesses that directly benefit the metro network.

For the State:

As part of the launch of a PPP, the state should base their decisions on more credible and conservative demand studies and the projects must be substantiated through rigorous economic and social feasibility studies. Demand studies must be technically validated by the state and will be determined prior to launch of the competition;

The state should introduce, for example, in the renegotiation of the MST concession contract more stringent and effective mechanisms of traffic control that minimize the impact of fraud on payment of tickets as a way to ensure the economic and financial balance of the contract.

7.3. Future work

For future work some questions are left open that can stimulate further studies of this issue, the contract management of a PPP, such as issues of political and economic forums such as: "What is the best form of management, public or private?" The counties on the southern bank would need a light rail, what is the impact of its implementation? ", " How can we best service and best form of contract of different services? ", " What are the risks of poor contract management of a PPP in a particular industry? ".

These issues are very important for the planning of a more efficient transport service and would make good topics for discussion in future analyses. Although the relevance of these issues is identified, these were excluded from the analysis, given the volume of work that would entail and what the proposed goal of this dissertation.

The state should strengthen technical and human resources that ensure more effective management and oversight of contracts in their various aspects. Staff must be trained and qualified to handle projects of this complexity.

It is recommended the urgent establishment of a monitoring agency with expertise in contract management under the PPP, given that in Portugal there is a high number of a similar case such as the MST, at which the concession survives at the expense of the state.

The State must proceed systematically to the ongoing reappraisal of risk resulting from any process of negotiation or renegotiation of a PPP, as the case of MST, in order to be able to assess the impact on their respective financial effort.

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