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The Regulation of Road Infrastructure Operators in Portugal

Extended Abstract

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Abstract

In the last two decades the Portuguese road sector has experienced profound changes. The main outcome of these changes is a superior highway network, which allows traveling across almost all the country with comfort and ease. These highways are operated by private entities, through concession contracts signed between them and the public partner, the State directly, or indirectly by the *Portugal Road Company* (EP). These concessions, which are public-private partnerships, need to be subject to regulation. This regulation could be contained in the concession contracts, or done by a road sector regulator, which in Portugal is the *Institute for the Road Sector* (InIR). The contract regulation, although with some common features, differs and has specific particularities on each contract type. The regulation duties assigned to InIR, jointly with the concession contracts and the legal framework, defines the Portuguese road sector participation rules. In Portugal, the success of concessions in the road sector can be much higher if there are improvements on contract design and if the regulator becomes more independent, more pro-active, and is endowed with more tools.

Keywords: regulation; concession; road sector; contract.

1. Introduction

Since the last decade of the past century until nowadays, the Portuguese government has made a great effort to improve the road sector in Portugal, with the main objectives of renewing the network, shortening the distances between the populations and reducing accidents, and this last was a serious problem to solve. The level of construction of road infrastructures has been outstanding in the past years. The public-private partnerships (PPP) of contractual type, such as the concession arrangements, have been adopted as the public procurement model to develop this sector.

The first toll road concession in Portugal was awarded in 1972, and included the construction, maintenance and operation of motorway linking Lisbon to Porto. But it may be said that modern road concessions, in PPP format, only emerged in last decade of the last century. Currently, there are 12 road concessions in operation and 10 other concessions have already been awarded. With the implementation of the *New Road Sector Management and Financing Model* (NMGFSR) in 2007, there were significant changes in the industry, especially in how the private sector interacts with the public sector, in the concession contracts and their format regulation. Other major modification was the creation of an entity with regulation and supervision functions in the sector, the *Institute for the Road Sector I.P.* (InIR). There was also a revision of the *Portugal Road Company* (EP) statutes and role, granting financial independence to this public company. The NMGFSR is still in an early stage of implementation, several contracts are being changed and negotiated to fit this new philosophy, and it is difficult to make the real assessment of its results and potential benefits. This reform has suffered some setbacks. The most relevant is due to the current economic and financial crisis that makes the access to the funds required to finance the sector more difficult.

This paper analyses the regulation in the Portuguese road sector, especially the regulation regarding road concessions, whether it is applied by a regulation entity or through the concession contract. After this introduction, the remaining of this paper is organized as follows. Section 2 presents the Portuguese road sector, and the main players, private and public ones. Section 3 tries to understand the principles and the theoretical background related to regulation, and section 4 analyses four concession contracts case-studies. Afterwards, section 5 discusses the role of InIR as the road sector regulator. Finally, section 6 concludes this extended abstract.

2. Portuguese road sector

According to the Monitoring Report of the Highway Network 2009 (1), there are approximately 8.500km of national road network¹ already constructed, 2.575km of those are highways, and 1.500 km of these corresponds to toll roads and the rest to concern virtual toll roads or with no toll at all. Figure 1 summarizes the Portuguese motorway network. Note that in the last eight years 1,288 km of highways have come into operation.

In the Portuguese road sector there are several stakeholders, divided in public and private sectors. The state assumes two different roles, it has to manage the contract in his best interest, but it also has to monitor and regulate the relationship between the private and public parties. Several public entities are involved in both roles mentioned above, maybe in excessive number since sometimes there are disagreements amongst

¹ This number does not include regional and municipal roads.

the various public stakeholders on renegotiation, measurement of the value for money (VFM) or issues related to information asymmetry matters (2).

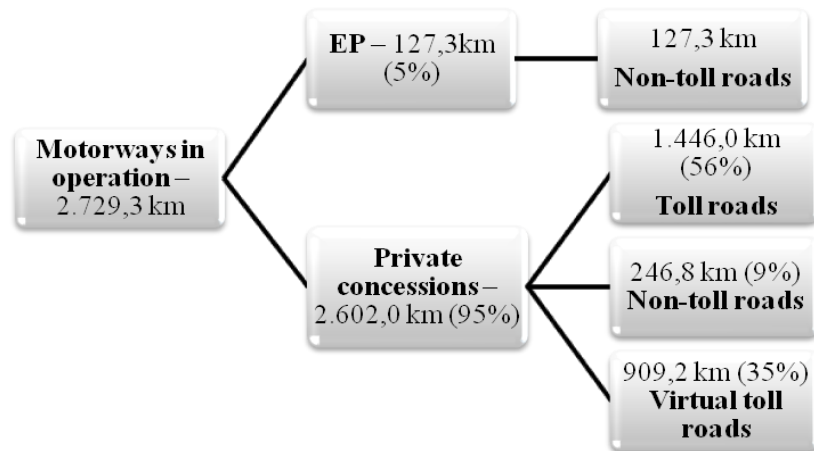


Figure 1 – Portuguese motorway network

One of the most important public stakeholder is the EP, a state-owned enterprise; in fact it is a concessionaire that has a 75 year concession contract signed with the Portuguese government dating back to 2007. This company has the responsibility of executing and managing, on behalf of the state, all the new concession contracts that are signed with the private sector. The EP assignments are throughout all the phases of the concession life cycle, from planning to monitoring, and support various committees at the stages of tendering processes and renegotiation. In the PPPs implementation process and taking into account the current legal framework, the process of evaluation/negotiation of partnerships entails the establishment of a number of committees:(3)

- Monitoring committee for the study phase and monitoring of PPP;
- Committee to evaluate proposals, which assesses the impact of the risks and costs incurred by the public partner, as well as the merits of their proposals;
- Negotiations committee, which shall represent the public partner in the negotiations that occur with the private partner.

All these committees are appointed by joint decision of the *Ministry of Treasure* (MFAP) and the *Ministry of Public Works* (MOPTC). These are the two ministries with direct responsibility towards roads concessions.

Another public entity with a major role in the sector is the *Court of Auditors* (TC). This authority, which is responsible for the supervision and control of public funds, has performed an important role concerning the PPP contracts in Portugal, since all these are subject to the Court of Auditors' financial control and approval. It also publishes many reports and case-studies follow-ups regarding road concessions subjects. In fact, it is the only Portuguese entity that publishes about regulation matters regularly. There are other public entities with responsibilities on the road sector, like the Municipalities, the

Ministry of Environment, General-Directorate of Treasury and Finance (DGTF), General-Inspectorate of Finance (IGF), among others.

In the private side, there are many players in the road concession business in Portugal usually associated with large construction companies. The largest operator in the Portuguese road sector is an ex-state owned enterprise which was privatized but that back in the 1990s was the unique concessionaire. However, in the past few years another concessionaire, a company that is part of one of the largest construction groups in Portugal, has gained ground in the road concession market.

Foreign companies are also present in the shareholder structure of many of these PPP and have important participations in some concession arrangements. Other important agents are the banks that ensure the provision of financial resources, and some even enter directly into the structure of the concessionary companies. Finally, there are external consultants, who support public and private sector entities. This use of outsourcing, especially by the public sector, serves to fill some lack of experience and know-how.

3. Theoretical background

Among many possible meanings, regulation is defined as the establishment and implementation of a set of specific rules, essential for the balanced operation of a particular sector on the basis of public interest (4). There is no regulation method or mechanism that prevents or eliminates all market failures. Regulation has currently assumed an increasing importance, due to the fact that the governments have less intervention in the public utilities and transportation services delivery, delegating some public services to the private sector. The State, as the granting authority, will have to manage the contract. However, to regulate the contract in an exempt way, the State should transfer this activity to an independent regulatory authority. If the State is a partner in a PPP, it cannot arbitrate directly in all the future decisions (renegotiation, contingencies, conflicts...).

There are at least five key objectives of economic regulation (4):

- Promoting efficiency;
- Protect the consumers interests;
- Ensure, whenever possible, the service self-financing;
- Comply with the road sector policies;
- Ensure that the service is robust and sustainable.

The choice by public authorities of a public or private provision should be based on cost-benefit analysis. The involvement of private operators is recommended in situations when they can take advantage of its greater efficiency and economy, even

when the public sector, dependent on credit ratings, has access to cheaper funding than private companies, efficiency gains from private sector participation may outweigh the extra financing costs (5).

The solutions to monopoly can be arrayed along a continuum according to the relative roles that markets and politics play in determining infrastructure prices and service quality, as shown in figure 2 (6).

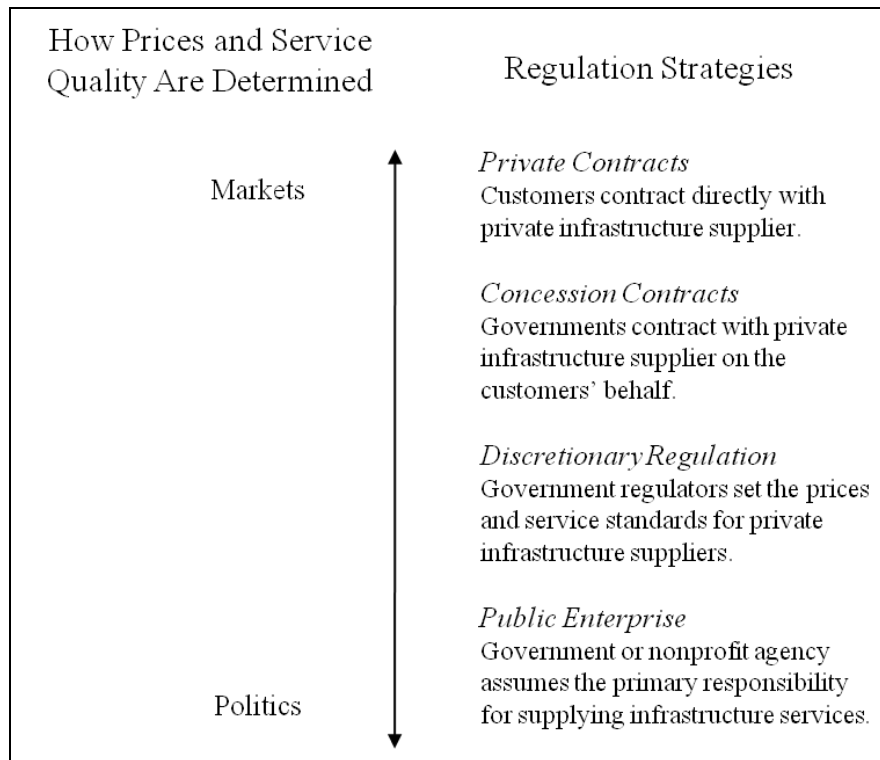


Figure 2 – The range of solutions to monopoly

There are two main approaches to preventing monopolistic infrastructure firms from charging excessively high prices: price cap regulation and rate-of-return regulation. The rate-of-return approach is when the rate of return that a utility can earn on its assets is fixed. The regulated price can be adjusted upward if the utility starts making a lower rate of return, and it will be adjusted downward if the utility makes a higher rate. The price cap regulation approach occurs when the regulated price is adjusted each year by the rate of inflation plus or minus some predetermined amount and without regard to changes in the firm's profits (7). Apart from these two regulation approaches, there is regulation by comparison methods that try to promote the efficiency of the regulated entities through comparison with other similar regulated entities, creating a healthy competitive environment. Finally, it is common to use hybrid methods that combine characteristics of other methods.

A concession is a contractual arrangement whereby a supplier acquires rights to provide a service at a given standard or specification, for a fixed time, usually on behalf of a

government or government agency (8). The road concession regulation has mainly two forms, regulation through the concession contract and regulation through the activity of a regulatory body. Concerning contract regulation, there are no perfect and complete contracts which anticipate all contingencies and upcoming events with impact on the road concession, therefore it must be complemented by extra contractual regulation. On the other hand leave everything under the discretion of a regulator is not effective.

Finally, emphasize two other important subjects on this matter, risks and renegotiations. On the firsts, road concession projects entail many risks that must be allocated and shared adequately. To this end, creating an appropriate risk-sharing structure (risk matrix) is critical. The general principle is that each risk should be carried by the party best able to assume or mitigate it (9), or in other words, minimize the economic cost. Therefore, the whole process of risk assessment and subsequent allocation between public and private, must be made with great care, and should be seen as one of the most important steps, if not the most important, of all the process of PPP arrangement in the public tender stage.

Renegotiation is usually seen as an integral part of the PPP life cycle. In principle, renegotiation can be a positive instrument when it addresses the inherently incomplete nature of concession contracts. Properly used, renegotiation can enhance welfare (10). In this view the renegotiation mechanisms give the required flexibility to PPP, and in a society where the needs and aims are constantly changing, this could be a great benefit. However, when renegotiation takes place, it can be seen as a major failure of the contract, since all the initial rules defined in a competition context (public tender) are perverted. Therefore, all the renegotiation matters must be handled with proper care, because they are susceptible to enable the creation of opportunistic behavior by the parties involved.

4. Concession contracts analysis

This section proceeds to the analysis of the following road concession contracts in Portugal, in particular its regulatory aspects:

- Brisa contract, toll highways. The concessionaire collects and keeps the toll revenues;
- Beira Interior contract, virtual toll highway;
- Norte contract, toll highways. EP collects the toll revenues, and pays the concessionaire by availability scheme;
- Douro Interior contract, non-toll roads.

First, concerning their legal framework, there are two main documents that rule all concession life cycle, the *Public Contract Code* (CCP) and the *PPP Legal System*

(RJPPP). Both the CCP and the RJPPP are important regulatory tools since, among other functions, they regulate the access to the road concession market.

These contracts have many things in common. They all have thirty years of duration, and with the exception of the *Brisa* contract, they all have the same requirements that trigger the mechanisms for restoring the financial balance, including:

- Unilateral modifications imposed by the public partner;
- Toll mechanisms that change from shadow toll to real toll;
- Reasons of *force majeure*;
- Law changes that have direct impact on the revenues or costs;
- New roads that can bring competition.

These requirements only trigger the renegotiation procedures when some economic key criteria experience reduction. The most relevant of these criteria is the internal rate of return (IRR), that cannot suffer a reduction above 0,01 percent, otherwise it will take the concession financial rebalancing. The *Brisa* contract is somewhat heedless on this subject. The concessionaire initiates the contract renegotiation when it feels appropriate to do so. This implies a great deal of attention from the regulator to prevent opportunistic behaviors.

Examining the mechanisms contained in the contracts that regulates the concessions performance, an evolution in their complexity can be observed. In the *Brisa* contract, apart from price cap formula, which is present in the other contracts that include toll and virtual toll roads, and an inarticulate sanction regime, there are no more performance incentives. The *Beira Interior* contract already includes the accidents ratio, awarding or penalizing the concessionaire by the results on this factor, as well as some specific penalties for the infrastructure unavailability. This contract is about to be changed, a real toll method will replace the virtual toll that prevails.

The *Norte* contract, recently changed, has a penalties scheme for lack of performance or availability, discounts or rewards depending on the accidents ratio, and financial incentives in case of extraordinary revenues from the EP. Finally, in the *Douro Interior* contract, these regulatory mechanisms have an increased complexity, probably due to the lack of direct income, since there are no toll revenues in this concession. Here in addition to mechanisms already referred to, there is also a complex classification scheme resulting from negative environmental externalities and accidents ratings.

Also related to this contract, some irregularities in the tendering process were found. Due to these facts, the TC, when the contract was subjected to its appreciation, did not approve it for non-compliance with the legal norms. After some modifications, the TC approved it, but probably because in case of disapproval the state financial burden would suffer a large increase. To terminate this section, the figure 3 summarizes the main conclusion.

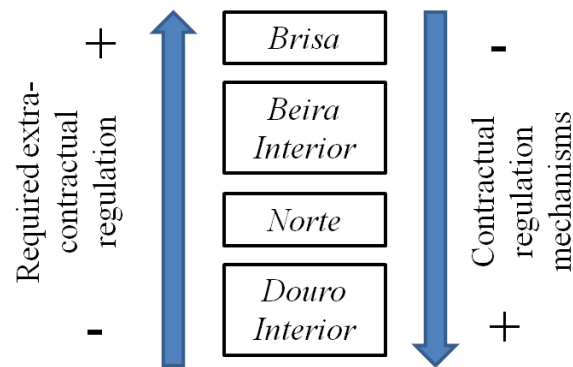


Figure 3 – Relation between contract regulation and the required extra-contractual regulation in the case-study contracts.

5. InIR

One of the most important public entities in the road sector matters is the InIR. In Portugal, as already stated, INIR is the sector specific regulator for the sector. However, it is not an independent regulatory authority. Its main tasks are:

- Supervising and overseeing the management and operation of roads, controlling compliance with laws, regulations and concession contracts;
- Guaranteeing the implementation of the National Road Plan;
- Ensuring the efficiency, equity, quality and safety infrastructure, as well as the rights of users.

In the concession contracts, beyond the regulator role, InIR assumes all the State's responsibilities in the ones signed between the private concessionaire and the State. This ambiguous role may lead to independence loss, always required by a regulator.

Many weaknesses are evident in the pursuit of its mission. Some of these debilities can be justified by its youth, since it was created only in 2007, with the NMGFSR implementation. The many setbacks that this implementation has been suffered, previously dissected, also helps to explain the present lack of relevance that InIR has. Only recently has InIR begun to participate in contract renegotiation processes, and its participation on the concession tenders is practically non-existent.

Other topic of apprehension is the relationship between EP and InIR. Most of the InIR staff has come from EP. Due to this, in the last, there are not the perceptions that InIR is the authority to whom they are accountable, maybe because in the past EP performed the regulator functions. These issues in the relationship between EP and InIR are

transferred to private operators, who did not take into account sufficiently the authority of InIR.

It is important to refer the publication of numerous quality guides and technical notes by InIR, but also the lack of these publications on regulation matters. If this took place, it would certainly contribute to gain the public and the private stakeholder's approval.

However, it is expected that its relevance increases in the future and its road sector regulator role will be fundamental for the success of the Portuguese road concessions programme.

6. Conclusion

The road concessions, in the present PPP format, are relatively recent. The contracts signed between the State or the EP, and the private concessionaires are still distant in time from its terminus, so it may be soon to make a rigorous assessment of the Portuguese road sector concessions programme. In contractual regulation subjects, there is a great dose of heterogeneity, maybe if concession contracts experience some standardization, like the NMGFSR foresees, the role of the regulator can be simplified but always having in mind that each concession project has its own specifications, and those have to be taken into account in the contract design.

The level of regulation increases or decreases according to contract incompleteness. In addition to the costs involved in its design, a strong and complete contract, which covers all the possible events and contingencies, may not have flexibility and this is not recommended in situations where the needs and expectations on a road are constantly changing. On the other hand, incomplete contracts may lead to opportunistic behavior that normally benefits the private partner of the road concession to the detriment of the public one. A balance must be reached between the contract itself, the regulator and the legal framework.

On the InIR topic, one must remember that it is still at an initial stage and it is expected that its regulatory activity increases with time. A road sector regulator is indeed necessary. The question is if with these template and attributions, the InIR is the entity that the road sector really needs.

In Portugal, the success of concessions in the road sector can be much higher if there are improvements on contract design and if the regulator becomes more independent, more pro-active, and endowed with more tools.

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