





International Meeting Infrastructure and PPPs

BUSINESS OPPORTUNITIES IN INFRASTRUCTURE AND PPPs: MEETING WITH THE WORLD REFERENCES ON THE THEME

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The Landscape on the Brazilian PPP Market

ELABORAÇÃO DO CONTEÚDO











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DATASHEET

REALIZAÇÃO



PARCEIROS





APOIO



ELABORAÇÃO DO CONTEÚDO



Bruno Coscarelli (Sócio - Radar PPP)

Bruno Pereira (Sócio - Radar PPP)

Guilherme Naves (Sócio - Radar PPP)

Rodrigo Reis (Sócio - Radar PPP)

Radar PPP believes that the Brazilian market of private investment in infrastructure can create benefits to companies, governments and service users.

The key is access to qualified information. The right information at the right time allows the players to **make better decisions**, creating value for all stakeholders.

Radar PPP wants to be a part of the success stories of our clients offering **meaningful information and adequate intelligence** related to PPP projects in the country as well as analysis of the main issues surrounding infrastructure in Brazil.

Our business is to develop the capacity of our clients to **understand the infrastructure** market and to make **informed decisions**.

We hold the largest database of the country related to the Brazilian PPP experience and we also have a singular team of experts in the subject to analyze and interpret all the information we gather









1. INTRODUCTION

It was possible to see in the last few years a significant rise in the number of Public-Private Partnership (PPP) projects in Brazil. Several projects were the objects for feasibility studies and since 2012, more than 40 PPP deals were closed in states and cities, totaling 74 contracts already signed¹.

Today, 10 years after the PPP National Law (Law # 11.079/2004) came into force, this hiring model is not just a mere option among many others for Brazilian administrations at all levels to convert budgetary resources into value for society. Thus, PPP is consolidated as a long term contract option between the public sector and private initiative.

This does not mean that everything is solved and that those who are concerned with Brazil's social and economic development can remove this topic from their list of concerns. The consolidation of PPP as a public hiring option demands even more attention in this point in time, for several reasons.

Firstly, the country is facing fiscal challenges in the years ahead and we may see a rise on the use of PPP in this context. This poses the condition that we can fully understand the Brazilian experience up to now, identify errors and best practices so that we can experience even better PPPs in the short term.

Additionally, the Construction industry needs to renew and assess business models with the public administration that go beyond the sole consideration of the construction service. It is required that the industry knows PPP deeper, develop innovative business models, and focus on enterprise organization in order to cooperate with the public administration via long term contract models, in which engineering, construction and maintenance risks can be allocated efficiently in the marketplace.

It is this moment that inspired CBIC to hire Radar PPP to generate this report, which presents a snapshot on the use of PPP in Brazil and the perspectives for the coming years.

The job could be easily developed in hundreds of pages and consume months worth of efforts. However, this first step is less pretentious and more handson. We have decided to gather information and basic knowledge that are at the same time interesting for those dealing with PPP for the first time and for those with some familiarity with the topic.

As you will see, this document presents the Institute essential concepts and at the same time, introduces empirical analyses on the Brazilian experience with PPP never seen before, extracted from analyses carried out by Radar de Projetos², a exclusive and wholly owned database developed by Radar PPP.

The Landscape on the Brazilian PPP Market

² All information from Radar PPP©'s Radar de Projetos that support this document were extracted on April 06, 2015. Please visit https://www.radarppp.com/portfolio/radar-de-projetos/









CBIC will keep fostering PPPs and contributing with the evolution of our members and joining the public debate on this topic. The reason is simple: there is no developed nation if the public administration does not focus on the quality of public spending, and there is no developed nation without a strong, technologically developed construction industry, specialized in both public and private asset lifecycle.

We consider that the PPP is the optimal contract model that will allow us to improve the quality of public spending with the support of an efficient industry in managing risks associated to the lifecycle of assets.

We encourage those who are interested in this topic to contact us. The challenges that we will face in the next years requires efforts from many parties.

Enjoy your reading!

São Paulo, April 22, 2015

JOSÉ CARLOS MARTINS

PRESIDENT
BRAZILIAN CHAMBER FOR THE CONSTRUCTION
INDUSTRY

BRUNO RAMOS PEREIRA

PARTNER RADAR PPP

CARLOS EDUARDO LIMA JORGE

PRESIDENT OF THE PUBLIC WORK COMISSION BRAZILIAN CHAMBER FOR THE CONSTRUCTION INDUSTRY

GUILHERME DE ÁVILA NAVES

PARTNER RADAR PPP



2. MAIN CONCEPTS ON PPP IN BRAZIL

2.1 Introduction

Typically the involvement of the private sector in public services gains traction in countries with a low capacity of public spending, due to the loss of investment capacity caused mostly by low economic growth and a decline on tax collection. In these times, options for financing projects in the public interest, until then funded solely with budgetary resources, make headway.

Another factor is related to the common need among countries to build and update their infrastructure to support their diverse industries and public policies. Such need many times faces the obstacle of insufficient public resources.

That was the context in which modernization of public management gained space in Brazil, and private management and financing for public infrastructure became an item on the public sector investment policies agenda.

Contracting out public services to the private sector gained traction in Brazil after the National Privatization Program (Programa Nacional de Desestatização, PND), launched in 1990 that aimed to reorganize the State strategic position in the economy, transferring to the private initiative activities and risks until then explored and managed by the State itself. The privatization of companies delivering public services, according to the PND, assumed that the government would contract out the service object of exploration, aiming to increase efficiency and the more qualified allocation of public resources.

In this context, in the mid-90s, the Law # 8.987/05 was passed. This is the legal framework for "user-funded projects", comprising public service (preceding public works or not).

Such modality is applicable to projects that are feasible without requiring public payments. Thus, all the revenue to reward the investor is obtained by charging fares from users and eventually by ancillary revenue streams from exploring the asset commercially.

User-funded PPPs were largely used in several industries, such as highways, sanitation, railways, ports, power, and most recently, airports.

However, not all projects in the public interest are compatible with the fee paid by user model. Up to the end of 2004, the Brazilian legislation lacked a piece that would accommodate projects that would require government payments to become economically feasible, such as a highway with a less intense flow of vehicles but requiring a great deal of investment.

In this same setting, projects in which charging fares from users would not be allowed by law also required legislation that would allow for long term contracts with the private partner, in which payments would come directly from a public budget via regular counter payments, like hospitals, public buildings or sports venues management.









In this context, it was enacted Law 11.079/04 that introduced the two types of Public-Private Partnerships as we know today: the administrative PPPs and the sponsored PPPs. In addition to authorize counter payments from the public sector to the private partner, the Law also introduced a series of innovations regarding user-funded projects that will be presented below, upon a brief description of how the PPP model currently works in Brazil.

2.2 Public-Private Partnerships in Brazil

Public-Private Partnerships (PPP) are long term contracts lasting between 5 and 35 years among a government and a private company (which may have one or several partners), normally used for building, financing, operation and maintaining infrastructure, with value not below R\$ 20 million.

Mostly, the hired private company, usually named as SPV (Special Purpose Vehicle), is responsible for the whole project's lifecycle. However, it is common that phases have very different relative importance in each project.

There are contracts, for instance, in which the works were already executed by the government by traditional hiring models, so that the PPPs private partner is in charge solely for acquiring equipments, maintain assets and operate them. In other cases, all the construction works, including land purchases (or material execution of dispossession procedures) are carried out by the SPV, which also focuses on operating and maintaining the asset at a later date.

There are also cases in which the whole operation and maintenance of physical works, as well as the delivery of services, are in charge of the private sector, whereas in other cases, only the building maintenance is carried out by the company and public workers delivery the service to users.

Despite such variations, the private sector is involved in almost every project somehow, with initial investment to deploy the infrastructure and later, by maintaining and operating the assets. Such assets may be related to several infrastructure items: from roads to waste treatment plants, from school to sea water desalinization plants, from hospitals to drug production units. These examples are in operation in Brazil or somewhere across the world by means of contracts very similar to what we call PPP in Brazil.









2.3 PPP Models

The Law nº 11.079/04 instituted ground rules for bidding and hiring Public-Private Partnerships for Brazil's Public Administration. The law refers to two PPP types: one is sponsored PPP and the other, administrative PPP.

In a sponsored PPP, the object is a public service as defined by Law # 8.987/95, but there is a public counter payment additional to the fare charged from users. In the administrative PPP model, the object is the delivery of services of which the government is a direct or indirect consumer. In both models, it is possible to have private revenue in addition to the direct payment from the government, which is called ancillary revenue.

In practice, there is not much difference between both models as it is quite common that the private company can obtain revenue originated by the government (counter payment) and also from other sources (fares or other type of asset commercial exploration), irrespective if it is an administrative or sponsored PPP.

Both contracting models have in common that are associated to long term contracts, accommodate an integrated set of activities (construction, financing, operating and maintaining), allow objective risk allocation and incorporate long term fiscal commitments from governments.

The first sponsored PPP signed in Brazil is the project for operating the Line 4 of São Paulo's subway, starting from Luz Station until the city of Taboão da Serra. Such contract was signed in November 29, 2006, valued at R\$ 790,000,000.00, between the Companhia do Metropolitano de São Paulo - METRÔ, owned by the State of São Paulo, and the company Concessionária da Linha 4 do Metrô de São Paulo S.A, operating under the trademark "ViaQuatro".

The first administrative PPP signed in Brazil is the project for building and operating the Jaguaribe Water Disposition System, celebrated in December 27, 2006 among the Empresa Baiana de Águas e Saneamento S/A - Embasa, owned by the State of Bahia, and Foz de Jaguaribe S.A. Later, the SPV became known as Odebrecht Ambiental - Unidade Jaguaribe.

Today, there are 61 signed administrative PPPs and 13 sponsored PPPs in Brazil.









2.4 Innovations Introduced by the PPPs

The most significant innovation brought over by Public-Private Partnerships on user-funded projects as governed by Law # 8.987/95 is about the revenue source for the private company. This is possibly the most impressive and particular aspect of this institute. On administrative PPPs, the private company gets payments from the government almost exclusively.

Such payments can take several forms, for instance those related to the schedule and by being linked to performance, and they can start during execution of works (upon the injection of public capital, as described in the MPV # 575/12 later converted into Law # 12.766/12) or, more commonly, only upon availability of services³.

On sponsored PPPs, as well as on user-funded projects, the company generates revenue by charging fares (as a toll in a highway or any other case in which the object is a public service) and by generating ancillary revenue exploring the asset commercially (as displaying billboard ads in a public building). However, there is another source of revenue that is the respective public payment.

The general rule is that PPPs can only have this legal classification in Brazil if there is any public counter payment⁴. This combination of counter payment and revenue generation is used by the private company to recover initial investment, bear operational costs, manage risks, pay financers, taxes and get a return on investment.

In addition to this rule, there are other important changes that deserve to be mentioned.

Law # 11.079/04 is way more clear than Law # 8.987/95 when covering objective risk allocation (article 4, VI and article 5, III), one of the long term contract's main pillars. Albeit not necessarily an innovation compared to user-funded projects, administrative and sponsored PPPs have enhanced the concept until then prevailing that all risks should be taken by the private partner (as per interpretation of article 2, II of Law 8.987/95). Actually, the most efficient strategy for allocating and sharing risks between the public sector and the SPV shall be analyzed for each project.

All PPP contracts have the same characteristic, thus: they are long term arrangements in which there is risk allocation between the public sector and the private sector. This means that these contracts foresee, explicitly or not, who will bear positive and/or negative effects of uncertain future events. As risk allocation for the SPV depends on the project and its circumstances, it is not possible to speak in risks necessarily allocated to the private partner.

However, it is common to find in PPP contracts in Brazil the following risks being allocated to the SPV: engineering, construction, operational cost variations and financing, among others.

Risk allocation is frequently indicated as one of the most relevant factor for these contracts, as it is able to determine the whole incentive structure that will establish the conditions and will guide the player behaviors during the contract life.

Additionally, structuring sophisticated incentive schemes in the contracts is something









inherent to the PPPs, especially linking the SPV's performance to payments from the government.

The PPP Bill also brings the innovation that debt obligations incurred by public partners can be warranted by earmarking revenues, usage of special funds, buying insurance policies, warrant delivered by financial institutions or a warrant fund or by a state-owned company established for this purpose. The practical consequence of this change is to mitigate the delinquency risk by the public sector. As the quality of the warrant obtained by the grantor to a PPP project improves, it reduces the risk perception for bidders and, consequently, also decreases the cost of the contract for the public sector.

The Law # 11.079/04 also innovates by forecasting the possibility for the public sector to allow the transfer of SPV control to their financial backers without voiding the project, aiming to promote its financial restructuring and ensure that service delivery is not disrupted. This device, known internationally as step-in right, is typically exercised in case of default on financing contracts or a decrease in the project's return to levels threatening the fulfillment of obligations established in the contract.

Finally, on what concerns to fiscal responsibility, PPP Bill's article 28 grants the rights to states, cities and the Federal District to receive warrants and voluntary resource transfers from the Federal Administrations if the sum of ongoing expenses derived from the set of PPPs already signed by them has not exceeded 5% of the fiscal year's Net Current Revenue (NCR) in the previous year, or if yearly expenses of standing contracts in the next 10 years do not exceed 5% of the NCR forecast for the respective fiscal years.

There are several other aspects that define the PPP contract and that will be just mentioned for now:

PPP projects that forecast the execution of a public work are exempted from drafting a basic or executive engineering project for the bid, thus granting a larger freedom for bidders, when comparing to the traditional contracting models. Therefore, the private partner is able to find the best balance between asset construction and maintenance, incorporating the efficiency gained to their price proposals (article 10, paragraph 4). The value of investments to define the benchmark price for the bid can simply be calculated using market values, considering the global cost of similar works in Brazil or abroad by means of a synthetic budget.

Finally, it is not allowed to celebrate a PPP contract having as exclusive object the supply of workforce, the supply and deployment of equipment or the execution of a public construction. By its nature, the PPP assumes an arrangement integrating several activities in a single contract. If the object being considered for grant is limited to one of these activities, the PPP is not legally feasible and the public sector shall opt for another solution.









2.5 Value for Money (VfM)

Value for Money (VfM) analysis is the quantitative assessment of a PPP project's capacity to deliver efficiency gains when compared against the traditional deployment of infrastructure. Thus, Value for Money is a test to which all PPP projects should be submitted one or several times during the project development. If a PPP project delivers a better "Value for Money" than its public competitor, the project is green lighted and can be bid through a PPP.

The PPP promise, thus, is to be a contracting model that requires less public resources than it would be necessary if a need in the public interest would be met by traditional contracting models - assuming the same level of service.

Measuring the "Value for Money" typically requires surveying two cash flows:

- The flow of disbursements expected to the government in a PPP contract, including all additional costs stemming from the project as regulatory costs, hiring of consulting firms and audit firms, etc.
- The flow of disbursement expected to the government if it would deploy a project directly in the same conditions, including an economic valuation of risks that the government would bear with such deployment strategy but that will be transferred to the private partner in the PPP. Usually this second cash flow is called Public Sector Comparator (PSC).

The Net Present Values (NPV) from both cash flows are compared and if the PPP generates a lower cost, then it is considered that this alternative presented a best "Value for Money" and the project passes.

Despite there is no legal or formal requirement in Brazil to carry out VfM studies, there is the need to evidence the convenience and opportunity of contracting by identifying the reasons that justify the PPP scheme (article 10, I, a). In this sense, some governments are carrying out studies using the VfM methodology and incorporating it to their routine. Unfortunately, there is not yet in Brazil a previously established method to analyze the cost effectiveness of a PPP. Attempts in this regard have been made by the Ministry of Planning, Budget and Management, but there is no information on their results.

The VfM, thus, is an important tool to help structure a PPP project and grant legitimization to this contracting model. Thus, it must be used in a transparent, predictable and diligent way.

It is important to note that the VfM has more than a quantitative dimension. It also has a qualitative dimension that helps decision-making on the deployment of a project in the public interest by means of a PPP.









2.6 PPPs and the Increase of Efficiency in the Operation of Public Infrastructure

The institutional environment in which governments deploy and maintain public infrastructure and services is a key factor when determining less or more efficiency in the use of public resources. Rigid rules, hierarchy and centralized decision-making, along with the difficulty to articulate several entities during a project's lifecycle, tend to create an environment that prevents achieving optimal outcomes.

PPP changes the rationale of the public sector operation, introducing outcome controls that replace classic process control to which public entities are submitted. In other words, private companies in PPP schemes operate in a much more flexible environment than the government's, which can dramatically increase efficiencies in infrastructure construction and operation, since contracts incorporate proper outcome controls.

It is the SPV's responsibility to manage the supply chain required for deploying and managing a project by private contracts. This is an aspect of PPP that can contribute a great deal to increase efficiency. The SPV usually becomes responsible for all hiring required for the service delivery, reducing significantly government costs related to bids, management of multiple contracts and all associated administrative activities.

The table below lists some advantages of the Public-Private Partnership model both from the standpoints of the public sector and the private sector:

PUBLIC SECTOR	PRIVATE SECTOR
Gains of scale from delivering the service at long term	Stable revenue stream in the long term
Performance-linked compensation	More incentives to deliver services with higher quality
Follow-up of a single provider's contract, reducing transaction costs from several bids.	Integration of service delivery and long-term relationship with public sector
More planning capacity	More efficiency and flexibility at service delivery
Public spending with quality	Warrants provided by the public sector









2.6.1 Why does PPP make sense for the public sector?

PPP makes sense for the public sector if well structured, well bid and well managed because, these conditions provided, it delivers required services to the public sector and/or to citizens with less consumption of public resources and in a more efficient level.

The PPP promise is that it is a contracting model in which organic collaboration with the private initiative, by transfer of risks, allows for the deployment of projects in shorter time and saving budgetary resources.

There is another gain to government in the context of fiscal restraint. Usually in a PPP, the SPV first makes the necessary investments for deploying an asset using shareholder's own capital and capital from banks or stock market. When such asset reaches the operational phase, the government starts periodic payments as determined by the contract.

Thus, normally, there are no disbursements by the government in the construction of the asset. The government does not finance the work, which is responsibility and risk of the SPV.

Many times, the public sector is not experienced to efficiently hire through the options made available by Law # 8.666/93, whether because the object of the project is very complex or because the know-how for the project lies in the private sector. Due to these circumstances, PPPs can be, many times from a qualitative standpoint, the best solution for deploying a project.









2.6.2 Why does PPP make sense for the investor and the construction industry?indústria da construção?

From the investor's standpoint, a PPP is an attractive business if the project is well structured and managed, as it can generate a payment stream adjusted by inflation on a yearly basis, in the long term. So, depending on the project, a PPP risk profile and return can be quite attractive to investors with larger appetite for risk and expectations for return in the long term.

From the construction industry's standpoint, PPP can be a contract model with higher added value, more risk and more returns when compared against the traditional public contracting market.

The traditional public contracting market is way more competitive as there are many companies able to compete for work contracts. In the other hand, as PPPs are a long-term contract involving construction, financing, maintenance and operation, it is normally required a complex business and/or partnership structure that do not depends only from the know-how of a traditional construction company.

PPP demands a complex financial engineering that requires relationships with financial institutions and the capital market, in addition to the exposure of the shareholder's own capital that is materialized in contracts that are sophisticated and dense enough to incorporate the required supply chain to the project.

From a building company standpoint, it may be a suitable way to generate demand for work contracts outside the "commoditized" market and the public works hiring market via Law # 8.666/93.









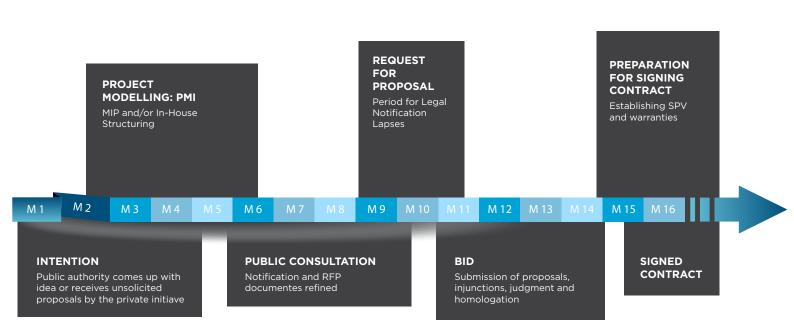
3. PPP LIFECYCLE

Among 16 to 21 months are lapsed from the official announcement of a public intention to the signing a PPP contract, according to Radar PPP data.

This period can be explained by several factors, which may include:

- The complexity of the projects;
- The variety of stakeholders with multiple interests over the project;
- The public sector capacity to manage the decision-making process of a PPP;
- Quality of the private sector participation at the project's structuring phase (via unsolicited proposals);
- Long deadlines inherent to the Public Administration;
- Introduction of new phases to be fulfilled previously and during the bidding process;
- Intervention from controlling offices and the judiciary courts;
- Competitive bidding processes exhausting all injunction instances.

We summarize below the steps that are common to most PPP projects celebrated in Brazil and will provide a brief explanation of the most peculiar steps, when compared against other projects similar in nature that are bid by the public sector.











3.1 The Intention

The intention for a PPP may emerge from an interest arising spontaneously from any entity related to the Public Administration, which means that there is a public intention to contract out some kind of public service to the private sector. In the other hand, such intention may come spontaneously from the private sector, as an unsolicited proposal (Manifestação de Interesse da Iniciativa Privada – MIPs)⁵.

Unsolicited proposals are still in need of regulation to become a homogeneous tool among national public entities. Some subnational entities have regulated this tool, such as the State of São Paulo. However, there is a consensus that this tool consists on presenting proposals, studies or surveys by individuals or private companies aiming to add projects to the PPP Program of a given target public sector.

In other words, unsolicited proposals are a tool through which the private sector interacts with the Public Administration to submit projects on their interest - providing technical, legal, political, institutional and even public interest arguments to inform the Public Administration on the convenience of carrying out a detailed study about a given object. Generally, by presenting an unsolicited proposal, a private sector's representative aims to obtain permission for studying a given project.

Once convinced that the unsolicited proposal is consistent, the Government can opt by advancing to the project development, moving on to the elaboration phase of the respective full feasibility studies.

Normally, such step is closed by consolidating the initial studies for a potential PPP project in a document that some call "preliminary proposal". It is a first attempt to understand the public need under a PPP model.









3.2 Project Modelling

The preparation and planning phase of a PPP project is a predominant technical activity demanding specialized and experienced professionals. There are some strategies that may be combined in each case, so that a project team is properly deployed and that the required competencies and skills are gathered to develop the preparation and planning activities for a project. Governments can:

- Gather internal teams;
- Hire and manage external advisors; or still
- Use the expertise of companies by means of an unsolicited proposals or calling for submission of studies (Procedimento de Manifestação de Interesse, PMI).

Each strategy to complete full feasibility studies has pros and cons and may be used together or independently.

In addition to developing internal teams, it is quite common to add professional external support to get specific knowledge into the project that is normally granted by a bid, as determined by Law # 8.666/93 or by exemption cases also established in this referred Bill.

Multilateral entities also perform a relevant role among the options available to the public sector to hire consultants. Such entities can direct nonrefundable resources (or loans) to allow for the public authority to hire consultants based on the rules determined by the entity granting the resources. Multilateral entities may work as integrators, even offering part of their internal teams to join the conduction of studies.

In addition to hiring consultants, a tool of growing importance in the Brazilian experience at structuring PPP projects is the call for submission of feasibility studies. As it is a quite influential tool for drafting PPP projects in Brazil, this topic will be discussed in more detail below.









3.3 Call for Submission of Studies

The PMI is a tool used by the public authority to gather the perceptions of the private sector about a given type of project in an organized way, demanding technical studies from private companies that will comprise the preparation and planning phase. The PMI must always be managed in order to achieve a two-fold goal: to allow the public sector to obtain the best information on a project and to expand the competition level for the future bid. However, these goals are not met so often.

Legal, operational, economic-financial surveys are usually associated to such studies, as well as engineering elements.

The PMI is launched by a calling from the public authority for the applicants to submit their multidisciplinary studies. The applicants, thus, are encouraged to develop the project's technical studies on their own risk.

Companies, independently or gathered in a consortium, usually enroll them to submit studies and the Government may select the best assessments to be used as part of a project preparation and planning. In this case, it is common that the company drafting the studies be paid according to the study's use, and such payment shall be made by the winner of the bid, only and exclusively if the PPP is homologated.

PMIs have been widely used in Brazil, especially by city governments that are using this tool to probe the market on ideas arising from the public sector and, of course, to receive studies in the early stages of the project.

Data from Radar PPP shows that 39⁶ PMIs have been launched in 2012. In 2013, there were 59⁷ PMIs. In 2014, there were 53⁸ PMIs. 18 PMIs⁹ were posted only in 2015, all from city governments, which indicates that the market remains active despite uncertainties in the economy and in the construction industry.

It is safe to say that until 2014, 48% of signed PPP contracts were preceded by PMIs, almost half of the total.

Despite being rooted in the Brazilian practice for PPPs, PMI usage still require systemization¹⁰. The last years have seen a growing standardization of PMI by subnational entities, but there are still discrepancies among public callings being launched.

It is probable that the PMI will still enjoy preference from both the private and the public sectors as an important tool for obtaining feasibility studies for PPPs. This does not mean that its usage cannot be improved, though.

It is necessary to overcome the challenge of creating more transparent mechanisms for launching and managing PMIs. The tool needs to be used by the public sector in a diligent, foreseeable and efficient way in order to not create expectations within the private sector that cannot be satisfied. Public authorities should not post PMIs before completing their homework on the project's pre-feasibility, its effective prioritization and the preparation of the public manager team that will work in the project until the bid.

⁶ Federal Government: 7; Federal District: 2; States: 28; Cities: 2.

⁷ Federal Government: 4; Federal District: 3; States: 25; Cities: 27.

⁸ Federal Government: 6; Federal District: 3; States: 12; Cities: 31; City Public Consortium: 1.

⁹ Federal Government: 0; Federal District: 0; States: 0; Cities: 18. Data collected until March, 23 2015

¹⁰The Federal Government passed the Decree # 8.428/15, signed by the President Dilma Rousseff in April, 2nd, that intents to regulate the use of the PMI in the federal level.









In a PMI, all risk is private, even the risk that great feasibility studies are presented and weeks later the project is either explicitly or implicitly shelved. If all the risk is borne by the private sector, the public authority shall create the conditions so that ideally the largest number of companies can join these pre-bid procedures, injecting new blood into the public sector's decision-making process in order to achieve two goals: increasing the competition for the upcoming bid and obtaining the most possible information for the decision making.

As it is a method for obtaining studies from the private sector without spending money upfront, the low conversion rate of PMIs into PPP contracts has caused a change in the private sector engagement levels to public calls carried out in the last years, which urges for a review by the public sector of its own management culture for such processes.

Anyway, Radar PPPs Radar de Projetos indicated that there are currently more than 70 projects with PMIs in progress, and it is worth mentioning 14 projects in the Public Lightening segment, in addition to the new Congress building, the new Fortaleza City Council Headquarters (CE), the parking buildings in Salvador (BA) and Aracaju (SE), and the Administrative Centers for Belo Horizonte (MG) and Uberaba (MG).

3.4 Public Consultation

Law # 8.987/95 does not stipulate an expressly forecast for public consultation related to the projects. However, article 10; VI of Law # 11.079/04 determines that opening a bid for hiring any PPP is conditioned to the submission of bid's notice and contract drafts for public consultation, establishing a 30-day period for receiving suggestions.

Projects that reach the public consultation step normally present a certain maturity degree, once they have been through the feasibility study step and they are going to bid now.

Radar PPPs Radar de Projetos indicate that there are currently 30 projects with respective public consultation in progress or already closed – they happen in more than 15 different segments and 16 of them are in the municipal level.









3.5 The Bid

Article 2, paragraph 4 of Law # 11.079/04 determines three important, objective aspects for bidding PPP projects:

- The contract for PPP projects shall be worth no less than R\$ 20 million;
- Projects shall contemplate a period not below 5 years but not above 35 years;
- Projects are forbidden by law to limit objectives to simply supply the workforce or supply and deployment of equipment or merely executing public works. PPPs are mandatorily management contracts.

Article 2, III, combined with article 6 as explained above, determines that PPPs shall feature counter payments from the public authority to the SPV, which must be reflected in the Request for Proposals (RFP).

Article 10 determines that the PPP shall be bid in the competition model, as defined on article 22, I, paragraph 1 of Law # 8.666/93 between the parties that meet the minimum qualification requirements demanded in the RFP for executing its object.

PPP bids, thus, follow the usual rite of public competition - but there are new elements as pre-qualification, which is the possibility that the judgment is preceded by a technical proposal qualification stage, where bidders that do not obtain a minimum score are barred from the next stages (article 12, I). A new possibility is failure solving, bridging gaps or yet the permission to make formal corrections during the procedure (article 12, IV). Finally, it is worth mentioning a another element, which allows the possibility for inverting the sequence of qualification and judgment of the commercial proposal (article 13). The effect caused by such changes may be the increase of competition in the bidding process and the restraint on the excess of severity from the Public Authority during the bidding process.

In relation to this last point, such functionality has not being widely adopted - not at least for bids that resulted in signed contracts - as shown in the graph below:

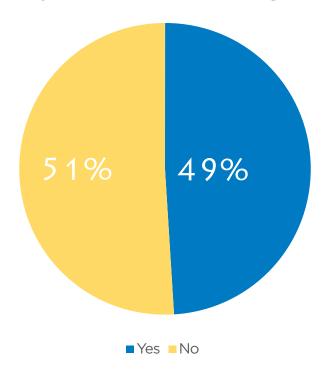






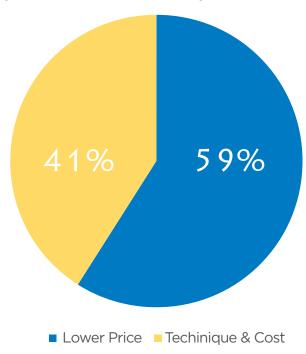


Invertion of the Sequence of Qualification and Judgement of the



The competition model, in the case of PPPs, is commonly classified as "lower price"

Competition Type: Lower Price or Techinique & Cost



(menor preço) or "technique and cost" types (técnica e preço). Among such alternatives, it is possible to note a slight preference among signed contracts for bids which committees have assessed solely the commercial proposal to declare the winner - evidently, if all objective criteria for qualification are met.

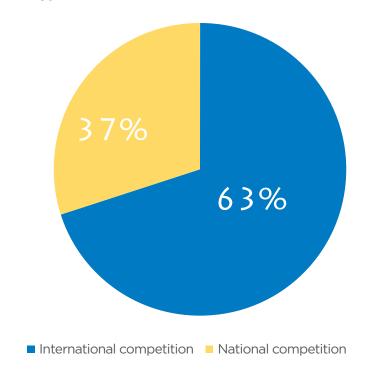








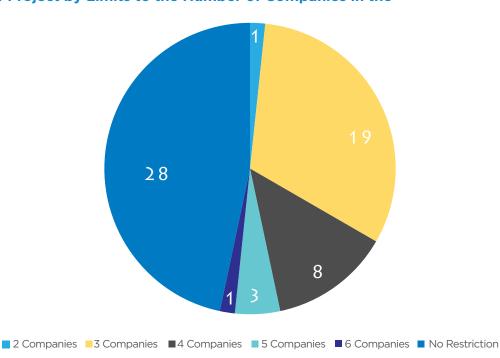
Competition Type: International or National



However, the participation of foreign companies in these processes cannot be ignored as 89% of bids that turned into signed contracts allowed for foreign companies joining consortiums.

Finally, still analyzing the 74 signed contracts sample, the graph below shows that, although there are more projects imposing limits to the number of companies that can be grouped in a bidding consortium, the number of projects without such restriction is significant:

Of Project by Limits to the Number of Companies in the











4. MARKET SITUATION

4.1 Introduction

The year of 2014 saw the consolidation, diversification and maturity of the Public-Private Partnerships in the Brazilian market for several reasons, including:

- It was the year when most PPP contracts were signed (16) in history;
- Several cities started to move towards PPP, whether by a normative standpoint or by number of feasibility studies being carried out for PPP projects;
- At the conclusion of state governor's tenures, an important cycle has ended for state level PPPs, which led to important learning about what really happened in this level during 2011 and 2014;
- The debates for the Brazil's Presidency showed important consensus on the needs for modernizing Brazilian infrastructure and the importance of having the private initiative delivering public services (there were no "demonizing" of privatization or PPP); and
- The investigation on Petrobras work contracting processes herald impacts for the traditional public hiring market that cannot be fully anticipated yet.

To better understand how we arrived here, it is important to analyze the Brazilian experience in the last years, as we intend to do next.

4.2 What Happened in the Last 10 Years

Advancements in the Brazilian experience in the years after the passing of the PPP Bill have contributed to the fight against prejudices against this contracting model.

The last years have confirmed this model as an effective option for investing in infrastructure, allowing for overcoming common challenges experienced by the Brazilian public sector from the standpoint of spending efficiency above all.

It is a fact that there is never been so much corporate interest and so many government initiatives, projects being studied and PPP contracts signed.

To make a point, from 2011 until today 199 calling for submission of studies (PMIs) were launched, increasing every year (exception made to a slight decrease between 2013 and 2014):

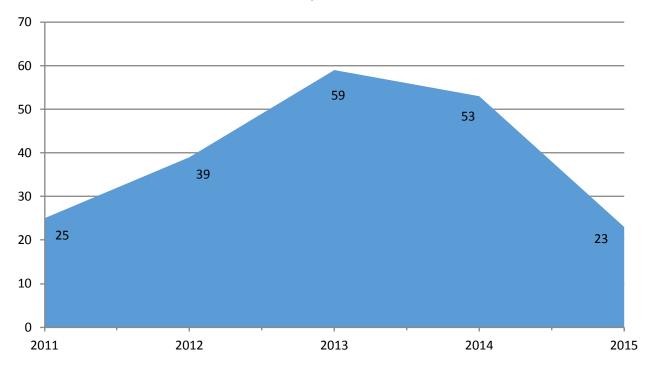








Call fo Submission of Studies Launched per Yer



At a state level, five states passed PPP legislation before the Federal Administration managed to pass a nationwide legal framework: Minas Gerais, Santa Catarina, São Paulo, Goiás, and Bahia. Currently, only the states of Acre and Roraima do not have specific legislation to PPP.

The State of Minas Gerais was the first state to pass a PPP legislation among Brazilian states, at the end of 2003, and also built a much celebrated PPP program, achieving 9 signed contracts - including the first penitentiary complex ever to be managed by private company in Brazil.

It took 2 years to sign the first PPP contract after the Law # 11.079 was passed in December 30, 2004. It was a sponsored PPP for the São Paulo subway's Line 4, signed in November 29, 2006, under responsibility of the State Administration. The State of São Paulo also was the first one to reach the mark of 10 PPP contracts by signing the Casa Paulista housing project at the end of March 2015. The State of São Paulo is the local leader among public authorities in terms of signed PPP contracts.

In 2006, in addition to the first PPP, the second and the third projects were also signed in compliance to Law # 11.079/04. The second PPP, which is the Jaguaribe Seawater Disposal System by the State of Bahia, was also the first one in the administrative PPP model. The State of Bahia has currently 6 signed PPP contracts, 3 of them in the Health area: Hospital do Subúrbio, Instituto Couto Maia, and Diagnóstico por Imagem.

At a city level, the City of Rio Claro (State of São Paulo) was the first to adhere to PPPs by signing an contract for the administrative PPP for the city sewage system in February 2007. Among the 26 state capitals in Brazil, Goiânia, Belém, Macapá, Florianópolis, Porto Velho and Boa Vista have not passed legislation that is specific for PPPs.









4.2.1 Analysis of Signed Contracts¹¹

There are 42 signed PPPs at the state level. In addition to Minas Gerais, São Paulo and Bahia - that together have 25 signed projects in all - the states of Ceará and Pernambuco have 4 PPPs each. On top of that, Radar PPPs database shows that 11 out of 26 states have PPP contracts in force.

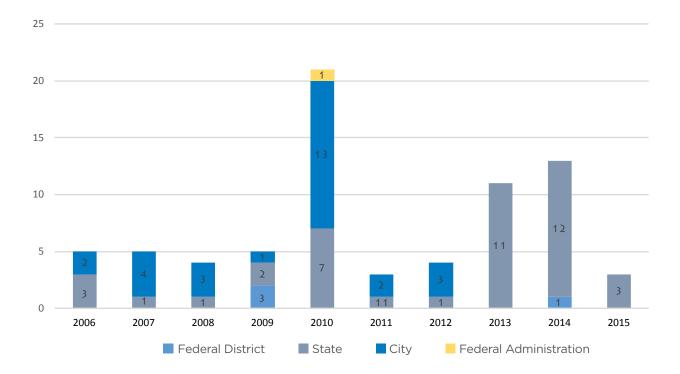
From a municipal perspective, however, signed PPP contracts are not widespread as one can see for States - not among state capitals at least. Only Rio de Janeiro (3), Belo Horizonte (3), Manaus (1) and São Luís (1) have signed contracts among 28 municipal PPPs in force within Brazil.

The Distrito Federal (DF) has three signed PPPs: the housing project of Jardins Mangueiral, the Administrative Centre and the Integrated Management Centre.

By adding the only PPP signed by the Federal Administration (the datacenter complex for the Caixa Econômica Federal and Banco do Brasil banks, signed in 2006) to these contracts, one arrives at 74 PPP contracts signed in Brazil at the three Federation levels, DF included.

The chart below illustrates this topic by organizing PPPs by their year of signature and the grantor federative level:

Signed PPP Contracts

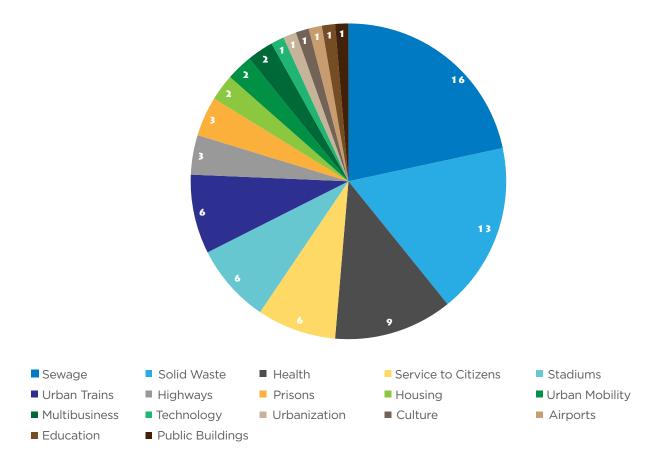








In 2015, 5 contracts more have been signed, forming the following configuration of signed contracts per segment, according to Radar PPPs *Radar de Projetos* data:



All 74 signed PPP contracts total R\$ 138,319,349,354.91 in value, as reported by the respective official statements¹². Public authorities are not required by law to report the estimated investment value for posting contracts. However, such estimations were officially announced for 29 signed contracts, totaling more than R\$ 30 billion.

There are at least 9 PPP contracts that have been awarded to bid winners and that shall be signed in the coming months¹³.

¹²This calculation takes into account the respective nominal values for contracts posted by the public authorities, not considering any inflation-adjustment indexes and eventually different methods that may be applied for defining the contract value (sum of the maximum counter payments nominal value, estimated investment, NPV, among others).

¹³This counting does not include the irrigation project by the Federal Administration, whose winner was declared in December 2010 but as the winner refused to sign the contract, the project could not be completed. The proposal warrant was executed and a administrative punitive process is being held against the bidder.





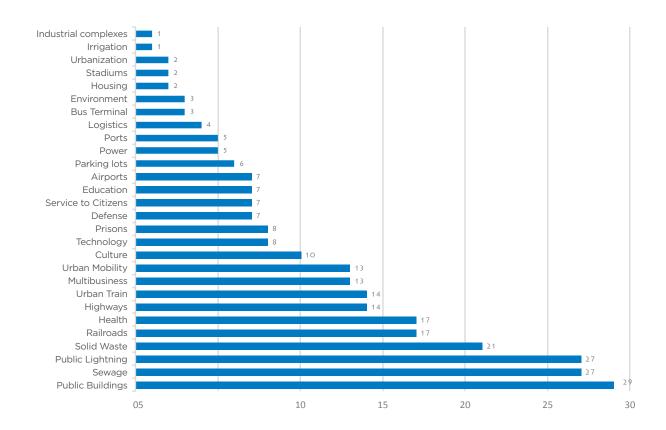




4.2.2 Analyses per Segment

Despite Sewage and Solid Waste projects have more contracts signed than all other segments, we have a significant number of contracts in the Health segment and a growing number of opportunities in several other sectors, especially Public Lightning, Public Buildings and, with little less intensity, Urban Mobility.

In the graph below, it is possible to break down the PPP projects registered in Radar PPP database that are in the following steps: public intention, modeling, PMI, bid or projects having a declared winner which the contract has not been signed yet. There are 280 opportunities divided into 28 segments:











Segment diversification seems to be a steady trend when one assesses critically the PPP project pipeline in Brazil.

Facing the economic crisis and the closure of the state cycle, it is possible that a surge on interest for brownfield PPPs from existing public assets may happen, creating more efficiency in management and smaller projects, giving space for players from the construction industry that have not yet engaged for real in the PPPs world.

Such business models may have a smaller financial decoupling between the investment and the operation stages, which would imply in less leveraged projects demanding less capital from shareholders and less capital from third parties. In this context, we consider that city-based projects that are smaller and consequently, present lower investment estimative, may ensure activity for the market in 2015 and raise the profile of players from the construction industry that are not those we are used to identify.

Another trend seen in 2015 is that the PPP model may reach industries with large demand for investment but traditionally are objects of user-funded projects. The need to expand utility infrastructure such as water, power and telecommunication may lead to the development of PPP business models that essentially devote themselves to managing the demand for public services. The rule in Brazil is to solve the deficiency in public service delivery by working only in the supply side. Perhaps, for the next years, winning business models will be those primarily incorporating intelligence at the demand management.

Telling from the experience accumulated up to now and from the huge infrastructure needs in Brazil, the volume of initiatives will be broadly expanded in the coming years. The near future would probably see the business expansion and diversification, which should be accompanied by institutional enhancement and the public and private sectors capacity's upgrade in developing good PPP projects.



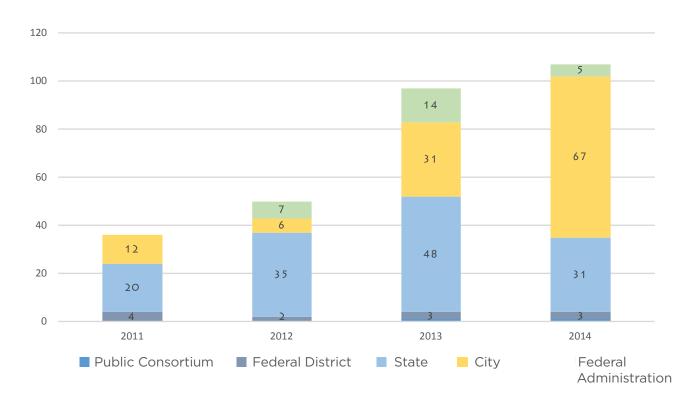






4.3 The City Perspective

In the city perspective, as one can see in the graph below, according to Radar PPP data there has never been a year with so many projects being launched as 2014.



A great deal of initiatives was launched between 2013 and 2014 in several cities. The cities of Fortaleza (CE), Sorocaba (SP), São Paulo (SP), Salvador (BA), Mauá (SP), Vila Velha (ES), Montes Claros (MG) are the highlights of 2013, among others. There have been PPP-related activities also in cities like Rio de Janeiro (RJ) and Belo Horizonte (MG), which were already dedicated to the PPP agenda before 2013.

The cities of Uberaba (MG), Aparecida de Goiânia (GO), Cuiabá (MT), Camaragibe (PE), Caruaru (PE) and Atibaia (SP), among others, raised their profile in 2014. PPP projects are expected to be signed in Vitória (ES), Contagem (MG) and Florianópolis (SC) for 2015. Likewise, the city of São Paulo might have an even more active PPP program after the ending of the city public lightening project that has completed the public consultation phase.









Finally, by analyzing state capitals legislation, one can see that 5 PPP Bills were passed in 2013 and 2 more in 2014, totaling 20 state capitals with PPP-specific legislation.

STATE CAPITAL PPP LEGISLATION

Capitais	2005	2006	2007	2009	2011	2013	2014
Belo Horizonte	•						
Porto Alegre	•						
Teresina	•						
Curitiba		•					
Manaus		•					
Palmas		•					
Salvador		•					
São Luís			•				
São Paulo			•				
Rio de Janeiro				•			
Campo Grande					•		
Fortaleza					•		
Natal					•		
Aracaju						•	
Cuiabá						•	
Maceió						•	
Recife						•	
Vitória						•	
Boa Vista							•
João Pessoa							•

Such institutional consolidation stemming from passing city laws, associated to the increase in the number of projects, indicates that a new generation of city contracts might be celebrated until 2016. It is expected that such evolution generates less cancelled or suspended projects, allowing for a more stable and foreseeable project lifecycle. Thus, the municipal experience seems to consolidate a set of business opportunities that is relevant in terms of volume of required investment and are quite diverse in terms of infrastructure to be deployed.







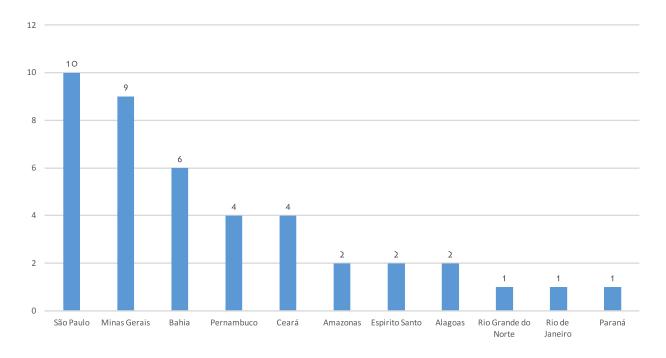


4.4 The State Perspective

The states of São Paulo, Minas Gerais, Bahia, Pernambuco, Ceará, Amazonas, Espírito Santo, and Alagoas attracted a lot of eyes due to their respective performance towards PPP among 2011 and 2014.

The graph below evidences the lead these states enjoyed in relation to signed PPP contracts in Brazil, and also exhibits all states having PPPs in force:

Projects



However, as one can see, not all states achieved the same results, as not all projects matured to a signed contract. Despite that, the fact that several states are working on PPPs in the last years is a reflection of the PPP model consolidation in Brazil. Actually, the states were the cradle where the first experiences have disseminated from and where learning was mostly absorbed.

Such mobilization was caused by some factors. The convergence of interests from governors and state secretaries to promote PPPs, added to the private sector's appetite for developing feasibility studies at risk, caused that dozens of calling for submission of studies (PMIs) were launched at the state level.



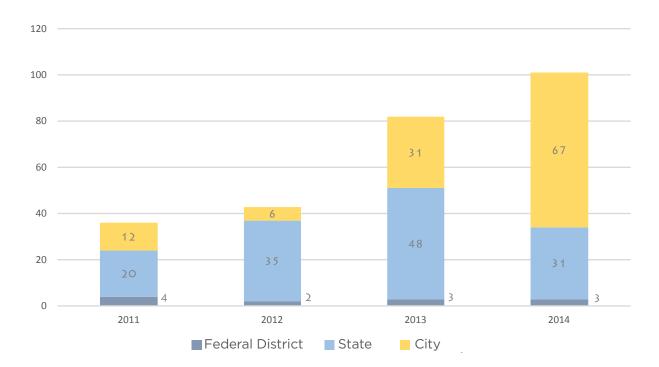






The graph below exhibits a snapshot on PMIs at the state level. In 2012 and 2013, states were quick enough to post more than 2 PMIs a month in average, totaling 28 and 25 for each year, respectively. But in 2014, the end of governor tenures caused a dramatic fall in PMIs posted.

Launching Year for PMIs in States, Federal District and Cities



Next, we will discuss some views for PPPs in 2015. In terms of perspective, we will indicate some projects that are likely to make to the bidding stage in the coming months, which means to identify upcoming business opportunities as well as we will signal perceptions on the perspectives for PPP programs at the federal, state and city levels.









4.5 Trends

Perspectives for Public-Private Partnerships will be unveiled at the sections below for the three federation levels, based on analyses that consider the approach to PPPs here and the signals provided by main representatives of each federation level since the beginning of 2015.

4.5.1 Federal Government

Debates for the 2014 presidential election were less polarized on what concerns to the participation of the private sector on delivering public infrastructure and services, as opposed to the debates in the 2010 election.

This is good news because without a serious public debate on long term contracts between the public authority and the private sector, there is a perception by investors and backers of increased risks arising from PPPs.

The new economic team also is good news for PPPs. The new Minister of Economy, Joaquim Levy, and Minister of Planning, Nelson Barbosa, addressed very clearly in their inauguration speeches the topics of PPPs and alternatives to long-term financing led by state-owned banks.

At the beginning of March this year, President Dilma Rousseff said wonders about the Porto Maravilha PPP, in Rio de Janeiro, especially by bringing in investments and creating jobs¹⁴.

However, it is necessary to wait for practical measures by the Federal Administration about grants and PPPs. Institutional aspects, such as governance and decision-making, as well as options for project financing, are some of the issues that the Federal Administration will have to deal.

It is relevant to track the evolution of the plans for the new Congress building after launching the PMI # 001/2015-CD for submission of projects, studies, surveys or investigations for technical, operational, economic-financial and legal feasibility, in order to model a Public-Private Partnership in the administrative PPP model, aiming for building, renovating, operating and maintaining buildings for Congressmen offices and other Congress facilities¹⁵.

[&]quot;Here we combine federal, state, city and private investments through a PPP. This is very important because it creates jobs, improves life standards and urban mobility, and generates the cultural and leisure use of a city." - Dilma Rousseff. 03/01/2015. Rio de Janeiro/RJ

¹⁵This PMI was posted despite a presidential veto to articles 143 and 144 of the MPV 656/2014, that was converted into Law # 13.097/15. Such articles proposed a change to Law # 11.079/04 to make it applicable to the Legislative and Judiciary as well. The veto was justified by President Rousseff as "the proposal does not set up limits, warranties and governance rules to be applied to other Powers when hiring Public-Private Partnerships."









4.5.2 State Governments

At a state level, there will be a dissemination of the experience, up to now concentrated in 5 or 6 states. This is going to expand geographical coverage for investment opportunities and some states that have not been so effective in PPP in the last years will become to be so. These states include Rio de Janeiro, Rio Grande do Sul, Piauí, Santa Catarina, and Sergipe, which are already preparing their PPP pipelines.

It is expected that most active states in the last years will remain their activity level in the future. São Paulo and Bahia shall remain with active PPP programs. Minas Gerais, in the other hand, is still hard to read in the administration of Governor Fernando Pimentel (PT – Workers Party), after 12 years of administration by PSDB (Brazilian Social Democratic Party), period during which the state PPP program was created and consolidated.

Paraná and Espírito Santo shall increase their activity levels as they are considering projects that may be even bid in 2015, as the hospital for children in the State of Espírito Santo.

4.5.3 City Governments

It is certain that the years of 2015 and 2016 - the last couple of years of mayor's tenure - will be very busy in municipal PPPs, presenting a large volume of initiatives that will offer material investment opportunities for the private sector. As discussed previously in this document, several cities are evaluating and structuring new PPP projects.

Thus, in order to shed a light on projects that deserve attention in 2015, we list below some initiatives that may reach the bid phase until December:









Projects that Might Reach the Bid Phase until December/ 2015

SEGMENT	PROJECT	CITY	
SEWAGE	Water Supply and Sewage System	São Mateus	
CITY LIGHTNING	City lightning	Vitória	
STADIUMS	Paulo Machado de Carvalho City Stadium - Pacaembu	São Paulo	
PUBLIC BUILDINGS	Administrative Center	Uberaba	
SOLID WASTE	Solid Waste And City Cleaning	Cabreúva	
CULTURE	Estação Cultura	ltu	
PARKING LOTS	Belo Horizonte Underground Parking Lot	Belo Horizonte	
CITY LIGHTNING	City Lightning	São Paulo	
URBAN MOBILITY	Bus Rapid System	Sorocaba	
URBAN MOBILITY	Restoration and Upgrade of Tunnels	Rio de Janeiro	
MULTIBUSINESS	PARQUE Brasil 500	Paulínia	
PUBLIC BUILDINGS	City Hall	Mauá	
PUBLIC BUILDINGS	Administrative Center	Belo Horizonte	
SOLID WASTE	City Cleaning and Solid Waste Handling	Caruaru	
SEWAGE	Drinking Water Supply and Sewage System	Marabá	
HEALTH	Northern Side Hospital	Sorocaba	
TECHNOLOGY	City Management Integrated Solution	Belo Horizonte	









4.5.4 What Do We Need to Have a Better Organized Market?

In this section, some topics conditioning the consolidation of PPPs in Brazil and that have to be perfected in the next years will be presented.

In order to have a true and positive breakthrough that generates value for PPPs, it is required that governments prepare an effective public plans and policies for using PPPs. Governments need to think about their project pipeline in systemic, organized way, as a reflection of the most urging public needs, in order to present foreseeable and consistent behaviors. That way, it would be possible to transmit the feeling that the PPP program is being conducted responsibly and seriously.

Equally, it is necessary to improve the method how PPP programs are communicated to society. There is a lot of room for innovating at the communication with relevant stakeholders (public managers, marketplace, banks, press, universities, and the citizen). Projects are complex and their understand does not rise from elementary efforts. It is critical that communication teams engage with technical teams in order to increase society's understanding on the contracts rationalities and prevent a climate of distrust that may repudiate all PPP projects that might be developed. It is also required to train public managers who will deal with PPPs. Public-Private Partnerships are complex contracts involving multiple disciplines and non-elemental matters that are disruptive in terms of the hiring and regulation practices in the public sector before the PPP Bill. It is critical to make a clear effort to develop and qualify public employees that will deal with this topic, so that contracts achieve the intended social return.

Upon signing the contract, governments need to ensure that the contract incentives are always aligned and balanced to be translated into an efficient service delivery, increasing user satisfaction. Thus, it is critical to have an impartial, careful contract regulation which requires focus on knowledge transfer between the team in charge of drafting the contract and the team in charge of regulating it, in addition to a strong surveillance and result measurement.

The National Treasury (Secretaria do Tesouro Nacional, STN) shall have a more active role to support States and Cities facing the challenges for managing their PPP contracts, namely from the standpoint of measures that contribute to fiscal transparency, allowing for public budgets to reflect contingent liabilities stemming from PPPs. Additionally, it is urgent that the STN attempts to set up guidelines to create a national benchmark for cost-efficiency analysis of hiring a PPP against traditional public hiring models.

The PPP Intergovernmental Network (Rede Intergovernamental de PPP)¹⁶, created in 2014, needs to be encouraged and strengthened in order to fulfill the development of PPP programs and to generate consensus in the Brazilian public sector, especially in the creation of documents for the Request for Proposals and standardized contracts with quality.

The need for qualification is urgent, as seen by both public sector and the private sector. PPPs need to be seen as different institutes that deserve a special dedication to be understood. This is the only way investors will raise their critical capacity and will know how to behave more efficiently and conveniently at situations that are peculiar to the PPP world.

In addition to that, it is critical that objective information is readily and timely accessible so that projects can be known, compared against and analyzed by potential interested parties. This way, there will be created conditions that will allow best decisions to be made by investors, aligned to their respective corporate strategies and in the other hand, competition for projects will be increased and improved.









5. FLAGSHIP PPPS IN THE BRAZILIAN EXPERIENCE

5.1 Porto Maravilha

On November 26, 2010, the Companhia de Desenvolvimento Urbano da Região do Porto do Rio (CDURP), a company controlled by the City of Rio de Janeiro, celebrated the largest PPP contract already signed in Brazil. It is the Contract for Urban Renovation of the city's port area, requiring private investment of R\$ 7.6 billion in infrastructure works and delivery of public equipment maintenance services.

The contract is currently valuated at R\$ 8.2 billion and was signed with SPV Porto Novo S/A, a consortium formed by Carioca Christiani-Nielsen Engenharia S.A., Construtora Norberto Odebrecht Brasil S.A and Construtora OAS Ltda.

This was an incredibly innovative initiative in the local context by combining several financing and infrastructure management tools as never seen before, such as Consortium Urban Operation (Operação Urbana Consorciada, OUC), the issuing of Potential Additional Building Certificates (Certificados de Potencial Adicional Construtivo, CEPAC), the creation of a Real Estate Investment Fund (Fundo de Investimento Imobiliário, FII), the management of the contract being deployed by a partially state-owned company and the celebration of a contract in the administrative PPP model. All these instruments were critical to make the investments feasible.

The Administrative PPP for urban renovating of the Porto Maravilha area assigned the private partner with obligations related to architectural design, implementation of several urban equipment and works, in addition to public service maintenance and operation.









The private partner is in charge of getting financial resources and performs the following works for infrastructure equipment deployment:

- the full removal of the Perimetral Avenue
- building a 3km tunnel with six lanes to replace Perimetral Avenue
- building the Museu do Amanhã (Tomorrow's Museum)¹⁷;
- deployment of a new underground infrastructure of public lightning, power distribution and telecommunication:
- building 650,000 m² of sidewalks
- purchase and planting of 15,000 trees
- deployment of 17 km of bicycle lanes

The most relevant source of income for the SPV is regular counter payments from the public authority during the contract's 15-year life. There are two different counter payment installments - one is a flat, monthly-paid installment of R\$ 10 million.

This installment will repeat for 12 consecutive months upon the starting of each of the 15 stages of the project. In other words, the monthly counter payment is paid upon the execution of works by the private partner and from the moment when the grantor authorizes the start of such works. At the planning of the project, these 15 stages are scheduled on a yearly basis and would take place in a row, which would allow for an ongoing payment of monthly counter payments.

In addition to the monthly counter payment, CEDURP would pay a yearly counter payment installment every half-year, in June and December. The value of these yearly counter payments, split between June and December, was determined by the private partner at the winning offer at the bid.

Figures for each year correspond to one of the 15 stages into which the project is divided. Thus, a starting order is required for all yearly stage, which triggers the payment of 12 Monthly Counter payments and 2 semiannual installments of the Yearly Counter payment. In the next year, a new starting order has to be issued by the grantor to authorize works for the new stage, as well as the payment of new counter payment installments and so on.

A point that calls attention here is how the contract allowed for 80% of all money owed by CEDUP to be repaid at the first 6 years of contract. The payment flow seems to reflect the SPV cost concentration at the first six years of project, along with the City possible intention of not demanding long-term, private financing of investments. This payment model, which generates a huge counter payment concentration, is quite unusual for PPP contracts in Brazil and has caused relevant impacts to the project:

In one hand, there is a significant reduction of capital costs associated to the investment. In other words, if the payment flow was constant and the investment flow remained unchanged, the private partner would have to incur debt to carry out the works and the costs of such financing would be transferred to CEDURP by means of demanding a higher return rate. As public capital costs are typically lower, concentrating counter payments at the beginning of contracts causes a reduction of the total cost paid by the government during the contract life, optimizing financially the public entity's cash flow.

¹⁷The works for the Museu do Amanhã were included in the contract object by means of the first supplement, celebrated in April 2012.









However, there is an issue. By concentrating payments at the project's early stages, the government freezes the incentives to which the private partner is submitted across the contract life. This is because the payment mechanism is a powerful tool for generating incentives related to fulfilling service results, performance indicators and the mechanisms of contract-based penalties (which can be discounted directly from the counter payments to be paid). As a result, the more payments are concentrated in the beginning of contracts, lesser will be the public entity ability to use the payment mechanism to ensure quality at the service delivery across the contract life. In other words, mechanisms of control by result and performance, which set the PPP model apart from traditional public hiring methods, are clearly diluted when payments are concentrated at the beginning of projects.

The Porto Maravilha PPP project seems to indicate that the team working on the structuring phases of the project believe that the argument of cost reduction in the capital cost is more relevant to this case than the efforts to preserve incentives to performance across the contract.

Anyway, the contract created a performance assessment system to encourage the private partner to reach the desired levels of performance. Appendix V determines the set of parameters that will be measured on a monthly basis across the contract. This is a quite thorough set comprising 35 items, capturing several strategic topics for implementing and managing the region's urban structure.

The counter payment maximum exposure to the indicators varies over time, as the proportion between the Yearly Counter payment and the Monthly Counter payment changes. Despite the project contemplated a quite comprehensive set of performance indicators, the effective potential impact of such indicators at the SPV's compensation is way limited, ranging from less than 2% of total compensation at the first six years of contract and never exceeding 9%.

Read below the snapshot for the Porto Maravilha PPP project, extracted from Radar PPP database:









PORTO MARAVILHA (CITY OF RIO DE JANEIRO)

	PROJECT STEP								
Public Intention	Modeling Initiated	PMI Initiated	Public Consultation Initiated	Public Consultation Closed	Bid in Progress	Winner Declared	Signed Contract	Cancelled	Suspended

BASIC PROJECT INFO				
Name Porto Maravilha (City of Rio de Janeiro)				
Reference Number	Contract PPP-01			
Entity Responsible	Companhia de Desenvolvimento Urbano da Região do Porto do Rio de Janeiro S/A - CDURP			
Project Segment	Urbanization			
Public Authority	City of Rio de Janeiro			
Project Characteristics	Administrative PPP for delivering services and works aiming for renovating, operating and maintaining the Special Urban Interest Area of the Port of Rio de Janeiro.			

CONTRACT INFO		
Contract value: R\$ 8,207,828,511.00		
Warranty of Proposals by Bidders: R\$ 80,000,000.00		
Initial Warrant from the Winner to Execute the Contract: R\$ 320,000,000.00		

BASIC BID INFO				
Bid Type	Lower Price			
Bid Model	National Competition			
Contract Model	Administrative PPP			
Inversion of Qualification and Judgment Phases	No			

CONSORTIUM				
Consortium Permission	Yes			
Permission for Foreign Company in Consortium	Yes			
Maximum Limit of Companies in Consortium	3 Companies			

SCHEDULE				
Date of PMI Posting	08/09/2006			
Limit Date for Manifesting Interest on Joining the PMI	10/08/2006			
PMI End Date	09/10/2007			
Public Consultation Notification Date	05/17/10			
Public Consultation End Date	06/17/10			
Date of Bid's Notice Posting	07/29/10			
Offer Submission Date	09/20/10			
Offer Opening Date	09/24/10			
Contract Signing Date	11/26/10			

INFO ABOU	UT STUDIES
Maximum Threshold for PMI Reimbursement (R\$)	17.492.237

COMPANIES					
	Carioca Christiani-Nielsen Engenharia S.A. Construtora Norberto Odebrecht Brasil S.A. Construtora OAS Ltda.				
SPV	Concessionária Porto Novo S/A				









03/25/15

Posting on March 25, 2015 of a Communication for investigation of events that may cause contract-based penalty to SPV by not fulfilling items 3.4 and 3.5 of the PPP Contract. There is a 15-day period for the SPV to submit a plea.

11/28/14

Posting on November 28,2014, of decision by the 1st Region Federal Regional Court about incidental legal proceeding (process 682250420144013400), initiated by Telcomp (Brazilian Competitive Telecom Carriers) against ANATEL, the City of Rio de Janeiro and CDURP, in which the anticipation of protection until further examination of inquiry and mandated that: a) ANATEL refrains from applying sanctions against Telcomp members for eventual industry regulation non-conformity facing the impossibility of building own ducts at the region of Porto Maravilha; b) the City of Rio de Janeiro examines within 30 days requests already submitted, and those which come to be submitted by Telcomp members to grant permission for building ducts in the Porto Maravilha region, and it shall inform within 10 days to Telcomp members the schedule of works and technical conditions for building new ducts in the region.

11/19/14

Posting on November 19, 2014, of decision by the City of Rio de Janeiro Accounting Court's judge that rules diligence with recommendation and alert for legal proceeding 040/001882/2013 and 040/002167/2013 about the analysis of 2nd and 3rd Supplemental Terms to Contract PPP-01, respectively.

08/18/14

Posting on August 18, 2014, of the statement related to the 5th Supplemental Term to Contract PPP-01, signed on June 16, 2014, for revision of Appendices 3, 5, 10, and 11.

01/29/14

Posting in January 29, 2014, of the statement related to the 4th Supplemental Term to Contract PPP-01, signed on December 20, 2013, to implement mitigation measures to be adopted during Perimetral Bridge replacement works and to be effected by means of freighting a manned ferry as a means to support the State SPV of Public Service for the Operation of Passenger Ferry in the Guanabara Bay, for the sum of R\$ 6,496,492.00 (six million, four hundred-ninety-six thousand, four hundred-ninety-six BRL).

12/23/13

Posting on December 12, 2013 of decision by the City of Rio de Janeiro Accounting Court's judge that rules for archival of legal proceeding 040/002167/2013 about the analysis of the 3rd Supplemental Terms to Contract PPP-01.

12/22/13

Posting on December 22, 2013 of decision by the City of Rio de Janeiro Accounting Court that rules for archival with recommendation of legal proceeding 040/0000182/2013 about the analysis of the 2nd Supplemental Terms to Contract PPP-01.

10/18/13

Posting on October 18, 2013, of the statement for the Use Permit Term for the underground galleries and passage boxes included in the Associated High Capacity Telecommunication Project, signed in October 7, 2013, between CDURP and SPV Porto Novo S/A, in conformity with clause 8 of Contract PPP-01.

04/09/2013

Posting on April 09, 2013 of decision by the City of Rio de Janeiro Accounting Court that rules for archival with recommendation of legal proceeding 040/000337/2012 about the analysis of the 1st Supplemental Terms to Contract PPP-01.

04/04/2013

Posting on April 4, 2013, of the statement related to the 3rd Supplemental Term to Contract PPP-01, signed on March 22, 2013, for supplementing works to Downtown's road system at the sum of R\$ 592,332,019.00 (five hundred-ninety-two million, three hundred-thirty-two thousand, nineteen BRL).

03/19/13

Posting on March 19, 2013, of the statement related to the 2nd Supplemental Term to Contract PPP-01, signed in March 06, 2013, for changing part of Appendix 3, of item 4 on Appendix 5 and Work plan on Appendix 10, as determined on Appendixes 3A, 5A, and 10A.

06/14/12

Posting on June 14, 2012, of the Starting Order for the 2nd stage of Contract PPP-01.

05/08/2012

Posting on May 8, 2012, of the statement related to the 1st Supplemental Term to the Contract PPP-01, signed on April 17, 2012, for changing the scope defined on Clause 4 and in Appendixes 3, 4, and 10 of the Contract.

06/15/11

Posting on June 15, 2011, of the Starting Order for the 1st stage of Contract PPP-01.

03/31/11

Posting on March 31, 2011 of decision by the City of Rio de Janeiro Accounting Court that rules for archival of legal proceeding 040/000452/2011 about the analysis of Contract PPP-01 signed with SPV Porto Novo S/A.

12/20/10

Posting in December 20, 2010, of Public Competition # 002/2010 for hiring specialized technical services for management and surveillance of Administrative Grant Contract for renovation, operation and maintenance of AEIU of Rio de Janeiro's Port area.

12/16/10

Posting on December 16, 2010, of the statement related to Contract PPP-01 signed in November 26, 2010 with SPV Porto Novo, formed by Construtora OAS Ltda, Construtora Norberto Odebrecht Brasil S/A and Carioca Christiani-Nielsen Engenharia S/A.

11/26/10

Posting on November 26, 2010, of Communication of signing of the Administrative Grant Contract.









10/27/10

Posting on October 27, 2010, of the Granting and Homologation Notice of the bid object to the Consortium Porto Novo, formed by Construtora OAS Ltda, Construtora Norberto Odebrecht Brasil S/A and Carioca Christiani-Nielsen Engenharia S/A.

10/27/10

Posting on October 27, 2010, of the Final Score Result. The winner was the Consortium Porto Novo, formed by Construtora OAS Ltda, Construtora Norberto Odebrecht Brasil S/A and Carioca Christiani-Nielsen Engenharia S/A.

10/27/10

Posting on October 27, 2010, of the public session minutes for the Technical Proposal evaluation that took place in October 21, 2010, the public session minutes for the Economic Proposal evaluation that took place in October 25, 2010, and the public session minutes for the communication of results for the Public Competition # 001/2010 that took place in October 26, 2010.

10/25/10

Posting on October 25, 2010, of the public session notice for communication of the Bid result at 10am, October 26, 2010, at Rua Gago Coutinho, 52, Laranjeiras, Rio de Janeiro-RJ.

10/25/10

Posting of Technical Proposal evaluation in October 25, 2010. The qualified bidder was the Consortium Porto Novo, formed by Construtora OAS Ltda, Construtora Norberto Odebrecht Brasil S/A and Carioca Christiani-Nielsen Engenharia S/A.

10/21/10

Posting on October 21, 2010, of the public session notice for communication of the Technical Proposal assessment result at 10am, October 22, 2010, at Rua Gago Coutinho, 52, Laranjeiras, Rio de Janeiro-RJ.

10/15/10

Posting on October 15, 2010, of the public session minutes for communicating the ruling on the legal proceeding initiated by Construtora Queiroz Galvão S.A. related to assessment of qualification documents and offer opening of Consortium Porto Novo's Technical Proposal.

10/14/10

Posting on October 14, 2010, of the ruling minutes on the legal proceeding against the Bid Special Committee's decision to bar Construtora Queiroz Galvão S.A. The Bid Special Committee sustained the decision.

10/14/10

Posting on October 14, 2014, of a public session notice for communicating the ruling on legal proceeding initiated by Construtora Queiroz Galvão S.A. at 10 am, October 14, 2014, at Rua Gago Coutinho, 52, Laranjeiras, Rio de Janeiro-RJ.

10/14/10

Posting on October 14, 2014, of Receipt Notification of legal proceeding initiated on September 30, 2010, by Construtora Queiroz Galvão S.A. related to qualification.

10/01/2010

Posting of the ruling on Qualification on October 10, 2010. The qualified bidder was the Consortium Porto Novo, formed by Construtora OAS Ltda, Construtora Norberto Odebrecht Brasil S/A and Carioca Christiani-Nielsen Engenharia S/A.

09/29/10

Posting on September 29, 2010, of the public session minutes for receiving Qualification documents, Technical and Economic Proposals that took place in September 24, 2010, and the session minutes for assessing Qualification documents, that took place in September 20, 2010.

09/28/10

Posting on September 28, 2010, of City Accounting Court's Ruling for archival with determination of legal proceeding 40/004253/2010, which object is the analysis of Public Competition # 001/2010 procedure.

09/28/10

Posting on September 28, 2010, of public session notice for communicating the Qualification Result on September 29, 2010. If bidders expressly renounce to the right to initiate legal proceedings, Technical Proposals will be assessed in the same session.

09/23/10

Posting on September 23, 2010, of public session notice for assessing Qualification documents at 10 am September 24, 2010, at Rua Gago Coutinho, 52, Laranjeiras, Rio de Janeiro-RJ.

09/13/10

Posting, on September 13, 2010, of Rectification notice for the Public Competition Bid #001/2010. The delivery and document assessment date and place remain unchanged.

09/13/10

Posting on September 13, 2010, of response to requests of clarification on the Public Competition Bid # 001/2010.

08/17/10

Posting on August 17, 2010, of response to requests of clarification on the Public Competition Bid # 001/2010.

08/17/10

Posting, on September 17, 2010, of Rectification notice for the Public Competition Bid #001/2010. The delivery and document assessment date and place remain unchanged.

08/12/2010

Posting on August 12, 2010, of Decree # 332666, dated August 11, 2010, that determines the issuance of Additional Potential Building Certificates (Certificados de Potencial Adicional de Construção - CEPAC). The City of Rio de Janeiro issues six million, four hundred-thirty-six thousand, seven hundred-twenty-two CEPACs at face value of R\$ 400 each, subscribed, to be used as additional potential building in the AEIU.









08/10/2010

Posting, on August 10, 2010, of Rectification notice for the Public Competition Bid #001/2010. The delivery and document assessment date and place remain unchanged.

07/29/10

Posting of Public Competition # 001/2010 posted on June 29, 2010. Offers shall be submitted until September 20, 2010, and will be opened in a public session at the same day. Offers shall be delivered to Rua Gago Coutinho, 52, 1 and ar, Laranjeiras, Rio de Janeiro-RJ.

07/29/10

Posting on June 29, 2010, of Decree # 32575, dated June 28, 2010, that determines the inclusion of the Rio Port Region Renovation Project to the Public-Private Partnership City Plan, and Decree 32576, dated June 28, 2010, that stipulates the management of services of local interest and public services under city's responsibility to be delivered within the Special Urban Interest Area (Área de Especial Interesse Urbanístico, AEIU) of the Rio Port region.

06/28/10

Posting on June 28, 2010, of CDURP's Notice communicating an error in the posting dated June 23, 2010. It is reported that the license previously granted is for developing an Operation and Renovation Project for the Special Interest Urban Area (AEIU) of the City of Rio de Janeiro Port region, as per Neighborhood Impact Study (Estudo de Impacto de Vizinhança, EIV) approved by the Environment Office.

06/23/10

Posting on June 23, 2010, of CDURP Notice about the granting of previous license for 24 (twenty-four months) for carrying a Neighborhood Impact Study for the AEIU and the previous license for a Consortium Urban Operation of the Rio Port region.

06/14/10

Posting on June 14, 2020, of CDURP Notice about the need for approval of the Neighborhood Impact Study (Estudo de Impacto de Vizinhança, EIV) for the Rio de Janeiro Port region's AEIU, and the previous license for the Consortium Urban Operation of the Rio Port region to the City's Environment Office.

05/17/10

Posting of Public Consultation on May 17, 2010. The period for submitting comments, feedback and inputs starts in May 17, 2010, and ends on June 17, 2010.

12/23/09

Public Consultation to take place at 9am January 15, 2010, at the City Hall's auditorium.

12/22/09

Posting on December 22, 2009, of Decree 31620, dated December 21, 2009, creating the Companhia de Desenvolvimento Urbano da Região do Porto do Rio de Janeiro S/A - CDURP and approving its statutes.

11/24/09

Posting on November 24, 2009, of Supplemental Law # 102, dated November 23, 2009, creating the Companhia de Desenvolvimento Urbano da Região do Porto do Rio de Janeiro - CDURP that is responsible for developing the AEIU of Rio Port region.

11/24/09

Posting on November 23, 2009, of Supplemental Law # 101, dated November 23,2009, the changes the urban plan and authorizes the City Hall to create a Consortium Urban Operation for the Rio Port region, in the Special Urban Interest Area - AEIU.

02/18/09

Posting on February 18, 2009, of City Decree # 30475, dated February 17, 2009, that creates an Executive Group to implement decisions made by the Work Group, created by City Decree # 30355, dated January 01, 2009, and the implementation of Porto Maravilha Project.

02/05/2009

Posting on February 05, 2009, of City Decree # 30448, dated February 4, 2009, that changes City Decree # 30355, dated January 01, 2009, to add the City of Rio de Janeiro Public Attorney in the composition of the Work Group that will oversee the implementation of the Porto Maravilha Project.

01/13/09

Posting on January 13, 2009, of City Decree # 30406, dated January 12, 2009, that changes City Decree # 30355, dated January 01, 2009, to add the City Transportation Office and the City Environment Office in the Work Group managing the Porto Maravilha Project.

01/09/2009

Posting on January 09, 2009, of City Decree # 30397, dated January 1, 2009, that changes City Decree # 30355, dated January 01, 2009, to add the City Culture Office in the composition of the Work Group that will oversee the implementation of the Porto Maravilha Project.

01/01/2009

Posting on January 1, 2009, of City Decree # 30355, dated January 1, 2009, that creates the Work Group to oversee the Porto Maravilha Project implementation.

01/02/2008

Posting on January 02, 2009, of the Work Group Final Report that is in charge of analyzing studies to select a grant model or public-private partnership for deploying the Rio Port Region Recovery and Renovation Plan. The studies were submitted by Consortium Rio Mar e Vila, formed by Construtora OAS Ltda, Construtora Norberto Odebrecht Brasil S/A and Carioca Christiani-Nielsen Engenharia S/A and Construtora Andrade Gutierrez S.A, which left the Consortium during the process. The Technical Group concluded that it is not applicable the reimbursement as established on article 4, II of Decree # 26852, dated August 8, 2006, because the Consortium did not decided for the Public-private partnership model.









13/03/2007

Posting on March 13, 2007, of Decree # 27665, dated March 12, 2007, that creates a Work Group to follow-up the conditions established by Decree # 26852, dated August 8, 2006. The deadline for submitting studies related to the project is September 10, 2007.

08/10/2006

Posting on August 10, 2006, of Decree # 26866, dated August 9, 2006, that defines the members of the work group created by Decree # 26852, dated August 8, 2006, determining that it will comprise representatives from City Offices for Urbanism, Economy and the City Urbanism Institute Pereira Passos - IPP.

08/09/2006

Posting of permission for submissions of interest manifestation in August 9, 2006. There is the need for a previous manifestation of interest to join the bid, which must be forwarded until October 8, 2006.

08/09/2006

Posting on August 8, 2006, of Decree # 26852, dated August 8, 2006, that creates and defined the boundaries for the Rio de Janeiro Port Special Interest Area that declares real estate for public use, establish conditions for partnering with the private sector and authorizes the constitution of a Work Group.









5.2 Tamoios Highway

On December 19, 2014, the signature of the contract between Rodovia dos Tamoios S/A and the State of São Paulo Transportation Services Regulating Agency (ARTESP) for a Sponsored PPP for delivering public operation and maintenance services for a SP 099 highway segment between kilometer 11+500 and kilometer 83+400, SPAs 032/099, 035/099, and 037/099, as well as Caraguatatuba and São Sebastião Roadways, as well as for civil works in the segment starting at kilometer 60+480 and 82+000 of SP 099 Highway.

This was the 9th PPP contract signed by the State of São Paulo, and the first for a highway. The contract is valued at R\$ 3,906,334,654.07 and determines investment totaling R\$ 3.75 billion. The SPV is comprised by Construtora Queiroz Galvão S.A and Queiroz Galvão Desenvolvimento de Negócios S.A, both from the Queiroz Galvão Group.

The project was approved by the Public-Private Partnership Managing Committee in April 2011. Thus, 3 years and 8 months lapsed from the formalization of the public intention and the contract signature.

Public capital input will be provided for the SPV at the maximum sum of R\$ 2,185,334,000.00, during the construction phase.

From the PPP second year, tagged to the fulfillment of contract obligations, the SPV can start to collect fares by installing tollbooths. Public payments arising from the PPP start only at the 5th year and go on until the end of the contract.

The contract features a payment mechanism that is worth describing, especially considering the commercial proposal that won the bid. This process is briefly described below.

As it is a lower price-type competition, the winner proposal presented the lower costs for the yearly counter payment.

According to clause 30.1 of the contract, the counter payment owed to the private partner would vary according to the fulfillment of a set of Performance Indicators, and the Delivered Service Performance Coefficient (CSP) may cause a pro-rata counter payment with a maximum reduction of 20%.

CAID = (0.8 + 0.2*CSP)*Counter payment offered. Monthly

Where:

- CAID = Counter payment with Incidence of Performance Indicators
- Monthly Counter payment Offer = Yearly Counter payment Offered monthly amount/12
- CSP = Delivered Service Performance Coefficient

However, a curiosity in this contract led us to find that, despite the complexity of the payment mechanism linked to the performance measurement, described in the









contract's Appendix III (that was specifically created to this end); the value presented by the winning bidder had made it virtually void.

The winning proposal, submitted by Consortium Litoral Norte, had a value of R\$ 0.01, despite the second best proposal had a value of R\$ 34 million. In other words, the winning proposal rendered mathematically irrelevant the calculation of discounts by performance in the public counter payment offered, once the private partner has proposed to execute the object having solely the public capital inputs during the construction phase, the user fares and possible ancillary revenue as return for investment.

Due to the value assigned to the Yearly Counter payment Offered, there are no incentives left for performance by measuring the Key Performance Indicators (KPIs). This means that the winning bidder would probably agree to sign this PPP contract even if it had been developed in a user-funded project basis, as determined by Law 8.987/95.

Especially due to this configuration imposed by the tender, there is a point in this contract that is worth to highlight - demand risk sharing, which takes place as follows:

If the Verified Fee Revenue is up to 10% above or below the Projected Fee Revenue (previously forecast at the Appendix XXV of the contract), the Owed Counter payment will be equal to the Counter payment.

If the Verified Fare Revenue is more than 10% above to the Projected Fare Revenue, the Monthly Counter payment will be discounted at 90% of the value of the Verified Fare Revenue exceeding the Projected Fee Revenue.

If the Verified Fare Revenue is more than 10% below the Projected Fee Revenue, the Monthly Counter payment will be increased by an amount equal to 90% of the difference between the Verified Fare Revenue value and the value of 90% of the Projected Fare Revenue.

The Toll Basic Fare was previously defined in the contract as R\$ 0.1080/km of double lane (which is equal to a Basic Fee of R\$ 0,077/Km for single lane), based on July 2013 and adjusted on a yearly basis.

As well as in the demand risk, the contract also determines sharing risks related to environmental licensing, which are particularly relevant for this project as the North Coast of São Paulo covers a large area of Atlantic Forest.

In a given stretch of the highway, such licensing is fully under the responsibility of the public sector, while the private partner is in charge of the conditioning elements. In another stretch, the Previous License is under responsibility of the Government, while the private partner is in charge of Installation and Operation Licenses. Finally, in the third segment, Previous and Installation Licenses are Government task, while the company is in charge only of the Operation License.

The public authority also retains risks for the proper and timely execution of public works, but whose maintenance, preservation and operation make part of the project scope.

Read below the snapshot of the Tamoios Highway PPP project, extracted from Radar PPP database:









TAMOIOS HIGHWAY (STATE OF SÃO PAULO)

	PROJECT STEP							
Public Intention	Modeling Initiated	PMI Initiated	Public Consultation Initiated	Public Consultation Closed	Bid in Progress	Winner Declared	Signed Contract	Cancelled

BASIC PROJECT INFO				
Name	Tamoios Highway (State of São Paulo)			
Reference Number	Sponsored Grant Contract SLT # 008/2014			
Entity Responsible	State of São Paulo Transportation Public Services Regulation Agency - ARTESP			
Project Segment	Highway			
Public Authority	State of São Paulo			
Project Characteristics	Sponsored Grant for delivering public maintenance and operation services for segment of SP 099 highway from the kilometer 11+500 and 83+400 km, SPAs 032/099, 035/099, and 037/099 and Caraguatatuba and São Sebastião Roadways, as well as the execution of civil works in the segment between kilometer 60+480 and kilometer 82+000 of SP 099 Highway.			

CONTRACT INFO			
Project period: 30 years			
Contract value: R\$ 3,906,334,654.07			
Estimated Investment: R\$ 3,906,334,654.07			
Capital to be Paid In Before Signature: R\$ 13,715,144.32			
Capital to be Paid In: R\$ 137,151,443.20			
Public Resource Input (referred to by Law # 12.766/2012): R\$ 2,185,334,000.00			
Warranty of Proposals by Bidders: R\$ 39,063,346.54			
Initial Warrant from the Winner to Execute the Contract: R\$ 309,968,000.00			

BASIC BID INFO					
Bid Type	Lower Price				
Bid Model	International Competition				
Contract Model	Sponsored PPP				
Inversion of Qualification and Judgment Phases	No				

CONSORTIUM			
Consortium Permission	Yes		
Permission for Foreign Company in Consortium	Yes		
Maximum Limit of Companies in Consortium	No Restriction		

SCHEDULE			
Public Consultation Notification Date	11/06/2013		
Public Consultation End Date	12/06/2013		
Date of Bid's Notice Posting	03/28/14		
Offer Submission Date	05/14/14		
Offer Opening Date	05/14/14		
Contract Signing Date	12/19/14		

COMPANIES		
SPV's Shareholders	Construtora Queiroz Galvão S.A. Queiroz Galvão Desenvolvimento de Negócios S.A.	
SPV	Tamoios Highway S/A	









02/07/2015

Posting on February 7, 2015, of a ARTESP communication authorizing the SPV Rodovia dos Tamoios to obtain financing (Bank Credit Letter) from Bradesco Bank at the amount of R\$ 250,000,000.00 (two hundred-fifty million BRL) and constitute warrants of: (i) fiduciary grant of the rights stemming from a linked account; (ii) fiduciary grant of rights emerging from the grant and credit rights; and (iii) fiduciary alienation of stocks in order to fulfill the obligations mandated by the Grant Contract. (Protocol # 284.600/2015)

01/10/2015

Publication, in January 10, 2015, of an ARTESP Communication authorizing the celebrating of a share pledge and other agreements so that the quotes of the "ARTESP Fund" are used in favor of the Grantor Rodovia dos Tamoios S/A. (Protocol ARTESP # 279.680/14)

12/20/14

Posting on December 20, 2014, of a Deliberation of ARTESP Boarding Committee related to the Process 016.162/2013, through which it approved the new draft of the Sponsored Grant Contract in reference to the International Competition # 01/2014, with all changes, and ratified all the process-related instruction and determined the adoption of proper measures by competent technical areas.

12/19/14

Posting on December 19, 2014, of communication of Public-Private Partnership contract signature for granting Tamoios Highway to SPV Rodovia dos Tamoios S/A, comprised by Construtora Queiroz Galvão S/A and Queiroz Galvão Desenvolvimento de Negócios S/A.

10/31/14

Posting on October 31, 2014, of State Law # 15.567, dated October 30, 2014, which authorizes the Executive branch to obtain credit from the Economic and Social Development National Bank - BNDES, the Caixa Econômica Federal bank, Banco do Brasil bank and local private banks, and changes Laws # 15.427, dated May 22, 2014, and # 14.987, dated April 17, 2013.

10/30/14

Posting on October 30, 2014, of Qualification and Granting Notice of the bid object to Consortium Litoral Norte, comprised by Construtora Queiroz Galvão S/A and Queiroz Galvão Desenvolvimento de Negócios S/A.

10/21/14

Posting on October 21, 2014, of the Final Score Result. The winner was Consortium Litoral Norte. A 5-day period was given for appeals.

10/14/14

Posting on October 14, 2014, of a Communication from the Bid Special Committee reporting that no administrative appeals were made against decision on the Price Proposal classification and that the Committee will analyze the Consortium Litoral Norte's Book 2 - Business Plan solely, since it was the bidder with the best ranked Price Proposal.

10/04/2014

Posting on October 4, 2014, of the public session minutes from the Price Proposal offer analyses. The ranking of proposals in terms of amounts for the Yearly Counter payment Offered was: 1) Consortium Litoral Norte – R\$ 0.01; 2) Consortium Via Nova Tamoios – Amount: R\$ 34,039,683.30; 3) Consortium Desenvolvimento Nova Tamoios – R\$ 58,040,050.00; 4) Consortium Concessionária Novos Caminhos – Amount: R\$ 152,159,050.00 The deadline for appeals against the Committee's decision that ranked bidding consortiums will be October 10, 2014.

10/02/2014

Posting on October 2, 2014, of a Communication from the Bid Special Committee reporting the scheduling of public session for analysis of Price Proposals to October 3, 2014, at the ARTESP offices.

10/01/2014

Posting on October 1, 2014, of the decision to accept the injunction and to determine the suspension of the bid, according to legal proceedings initiated by Empresa Ecorodovias Infraestrutura S/A, as company leader of the Via Nova Tamoios Consortium, against ruling of the General Director of State of São Paulo Transportation Agency, ARTESP, in order to: recognize the disqualification of Desenvolvimento Nova Tamoios Consortium and that the entity can proceed with the bid without the participation of both companies.

09/18/14

Posting on September 18, 2014, of the minutes from a Bid Special Committee meeting that took place in September 17, 2014, in which was decided to qualify the following consortiums: Concessionária Novos Caminhos, Litoral Norte, Desenvolvimento Nova Tamoios and Via Nova Tamoios in the terms of their Execution Methodology proposals. A 5-day period was given for appealing from such decision.

09/12/2014

Posting on September 12, 2014, of a diligence carried out by the Bid Special Committee on documents submitted on Envelope C by consortiums Concessionária Novos Caminhos, Litoral Norte, Desenvolvimento Nova Tamoios and Via Nova Tamoios. These consortiums shall submit their clarifications until September 16, 2014.

08/23/14

Posting from the Bid Special Committee on August 23, 2014, reporting that the bidding consortiums have entered Administrative Injunctions. A 5-day period was given to interested parties to void such injunctions.









08/19/14

Launchin on August 19, 2014, of a decision from the Bid Special Committee about Protocol 273.581, dated August 15, 2014, from the Consortium TPI - Triunfo Participações e Investimentos S.A - Construtora Triunfo S.A requiring suspension of the deadline for injunction. The Committee decided that the request for suspending the deadline for injunctions until the effective obtaining of legal proceeding documents does not have legal basis and so was denied.

07/31/14

Public session for analyzing qualification documents from all enrolled consortiums: Consortium Litoral Norte; Consortium Via Nova Tamoios; Consortium Desenvolvimento Nova Tamoios; Consortium Concessionária Novos Caminhos; Consortium TPI - Triunfo Participações e Investimentos S.A. - Construtora Triunfo S.A.

07/29/14

Decision from the Bid Committee to deny all administrative injunctions. Public session for analyzing all other documents scheduled for July 30, 2014.

05/01/2014

Re-launching of International Competition # 01/2014 Bid's Notice on May 1, 2014. The documentation delivery date was changed to June 18, 2014, and it will be analyzed in a public session scheduled for June 18, 2014. Address for delivering the documentation is Rua Iguatemi, 105, 2° andar, Itaim Bibi, São Paulo, SP.

03/28/14

Launching of International Competition # 01/2014 Bid's Notice on March 28, 2014. The documentation delivery date is May 14, 2014, and it will be analyzed in a public session scheduled for March 14, 2014. Address for delivering the documentation is Rua Iguatemi, 105, 2° andar, Itaim Bibi, São Paulo, SP.

11/06/2013

Launching of Public Consultation on November 6, 2013. The period for submitting comments, feedback and inputs starts on November 6, 2013, and ends on December 6, 2013.

10/12/2013

Public Consultation in October 29, 2013.

04/20/11

Approval of the Tamoios Highway Project by the CGPPP at the 36th Ordinary Counsel Meeting.









5.3 Macaé Sewage System

In the 70s, the city of Macaé was selected to be Petrobrás headquarters for the oil operations at the Campos Basin. Since then, the city has seen exponential growth from both the economic standpoint and the demographics standpoint, and the city's sewage system could not keep the pace. Such service, thus, was being defined with no urban planning.

For this reason, part of the sewage was directed to septic tanks, while part of the sewage was being released directly into draining networks or channels and lakes.

Thus, in order to be in compliance with current legislation and to meet the needs of a growing population, it became necessary to invest in effluent tertiary treatment. The city then launched a Public-Private Partnership to fulfill part of the investments required and the management of this service, especially the delivery of a sewage system comprising piping, collection, pumping stations and treatment plants.

Not considering the projects signed off by the city of Rio de Janeiro, this PPP is only the second at the municipal level in the whole State of Rio de Janeiro, which grants a certain regional pioneer status to the City of Macaé¹⁸.

The Macaé Sewage System PPP is a three-party contract between the State public company delivering water and sewage services (CEDAE), the city company that provided sewage services (ESANE) and the SPV.

ESANE conducted the bidding process for hiring and signed the contract, as a sponsored PPP model, on December 21, 2012, with the SPV Foz de Macaé S.A, which later changed the name to Odebrecht Ambiental - Macaé S.A. The contract was evaluated at R\$ 634,692,000.00 by the time of signature.

In this sponsored PPP, fares that users will pay for the services were established in the bidding procedure, on Appendix IX, being classified as (i) residential, (ii) commercial, (iii) industrial, and (iv) public.

As typical of sponsored PPPs, in addition to charging fees directly from the user, the SPV will also receive a counter payment from the public authority.

The calculation for such public counter payment follows the equation below:

CPM = K x VCPM

Where:

CPM: Monthly Public Counter payment

K: Factor due to the goal already completed and in force **VCPM:** Value Offered for the Monthly Counter payment

The maximum Monthly Counter payment amount was of R\$ 4,600,000.00 as determined in the Request for Proposal document. The winning bidder proposed the amount of R\$ 4,508,000.00 with a discount of 2%, and this became the VCPM amount.

As for the K "coefficient", when the SPV took control of the system, it applied the K









Factor - 0.30 upon the amount of the Monthly Counter payment Offered (VCPM). The SPV applied then K = 0.7 upon the completion of a phase that determined intervention in a subsystem, and 1.0 when the works for a second subsystem were completed.

In addition to the compensation structure, the performance measurement mechanism is also noteworthy in this contract.

The Appendix X of the competition bid's notice determines 10 indicators divided into 4 groups: Operation, Construction, Environment, and Social.

The indicators for Operation (IDO), Construction (IDC) and Environment (IDA) have a weight of 30 percent each, and the Social indicators (ISC) have a weight of 10%.

However, the contract does not explain the methodology for measuring these indicators. Additionally, it determined that the SPV shall present this study - which is quite unusual.

From a mandatory standpoint, the contract establishes a penalty assumption of 0.01% of the CPM amount if the quality criteria determined on Appendix X of the RFP documents are not fulfilled. However, it is important to explain that, as it is a fine, such discount from the public payment does not seem to be tied to the own PPP rationale for immediate reduction of public payment if the SPV's performance is poor. In other words, there is no discount related to performance in the formula calculating the CPM. According to a literal interpretation, thus, the contract determines that a penalty shall be applied by an administrative process, granting rights to broad defense to proceed to the application of the fine.

As for contract governance, as a means to ensure better convenience to users and clarify on service responsibility and operation, the SPV took charge of the commercial water supply services that were delivered by CEDAE until then. The SPV became responsible for issuing bills for collecting fares related to water and sewage services delivery, indicating the amount charged for each service separately. The CEDAE is in charge of delivering specific water services.

Thus, the fees collected were deposited in a central account managed by an administrator bank that is in charge of directing resources according to the proportion established in contract between the parties.

Finally, as for risk allocation, the grantor retained the environmental risks that may raise project costs. The contract was also quite clear in excluding costs that the SPV may have to pay in case of expropriation in the areas within the project perimeter. Finally, it is important to notice that, as the public authority hired other providers according to Law # 8.666/93 for another set of works related to this PPP, the SPV was exempt from penalties related to not being able to fulfill the contract due to possible issues arising from these other works.

Read below the snapshot for the Macaé Sewage System PPP project, extracted from Radar PPP database:









SEWAGE SYSTEM (MACAÉ)

PROJECT STEP									
Public Intention	Modeling Initiated	PMI Initiated	Public Consultation Initiated	Public Consultation Closed	Bid in Progress	Winner Declared	Signed Contract	Cancelled	Suspended

BASIC PROJECT INFO			
Name	Sewage System (Macaé)		
Reference Number	Contract # 001/2012		
Entity Responsible	City Public Sewage Company		
Project Segment	Sewage		
Public Authority	Macaé		
Project Characteristics	Deliver of sanitation in the granted area, along with execution of exclusive works comprising the required investments for deploying, expanding, operating and maintaining the sewage system as well as activities related to commercial management of water supply.		

CONTRACT INFO
Project period: 30 years
Contract value: R\$ 634,692,000.00
Capital to be Paid In Before Signature: R\$ 2,000,000.00
Capital to be Paid In: R\$ 5,000,000.00
Warranty of Proposals by Bidders: R\$ 8,652,000.00
Initial Warrant from the Winner to Execute the Contract: R\$ 31,734,600.00

BASIC BID INFO			
Bid Type	Technique & Cost		
Bid Model	National Competition		
Contract Model	Administrative PPP		
Inversion of Qualification and Judgment Phases	No		

CONSORTIUM			
Bid Type	Technique & Cost		
Bid Model	National Competition		
Contract Model	Administrative PPP		
Inversion of Qualification and Judgment Phases	No		

SCHEDULE		
Public Consultation Notification Date	01/24/12	
Public Consultation End Date	02/23/12	
Date of Bid's Notice Posting	03/15/12	
Offer Submission Date	09/17/12	
Offer Opening Date	09/17/12	
Contract Signing Date	11/05/2012	

COMPANIES		
SPV's Shareholders	Odebrecht Ambiental S.A.	
SPV	Odebrecht Ambiental - Macaé S.A.	









03/25/15

Posting, on March 25, 2015, a Communiqué of event investigation that may cause the application of penalty as established by contract to the SPV for not fulfilling items 3.4 and 3.5 of the PPP contract. There is a 15-day period for the SPV to submit a plea.

06/03/2014

Posting on June 3, 2014, of the SPV Ordinary and Extraordinary General Assembly's Minutes in which the corporate name change to Odebrecht Ambiental - Macaé S.A. from Companhia de Foz de Macaé S.A. was approved.

12/28/12

Posting, on December 28, 2012, of the Contract # 001/2012 statement, signed between the Fundo Garantidor de Parcerias Público -Parcerias Público de Serviço de Saneamento Básico no Município de Macaé - FGPSB and Caixa Econômica Federal, whose object is the management and administration of the Warranty Fund related to the warrant granted by the City of Macaé to Foz de Macaé S.A.

12/21/12

Posting in December 21, 2012, of the Contract # 001/2012 statement, signed in November 5, 2012 with the SPV Foz de Macaé S.A., constituted by the Foz do Brasil S.A. company.

12/21/12

Posting on December 21, 2012, of the Service order # 001/2012 that authorizes SPV Foz de Macaé S.A. to start services under Contract # 001/2012 from December 20, 2012.

10/02/2012

Posting on October 2, 2012, of the Final Score Result. The winner was the Foz do Brasil S.A. company.

09/06/2012

Posting on September 6, 2012, of Notification of change to sub item 32.1, 'a' of Appendix I - Contract Minute; of the scheduling of technical inspection to September 11, 2012 at 10 o'clock; and of postponing of offer submission date to September 17, 2012, from August 30, 2012. The offers will be opened in a public session that was also postponed to September 17, 2012, from August 30, 2012. The address for submitting offers remains unchanged.

09/04/2012

Posting on September 04, 2012, of the State of Rio de Janeiro Accounting Court's decision on Legal Proceeding TCE-RJ # 204.473-2/12 that determines that a communiqué shall be sent to the current Director-President of ESANE to rectify text of sub item 32.1, 'a' of the contract minute and post an rectification changing the calling under such decision before the start of competition, and these changes shall be evidenced when sending the Contract to the Court under the penalty of making the Bid's Notice null, as well as voiding instruments established under such Contract.

08/24/12

Posting in August 24, 2012, of a Notification of error to Public Competition # 001/2012, in compliance to State of Rio de Janeiro Accounting Court's decision. The error rectification to the Bid's Notice text can be read in full in the City Electronic Portal or in ESANE headquarters.

08/15/12

Posting on August 15, 2012, of a Communication of sine die postponing of Public Competition # 001/2012, for incorporation of measures determined by the State of Rio de Janeiro Accounting Court according to decision GC-2 90328/2012, for the Legal Proceeding # 204.473-2/12.

07/16/12

Notification of postponing the offer submission date to August 30, 2012 posted. These will be opened in a public session scheduled for the same day. The address for submitting offers remains unchanged.

06/26/12

Posting on April 26, 2012, of the State of Rio de Janeiro Accounting Court decision on Legal Proceeding TCE-RJ # 204.473-2/12 that determined communication to current Director-President of ESANE to take appropriate measures in 30 days to address external diligence proposed by the Instruction and added to the Decision, as well as adopting a maximum weighing factor of 60 percent to be attributed to the technical proposal.

04/26/12

Posting on April 26, 2012, of the State of Rio de Janeiro Accounting Court decision on Legal Proceeding TCE-RJ # 204.473-2/12 that determined communication to current Director-President of ESANE to take appropriate measures in 30 days to address external diligence proposed by the Instruction and added to the Decision.

03/22/12

Posting on March 22, 2012 of Price Consultation # 5/2012 for hiring a specialized company for drafting a basic sanitation plan. Offers shall be submitted until April 10, 2012, and will be opened in a public session at the same day. Address for submission of offers is Avenida Presidente Feliciano Sodré, 534, Centro, Macaé-RJ.

03/15/12

Public Competition # 001/2012 posted on March 15, 2012. Offers shall be submitted until April 30, 2012, and will be opened in a public session at the same day. Offers shall be submitted to Rua Vereador Djalma Salles Pessanha, n° 591, Botafogo, Macaé-RJ.

01/24/12

Public Consultation in February 13, 2012.

01/24/12

Notification for Public Consultation on January 24, 2012. The period for submitting comments, feedback and inputs starts in January 24, 2012 and ends on February 23, 2012.









6. APPENDIX I - LIST OF PPPs SIGNED IN BRAZIL

Below there is a list for administrative and sponsored PPPs signed in Brazil, according to Radar PPP database:

#	PROJECT	PUBLIC AUTHORITY
1	Zona da Mata Regional Airport	Minas Gerais
2	Fonte Nova Arena	Bahia
3	2014 World Cup Multipurpose Arena	Pernambuco
4	Casa Paulista	State of São Paulo
5	Administrative Center	Federal District
6	Integrated Management Center	Federal District
7	Itaquitinga Resocialization Integrated Center	Pernambuco
8	Solid Waste Collection and Final Destination	Paulista
9	Datacenter Complex	Federal Government
10	Mineirão Complex	Minas Gerais
11	Prison Complex	Minas Gerais
12	Prison Complex	Amazonas
13	Hospital Complexes	State of São Paulo
14	PR-323, PRC-487 and PRC-272 highways	Paraná
5	Image-based Diagnostics	Bahia
16	Sewage System	Atibaia
7	Sewage System	Guaratinguetá
18	Sewage System	Macaé
19	Sewage System	Paraty
20	Sewage System	Piracicaba
21	Sewage System	Rio Claro
22	Sewage System for the Urban Area	Guarulhos
23	Sewage System for Maceió	Alagoas
24	Sewage System for Recife Metropolitan Area and the city of Goiana	Pernambuco
25	Sewage System for the city of Serra	Espírito Santo
26	Castelão Stadium	Ceará
27	Dunas Stadium	Rio Grande do Norte
28	Maracanã Stadium	State of Rio de Janeiro
29	Fleet for Line 8 Diamond	State of São Paulo
30	Hospital da Zona Norte	Amazonas
31	Hospital do Subúrbio	Bahia
32	Belo Horizonte Metropolitan Hospital	Belo Horizonte
33	Metropolitan Regional Hospital	Ceará
34	Couto Maia Institute	Bahia
35	City Cleaning	Osasco









#	PROJETO	ENTE CONCEDENTE
36	City Cleaning and Solid Waste Management	Piracicaba
37	City Cleaning and Solid Waste Management	São Luís
38	City Cleaning	São Carlos
39	City Cleaning and Solid Waste Management	Campo Grande
40	City Cleaning and Solid Waste Management	Embu das Artes
41	City Cleaning and Solid Waste Management	Itu
42	City Cleaning and Solid Waste Management	Salto
43	São Paulo Subway - Line 18 Bronze	State of São Paulo
44	São Paulo Subway - Line 4 Yellow	State of São Paulo
45	São Paulo Subway - Line 6 Orange	State of São Paulo
46	New FURP Production Plant	State of São Paulo
47	Olympic Park	City of Rio de Janeiro
48	Cinema and Cultural Center	Paulínia
49	Access bridge and roadway system for tourism and leisure Praia do Paiva	Pernambuco
50	Cable-stayed bridge over the Cocó River	Ceará
51	Porto Maravilha	City of Rio de Janeiro
52	Housing Program - Jardins Mangueiral Project	Federal District
53	Solid Waste	Belo Horizonte
54	Tamoios Highway	State of São Paulo
55	MG-050 Highway	Minas Gerais
56	Popular Shopping and Square Maintenance	Pelotas
57	Agreste Irrigation System	Alagoas
58	Jaguaribe Seawater Disposal System	Bahia
59	Sewage System	Rio das Ostras
60	Solid Waste Management Integrated System	São Bernardo do Campo
61	Salvador and Lauro de Freitas Subway System	Bahia
62	Alto Tietê Production System	State of São Paulo
63	Rio Manso Production System	Minas Gerais
64	São Lourenço Production System	State of São Paulo
65	Urban Waste Treatment Plant	Barueri
66	Urban Waste Treatment Plant for Belo Horizonte Metropolitan Zone	Minas Gerais
67	Integrated Service Unit - Phase 2	Minas Gerais
68	Integrated Service Unit - Cities	Minas Gerais
69	Integrated Service Unit - Sete Square	Minas Gerais
70	Family Hospital Basic Units	Manaus
71	Faça Fácil Service Units	Espírito Santo
72	Schools for Basic Education City Network	Belo Horizonte
73	Vapt Vupt	Ceará
74	Light rail	City of Rio de Janeiro