

CASE STUDY: NOVA ESTRADA ACE BAD REFINANCE PROCESS

MASTER'S DEGREE DISSERTATION

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ABSTRACT

Title:

Case Study: Nova Estrada ACE bad refinance process.

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Purpose:

On the 21st of December of 1998 a concession agreement between the Portuguese State and Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A. was signed. The concession contract aimed not only the acquisition, financing, exploration and maintenance of an existent motorway section (A8 *Sul*) but also the design, construction, financing, operation and maintenance of two new sections and associated road sets (A8 *Norte* and A15).

Nova Estrada ACE was responsible to develop the conception, design and construction of the two new sections. On the 20th of March of 2002 the construction works finished and Nova Estrada ACE, through Auto-Estradas do Atlântico, requested the financial rebalance of EUR 55,985,335 to the Portuguese State. This action triggered a long bad refinance process that only finished with the final decision of an Arbitration Court on the 11th of March 2005.

This master's degree dissertation consists on a case study that analyzes the bad refinance process and presents conclusions of what was done properly and what could have been done differently by the Portuguese State.

Findings:

This paper concludes that in Oeste concession, there were pitfalls in the process of risk allocation and valuation. The concession agreement was not analyzed to the extent necessary to avoid future ambiguities. This resulted in higher costs for the public sector, during the construction phase.

Limitations:

The conclusions of this paper are based on the analysis of the concession agreement, the information provided by Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A. and the Arbitration Court judgment.

Originality/ Value:

This paper contains a further analysis on the financial rebalance processes concerning the construction stage of infrastructure concessions. It also contributes to minimize the lack of existent case studies about PPPs renegotiations.

KEY WORDS

Public private partnership; renegotiation; Nova Estrada ACE; Auto-Estradas do Atlântico; A8; A15; concession agreement; *force majeure;* expropriations.

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PREFACE

This paper was formulated through the Public-Private Partnerships Seminar of Católica Lisbon School of Business & Economics. The paper had the direct orientation of Prof. Ricardo Reis and Mestre Joaquim Miranda Sarmento, which presented several current themes regarding PPP's in Portugal, one of which was chosen to write this paper.

Any mistake or omission in this document is solely responsibility of the author.

The opinions expressed in this document are those of the author and do not represent the views of Nova Estrada ACE, Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A., Católica Lisbon School of Business & Economics, Nova School of Business & Economics or The Lisbon MBA.

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To my future wife and my mother.

1 INTRODUCTION

Over the last few decades, public-private partnerships (henceforth PPPs) have gained importance as vehicles to finance public infrastructures all around the world. In the European Union, for example, according to Kappeler & Nemoz (2010), more than 1300 PPP contracts have been signed from 1990 to 2009, representing a capital value of more than EUR 250,000 million. Portugal was not an exception, according to Direcção Geral do Tesouro e Finanças (2012), between 2008 and 2011, the amount of annual net charges with PPPs has almost quadrupled up to EUR 1,823 million. As a percentage of GDP these charges evolved from approximately 0.3% in 2008 to 1.1% in 2011 and are currently appointed as one of the several contributors for the present financial crisis in the country. The Portuguese case is also an example of the significance of financial rebalances in PPPs; in 2011, for example, there was an increase of 25% (EUR 364,8 million) over the forecasted net charges with PPPs in Portugal, mainly derived from the payment of claims for replacement of financial balance (DGTF, 2012).

According to Guasch (2006), financial rebalances and renegotiations in PPPs are the processes in which a PPP contract is revised and, should the revisions affect the financial balance of the project, a financial rebalance is requested. The Portuguese decree law no.18/2008 (article 282) states that the contractor is entitled to the restitution of the financial balance when, taking into account the allocation of risk between the parties, there was a change in assumptions on which the contractor has determined the value of the benefits to which was obliged, since the public contractor knew or should not ignore these assumptions. According to the same article (282) there are four main ways to reach financial rebalance: extension of the period of performance of the services or the contract, price revision, direct compensation and increase of pecuniary obligations.

Andres & Guash (2008) argued that perhaps the biggest problem with concessions has been the high incidence of contract renegotiation shortly after they are awarded. The authors concluded that, concession design, regulation and political factors are important determinants of renegotiation and, consequently, should be taken into consideration by governments to identify key actions to avoid opportunistic renegotiations.

On the 21st of December of 1998 a concession agreement between the Portuguese State and Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A. (henceforth A.E.A.) was signed. The concession contract aimed not only the acquisition, financing, exploration and maintenance of an existent motorway section (A8 *Sul*) but also the design, construction, financing, operation and maintenance of two new sections and associated road sets (A8 *Norte* and A15). Nova Estrada, A.C.E. -

Agrupamento para a Concepção, Projecto e Construção das Auto-Estradas do oeste (henceforth Nova Estrada ACE) was responsible to develop the conception, design and construction of the two new sections. On the 20th of March of 2002 the construction works finished and Nova Estrada ACE, through A.E.A., requested the financial rebalance from the Portuguese State in the amount of EUR 55,985,335. This action triggered a long bad refinance process that only finished with the final decision of an Arbitration Court on the 11th of March 2005. To substantiate the claim, Nova Estrada ACE argued that, firstly, the Grantor had incurred in repeated delays in providing the Concessionaire with the lands needed for the construction of the new motorway stretches, and, secondly, the bad weather of the 2000-2001 winter, which should be considered *force majeure*, caused successive delays in the works' schedule.

This dissertation consists on a case study that analyzes the bad refinance process and presents conclusions of what was done properly and what could have been done differently by the Portuguese State. Generally, this paper concludes that in Oeste concession, there were pitfalls in the process of risk allocation and valuation. The concession agreement was not analyzed to the extent necessary to avoid future ambiguities. This resulted in higher costs for the public sector, during the construction phase.

This document starts by making a brief revision of the literature regarding PPP renegotiations in section 2. Section 3 presents the case study of Oeste concession. This section describes the initial concession agreement (section 3.2), the tender phase and the winning bid (section 3.3), the concession finance and performance bond (section 3.4) and the financial rebalance process (section 3.5). Last but not least, section 4 analyzes the financial rebalance process and presents conclusions.

2 A BRIEF SURVEY OF LITERATURE

2.1 INTRODUCTION

A research paper by the World Bank (2007) defines a PPP broadly as "an agreement between a government and a private firm under which the private firm delivers an asset, a service, or both, in return for payments contingent to some extent on the long-term quality or other characteristics of outputs delivered". According to the UK Treasury (2000), "public-private partnership is an arrangement that brings public and private sectors together in long-term partnership for mutual benefit".

According to Ahadzi and Bowles (2004), the entire PPP procurement process may be broken into four main stages. The stages are 1) the planning and feasibility stage, 2) the bidding and negotiation

stage, 3) the construction stage and 4) the operation stage and possibly the transfer and/or renegotiation stage.

Robinson, Carrillo, Anumba, & Patel (2010) state that the two first stages cover technical and financial issues such as preparing the business case for the project, invitation and pre-qualification of potential bidders, design solution, evaluation of bids to determine value for money and affordability, selection of the preferred bidder, financial close and developing the full business case for the PPP project. The construction stage focuses on specific issues relating to completing and translating the design into facilities, resources required for the assembly process, scheduling of key construction activities, phasing of projects and decanting. The operation stage focuses on key issues relating to delivering various facilities management services, performance monitoring to ensure services are delivered in accordance with the output specification, payments to the private sector and deductions for service failures. The renegotiation stage happens if the public entity and/or the government requests for a renegotiation.

2.2 PLANNING AND FEASIBILITY STAGE – RISK ALLOCATION – FORCE MAJEURE

According to Robinson, Carrillo, Anumba, & Patel (2010), costing of the output specification and the value of risk transfer is important in determining the bid cost from the private sector perspective and to assess whether it represents value for money from the public sector perspective. Risk is an event leading to a variation from the most likely outcome. All projects are associated with some element of uncertainty and risks. Uncertainty generally reflects an unknown factor that could have a negative or positive effect on a project.

Akintoye et al. (2003) argued that it is a fundamental requirement that appropriate risks are transferred to the private sector. *Force majeure* is one of the various risks associated with the different stages of the PPP procurement process. Gatti (2008) defines the *force majeure* risk as the risk that contractual nonperformance is due to events beyond the control of all parties. These events are either "acts of God" (floods, fires or other natural disasters) or political risks (war, strikes, riots, expropriation, breach of contract, etc.). Regarding risk transfer, Robinson, Carrillo, Anumba, & Patel (2010), state that the public sector should retain political and occupant risks as they have control on these risks but other risks relating to *force majeure* and changes in legislation should or could be shared.

2.3 THE RENEGOTIATION STAGE

According to Guash (2004), the high incidence of renegotiations and the responses to it are one of the main reasons for the negative sentiments regarding concessions among the population of countries in Latin America and the Caribbean. Globally, renegotiations are considered a signal of lack of compliance with agreed-upon terms that, on average, adversely affects the users and departures from expected promises of sector improvements. Guash (2004) states that the model and conceptual framework of public-private partnerships concessions is appropriate, yet the problems have been in faulty design and implementation, and those can and should be improved.

Andres & Guash (2008) recognize the negative impact in the public opinion of the high incidence of bad refinance processes shortly after concession contracts are awarded. Usually, concessions are granted through an auction. The competitive nature of the auction is supposed to dissipate excessive rents and select the most efficient operator. But if concessions are renegotiated shortly after being awarded, as often happens, the initial bidding or auction turns into a bilateral negotiation between the winning operator and the government—undermining the competitive discipline and benefits of the auction.

On the other hand, Guash (2004) states that, in principle; renegotiation can be a positive instrument when it addresses the inherently incomplete nature of concession contracts. Properly used, renegotiation can enhance welfare. Although some renegotiation is desirable, appropriate, and to be expected, the high incidence exceeds expected and reasonable levels and raises concerns about the validity of the concession model. It might even indicate excessively opportunistic behavior by new operators or by governments. Such behavior undermines the efficiency of the process and the overall welfare. For the author, the key issue is how to design better concession contracts and how to induce both parties to comply with the agreed-upon terms of the concession to secure long-term sector efficiency and vigorous network expansion. Renegotiation should occur only when justified by the initial contract's built-in contingencies or by major unexpected events.

2.3.1 PROBLEMS AND RISKS OF RENEGOTIATIONS

According to Andres & Guash (2008), at the renegotiation stage, the operator has significant leverage to secure additional benefits because the government is often unable to reject renegotiations and is usually unwilling to claim failure (and let the operator abandon the concession) for fear of political backlash and additional transaction costs. By embarking on renegotiations, the operator can undermine all the benefits of the bidding - or auction-led competitive process. And if bidders expect

easy renegotiations, the auction might result in the selection of those who are the most skilled at renegotiation rather than the most efficient operators. Renegotiations can have a large impact on who appropriates the large efficiency gains from private participation in infrastructure.

Regarding the Portuguese experience in PPPs, Monteiro (2007) mentions that although in certain circumstances the public partner was able to keep some bargaining power – for example, cases in which the private partners needed to care for a good reputation, or show the ability of the private sector to deliver high quality at low cost through PPP projects – the private partner was generally in a stronger position whenever the government felt the need to renegotiate a contract.

According to Molnar (2003), concentration in the construction industry can be considered a problem in renegotiations. According to the author, it creates increased risk for the public sector because the companies are large and powerful enough to take on the regulators in the case of conflict and force contract renegotiation on more favorable terms.

Andres & Guash (2008) mentioned that, if not controlled, renegotiation can be the norm rather than the exception. Renegotiation can reduce the potential efficiency gains and benefits of PPPs and shift the appropriations to the PPP operator. Efficiency gains and benefits from PPPs can be significantly larger if appropriate contract and regulatory designs are in place and renegotiations are dissuaded and controlled.

2.3.2 DETERMINANTS OF RENEGOTIATION

After analyzing a number of key summary statistics from the Guasch (2004) dataset of more than 1,000 concessions granted in the Latin American and Caribbean region during 1985-2000 period, Andres & Guash (2008) concluded that the following factors play an important role in the probability of renegotiation:

- Concession design;
- Regulatory framework;
- Political factors.

Andres & Guash (2008) state that concession design is an important determinant of renegotiation; for example, awarding contracts based on the lowest tariff rather than the highest transfer fee significantly increases the probability of renegotiation. First, tariffs are a weak anchor for a concession. They are subject to constant revisions, and it is unlikely that they will remain unchanged for the duration of a concession using the adjustments agreed upon. Second, such award criteria

impose little lock-in or sunk commitment on operators. Unlike the case of transfer fees, operators have to pay nothing upfront, so their leverage is much stronger, and they can walk out early with little to lose. Finally, minimum tariffs might be viewed as a proxy for tariff adequacy. Their use as award criteria can lead to the bidding of inadequate tariffs and to prompt requests for renegotiation. Investment obligations also affect renegotiation and increase its probability. These refer to regulating by means as opposed to regulating by objectives. Since the investments need to be evaluated, monitored, and accounted for, there is a permanent conflict in determining what counts as investments, the amounts of investments, prices paid or transfer fees used, and so on. That leads to protracted negotiations and can lead to early renegotiation. In principle, the implications are clear: no investment obligations should be required other than requirements to achieve a number of outcome targets (performance measures). That approach avoids the problem of measuring investment, manipulation of transfer fees, and proper use of investment.

Andres & Guash (2008) also concluded that concession contracts should be designed to avoid ambiguities as much as possible. For example by defining the treatment of assets, evaluation of investments, outcome indicators, procedures and guidelines to adjust and review tariffs, criteria and penalties for early termination of concession, and procedures for resolution of conflicts.

According to Andres & Guash (2008) the existence and type of regulation are highly significant in explaining the incidence of renegotiation. Both are proxies for the quality of enforcement, and better enforcement (through a neutral professional institution that can evaluate an operator's status and claims) should dissuade or reject inappropriate claims for renegotiation. In addition, a stronger legal grounding for regulation (embedded in a law rather than in a decree or contract) lessens the probability of renegotiation and increases the political cost of government-led renegotiations. The type of regulation also affects the probability of renegotiation, as the theory predicts, through risk allocation. Rate-of-return regulation lowers the probability of renegotiation because the costs of potential adverse events are borne by government. In contrast, price-cap regulation, where risks are borne by the operator, is more fragile to shocks, such as when adverse events might trigger a demand to renegotiate by an operator seeking to restore financial equilibrium.

Regarding political factors, Andres & Guash (2008) states that affiliation and proximity to government increase the probability of renegotiation through a higher possibility of capture and higher success in seeking renegotiation. That might induce risky offers and lead to the selection, not of the most efficient operator, but of the one most skilled in renegotiation or with stronger affiliation. Another political factor is the extent of corruption. If operators believe that their

government counterparts are subject to influence, they will be more likely to believe that renegotiations and the capture of additional rents are possible. The timing of elections is also considered an important political factor. New administrations tend to reconsider actions taken by previous administrations, either because they entertain new priorities and need to change contract terms accordingly, or because of politically motivated objectives. A typical example arises when a new administration belongs to a different political party from the previous one and terminates agreements secured by the previous party in an attempt to undermine it politically.

2.3.3 HOW TO AVOID OPPORTUNISTIC RENEGOTIATIONS

According to Guash (2004) the key to avoid opportunistic renegotiations is to bar major unforeseen events, and others that can be spelled in the contract as contingencies, through, first, the design of a proper concession, regulatory framework, and contractual arrangements and, second, how to increase the likelihood that both signatory parties to a concession contract comply with terms of the contract and avoid opportunistic renegotiation.

Andres & Guash (2008) also list the key actions to take to avoid opportunistic renegotiations. Starting by designing better contracts that do not facilitate renegotiation and that penalize noncompliance; also improving regulatory framework; holding the bidders accountable for their initial bids; making the costs of opportunistic renegotiation high through much larger performance bonds; committing to a policy of no renegotiation for at least the first quinquennial tariff review; making compensation to operators quite significant in the event of government-led renegotiation; specifying the triggers for renegotiation and guidelines for the process; and establishing a neutral and professional advisory group to evaluate renegotiation demands.

A list of lessons learned regarding renegotiations is also presented by Akintone & Beck (2009), some of which with direct application to the Portuguese example. The first lesson states that Governments should not have PPP projects that are not allowed to default because from a societal perspective, projects that are too important to fail or too expensive to default are not good candidates to being PPPs. Such projects will create more opportunities of opportunism than others. In their second lesson the authors state that governments should not focus too much on the bidder's financial proposal to decide the winning bid. The greater the incentives and opportunities for opportunism, the lower the credibility of the bidder's financial proposal. Therefore, a more optimistic proposal requires more justification for positive figures. The third lesson mentions that governments should encourage the separation of the developer and contractor in the procurement process by, for

example, giving such separation higher scores in bid evaluation. The separation of the developer and contractor will make the developer emphasize long-term profits and reduce the incentive for opportunism. The fourth lesson brings attention to the need for governments to prepare in advance for project default and take over since it reduces the cost of project retendering and hence renegotiation expectation and opportunism. The fifth lesson states that governments should use professional help like professional consulting firms to provide support in evaluating financial proposals and negotiating contract terms. Professional help will largely reduce the potential for developers to behave opportunistically and the possibility of awarding projects to opportunistic bidders. Last but not least, the authors highlight the fact that governments should know that the transaction costs of PPP projects are much higher than that of government projects. The higher transaction costs for PPP projects may include the costs due to a more complex project procurement process and the higher capital costs compensating for fair market required returns on equity and debt. Lack of government funding should not be the major reason for adopting PPPs. The use of PPPs for a project should be justified by higher creativeness and efficiency due to private participation. For example, in the UK the use of PPPs for a project is required to meet the VFM¹ criteria. Blindly promoting PPPs only because of the lack of government funding will generate more problems and difficulties in the future.

¹ Value for Money.

3 CASE STUDY

3.1 INTRODUCTION

On the 21st of December of 1998 a concession agreement between the Portuguese State and Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A. was signed.

The concession contract aimed not only at the acquisition, financing, exploration and maintenance of the existent 88km of the A8 *Sul* motorway section, but also the design, construction, financing, operation and maintenance of two new sections and associated road sets, one named A8 *Norte* (between Caldas da Rainha and Leiria) and second one named A15 (between Caldas da Rainha and Santarém). Both sections together would represent a total of 82km of new motorway (Exhibit 1).



Exhibit 1 - Oeste concession map

Source: Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A.

The object of the concession was the design, construction, financing, operation and conservation, under a toll system, of the following stretches (Exhibit 2):

- a) A8/IC1/IC9 Caldas da Rainha (Tornada) Marinha Grande Leiria, from the end of the Caldas by-pass to the IC2, which is approximately 46km long;
- b) A15/IP6 EN 115 Rio Maior Santarém, from the IC1/A8 to the IP1/A1, which is approximately 36km long.

The following stretches, already built, also form part of the object of the concession for the purposes of acquisition, financing, operation and maintenance (Exhibit 2):

- a) Subject to the toll system:
 - A8/IC1 Loures Malveira stretch, which is 11.7km long;
 - A8/IC1 Malveira Torres Vedras South stretch, which is 17.4km long;
 - A8/IC1 Torres Vedras North Bombarral stretch, which is 19.7km long.
- b) Not subject to the toll system:
 - A8/IC1 CRIL Loures, which is 5.2km long;
 - A8/IC1 Bombarral Óbidos, which is 12.3km long;
 - A8/IC1 Óbidos Caldas da Rainha (Industrial Zone), which is 8.6km long.
- c) Subject to the toll system, save for local traffic:
 - A8/IC1 Torres Vedras South Torres Vedras North, which is 5.9km long;
 - A8/IC1 Caldas da Rainha (Industrial Zone) Tornada, which is 3.6km long;
 - A15/IP6 Arnóia EN115, which is 4.0km long.

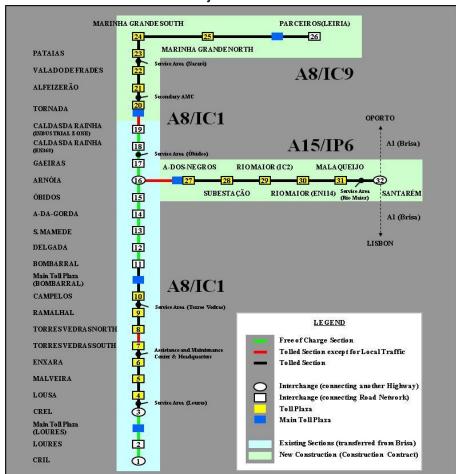


Exhibit 2 - Object of the concession

The main objective of the Portuguese State was to accelerate the development of the Western Zone of the country due to an expansion of the industrial areas and, consequently, an increase in the number of jobs offered in the region. Exhibit 3 presents a synthesis of the concession.

Exhibit 3 – Synthesis of Oeste concession

GRANTOR	Portuguese State.
CONCESSION TYPE	Conception, design, construction, financing, operation and maintenance, under a toll system.
CONCESSION OBJECT	The acquisition, financing, operation and maintenance of the existent 88km of the A8 <i>Sul</i> motorway section and the design, construction, financing, operation and maintenance of two new stretches and associated road sets, one named A8 <i>Norte</i> and second one named A15 (total 82km).
NATURE OF THE CONCESSION	Public works concession granted subject to exclusivity with regard to the motorways, which form part of its object.
CONCESSION DURATION	30 years (until 24h00 of 21st December 2028).
MAIN LEGISLATION	 Declaw 9/1997 of 10-01 - Tender regulation; Declaw 393-A/1998 of 04-12 - Concession bases; RCM 140-A/1998 of 21-12 - Concession agreement.
REGULATORY ENTITY AND TECHNICAL SUPERVISION	IEP - Instituto das Estradas de Portugal.
ECONOMIC AND FINANCIAL SUPERVISION	IGF - Inspecção Geral das Finanças.
MAIN DATES	 Approval of the concession bases: 04/12/1998; Signature of the concession agreement: 21/12/1998; Finishing of construction works: 20/03/2003.
INFLUENCE AREA	Western zone of Portugal.
SIZE	170 Km
INITIAL INVESTMENT	EUR 415 M
EXPROPRIATIONS	 Information prepared by the Concessionaire (responsibility passed to the ACE); Land expropriations carried out and paid by the Grantor.
OPERATION AND MAINTENANCE	Initial period by Briser, and afterwards the Concessionaire assumed O&M. Widening works necessary upon certain thresholds of traffic level: • 2x2 to 2x3 lanes 2 years after AADT ² reaches 35,000 vehicles/day; • 2x3 to 2x4 lanes 2 years after AADT reaches 60,000 vehicles/day.
FORCE MAJEURE INCLUDES	War, hostilities, invasion, riots, rebellion, blockade situations, terrorism, epidemics, atomic radiation, fire, lightening, severe flooding, cyclones and earthquakes.

Source: www.dgtf.pt; www.aeatlantico.pt; concession agreement.

In order to develop the conception, design and construction of the new stretches, A.E.A. signed a construction contract with Nova Estrada ACE.

On the 20th of March of 2002 the construction works finished and Nova Estrada ACE, through A.E.A., requested the financial rebalance of EUR 55,985,335. This action triggered a long process that only finished with the final decision of an Arbitration Court on the 11th of March 2005. To substantiate the claim, Nova Estrada ACE argued that, firstly, the Grantor had incurred in repeated delays in providing

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² Annual average daily traffic.

the Concessionaire with the lands needed for the construction of the new motorway stretches, and, secondly, the bad weather of 2000-2001 winter, which should be considered *force majeure*, caused successive delays in the works schedule.

3.2 HISTORICAL FRAMEWORK OF THE CONCESSION

In late 1996, nine construction companies, Somague, Edifer, MSF, Zagope, Construtora Abrantina, Construtora do Lena, Construtora do Tâmega, Conduril, and Novopca, formalized a partnership whose aim was to respond to the several public tenders for the exploration of new highway concessions that were expected to be launched by the Portuguese State.

The Portuguese State launched an international public tender to award the concession for the conception, design, construction, financing, operation and maintenance, under a toll system, of certain motorway stretches and associated road sets on the Western Zone of Portugal. The tender was regulated by Decree-law 9/97 of the 10th of January and by joint ministerial order of the Ministries for Finance and for the Equipment, Planning and Administration of the Territory of 7th of February 1997.

Banco BPI and ACESA (Autopistas, Concessionária Española AS) joined the first group of companies and, on the 21st of May 1997, submitted a joint proposal that was ranked first in the public tender.

The negotiations between the Portuguese State and the future Concessionaire lasted until 16th of September 1998. On the 22nd of October 1998, by joint ministerial order of the Ministers for Finance and for the Equipment, Planning and Administration of the Territory, the Portuguese State appointment Auto-Estradas do Atlântico partnership as the entity to which the concession was granted.

One month before the signature of the concession agreement Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A. was formed. The shareholders and their respective participations are presented in Exhibit 4.

Exhibit 4 - Shareholder structure of Auto-Estradas do Atlântico S.A. and subordinated debt

COMPANY	EQUITY (%)	SUB. DEBT (%)
Somague - Sociedade de Construções, S.A.	8.99	18.99
Edifer - Construções Pires Coelho & Fernandes, S.A.	8.99	8.99
Moniz da Maia, Serra & Fortunato - Empreiteiros, S.A.	8.99	8.99
Zagope - Empresa Geral de Obras Públicas Terrestres e Marítimas	8.99	8.99
Construtora Abrantina, S.A.	8.99	8.99
Construtora do Lena, S.A Empreiteiros de Obras Públicas	8.76	8.76
Construtora do Tâmega, S.A Empreiteiros de Obras Públicas e Construção Civil	8.76	8.76
Conduril - Construtora Duriense, S.A.	8.76	8.76
Novopca - Construtores Associados, Lda.	8.76	8.76
Banco BPI, S.A.	10.00	10.00
Autopistas - Concesionaria Española, S.A.	10.00	

Source: Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A.

In order to develop the conception, design and construction of the new stretches (extension of the A8 to Leiria and the A15) a special purpose vehicle (SPV) was created. In Portugal, for this type of contracts, the legal framework of these SPVs is denominated Complementary Association of Companies (ACE), and the one created for this project adopted the name Nova Estrada, A.C.E. - Agrupamento para a Concepção, Projecto e Construção das Auto-Estradas do oeste, which included all nine construction companies that were also shareholders of A.E.A.. The shareholder structure of Nova Estrada ACE is presented in Exhibit 5.

Exhibit 5 - Shareholder structure of the Nova Estrada ACE

COMPANY	EQUITY (%)
Somague - Sociedade de Construções, S.A.	15.00
Edifer - Construções Pires Coelho & Fernandes, S.A.	10.76
Moniz da Maia, Serra & Fortunato - Empreiteiros, S.A.	10.76
Zagope - Empresa Geral de Obras Públicas Terrestres e Marítimas	10.76
Construtora Abrantina, S.A.	10.76
Construtora do Lena, S.A Empreiteiros de Obras Públicas	10.49
Construtora do Tâmega, S.A Empreiteiros de Obras Públicas e Construção Civil	10.49
Conduril - Construtora Duriense, S.A.	10.49
Novopca - Construtores Associados, Lda.	10.49

Source: Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A.

On the 19th of December of 1998, a construction contract was signed between Nova Estrada ACE and A.E.A.. Exhibit A. 1, in appendix, presents a summary of the contractual structure of the Project and the positioning of the construction contract between Nova Estrada ACE and A.E.A. within all Project contracts.

On the 21st of December of 1998, A.E.A. and the Portuguese State signed the concession agreement. The main phases of the initial public tender are presented in Exhibit 6.

Exhibit 6 – Main phases of the initial public tender of Oeste concession

PHASE	DOCUMENT	DATE
Tender regulation	Declaw 9/97 of 10 January and joint Ministerial Order of the Ministries for Finance and for the Equipment, Planning and Administration of the Territory of 7 February 1997.	10/01/1997 and 07/02/1997
Last negotiation session (session 12)	-	16/09/1998
Appointment of the Concessionaire	Joint Ministerial Order of the Ministries for Finance and for the Equipment, Planning and Administration of the Territory of 22 October 1998.	22/10/1998
Approval of the concession bases	Declaw 393-A-B/98.	04/12/1998
Signature of the concession agreement	RCM 140-A/98.	21/12/1998

Source: Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A.

According to clause 5 of the concession agreement, all new stretches should have entered into service in the third quarter of 2001. It was also stated in clause 27 of the same agreement that in case of any modification to the works schedule, even if allowed under the provisions of the concession agreement; the construction works of the first stretch should have begun within a maximum period of nine months of the date of the concession agreement (deadline: 21/09/1999); the entry into service of the first stretch to be build should have occurred within a maximum period of three years of the concession agreement date (deadline: 21/12/2001) and; all motorways should be in service within a maximum period of five years of the date of signing of the concession agreement (deadline: 21/12/2003).

The dates of entry into service (contractual and actual), size and investment of each stretch are presented in Exhibit 7.

Exhibit 7 – Dates of entry into service, size and investment of each new stretch

STRETCH	CONTRACT DATE	ACTUAL DATE	SIZE (km)	INVESTMENT
A8 Caldas da Rainha (Tornada) – Marinha Grande	third quarter of 2001	09/10/2001	46	EUR 240 M
A8 Marinha Grande – Leiria	third quarter of 2001	20/03/2002	•	
A15 Caldas da Rainha – Rio Maior	third quarter of 2001	09/09/2001	36	EUR 175 M
A15 Rio Maior – Santarém	third quarter of 2001	09/09/2001		

Source: www.dgtf.pt; www.aeatlantico.pt; concession agreement.

3.3 THE TENDER AND THE WINNING BID

The selection of the winning bidder for the Oeste concession was based on the following criteria, in order of decreasing relative importance:

- 1. Value of the State support required;
- 2. Involvement of private sector and respective degree of commitment (including equity and debt);
- 3. Quality of the bid: design, planning and construction;
- 4. Strength of the financial, corporate and contractual structure;
- 5. Service quality and safety levels;
- 6. Dates for entry into service; and
- 7. Concession term.

The Auto-Estradas do Atlântico winning bid included the following main features:

- No support requested from the State;
- Upfront payment of PTE³ 17,000,000,000 (EUR 84,795,643)⁴ plus PTE 750,000,000 (EUR 3,740,984) to be paid in the end of 1999, for the acquisition of the existing stretches;
- Inclusion of some of the most experienced Portuguese construction companies, of Autopistas, and of BPI bank, in the shareholding structure of A.E.A.;
- Level of equity committed (low leverage) together with sponsors commitments fully backed by bank guarantees;
- Support from a group of banks including both domestic and international commercial banks;
- Support from the European Investment Bank;
- Quality of the design, namely degree of detail;
- No charge of tolls on the Bombarral to Caldas da Rainha section (instead of local traffic exemption as provisioned for in the tender documents); and
- Early entries into service of the new facilities (26 months construction period).

3.4 THE CONCESSION FINANCE AND PERFORMANCE BOND

3.4.1 CONCESSION FINANCE

The financing of the Project was provided by the European Investment Bank (henceforth EIB), together with Banco BPI, S.A., Banco de Negócios Argentaria, S.A., Caixa Geral de Depósitos, S.A. and Crédit Lyonnais, S.A.

The financing of the Project was primarily based on a PTE 42,000,000,000 (EUR 209,495,117) long term loan provided by the EIB and guaranteed by the Banks and on a long term loan up to PTE 42,000,000,000 (EUR 209,495,117) provided by the same Banks. The remaining sources of financing were share capital (PTE 11,000,000,000/ EUR 54,867,769), subordinated debt (PTE 11,000,000,000,000/

³ Portuguese escudos

⁴ Exchange rate: 1 EUR = 200,482 PTE (Bank of Portugal, 1998)

EUR 54,867,769) and cash flow from operations (approximately PTE 8,832,900,000/EUR 44,058,319), (Exhibit A. 2 in Appendix 2).

The finance documents that govern all the financing relations within the Project are presented in Exhibit A. 3 (Appendix 2). The main contract is the facility agreement dated 19th December, 1998 and entered into between A.E.A. and, among others, the Banks. The facility agreement, whereby term loans and banks guarantees were provided to the Concessionaire, defined the conditions agreed by the parties in relation to the credits, namely conditions precedent, representations and warranties, covenants, events of default, minimum insurance requirements and reserved discretions.

The funds were mainly applied in the construction of the new stretches and facilities (PTE 75,328,763,960/ EUR 375,738,291), followed by the acquisition of the existing stretches (PTE 17,750,000,000/ EUR 88,536,627). The remaining funds were allocated to interest during construction (PTE 5,418,500,000/ EUR 27,027,364); other assets and works (PTE 9,598,900,000/ EUR 47,879,111) and funding of reserve accounts (PTE 5,137,000,000/ EUR 25,623,248).

3.4.2 PERFORMANCE BOND

A.E.A. provided a performance bond in favour of the Grantor to guarantee the fulfilment of the obligations assumed under the concession agreement. This performance bond was provided in the form of irrevocable first-demand bank guarantees issued by Banco BPI and Caixa Geral de Depósitos.

The initial value of the guarantee was PTE 500,000,000 (EUR 2,493,989). As long as any stretches were still being built, the guarantee should be increased in January of each year with a sum corresponding to 5% of the amount foreseen on the construction budget for that year.

In the quarter following the date of entry into service of each stretch built, the amount of the guarantee corresponding to that stretch should be reduced to 1% of its value of gross tangible fixed asset, so that, in the year following the entry into service of all the motorways, the value of the guarantee shall correspond to 1% of the value of gross fixed assets of all the stretches built. In no event should the amount of the guarantee be lower than PTE 500,000,000 (EUR 2,493,989).

3.5 THE FINANCIAL REBALANCE PROCESS

On the 20th of March of 2002 the construction works finished and Nova Estrada ACE, through A.E.A., requested the financial rebalance from the Portuguese State in the amount of EUR 55,985,335.

To substantiate the claim, Nova Estrada ACE argued that, firstly, the Grantor had incurred in repeated delays in delivering the expropriated lands needed for the construction of the new motorway stretches and that these delivery failures caused a 4.65 months delay in the global works schedule. Secondly, the bad weather during the 2000-2001 winter, which, Nova Estrada ACE debated that should be considered *force majeure*, caused further successive delays in the works schedule. According to the Concessionaire, between November 2000 and March 2001, not only was the amount of rain exceptional (more than double of what was expected), but also, the continuous characteristics of it. Nova Estrada ACE also mentioned that had closed a contract A.E.A., under which each and every one of the members of ACE had secured the Concessionaire, jointly and severally with each other, punctual and timely compliance with the obligations assumed by ACE in respect of design and construction of the new stretches referred to in the concession contract.

Afterwards, to recover from the above mentioned delays and in order to fulfill the contractual obligations, the ACE needed to implement a strong acceleration in the pace of execution of the works through a substantial increase in material and human resources and adopting an extended hours scheme, which, consequently, substantially increased constructions costs. Moreover, the ACE also claimed financial costs and loss of profits.

The Portuguese State rejected the financial rebalance request. While acknowledging that there were delays in the provision of certain lands expropriated, beyond what was originally planned, it has rebutted that those had been significant delays, at least to a degree likely to prevent or delay the onset of construction of the motorways. As such, the Portuguese State did not regard the construction delays attributable to itself. The Portuguese State also claimed that there was a late delivery of the documents necessary for the promotion of administrative processes leading to the possession of the lands defined on the basis of the pre-study, and that the Concessionaire did not fulfill clause 88.12 of the concession contract which mentions that the Concessionaire should notify the Grantor of the occurrence of any event which, on an individual or cumulative basis, may lead to restoration of the financial balance concession within thirty days of its occurrence.

The abovementioned rejection triggered a long process that only finished with the final decision of an Arbitration Court on the 11th of March 2005, stating that the Portuguese State should compensate A.E.A. with EUR 11,500,000.

3.5.1 <u>SUMMARY OF THE MAIN CLAUSES OF THE CONCESSION AGREEMENT RELATED TO THE</u> FINANCIAL REBALANCE PROCESS

According to the concession agreement, A.E.A. assumed full responsibility for all risks inherent to the concession, save where the concession agreement stipulated otherwise. Both parties agreed that the Base Case, which was part of the concession agreement, represented the financial equation on which the restoration of the financial balance of the concession was based. The Base Case is a frozen financial model that should be modified only where restoration of the financial balance of the concession takes place, and exclusively to reflect the restoration made.

The four cases in which the Concessionaire was entitled to financial rebalance of the concession are listed in clause 88 of the concession agreement. The first mentioned case refers to unilateral modifications imposed by the Grantor to the conditions for developing the activities forming part of the concession, provided that, as a direct result thereof, there would be a significant increase in costs or a significant reduction in income for the Concessionaire; secondly, the occurrence of events of *force majeure*; thirdly, the change of laws of a specific nature which impact significantly and directly on the income or costs concerning the activities forming part of the concession, excluding amendments to general law, such as to tax and environmental law; and last but not least, where entitlement to restoration of the financial balance was expressly contemplated in the concession agreement. According to the same clause, the Concessionaire should notify the Grantor of the occurrence of any event which, on an individual or cumulative basis, may lead to restoration of the financial balance concession within thirty days of its occurrence.

The agreement also stated that the restoration of the financial balance of the concession should only take place to the extent that, as a result of the individual or cumulative impact of the events referred to above:

- Any annual Debt Service Cover Ratio or Loan Life Cover Ratio is reduced by more than 0.01 points;
- The nominal annual Internal Rate of Return for the Company's Shareholders is reduced by more than 0.01 percentage points.

The agreement also foresees a list of means to restore of financial balance of the concession; however, in case the situation that entitles the Concessionaire to financial rebalance occurs during the design and construction stages, the agreement mentions that financial balance of the concession should be made by means of direct compensation by the Grantor.

Concerning expropriations, according to clauses 24 and 25 of the concession agreement, the Concessionaire should supply the Grantor with all the information, documentation and co-operation necessary to perform acts leading to the urgent declaration of public utility within the periods of time set out in the Works Schedule. According to the concession agreement, if the information or documents prove to be incorrect or insufficient, the period of time for carrying expropriations contemplated in the Works Schedule would be suspended until corrections were made. After receiving all the information and documentation, the Grantor was responsible to conduct and implement all the expropriation process relating to assets or rights necessary to set up the concession, including associated costs, and deliver expropriated land parcels to the Concessionaire free of any charges and persons within the time periods contemplated in the above mentioned Works Schedule. Delays not attributable to the Concessionaire and greater than fifteen days in the delivery by the Grantor of expropriated assets and rights would entitle the Concessionaire to restoration of the financial balance of the concession in the terms of clause 88.

Exemption of the responsibility for nonperformance in case of *force majeure* is contemplated in clause 79 of the concession agreement. *Force majeure* is defined as unforeseeable and irresistible events external to the Concessionaire and whose effects occur regardless of the Concessionaire's will or personal circumstances. Events of *force majeure* are defined as, among others, events of war, hostilities or invasion, riots, rebellion or terrorism, epidemics, atomic radiation, fire, lightning, severe flooding, cyclones, earthquakes and other natural cataclysms directly affecting the activities forming part of the concession. Under the concession direct agreement, blockade situations were also considered *force majeure*.

Clause 79.9 clearly states that the Concessionaire would be responsible to notify the Grantor immediately in writing of any event which would be regarded as an event of *force majeure*, as well as to indicate the obligations arising from the concession agreement whose compliance, in its opinion, was prevented by the event, as well as of the measures intended to implement in order to mitigate the impact of the event and its respective costs.

Clause 93 removes authority of previous clauses; this clause states that failure to exercise or late or partial exercise of any rights attributed to any Party under the concession agreement shall not constitute a waiver of these rights, nor prevent their subsequent exercise, nor constitute a moratorium on or novation of their corresponding obligations.

A copy of the main clauses of the concession agreement related with the financial rebalance process analyzed in this master thesis is presented in Appendix 1.

3.5.2 RISK MATRIX

Exhibit 8 summarizes the various risks associated with the project construction and operation and the manner in which these risks were allocated to the appropriate parties.

Exhibit 8 - Risk matrix

DICK	ALLOCATION			
RISK	Grantor	A.E. Atlântico S.A.	ACE	
Archeological	Χ			
Geological			Х	
Expropriations	For expropriation (inc. costs)	Back-to-back to ACE	Documentation for DUP ⁵	
Design	Tacit approval within 60 days	Submission for approval	X	
Construction			Х	
Adverse weather conditions	Depending if considered as <i>Force</i> <i>Majeure</i> or not		х	
Traffic	If upgrades roads not in accordance with NRP2000	Х		
Operation & Maintenance		Х		
Force majeure	Χ			
Blockades	Χ			
Financial		Χ		
Change in law	Specific law	General law/ taxes/ environment		

Source: Auto-Estradas do Atlântico - Concessões Rodoviárias de Portugal, S.A.

3.5.3 THE SEQUENCE OF EVENTS

Exhibit 9 presents the main events associated with the financial rebalance process.

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⁵ Declaração de utilidade pública

Exhibit 9 – Main events associated with the financial rebalance process

EVENT	DATE
Contractual deadline for A.E.A. to submit to the Grantor all the information and documents required for the promotion of the administrative processes leading to the possession of the parcels necessary for the construction of A15 (Rio Maior/ Santarém).	24/02/1999
Contractual deadline for A.E.A. to submit to the Grantor all the information and documents required for the promotion of the administrative processes leading to the possession of the parcels necessary for the construction of A8 (IC1/ IC9).	03/03/1999
Contractual date in which the Grantor should have started the expropriation process.	04/03/1999
Actual submission by A.E.A. of all the information and documents required for the promotion of administrative processes leading to the possession of the parcels necessary for the construction of A8 – 19 days delay.	22/03/1999
Actual submission by A.E.A. of all the information and documents required for the promotion of administrative processes leading to the possession of the parcels necessary for the construction of A15 – 47 days delay.	12/04/1999
Contractual date (184 calendar days after submission) in which the Grantor should have got possession of all the parcels necessary for the construction of A15 .	03/09/1999
 Contractual date for the consignment to A.E.A of the parcels necessary for the construction of A15; Contractual date (191 calendar days after submission) in which the Grantor should have got possession of all the parcels necessary for the construction of A8; Contractual date for the consignment to A.E.A of the parcels necessary for the construction of A8. 	10/09/1999
Revised date for A8 consignment ("several land parcels were not available" ⁶).	29/09/1999
Revised date for A15 consignment ("200 parcels were not available" ⁷).	14/10/1999
Months with unusual high levels of precipitation.	11/2000 to 01/2001
Nova Estrada ACE initiates measures to recover delays (more human and material resources and adopting an extended hours scheme from 52 hours per week to 63).	03/2001
Notification by A.E.A. to the Portuguese State of the occurrence of <i>force majeure</i> and the recovery measures taken.	22/06/2001
Main construction works (except A8/IC9 Marinha Grande – Leiria stretch) finish.	end of 09/2001
All construction works finish and A.E.A. requests the financial rebalance of the concession: EUR 55,985,335.	20/03/2002
Portuguese State rejects the financial rebalance request.	06/12/2002
AEA sends to IEP ⁸ a written request for arbitration.	25/06/2003
Third arbitrator is chosen.	06/08/2003
The 3 arbitrators declare the Arbitration Court is installed.	01/10/2003
Failed Conciliation attempt between AEA and Portuguese State.	29/10/2003
Arbitration Court presents the list of facts.	18/02/2004
First Arbitration Court Session.	18/05/2004
Experts team was formed.	25/05/2004
Conclusion of the experts team report.	09/2004
Arbitration Court session with experts team.	27/10/2004
Last Arbitration Court Session.	12/11/2004
AEA and the Portuguese State submitted written report about the facts.	25/05/2004
Arbitration Court responds to the questions.	17/12/2004
Final decision of the Arbitration Court: Portuguese State should compensate A.E.A. with EUR 11,500,000.	11/03/2005

⁶ (Tribunal Arbitral, 2005) ⁷ (Tribunal Arbitral, 2005)

⁸ Instituto das Estradas de Portugal

After analyzing the above sequence of events it is possible to conclude that the time scheduled for the expropriation process in the concession agreement was not adequate to the complexity of the task. The Concessionaire delivered all the information and documents required for the promotion of the administrative processes leading to the possession of the parcels necessary for the construction with a substantial delay (19 days for A8 and 47 days for A15) and the Portuguese State completely failed to fulfill the revised consignment dates.

It is also possible to conclude that there was a considerable difference between the compensation requested by A.E.A. on behalf of Nova Estrada ACE and the final decision of the Arbitration Court.

3.5.4 THE OUTCOME OF THE FINANCIAL REBALANCE PROCESS

The Arbitration Court considered proved that the Grantor delivered critical land parcels beyond the 6 months plus 15 days provided in the concession agreement and that these delays impacted critical activities in the construction schedule, specially earthworks activities; nevertheless, the mentioned impacts were no more than 45 days and not 4.65 months as claimed by the ACE. The Arbitration Court noted the large number of land parcels to expropriate necessary for the construction of the new sections of the A8 and the entire A15 and the limited contractual period in which such expropriations should have been undertaken, in addition, it also noted that A.E.A. has decided, during the execution of works, to widen the A8 stretches under construction to 6 lanes, which yielded further expropriations.

Specifically with regard to the weather conditions recorded in the winter of 2000-2001, it was proved that the referred winter was particularly adverse to the development of road construction activity in terms of rainfall. Precipitation levels have made working conditions very difficult, or even impossible in some areas of the works of A8 and A15, making it impractical to run landfills in clay soils due to the high moisture content of the soil. It was also proved that the soils in the areas of construction were mainly clay soils. The Arbitration Court considered that delay in the earthworks caused by the above mentioned *force majeure* was more than 1 month but not more than 30 working days.

According to the Arbitration Court, the facts indisputably showed that Nova Estrada ACE, incurred in additional costs to recover the delays and allow the completion and subsequent commissioning of the motorway stretches in the contractually stipulated dates.

The Arbitration Court also considered proved that A.E.A. did not fulfill the duty of notification stated in clauses 88.12 (regarding expropriations delays) and 79.9 (regarding the *force majeure* event) of the

concession agreement, though, both absence and delay in notification, respectively, did not deserve censure by the Court. Notification of the occurrence of delays in expropriations was considered by the Court a simple fulfillment of a formality. Concerning the occurrence of the event of *force majeure*, the Court considered that the period that ended anomalous rainfall was the subject of disagreement, and, according to clause 93 of the concession agreement, the delay in communication did not extinguish the right of the Concessionaire to ask, albeit belatedly, the replacement of financial balance.

The Court found that the damages associated with alleged delays in the availability of the expropriated lands and the occurrence of an event of *force majeure* caused a change in any of the criteria listed in clause 88.8 of the concession agreement in excess of 0.01%, as a result, Nova Estrada ACE, through A.E.A., was entitled to receive a compensation of EUR 11,500,000 for the restitution of the financial balance. Extra costs due to delays derived from expropriation, including the extra financial costs and profits losses, represented EUR 2,000,000 of the compensation, and losses due to *force majeure* amounted to EUR 9,500,000.

Since the situations that entitled the Concessionaire to financial rebalance occurred during the design and construction stages and in accordance to clause 88.10 of the concession agreement, the financial balance of the concession was made by means of direct compensation by the Grantor.

4 ANALYSIS OF THE FINANCIAL REBALANCE PROCESS AND CONCLUSIONS

Exhibit 10 summarizes the analysis of Oeste concession in terms of the examples of determinants of renegotiation presented in section 2.3.2.

Exhibit 10 – Determinants of renegotiation vs. Oeste concession

Determinant	Examples	Higher incidence of renegotiation	Lower incidence of renegotiation	Oeste concession
	Ambiguity	Ambiguous contract	Clearly defined contract	Ambiguous contract
Concession	Investment obligations	Investment requirements	Performance indicators	Performance indicators
design	Contract award criteria	Based on the lowest tariff	Based on the highest transfer fee	Based on the highest transfer fee

Pogulaton	Existence of regulatory body	Regulatory body not in existence	Regulatory body in existence	Regulatory entity and technical supervision: IEP ⁹ Economic and financial supervision: IGF ¹⁰
Regulatory framework	Type of regulation	Price cap	Internal Rate of Return	Internal Rate of Return
	Impact of legal framework	Regulatory framework embedded in a decree or contract	Regulatory framework embedded in law	Regulatory framework embedded in a decree
	Corruption	High levels of corruption	Low levels of corruption	Portugal scored 6.3 in 2002 corruption perception index ¹¹ and ranked 25
Political factors	Timing of elections	New administrations	Same administrations	New administration: - Portuguese legislative elections: 17/03/2002 - Request for financial rebalance: 20/03/2002

From the analysis the financial rebalance process, it is possible to conclude that in Oeste concession not all unforeseen events, and others that can be spelled in the contract as contingencies, were bared through the design of a proper concession agreement.

From the analysis of the Arbitration Court judgment and, specially, of the reaction of the Lawyer¹² that defended the Portuguese State during the Arbitration Court process, it is possible to conclude that, together, clauses 79.9, 88.12 and 93 are examples of ambiguity in the concession agreement. On the one hand, clauses 79.9 and 88.12 clearly oblige the Concessionaire to inform the Grantor in cases of *force majeure* (clause 79.9) or, more broadly, in case of events which may lead to restoration of the financial balance (clause 88.12), on the other hand, clause 93 mitigates those obligations.

⁹ Instituto das Estradas de Portugal

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¹⁰ Inspeção Geral das Finanças

¹¹ The Corruption Perceptions Index launched by Transparency International ranks countries and territories based on how corrupt their public sector is perceived to be. A country or territory's score indicates the perceived level of public sector corruption on a scale of 0 - 10, where 0 means that a country is perceived as highly corrupt and 10 means it is perceived as very clean. A country's rank indicates its position relative to the other countries and territories included in the index. 2002 index included 102 countries and territories.

¹² Mr. Pedro Leite Alves

The dates of entry into service of the new motorway stretches were one the seven criteria to select the winning bidder during the tender phase. Among other features, A.E.A. proposed early entries into service with a twenty six months construction period, nonetheless, the need to accelerate construction works in order to accomplish those same proposed deadlines was, four years later, the main claim presented in the request for the financial rebalance. The Portuguese State goal of accelerating the implementation program of the National Road Plan in order to conclude, by year 2000, the construction of the key network, also mentioned in the tender regulation (Dec.-law 9/1997 of 10-01), might have been one of the factors that impelled a poor evaluation of the time allocated to expropriations in the works schedule developed by A.E.A., attached to the concession agreement and accepted by the Grantor when the concession agreement was signed. This conclusion is sustained by the note in the Arbitration Court judgment regarding the large number of land parcels to expropriate necessary for the construction of the new sections of the A8 and the entire A15 and the limited contractual period in which such expropriations should have been undertaken.

The Portuguese State goal of accelerating the implementation program of the National Road Plan recalls the first lesson presented by Akintone & Beck (2009) and previously referred in section 2.3.3 which states that "Governments should not have PPP projects that are not allowed to default".

From the analysis of the financial rebalance process is not possible to conclude that a different regulatory framework (embedded in a law rather than in a decree) would have influenced its outcome.

A.E.A. successful claim regarding the weather conditions recorded in the winter of 2000-2001 allows the conclusion that construction risks were not properly evaluated by the Portuguese Sate and not completely transferred to the Concessionaire. Geotechnical prospecting enables the knowledge of the type of soils in motorway construction areas; as a result, if the soils in the areas of construction were mainly clay soils¹³ where it is impractical to run landfills when it rains significantly, these facts should have been taken into consideration in the preparation of the concession agreement. Moreover, according to the literature review presented in section 2.2, the risks relating to *force majeure* and changes in legislation should or could be shared, as opposed to what was established in Oeste concession agreement.

¹³ According to the Arbitration Court judgment.

Generally, it is possible to conclude that, in Oeste concession, there were pitfalls in the process of risk allocation and valuation. The concession agreement was not analyzed to the extent necessary to avoid future ambiguities and this resulted in higher costs for the public sector, during the construction phase.

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6 APPENDICES

6.1 APPENDIX 1 - MAIN CLAUSES OF THE CONCESSION AGREEMENT RELATED WITH THE FINANCIAL REBALANCE PROCESS¹⁴

6.1.1 CLAUSE 18 – CONCESSIONAIRE'S INFORMATIONAL OBLIGATIONS

"18.1 Throughout the duration of the concession, and without prejudice to other informational obligations set out in the concession agreement, the Concessionaire undertakes before the Grantor:

- a) To inform the Grantor immediately of any events which may prejudice or prevent full and punctual compliance with any obligations arising from the concession agreement, and which may constitute a ground for sequestration of the concession or termination of the concession agreement in the terms contemplated in Chapter XVI;
- d) To inform the Grantor immediately of any and all circumstances which, during both the construction and operation stages, correspond to events which modify the normal course of the works or operations, as well as of structural or other anomalies in the conservation of the Undertaking under concession;
- e) To supply the Grantor, as soon as possible, with a detailed, written and grounded report on the circumstances contained in the preceding paragraph, possibly including the contribution of entities external to the Concessionaire and of recognized competence, and indicating the corresponding measures taken or to be implemented in order to overcome these circumstances."

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¹⁴ (Agreement for the concession of motorway stretches and associated road sets in Portugal's western zone, 1998)

6.1.2 CLAUSE 24 – DECLARATION OF PUBLIC UTILITY OF AN URGENT NATURE

"24.1 All expropriations caused directly or indirectly by the concession shall be of an urgent nature, the Grantor being responsible for performing all acts identifying the assets to be expropriated, in the terms of the Expropriations Code.

24.2 Within the periods of time set out in the Works Schedule the Concessionaire shall supply the Grantor with all the information and documents necessary to perform acts leading to the urgent declaration of public utility, in accordance with applicable legislation, excluding the document evidencing the guarantee of compensation values to be paid contemplated in the Expropriations Code.

24.3 If the information or documents referred to in the preceding number prove to be incorrect or insufficient, the period of time for carrying expropriations contemplated in the Works Schedule shall be suspend, with regard to the land parcels concerned by the lack or insufficiency information, until correction of the deficiencies found is made.

24.4 Where it becomes necessary to carry out expropriations in order to maintain the rights of third parties in the establishment or re-establishment of networks, roads of any type or affected services, these shall be of a public and urgent nature, all legal provisions governing the concession thereto, and the corresponding assets not necessarily having to form part of the Grantor's estate"

6.1.3 CLAUSE 25 – CONDUCT, CONTROL AND COSTS OF EXPROPRIATION PROCESSES

"25.1 The conduct and implementation of expropriation processes relating to assets or rights necessary to set up the concession shall he entrusted to the entity appointed by the MEPAT to act as the entity responsible for expropriations on behalf of the State, which shall also bear all costs inherent in the conduct of expropriation processes, as well as payment of indemnities or other compensation arising from expropriations or imposition of easements or other encumbrances or charges arising therefrom.

25.2 Without prejudice to the provisions of the preceding number, at all times and in particular within the scope of studies and designs to be submitted to the Grantor in the terms of Chapter VII, the Concessionaire shall supply the entity responsible for expropriations with all the information and co-operation necessary to facilitate and speed up expropriation processes.

25.3 Land parcels expropriated shall be delivered to the Concessionaire by the Grantor free of any charges and persons within the time periods contemplated in the Works Schedule.

25.4 Any delay which is not attributable to the Concessionaire and is greater than 15 (fifteen) days in the delivery by the Grantor of expropriated assets and rights referred to in this clause shall entitle the Concessionaire to restoration of the financial balance of the concession in the terms of clause 88."

6.1.4 CLAUSE 27 – PROGRAMME FOR BUILDING THE MOTORWAYS

"27.1 The deadlines for entry into service of each stretch referred to in clause 5.1 are the following:

stretch	Quarter	
A8 Caldas da Rainha – Marinha Grande	Third quarter of 2001	
A8 Marinha Grande – Leiria	Third quarter of 2001	
A15 Caldas da Rainha – Rio Maior	Third quarter of 2001	
A15 Rio Maior – Santarém	Third quarter of 2001	

27.3 In any modification to the Works Schedule, even if allowed under the provisions of the concession agreement, the Concessionaire shall respect the following deadlines:

- a) The construction works of the first stretch shall begin within a maximum period of 9 (nine) months of the date of signing of the concession agreement;
- b) The entry into service of the first stretch to be built shall occur within a maximum period of 3 (three) years of the date referred to in the preceding paragraph;
- c) All the motorways shall be in service within a maximum period of 5 (five) years of the date of signing of the concession agreement.

27.4 The Concessionaire may not be held liable for delays caused by unilateral modifications imposed by the Grantor or by any other delays attributable to the Grantor."

6.1.5 CLAUSE 29 – STUDIES AND DESIGNS SCHEDULE

"29.1 Within 20 (twenty) business days of the signing of the concession agreement, the Concessionaire shall submit to the JAE for approval a document indicating the dates on which it undertakes to submit all studies and designs for which it is responsible.

29.2 The document referred to in the preceding number, as well as the studies and designs to which it relates, shall be prepared and submitted in such a way as to allow the Concessionaire to comply with its obligation to meet the dates set out in the terms of clause 27 to begin construction and open the respective stretches to traffic.

29.3 The document referred to in this clause shall be deemed to have been tacitly approved within 20 (twenty) business days of its delivery, this period being suspended as a result of presentation by the JAE of requests for clarification in accordance with criteria of reasonableness."

6.1.6 CLAUSE 32 – APPROVAL OF STUDIES AND DESIGNS

"32.1 Studies and designs submitted to the JAE in the terms of the preceding clauses are deemed to have been tacitly approved by the MEPAT within 60 (sixty) days of their respective submission, without prejudice provisions of the following numbers.

32.2 A request by the JAE for corrections or clarifications essential approval of the studies or designs submitted shall imply the beginning of a new time limit for the purposes of approval, provided these corrections clarifications have been requested within 20 (twenty) days of submission these studies and designs, and a mere suspension of this period if the aforementioned request takes place afterwards."

6.1.7 CLAUSE 34 – WORKS SCHEDULE

"34.1 Any relevant modifications that the Concessionaire wishes to make Works Schedule contained in Annex 8 shall be notified to the JAE and duly grounded. The date for entry into service of the first stretch to be built and/or the date for entry into service of all the motorways set in clause 27 may not be postponed.

34.2 In the event of delay in complying with the Works Schedule which may put at risk the dates referred to in the preceding number, the JAE shall notify the Concessionaire to submit, within a reasonable time period set but which not be greater than 15 (fifteen) business days, a plan for recovering the delay and indicating the new means necessary to this end. The JAE shall issue its opinion on the plan within 10 (ten) business days of its submission.

34.5 Where any delay in complying with the Works Schedule is attributable to the Grantor, the Concessionaire shall be entitled to restoration of the financial balance of the concession in the terms of clause 88."

6.1.8 CLAUSE 74 – CONTROL OF THE CONSTRUCTION OF THE MOTORWAYS

"74.1 The Concessionaire undertakes to supply the JAE each semester with information on its general works schedule, prepared from documents containing the general schedule included in the Works Schedule referred in clause 34.

74.2 The Concessionaire undertakes to supply the JAE each quarter with partial works schedules, prepared from documents also containing partial schedules included in the Works Schedule.

74.3 Possible departures from these schedules shall be justified in the documents referred to in the preceding numbers and, in the event of delays; the corresponding recovery measures foreseen shall be indicated.

74.4 In addition to the documents referred to, the Concessionaire further undertakes to provide all additional clarifications and information reasonably requested by the JAE."

6.1.9 CLAUSE 79 – FORCE MAJEURE

"79.1 With the consequences set out in the following number and without prejudice to the provisions of clause 79.3, *force majeure* shall solely mean unforeseeable and irresistible events external to the Concessionaire and whose effects occur regardless of the Concessionaire's will or personal circumstances.

79.2 Events of *force majeure* are, among others, events of war, hostilities or invasion, riots, rebellion or terrorism, epidemics, atomic radiation, fire, lightning, severe flooding, cyclones, earthquakes and other natural cataclysms directly affecting the activities forming part of the concession.

79.9 The Concessionaire undertakes to notify the Grantor immediately in writing of any event which may be regarded as an event of *force majeure* under the provisions of this clause, as well as to indicate the obligations arising from the concession agreement whose compliance, in its opinion, is prevented by this event, as well as of the measures it intends to implement in order to mitigate the impact of this event and its respective costs."

6.1.10 CLAUSE 86 - RISK ASSUMPTION

"The Concessionaire expressly assumes full responsibility for all risks inherent concession, save where the concession agreement stipulates otherwise."

6.1.11 CLAUSE 87 – THE BASE CASE

"87.1 The Parties agree that the Base Case contained in Annex 11 represents the financial equation on whose basis restoration of the financial balance of the concession shall be made in the terms set in clause 88.

87.2 The Base Case shall be modified only where restoration of the financial balance of the concession takes place, and exclusively to reflect the restoration made."

6.1.12 CLAUSE 88 – FINANCIAL BALANCE

"88.1 Taking into account the allocation of risks set out in clause 86, the Concessionaire shall be entitled to financial rebalance of the concession, in the terms set out in this clause, in the following cases:

- a) Unilateral modification imposed by the Grantor to the conditions for developing the
 activities forming part of the concession, provided that, as a direct result thereof,
 there shall be a significant increase costs or a significant reduction in income for the
 Concessionaire;
- b) Occurrence of events of *force majeure* in the term of clause 79 save if, as a result thereof, the concession agreement is terminated terms of clause 79.7;
- c) Legislative modifications of a specific character which impact significantly and directly on the income or costs concerning activities forming part of the concession;
- d) Cases where entitlement to restoration of the financial balance is expressly contemplated in the concession agreement.
- 88.2 Amendments to the general law, such as to the tax and environmental law are expressly excluded front the provisions of paragraph (c) of the preceding number.
- 88.3 The Parties agree that, whenever the Concessionaire is entitled to restoration of the financial balance of the concession, this restoration shall, without prejudice to the provisions of the following number, be made in accordance with what shall be decided in good faith by the Granter and the Concessionaire in negotiations that shall begin as soon as requested by the Concessionaire.
- 88.4 30 (thirty) days after the request for the beginning of negotiations, if the Parties have not reached an agreement concerning the terms applying to the restoration of the financial balance, restoration shall be made by reference to the Base Case as amended pursuant to clause 87.2, and shall consist of the restoration of two of the three Key Criteria defined in the following number, selected by the Concessionaire.

88.5 The Key Criteria are defined as being:

- a) The Annual Senior Debt Service Cover Ratio (ASDSCR);
- b) The Loan Life Cover Ratio (LLCR);
- c) The Internal Rate of Return (IRR) in nominal terms, measured from the shareholders' perspective, for all the period of the concession, which values may not be modified, regardless of any modification to the Base Case.

88.6 The minimum value for the Key Criteria defined in the preceding number are those contained in Annex 21.

88.7 As soon as the Key Criteria Annual Senior Debt Cover Ratio and Loan Life Cover Ratio reach 2.0 and 2.5, respectively, restoration of the financial balance shall be constituted by restoration of these values, provided the Key Criterion Internal Rate of Return for the shareholders is restored in nominal annual terms and provided debt service and repayment of subordinated debt, as well as the annual distribution of dividends, in the terms foreseen in the Base Case are simultaneously ensured.

88.8 Restoration of the financial balance of the concession in the terms of this clause shall only take place to the extent that, as a result of the individual or cumulative impact of the events referred to in clause 88.1:

- a) Any Annual Debt Service Cover Ratio or the Loan Life Cover Ratio is reduced by more than 0.01 points; or
- b) The nominal annual Internal Rate of Return for the Concessionaire's shareholders is reduced by more than 0.01 percentage points.

88.9 Whenever financial rebalance of the concession is due, this rebalance may take place, by agreement between the Parties, by one of the following means:

- a) An extraordinary increase in toll rates;
- b) Direct compensation attributed by the Grantor;
- c) Extension of the period of the concession;
- d) A combination of the preceding means or any other way arced by the Parties.

88.10 If during the design and construction stages any event referred to in clause 88 .1 occurs, restoration of the financial balance of the concession shall be made by means of direct compensation by the Grantor.

88.11 The Parties agree that restoration of the financial balance of the concession made in the terms of this clause shall be full and final for all the period of the concession, with regard to the event which led to it.

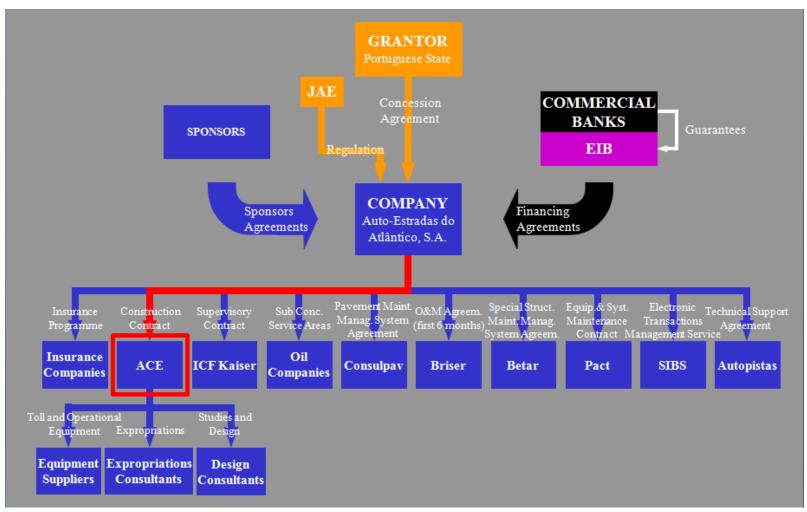
88.12 For the purposes contemplated in this clause, the Concessionaire shall notify the Grantor of the occurrence of any event which, on an individual or cumulative basis, may lead to restoration of the financial balance concession within 30 (thirty) days of its occurrence."

6.1.13 CLAUSE 93 – EXERCISE OF RIGHTS

"Without prejudice to the provisions of Chapter XXI, failure to exercise or late or partial exercise of any rights attributed to any Party under the concession agreement shall not constitute a waiver of these rights, nor prevent their subsequent exercise, nor constitute a moratorium on or novation of their corresponding obligations."

6.2 APPENDIX 2 - EXHIBITS

Exhibit A. 1 – Positioning of the construction contract between Nova Estrada ACE and Auto-Estradas do Atlântico, S.A. within all Project contracts



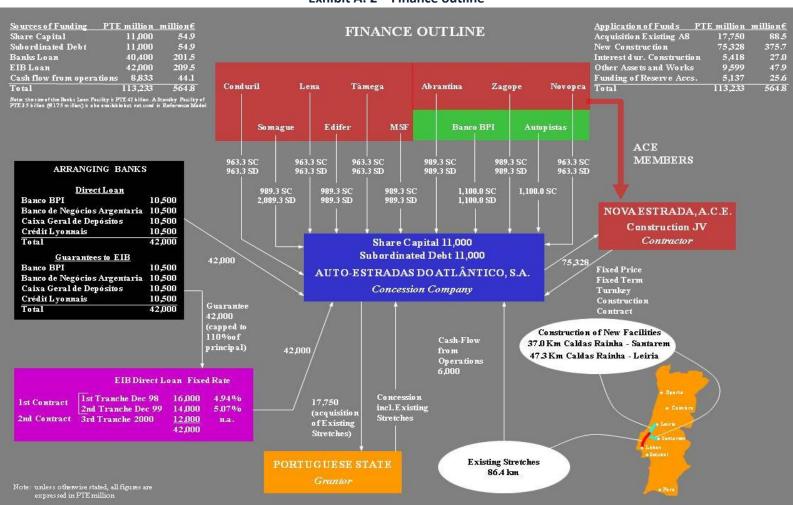


Exhibit A. 2 – Finance outline

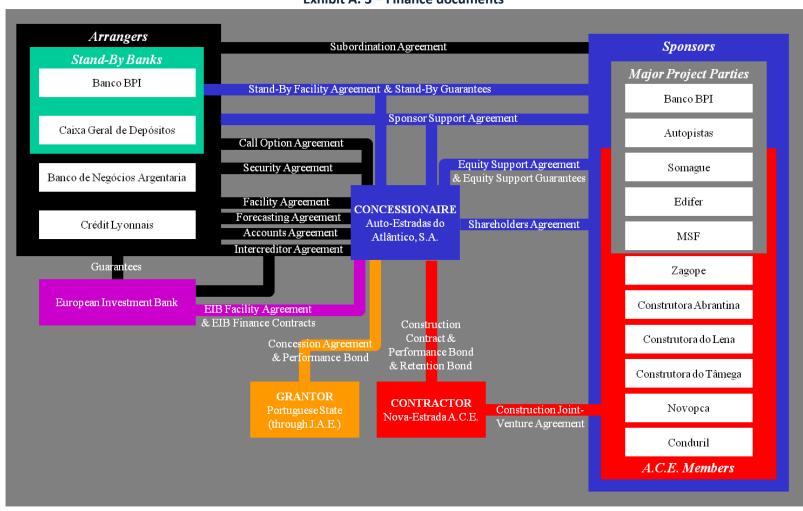


Exhibit A. 3 – Finance documents